What are after-action reviews?

An after-action review (AAR) is “a systematic technique that turns a recent event into a learning opportunity through a combination of task feedback, reflection, and discussion” (Keiser & Arthur, 2020, p. 2). The process has been used in various fields, leading to a variety of labels, including after-event review, debrief, guided team self-correction, and reflexivity (e.g., Chen et al., 2018; Couper et al., 2013; Ellis & Davidi, 2005; Smith-Jentsch et al., 2008). Note that though the term “debrief” is sometimes used, AARs are distinct from debriefing sessions that are intended to help individuals process stressful or traumatic events (e.g., critical incident stress debriefing). The most researched AARs have been conducted in the military (where AARs were first conceived) and in healthcare (Keiser & Arthur, 2020). They have been used, but less frequently studied, in other high-risk settings (e.g., aviation, fire service, and emergency management) and in business settings.

AARs are conducted for both actual and simulated events, many of which are explicitly designed for training purposes. Though they were initially developed for the purpose of team-based development and improvement (Morrison & Meliza, 1999), AARs have since also been applied to individuals. Examples of events that have been systematically studied include pediatric residents performing simulated neonatal resuscitation (Campbell et al., 2009), soldier navigation missions (Ellis et al., 2009), daily production of manufacturing teams (Chen et al., 2018), business decision-making exercises (Ellis et al., 2010), and pharmacy, nursing, and pediatric students conversing with patients on difficult topics like intimate partner violence and suicidal thinking (Marken et al., 2010).

AARs are intended to be structured and formalized, though the extent of that has come to vary in different settings. In addition, they may be led by an expert facilitator or self-led, and they may involve memory aids, such as a video of the event. A common review structure includes discussion of the following topics: a) purpose, context, and ground rules, b) what was expected to happen, c) what actually happened, d) what went well and why, e) what can be improved and how, and f) summary of key points (United States Agency for International Development [USAID], 2006). In some settings, a summary report is prepared, which includes recommendations for improvement in the future (USAID, 2006).
Why are AARs valuable?

AARs are valuable because they have positive effects on various learning outcomes, including attitudes (e.g., satisfaction and confidence), knowledge, processes (e.g., communication, leadership, teamwork), and task performance (Keiser & Arthur, 2020). Overall, they are particularly effective when the review includes objective records of the event, like a video or documents, to avoid relying solely on memory. Team AARs focused on team performance are more effective when they are self-led, whereas individual AARs focused on individual performance are more effective when they are led by a content expert. In the latter case, objective records aren’t as necessary. Finally, longer AARs (greater than 20 min) are more effective for individual AARs than for teams. What doesn’t matter is how structured the review is; even less-structured approaches can be effective.

The use of AARs in child welfare training is recommