

Medical Teacher



ISSN: 0142-159X (Print) 1466-187X (Online) Journal homepage: http://www.tandfonline.com/loi/imte20

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To cite this article: V. J. Grant, T. Robinson, H. Catena, W. Eppich & A. Cheng (2018): Difficult debriefing situations: A toolbox for simulation educators, Medical Teacher, DOI: 10.1080/0142159X.2018.1468558

To link to this article: https://doi.org/10.1080/0142159X.2018.1468558

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Published online: 23 May 2018.



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Difficult debriefing situations: A toolbox for simulation educators

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ABSTRACT

Background: Simulation-based education (SBE) has emerged as an essential modality for health professions education. One of the central tenants of effective SBE is reflective practice, typically guided by a facilitated debriefing. The debriefing conversation has the possibility of becoming a difficult conversation based on learner and situation-related factors. Difficult debriefing situations may threaten the learning environment, thus requiring an appreciation and understanding of the various ways that learners may react adversely to simulation and debriefing.

Aim: This article provides a review of the various phenotypes of difficult debriefing situations and a toolbox of proactive and reactive strategies to help guide the simulation educator to manage these situations, with the ultimate goal of achieving learning objectives.

Background

Simulation-based education (SBE) promotes the knowledge, skills, and attitudes necessary for effective clinical care (Issenberg et al. 2005; McGaghie et al. 2010; Cook et al. 2011; Cheng, Lang, et al. 2014). SBE requires that learners reflect and derive meaning from the simulated experience that can be applied to future clinical situations. Debriefing is a discussion facilitated by a simulation educator who helps guide the learners through a process of identifying performance gaps, exploring the rationale for behaviors and defining solutions (Fanning and Gaba 2007; Rudolph et al. 2008; Raemer et al. 2011; Cook et al. 2013; Cheng, Eppich, et al. 2014; Eppich and Cheng 2015). Debriefing is a difficult skill to master, and various methods, adjuncts and tools have been published to help accelerate the learning curve for simulation educators (Rudolph et al. 2006; Boet et al. 2013; Cheng et al. 2013; Kolbe et al. 2013; Phrampus and O'Donnell 2013; Sawyer and Deering 2013; Hunt et al. 2014; Eppich and Cheng 2015; Sawyer et al. 2016). Despite the growing body of literature supporting the implementation of debriefing for SBE, little has been published describing how to identify and troubleshoot difficult debriefing situations. Difficult debriefing situations have the potential to threaten the educational experience by creating a psychologically unsafe learning environment and/or diverting conversation away from important learning objectives. Simulation educators who effectively manage these difficult situations apply specific conversational strategies to address the issue(s) at hand. In this paper, we provide an overview of key considerations for handling difficult debriefing situations in SBE.

A review of the literature for *difficult debriefing* failed to identify any specific literature pertaining to the approach to, or management of, difficult debriefing situations. Most of the literature identified in the areas of education, psychology, human resources, conflict resolution and

Practice points

- Difficult debriefing situations are a threat to the psychological safety of the learning environment and may impact learning outcomes.
- Several manifestations (phenotypes) of difficult debriefing situations exist, each of which may be influenced to varying degrees by learner-specific and situation-specific factors.
- A "toolbox" of strategies can be used either independently, or in combination, to address difficult debriefing situations. These strategies can help prevent difficult debriefing situations (proactive strategies) or salvage debriefing situations that have become difficult (reactive strategies).

management fields more accurately covers general principles related to the approach, preparation for, and management of difficult conversations (Ury 1993; Cartwright 2003; Macdonald 2004; Edmondson and Smith 2006; Abrams 2009; Gallagher 2009a; Grimsley 2010; Stone et al. 2010; Bickel and Rosenthal 2011; Jacobs et al. 2011; Patterson et al. 2012; Overton and Lowry 2013; Polito 2013; Blanchard 2014; Dankoski et al. 2014; Reynolds 2014). Several important and recurring general themes appear in this literature, including: adequate preparation, establishing a clear purpose, the importance of practice, managing emotions, having empathy, active listening, and timely feedback and follow-up. There are also some specific tools that could be applied to difficult debriefing situations, which are congruent with our own observations of difficult debriefing situations over the past 10 years. The discussion that follows

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focuses on: (1) describing the various phenotypes (or manifestations) of difficult debriefing situations and (2) offering a toolbox of proactive and reactive solutions for educators that can help circumvent or address these issues during debriefing.

Phenotypes of difficult debriefing situations

Many different factors may contribute to the genesis of difficult debriefing situations. Learner-specific factors are those in which the inherent affect, personality, previous experiences or personal biases of the learner play a role in affecting the tone of the debriefing (Tiberius 2012; McCrorie 2013). Quite often, learners who portray an affect or persona in a debriefing may be perceived as "difficult". It is unlikely that this perception represents a defined personality trait that cannot be re-framed for a successful education experience, hence we strongly advise against labeling learners themselves as "difficult". Situation-specific factors involve the design and execution of the simulated event and debriefing that contribute to difficult debriefing situations. These are difficult situations that may arise independent of, or in combination with, learner-specific factors during the debriefing. The discussion that follows focuses on describing the various phenotypes, or overt manifestations of difficult debriefing situations, each of which may be influenced to varying degrees by learner-specific and situation-specific factors.

The learner who is quiet/reticent

There are many reasons why learners remain guiet during a debriefing (Tiberius 2012; McCrorie 2013). Some learners may be cognitively engaged in the debriefing, but choose to avoid participation in the conversation. Learners may be inherently shy, lack confidence (i.e. fear of embarrassment), have a language barrier, or prefer a more didactic style of learning (Frambach et al. 2014). Alternatively, the issue may be related to more situation-specific variables, such as cultural issues (Chung et al. 2013) (i.e. in certain cultures it is impolite to speak unless asked), hierarchy, physical issues (i.e. fatigue, hunger), or perhaps the simulation session was too challenging for the level of learner (Detert and Edmondson 2011; D'Souza 2011). Making misassumptions as to the underlying reason without gathering further information may contribute to making the debriefing more difficult.

The learner who is disengaged or disinterested

Disengagement or disinterest is evidenced when learners appearing withdrawn from the debriefing or distracted by other things in the room (e.g. mobile devices). Many factors may contribute to disengaged or disinterested learners in a debriefing. Learner-specific factors include poor prior experience with simulation or debriefing, a cultural or language barrier, or extenuating circumstances in their personal lives (Holyoke and Larson 2009; Davies et al. 2011; McCrorie 2013). In other instances, situation-specific variables are at play. If the educator does not address the issue of realism during the pre-simulation briefing (otherwise referred to in some circles as prebriefing) (Rudolph et al. 2014), learners may struggle to "suspend disbelief", and this issue may subsequently trickle down into the debriefing. Alternatively, some learners may not see the relevance of the activity to their clinical practice, or may disagree with and/or be upset by something that had been presented or discussed during the debriefing. These circumstances can be misinterpreted as the "disengaged" or "disinterested" learner, which can often lead to an educator bias that influences how the debriefing is facilitated. These behaviors may also lead to the distraction of other learners.

The learner who dominates with poor insight and/or knowledge

This phenotype includes learners who are dominating the discussion during the debriefing, while demonstrating through their comments that they lack knowledge and/or have poor insight (Tiberius 2012; McCrorie 2013). This situation may lead to deleterious learning outcomes, particularly if the information being shared is not representative of accepted standards, clinical practice or guidelines. Having learners with poor insight may result in a perception mismatch, where the educator interprets events occurring during the simulation differently than the learner(s). Sometimes, the perception mismatch is not related to a learner(s) with poor insight, but rather related to poor scenario design or poor facilitation of the debriefing. In this situation, it is important for the educator to take time to understand the learner's point of view before making assumptions about learner insight and knowledge base. While honest feedback is an essential component of debriefing (Rudolph et al. 2008), educators must be careful not to engage the learner(s) in a debate, which may lead to a power struggle for control of the debriefing.

The learner who dominates with good insight and knowledge

These are highly insightful learners who use the debriefing as an opportunity to share their knowledge and experiences with the group (Tiberius 2012; McCrorie 2013). In doing so, they may dominate the discussion, guide the debriefing in an unintended direction, and/or suppress the contributions of others. Sometimes, the response is situation-specific, where the learner enthusiastically contributes to the discussion beyond the educator's invitation to participate, often at the exclusion of others in the group.

The learner who reacts emotionally

Adult learners experience a broad array of emotion in response to SBE, ranging from what is seen as positive and energizing to what is seen as confrontational, negative and distracting (Clark and Dirkx 2008; Kasworm 2008; McCrorie 2013; Fraser et al. 2014; Rienties and Rivers 2014). Emotions may be tied to personal issues around family, relationships or work, or may be evoked by previous traumatic experiences (Kasworm 2008). There is also a fine balance between the emotion that is expected as a result of participating in simulation, and additional emotion triggered by learner-specific factors that may negatively impact the learning environment.

The emotional spectrum includes everything from feeling sad, dejected and despondent, to anger and frustration. The educator must carefully manage the situation to determine the underlying cause – are there learner-specific factors contributing to emotion, is it entirely situation-specific, or are there various factors contributing to the situation? These situations have been described as "hot moments" (Warren [date unknown]), when the emotion of the situation threatens learning and impact most or all of the learners. There are specific strategies that can be used to calm the emotional volume to create an important learning opportunity (van der Leeuw 2014; Vanderbilt [date unknown]).

The learner who reacts with defensiveness

Among them all, this phenotype may be the most difficult to manage in the context of teaching and learning. Defensiveness may reflect an underlying personality trait of the learner(s), a situational response by learner(s) to perceived sub-optimal performance, or a reaction to something that was said during the debriefing. Learners who receive negative feedback may feel ashamed, and respond to this shame with defensiveness (Bickel and Rosenthal 2011; van der Leeuw 2014). Defensiveness is an automatic emotional response to a perceived threat, and a universal reaction intended for self-preservation and safety (Baker 1980; Holmer 2014). Whatever the underlying reason, defensiveness can be destructive to the learning environment by: (1) putting individuals in a closed-minded state where they will not be open to discussing other points of view; (2) creating an aura of contention, thus making it difficult to engage in two-way dialog; and lastly (3) leaving the individual(s) feeling unheard, misunderstood, frustrated, and resentful (Cobb 2007; Holmer 2014).

Difficult debriefing situations – a "toolbox" of solutions

There are several skills that an educator can employ to prevent difficult debriefing situations (proactive strategies) or to salvage debriefing situations that have become difficult (reactive strategies). These skills make up a "toolbox" of strategies that can be used either independently, or in combination, to address the issue at hand. Educators are encouraged to become more familiar with these strategies by using them during debriefing and feedback practice, and ultimately following SBE sessions with learners.

Proactive strategies

The following proactive strategies minimize the chances of difficult situations during debriefings.

Pre-simulation briefing (prebriefing)

A comprehensive pre-simulation briefing establishes clear expectations of the learners and educators, acknowledges the limitations of current manikins, relays a commitment to respecting learners, and lays the foundation for establishing a psychologically safe environment for learning (Edmondson and Smith 2006; Rudolph et al. 2014; Vanderbilt [date unknown]). Establishing an expectation of mutual respect and honesty helps to avert difficult conversations, or at minimum sets the ground rules for the conversations to come should a difficult situation arise (Banja and Craig 2010; Jacobs et al. 2011). When a pre-simulation briefing is not conducted, the educator runs a higher risk of having learners who are disengaged with the simulated environment or who may become defensive when asked to reflect on certain behaviors during the debriefing.

Debriefing environment

The ideal debriefing environment is both comfortable and confidential, where learners feel safe to share their thoughts in an honest and open manner (McCrorie 2013). When possible, it is preferable for the educators and learners to sit for the debriefing. Standing for prolonged periods of time becomes guite uncomfortable and may deter from active engagement in the conversation. Standing also amplifies differences in physical stature between educator and learner. Sitting allows for a consistent conversation at the same eye level of all the participants, thus reducing power differentials. Educators should also try to form a circular shape with chairs, creating an environment where the educators also can see all learners. If a table is used, the educator should ideally avoid sitting at the "head" of the table, which may inadvertently introduce or augment the power differential between the educator and learners. These simple steps may help to further establish the psychologically safe debriefing environment that can play a significant role in avoiding difficult debriefing situations.

Body language

Nonverbal communication usually subconscious is (Mlodinow 2012). Many educators are unaware of the messages sent to learners via facial expressions, eye contact, hand gestures, and body positioning. Some have estimated that the proportion of meaning that is conveyed in adult conversation by nonverbal communications is 60%, followed by tone of voice (35%) and what has actually been said (5%) (Macdonald 2004). Educators should be wary of their nonverbal gestures, and continuously reflect on the messages they are conveying through their body language. Maintaining an open and inviting posture (e.g. leaning forward, arms at side) is key to making learners feel at ease, while a closed body position (e.g. sitting leaned back with arms crossed) may convey either disagreement or disinterest. Educators must also attend to the body language of the learners, which may provide cues to their emotional state (Macdonald 2004).

Eye contact

Eye contact is a powerful communication technique that has been studied with respect to social positioning, hierarchy, and persuasiveness. The visual dominance ratio (VDR) is a quotient of the percentage of time making eye contact while speaking divided by the percentage of time making eye contact while listening (Mlodinow 2012). VDR reflects the relative position on the social dominance hierarchy between two conversation partners. The closer this ratio is 1.0 or greater, the higher the relative positioning on the social dominance hierarchy, and vice versa if the VDR is lower. Examples of this include undergraduate students in psychology who scored 0.92 when talking to a person they believed to be in high school with no plans to go to college, but who scored 0.59 when talking to a person they believed to be a college chemistry honor student accepted into medical school. While this is thought to be a subconscious phenomenon where a person's ratio will fall in line with their natural dominance hierarchy in a given situation, there is emerging evidence to suggest this ratio can be manipulated in a tactical way when managing a conversation. One study suggests that people seem to respond more favorably to opposing arguments when the speaker looks at an angle to the recipient or focuses their eyes on the mouth instead of the eyes (Chen et al. 2013). In the context of a difficult debriefing, an educator could potentially proactively de-escalate a situation by adopting a pattern of deliberately breaking eye contact more while speaking and maintaining more eye contact while the other person is speaking.

Reactive strategies

Even if proactive strategies are utilized, sometimes educators find themselves in difficult debriefing situations where certain skills may help manage the group dynamic to improve learning outcomes. For most educators the natural instinct is to avoid, ignore or defer these difficult conversations, which may worsen the situation in the long run (Bickel and Rosenthal 2011; Patterson et al. 2012; Blanchard 2014). Simulation educators attempt to embrace these difficult conversations by using the following strategies to actively promote an open and respectful dialog among learners.

Body language

In the context of a reactive strategy, educators are encouraged to monitor their own body language closely as it may influence learners' responses during debriefing. For example, a quiet learner is more apt to share when body language of the educator is open and inviting, while an argumentative or defensive learner is more apt to react poorly to an aggressive body position or facial expression. Adapting body language and facial expressions to difficult situations can help to set the proper tone for the forthcoming discussion.

Eye contact

As a reactive strategy, eye contact must be carefully considered with the desired objective in mind. For example, with a group of learners who are being quiet, using deliberate eye contact to establish a connection and draw out conversation can be a powerful tool. When seeking an individual in the group to provide a response, educators can use a "scan and land" approach: where they first visually scan various members of the group, followed by landing on a specific individual who they maintain eye contact with for a longer period. This individual feels compelled to respond, and if they don't, the educator can quickly direct their gaze to another individual. With aggressive or defensive learners, eye contact can be used in a defusing manner by redirecting discussion to other learners (see discussion on VDR above).

Silence

Silence often generates an uncomfortable feeling among learners and educators. In some circumstances, learners simply need time to process and reflect on the information at hand. The longer silence sits within a group of learners, the more likely someone will feel compelled to say something to move the conversation forward (Tiberius 2012). As such, letting the silence "sit" can be a powerful way of engaging a group of quiet learners (Corrigan 2011; Rabbetts and Jones 2014; Zimmermann and Morgan 2016). If silence persists, educators should reflect on the wording of their question/statement as misunderstood and potentially rephrasing it to promote further discussion.

Directive questioning

Educators can use questions that are directed specifically at certain individuals (e.g. by name or eye contact) within the group to steer the conversation in a certain direction, to establish a broader consensus for specific opinions, or to uncover thoughts from team members who have not been as vocal (Tiberius 2012). Directive questioning can be used for learner(s) who seem quiet, disengaged, distracted, or in situations where individuals are dominating discussion. This technique may be used to direct questions at a specific individual for quiet learners, or away from a specific individual (i.e. throwing a questions out to the group as a whole) in the case of a dominant learner. In some situations (e.g. the emotional or upset learner) it may be important to take the learner(s) off the "hot" seat by redirecting the focus of conversation to other learners using directive questioning.

Specific communication tools for difficult debriefing situations

Specific communication tools can be used in isolation, or in combination, to help bring difficult debriefing situations back on track. Using several reactive strategies in combination allows educators to use strategies in a sequential fashion to rectify the situation until the learner(s) demonstrate (through verbal or non-verbal cues) they are ready to engage in discussion. The number of reactive strategies used and the order in which they are used should be adapted to the nature of the situation. Table 1 provides examples of phrases that can be used for each of these communication tools. Table 2 provides an illustrative example of how several strategies can be used in sequential fashion to address one example of a difficult debriefing situation. Figures 1 and 2 are cognitive aides that have been developed for use by simulation educators confronted with difficult debriefing situations.

Normalization. Normalization involves relating the behaviors, feelings or attitudes of others to a societal norm (Gallagher 2009a, 2009b). Normalization in various communication spheres has been shown to build trust, calm fears and help with coping (Northwestern [date unknown]). In the context of debriefing, this technique can be used for defusing emotional situations, particularly when the

Table 1. Communication tools (reactive strategies) for difficult debriefing situations.

Communication tool/reactive strategy	Sample wording			
Normalization	"That was a complex scenario. Most groups with a similar level of experience would have equally felt overwhelmed." "It is really tough to miss a clinical finding that is key to establishing the diagnosis. I have actually had this problem happen to me as well."			
Validation	"I hear what you are saying. The mannequin is really unreliable when it comes to breath sounds, which can be totally misleading."			
	"I think I understand what you are trying to say. Even established teams can have problems with communication that becomes frustrating to members of the team."			
Generalization	"I agree with you. Those clinical signs on the mannequin are really hard to pick up. Has anyone been in a clinical situ- ation where they had clinical signs that were really hard to pick up?"			
	"Some teams really struggle with having family members in the room during an acute event. Have any of you had that experience in your practice?			
Paraphrasing	"So if I am hearing you correctly, you feel that the deterioration of the scenario was linked to a fixation on the monitor and in particular the oxygen saturation reading and waveform. Does that sound right?"			
	"So what I am hearing is that some of the group really felt strongly to go in another direction, but the team leader really wanted to complete the steps to manage the first direction. Does that sound about right?"			
	"I feel like your body language is telling me that you don't quite agree with what is begin discussed. Am I correct?"			
Broadening	"I really sensed a lot of tension around the time of intubation. Did anyone else on the team sense that as well?" "I agree that there is a lot of controversy around using that drug in this situation. Is there a guideline can provide some guidance in this situation?"			
Previewing	"If it would be OK with you, I would like to change gears and re-focus on"			
	"I understand how difficult this situation must have felt for you. Would it be OK if we moved on to talk about \dots "			
Naming the Dynamic	"It feels to me that we are really stuck on the issue of whether the order to give the epinephrine was given or not. I can see it from both your points of view. Why don't we discuss the challenges of communication in a complex and noisy environment and see if we can come up with some solutions."			
	"It seems to me that there are some very strong viewpoints about parental presence in the resuscitation room that are affecting our ability to have a balanced discussion around this issue right now. This is a very tricky situation. Do you think we can all agree to create a list of the pros and cons of parental presence in the resuscitation room?"			

Table 2. Using reactive strategies in sequential fashion - illustrative example.

Difficult debriefing situation:

You are about to debrief two students (one medical, one nursing) who have just completed a simulation scenario of an infant who is apneic. During the simulation, the students fail to identify apnea despite the fact that the saturations were persistently low. In the debriefing, both students are visibly upset that they made this critical error. They fail to make eye contact and don't provide a reaction to your initial question in regards to their initial thoughts.

Reactive strategy	Sample wording		
Silence	Give the learners enough time to respond.		
Body language and eye contact	Try to engage some eye contact, move closer and have a body position that promotes sharing.		
Naming the dynamic	"It seems as though you are both feeling upset about what happened. Am I reading this right?"		
Silence	Give the learners enough time to respond.		
Validation	"I can see that you are both feeling really bad about what happened. That is totally understandable."		
Silence	Give the learners enough time to respond.		
Normalization	"It is not uncommon for things to be missed when assessing critically ill patients. Often, in the heat of the moment, we can become fixated on certain aspects of patient care. In fact, this has even happened to me last week when I was fixated on fluid resuscitation in a patient with septic shock, and as a result, I neglected to check the blood sugar in a timely fashion."		
Silence	Give the learners enough time to respond.		
Previewing	"I think there is a lot to learn from this scenario. Would it be OK with you both if we talked about what hap- pened in the scenario, and in particular the problems that teams run into with fixation?"		

learners feel upset, overwhelmed, embarrassed, or frustrated about their performance. These feelings can be tempered with normalizing statements from the educator, making learners understand that what they are going through would be considered "normal" in healthcare. When using normalization, educators should communicate in a genuine fashion, which may be accomplished by sharing a personal experience that aligns with the situation at hand. Normalizing a behavior does not necessarily imply approval, rather it signifies understanding, and most importantly that it is safe to discuss. Normalizing behaviors and attitudes in this manner is more likely to lead to a desired change in those areas (Gallagher 2009b).

Validation. Validation is the recognition and acceptance of another person's thoughts, feelings, and behaviors as understandable. This does not necessarily imply that the listener is in agreement or approval of the statements or behavior, but rather that they are real and understandable (Hall 2012a, 2012b; Hall and Cook 2012; Blanchard 2014;

Harvey and Ahmann 2014). Validation is responsible for regulating emotion, and also for building self-identity, relationships, understanding and effective communication (Hall 2012b; Hall and Cook 2012). By validating a learner's behavior or statement, the educator confirms that he/she is listening, and demonstrates to the learner that their perspective is important. In the context of debriefing, validation can be particularly helpful when learners become fixated and are unable to move the conversation forward. The fixation could be related to the experience (e.g. something specifically related to the simulation scenario including the equipment, the manikin, etc.), their particular performance (e.g. learners are overly critical of themselves), or the debriefing itself (e.g. learner(s) seem fixated on a particular point that has been discussed and resolved in the mind of others). The fixation can also be associated with learner emotions, ranging from elation to sadness to anger.

Generalization. Generalization is a strategy where a specific concept is applied in a broader manner, or when a

Difficult Debriefing Tool

Strategy	Definitions	Purpose	Sample Phrases
Name the Dynamic	Introducing a 'hot topic' by naming it	Focusing discussion, addressing hot topic	"You seem to be [insert emotion] what's on your mind?" "It seems like the key issue here is [insert hot topic], and that is causing some [insert emotion]"
Validation	Recognition that behaviors, feelings or thoughts are understandable	Reaffirming importance of learner perspective	"You're totally right, I agree that [insert perspective here]" "I agree in this situation [insert perspective here] is/can be [insert emotion here]"
Normalization	Relating behaviors, feelings or attitudes to a societal norm	Build trust, calm fear, defuse emotions	"The feelings you've expressed are common in this situation" "Your feelings are normal in this situation in fact, I had a situation once when [insert relevant story here]"
Generalization	Application of a concept in a different context	Enable learner to see broader relevance	"Have you ever had a situation when [insert concept here] was applicable to [insert related context here]" "Sometimes [insert concept here] can be applied to a different context, such as [insert context here] what do you think?"
Paraphrasing	Restating something in your own words	Clarify and/or confirm understanding	"What I'm hearing you say is [insert paraphrase here]" "So what [insert name here] is saying is [insert paraphrase here]"
Broadening	Widening discussion to involve others	Engaging other learners to share perspectives	"I'm wondering what others think of [insert topic here]" "I'd love it other others could share their perspective related to [insert topic here]"
Previewing	Introducing a new topic of discussion	Guide and refocus topic of discussion	"At this point, I'm wondering if we can switch gears and talk about [insert topic here] because [insert rationale here]"

Figure 1. Difficult debriefing tool for simulation educators.

behavior in one situation will be effectively applied in another situation (Walker et al. 2007). Generalization and learning are intimately linked, as the ability to apply new concepts to other settings is an essential skill that enables people to make sound judgments and decisions moving forward (Simon and Gluck 2013). If the process of generalization did not occur, each response would have to be learned in every specific situation. Generalization is effective when learners cannot see the relevance of the simulation experience or the relevance of the discussion, often manifesting as disengagement, disinterest, defensiveness, or an emotional reaction to the simulation. Educators can use their own clinical experience to highlight the importance of the activity or expand the discussion by drawing parallels to other contexts where these learning points can be applied.

Paraphrasing. Paraphrasing involves repeating in your own words what you interpreted someone else to have said, and in doing so, reinforcing the comments so that more people can understand and appreciate the importance of the comments (Ormond Coaching and Training 2011; Patterson et al. 2012; Tiberius 2012). There is no implication of agreement or disagreement, simply clarifying comments to encourage on-going conversation (Gallagher 2009a; Polito 2013). When paraphrasing, educators should be careful not to introduce their own biases or ideas. During debriefing, paraphrasing is particularly helpful when: (1) the educator wants to clarify rationale for a specific behavior; (2) the educator needs to put words to non-verbal communication seen among the learners (i.e. identify the "elephant in the room"); and/or (3) learners seem argumentative or defensive. In these situations, paraphrasing helps to establish clarity for the educator and learners, labels the issue at hand, and builds psychological safety for the learners to contribute to the conversation (Patterson et al. 2012). Paraphrasing may help to depersonalize the issue if it is followed by a generalizing statement, allowing for discussion with a greater understanding of the underlying rationale behind certain individual or team behaviors.

Broadening. In the context of debriefing, broadening implies widening the discussion to involve more learners or to another specific source of information. This is in contrast to generalization, where a topic is generalized to other contexts. By broadening discussion to a larger number of learners in the debriefing, a greater number of perspectives can be uncovered, thus leading to richer discussion. This may also help groups become more creative in problem solving as they connect to the broader wisdom and resources of the larger group (Fredrickson 2004; Fredrickson and Branigan 2005; Wagner and Ingersoll 2008; Wagner et al. 2017).

Broadening can be helpful when learners seem disengaged, reacting emotionally or defensively, or when one specific learner is dominating discussion. By engaging other learners and bringing them into the discussion, the

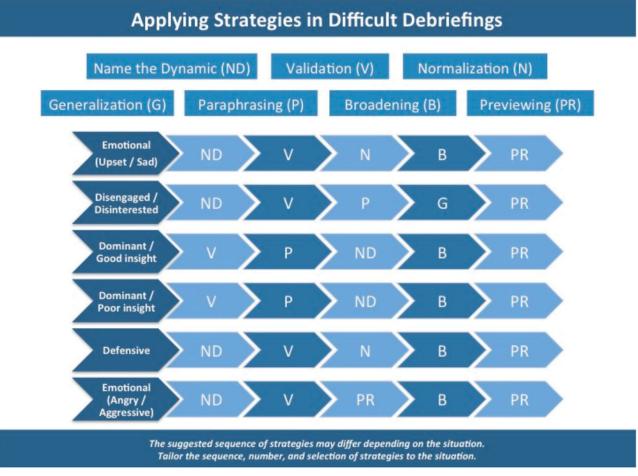


Figure 2. Cognitive aid for combining reactive strategies.

educator can redistribute and/or redirect the attention to other members of the learner group. Broadening helps with learners who dominate, share strong points of view, and seem to "know-it-all". Engaging other learners can help defuse these situations, and provide varying perspectives for others to consider. If learners become fixated on a specific piece of information or discussion point, broadening the discussion to an external source of information (e.g. clinical practice guideline) can help break the fixation. Broadening is an effective technique when the learner(s) challenge the information provided by the educator. Moving to an objective source to provide the "final" answer moves the conflict away from the learners (or between the learners and the educator) to a more neutral ground where the accepted answer can be discussed.

Previewing. Previewing is a communication technique where the educator uses a preliminary statement to indicate the topic of conversation that is about to occur (Edmondson 2003, 2012; Gamble and Gamble 2014). This technique helps the educator keep discussion on topic. It can be used to manage learner(s) who are dominating, or in combination with other communication tools to refocus and engage quiet, disengaged, distractible, emotional, or defensive learners. Previewing can also be used to manage discussion around contentious issues.

Sometimes, the conversation during debriefing may get "stuck", either because learners are making circular arguments, learners think they have done well when in fact

they missed something significant, or in situations when learners have little to say. In these situations, using a preview statement that refocuses attention to the learning objective(s) may assist learners in refocusing conversation around the issues at hand. In some difficult situations, this technique is best used when the learners are "ready" for discussion, which requires the educator to interpret the non-verbal cues offered by learners in order to determine when they are "ready" to reengage in discussion. Often, this particular strategy follows naturally after other strategies used for these types of scenarios, namely, normalization and validation.

Naming the dynamic. There are times when conversation is derailed by: (1) a specific issue where the learners are "stuck" and having a circular discussion; or (2) interpersonal conflict among leaners in the group (and potentially including the educator). This can occur with emotional learners, disengaged learners, and learners who are reacting defensively. A hot topic can be managed by "naming the dynamic", or naming/labeling the issue at hand so that the conversation can be refocused on this difficult issue (Edmondson and Smith 2006). By explicitly naming the "elephant in the room" and previewing the conversation around it, one can introduce topics that learners felt uncomfortable bringing up on their own out of fear or concern. In this context, the educator is encouraging discussion of the topic and may even choose to reiterate the ground rules to promote a safe conversation. Often, the educator

has to deliberately ask if the discussion can be paused for a moment while the controversial issue is identified. This is often coupled with either a normalizing or generalizing statement. When used in this manner, the educator has highlighted the issue to the group, identified it as being "normal", and generalized the situation to similar events that may occur in everyday life or practice. Using these techniques in this manner allows the educator to provide learners with a new perspective with which to frame the on-going discussion. By remaining calm, not taking sides (where possible), and letting all learners know that they will gain by understanding varying point of view, these situations can become profound learning opportunities that will help inform future practice (Warren [date unknown]). The focus must always remain on the situations or behaviors rather than the people involved (Jacobs et al. 2011).

Learner follow-up

Some difficult situations cannot be resolved during the debriefing. This may arise for any type of difficult situation, including the disengaged learner, the distracting learner, the learner who is trying to dominate the discussion, the emotional learner, and the defensive or argumentative learner (Tiberius 2012). Educators are advised to seek permission for follow-up with the learner, discuss the method for follow-up (e.g. formal meeting, informal coffee chat), the expected timeframe and the required information for contact (e.g. e-mail address, telephone number). Follow-up conversations may be more effective at resolving the issue at hand as the learner is typically further removed (in time and space) from the emotion, pressure, and tension associated with the debriefing and may have had further opportunity to reflect on their experience. Having a co-facilitation model with multiple facilitators can be helpful in the rare circumstance that a learner leaves abruptly during the debriefing, ensuring that there is some immediate contact and a plan for follow-up.

Summary

As with most human conversation, post-simulation debriefing is subject to the same emotions and misunderstandings that occur in our day-to-day environment. The first key to success in difficult debriefing situations is an awareness of the potential difficult situations that may occur in debriefing, in an attempt to avert them prior to their occurrence. A more thorough understanding of the factors that can lead to difficult debriefing situations will empower the educator with the skills to avoid unnecessary situations that can further deteriorate into difficult debriefing situations. By describing a toolbox of proactive and reactive strategies, we have provided educators with the resources required to circumvent and manage common difficult debriefing situations during SBE.

Disclosure statement

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the article.

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References

- Abrams J. 2009. Having hard conversations. Thousand Oaks (CA): Corwin.
- Baker WH. 1980. Defensiveness in communication: its causes, effects, and cures. J Bus Commun (1973). 17:33–43.
- Banja JD, Craig K. 2010. Speaking up in case management. Part II: implementing speaking up behaviors. Prof Case Manag. 15:237–242.
- Bickel J, Rosenthal SL. 2011. Difficult issues in mentoring: recommendations on making the "Undiscussable" discussable. Acad Med. 86:1229–1234.
- Blanchard K. 2014. Turning conflict into creativity. Train J. 29-32.
- Boet S, Bould MD, Sharma B, Revees S, Naik VN, Triby E, Grantcharov T. 2013. Within-team debriefing versus instructor-led debriefing for simulation-based education: a randomized controlled trial. Ann Surg. 258:53–58.
- Cartwright T. 2003. Managing conflict with peers. Greensboro (NC): Center for Creative Leadership.
- Chen FS, Minson JA, Schöne M, Heinrichs M. 2013. In the eye of the beholder: eye contact increases resistance to persuasion. Psychol Sci. 24:2254–2261.
- Cheng A, Eppich W, Grant V, Sherbino J, Zendejas B, Cook D. 2014. Debriefing for technology-enhanced simulation: a systematic review and meta-analysis. Med Educ. 48:657–666.
- Cheng A, Hunt EA, Donaghue A, Nelson-McMillan K, Nishisaki A, Leflore J, Eppich W, Moyer M, Brett-Fleegler M, Kleinman M, et al. 2013. Examining pediatric resuscitation education using simulation and scripted debriefing: a multi-center randomized trial. JAMA Pediatr. 167:528–536.
- Cheng A, Lang T, Starr S, Pusic M, Cook D. 2014. Technology-enhanced simulation and pediatric education: a meta-analysis. Pediatrics. 133:e1313–e1323.
- Chung HS, Dieckmann P, Issenberg SB. 2013. It is time to consider cultural differences in debriefing. Simul Healthc. 8:166–170.
- Clark MC, Dirkx JM. 2008. The emotional self in adult learning. New Dir Adult Contin Educ. 120:89–96.
- Cobb N. 2007. How to overcome defensiveness; [accessed 2015 May 15]. https://www.nathancobb.com/support-files/overcoming-defensivess.pdf.
- Cook DA, Hamstra SJ, Brydges R, Zendejas B, Szostek JH, Wang AT, Erwin PJ, Hatala R. 2013. Comparative effectiveness of instructional design features in simulation-based education: systematic review and meta-analysis. Med Teach. 35:e867–e898.
- Cook DA, Hatala R, Brydges R, Zendejas B, Szostek JH, Wang AT, Erwin PJ, Hamstra SJ. 2011. Technology-enhanced simulation for health

professions education: a systematic review and meta-analysis. JAMA. 306:978–988.

Corrigan PT. 2011. Silence in progressive teaching. Encounter. 24:8-11.

- Dankoski ME, Bickel J, Gusic ME. 2014. Discussing the undiscussable with the powerful: why and how faculty must learn to counteract organizational silence. Acad Med. 89:1610–1613.
- Davies M, Lamb S, Doecke E. 2011. Strategic review of effective reengagement models for disengaged learners. Melbourne: Centre for Research on Education Systems – University of Melbourne.
- Detert JR, Edmondson AC. 2011. Implicit voice theories: taken-for granted rules of self-censorship at work. Acad Manage J. 54:461–488.
- D'Souza D. 2011. Engaging the quiet learner: a seminar for the center for teaching excellence. Boston (MA): Suffolk University; [accessed 2015 May 15]. http://www2.suffolk.edu/files/CTE/quiet_learner_handout.pdf.
- Edmondson AC, Smith DM. 2006. Too hot to handle? How to manage relationship conflict. Calif Manage Rev. 49:6–31.
- Edmondson AC. 2003. Framing for learning: lessons in successful technology implementation. Calif Manage Rev. 45:34–54.
- Edmondson AC. 2012. Teaming: how organizations learn, innovate, and compete in the knowledge economy. San Francisco (CA): Wiley & Sons.
- Eppich W, Cheng A. 2015. Promoting excellence and reflective learning in simulation (PEARLS): development and rationale for a blended approach to health care simulation debriefing. Simul Healthc. 10:106–115.
- Fanning RM, Gaba DM. 2007. The role of debriefing in simulationbased learning. Simul Healthc. 2:115–125.
- Frambach JM, Driessen EW, Beh P, van der Vleuten CPM. 2014. Quiet or questioning? Students' discussion behaviors in student-centered education across cultures. Stud High Educ. 39:1001–1021.
- Fraser K, Huffman J, Ma I, Sobczak M, McIlwrick J, Wright B, McLaughlin K. 2014. The emotional and cognitive impact of unexpected simulated patient death: a randomized controlled trial. Chest. 145:958–963.
- Fredrickson BL, Branigan C. 2005. Positive emotions broaden the scope of attention and thought-action repertoires. Cogn Emot. 19:313–332.
- Fredrickson BL. 2004. The broaden-and-build theory of positive emotions. Philos Trans R Soc B. 359:1367–1378.
- Gallagher R. 2009a. How to tell anyone anything: breakthrough techniques for handling difficult conversations at work. New York (NY): American Management Association.
- Gallagher RS. 2009b. A "Candid" Approach to difficult conversations; [accessed 2015 May 15]. http://www.amanet.org/training/articles/A-CANDID-Approach-to-Difficult-Conversations.aspx.
- Gamble TK, Gamble MW. 2014. Interpersonal communication: building connections together. Los Angeles (CA): Sage Publications Inc.
- Grimsley A. 2010. Vital conversations: a practical approach to handling difficult conversations, managing conflict, giving feedback, and influencing difficult people. London (UK): Barnes Holland Publishing.
- Hall K. 2012a. Understanding validation: a way to communicate acceptance; [accessed 2015 May 15]. https://www.psychologytoday.com/ blog/pieces-mind/201204/understanding-validation-way-communicate-acceptance.
- Hall K. 2012b. What is validation and why do I need to know? [accessed 2015 May 15]. http://blogs.psychcentral.com/emotionallysensitive/2012/02/levels-of-validation/.
- Hall KD, Cook M. 2012. The power of validation: arming your child against bullying, peer pressure, addiction, self-harm, and out-of-control emotions. Oakland (CA): New Harbinger Publications.
- Harvey P, Ahmann E. 2014. Validation: a family-centered communication skill. Pediatr Nurs. 40:143–147.
- Holmer LL. 2014. Understanding and reducing the impact of defensiveness on management learning: some lessons from neuroscience. J Manage Educ. 38:618–641.
- Holyoke L, Larson E. 2009. Engaging the adult learner generational mix. J Adult Educ. 38:12–21.
- Hunt EA, Duval-Arnould JM, Nelson-McMillan KL, Bradshaw JH, Diener-West M, Perretta JS, Shilkofski NA. 2014. Pediatric resident resuscitation skills improve after "Rapid cycle deliberate practice" training. Resuscitation. 85:945–951.

- Issenberg SB, McGaghie WC, Petrusa ER, Gordon DL, Scalese RJ. 2005. Features and uses of high-fidelity medical simulations that lead to effective learning: a BEME systematic review. Med Teach. 27:10–28.
- Jacobs SC, Huprich SK, Grus CL, Cage EA, Elman NS, Forrest L, Schwartz-Mette R, Shen-Miller DS, Van Sickle KS, Kaslow NJ. 2011. Trainees with professional competency problems: preparing trainers for difficult but necessary conversations. Train Educ Prof Psychol. 5:175–184.
- Kasworm CE. 2008. Emotional challenges of adult learners in higher education. New directions for adult and continuing education. New Dir Adult Contin Educ. 120:7–18.
- Kolbe M, Weiss M, Grote G, Knauth A, Dambach M, Spahn DR, Grande B. 2013. Teamgains: a tool for structured debriefings for simulationbased team trainings. BMJ Qual Saf. 22:541–553.
- Macdonald E. 2004. Difficult conversations in medicine. Oxford: Oxford University Press.
- McCrorie P. 2013. Teaching and leading small groups. In: Swanwick T, editor. Understanding medical education: evidence, theory and practice. West Sussex (UK): Wiley & Sons.
- McGaghie WC, Issenberg SB, Petrusa ER, Scalese RJ. 2010. A critical review of simulation-based medical education research: 2003–2009. Med Educ. 44:50–63.
- Mlodinow L. 2012. Subliminal: how your unconscious mind rules your behavior. New York (NY): Random House.
- Northwestern University. [date unknown]. Basic skills and techniques in providing spiritual care. Chicago (IL): Northwestern University; [accessed 2015 May 15]. http://endlink.lurie.northwestern.edu/reli-gion_spirituality/part_four.pdf.
- Ormond Coaching and Training. 2011. Effective communication skills: the art of communication; [accessed 2015 May 15]. http://www.leadership-development-tips.com/effective-communication-skills.html.
- Overton AR, Lowry AC. 2013. Conflict management: difficult conversations with difficult people. Clin Colon Rectal Surg. 26:259–264.
- Patterson K, Grenny J, McMillan R, Switzler A. 2012. Crucial conversations: tools for talking when stakes are high. New York (NY): McGraw-Hill.
- Phrampus PE, O'Donnell JM. 2013. Debriefing using a structured and supported approach. In: Levine AI, DeMaria S, Schwartz AD, Sim AJ, editors. The comprehensive textbook of healthcare simulation. New York (NY): Springer.
- Polito J. 2013. Effective communication during difficult conversations. Neurodiagn J. 53:142–152.
- Rabbetts J, Jones P. 2014. Difficult conversations. Train J. 28-31.
- Raemer D, Anderson M, Cheng A, Fanning R, Nadkarni V, Savoldelli G. 2011. Research regarding debriefing as part of the learning process. Simul Healthc. 6:S52–S57.
- Reynolds M. 2014. The discomfort zone: how leaders turn difficult conversations into breakthroughs. San Francisco (CA): Berrett-Koehler Publishers.
- Rienties B, Rivers BA. 2014. Measuring and understanding learner emotions: evidence and prospects; [accessed 2015 May 15]. http://www. laceproject.eu/publications/learning-analytics-and-emotions.pdf.
- Rudolph J, Simon R, Dufresne R, Raemer D. 2006. There's no such thing as "Nonjudgmental" debriefing: a theory and method for debriefing with good judgment. Simul Healthc. 1:49–55.
- Rudolph JW, Raemer DB, Simon R. 2014. Establishing a safe container for learning in simulation: the role of the presimulation briefing. Simul Healthc. 9:339–349.
- Rudolph JW, Simon R, Raemer DB, Eppich WJ. 2008. Debriefing as formative assessment: closing performance gaps in medical education. Acad Emerg Med. 15:1010–1016.
- Sawyer T, Eppich W, Brett-Fleegler M, Grant V, Cheng A. 2016. More than one way to debrief: a critical review of healthcare simulation debriefing methods. Simul Healthc. 11:209–217.
- Sawyer TL, Deering S. 2013. Adaptation of the US army's after-action review for simulation debriefing in healthcare. Simul Healthc. 8:388–397.
- Simon JR, Gluck MA. 2013. Adult age differences in learning and generalization of feedback-based associations. Psychol Aging. 28:937–947.
- Stone D, Patton B, Heen S. 2010. Difficult conversations: how to discuss what matters. New York (NY): Penguin Books.
- Tiberius RG. 2012. Small group teaching: a trouble-shooting guide. New York (NY): Routledge.

- Ury W. 1993. Getting past no: negotiating your way from confrontation to cooperation. New York (NY): Bantam Books.
- van der Leeuw RM. 2014. Sharing is caring: dealing with feedback and difficult feelings. Med Educ. 48:1034–1042.
- Vanderbilt University Centre for Teaching. [date unknown]. Difficult dialogues. Nashville (TN): Vanderbilt University; [accessed 2015 May 15]. http://cft.vanderbilt.edu/guides-sub-pages/difficultdialogues/.
- Wagner CC, Ingersoll KS, Contributors W. 2017. Phase iii: broadening perspectives. Motivational interviewing in groups. New York (NY): Guilford Publications.
- Wagner CC, Ingersoll KS. 2008. Beyond cognition: broadening the emotional base of motivational interviewing. J Psychother Integr. 18:191–206.
- Walker JE, Shea TM, Bauer AM. 2007. Generalization and the effects of consequences; [accessed 2015 May 15]. http://www.education.com/ reference/article/generalization-effects-consequences/.
- Warren L. [date unknown]. Managing hot moments in the classroom. Boston (MA): Harvard University; [accessed 2015 May 15]. http://bokcenter.harvard.edu/hot-moments.
- Zimmermann AC, Morgan WJ. 2016. A time for silence? Its possibilities for dialogue and for reflective learning. Stud Philos Educ. 35:399–413.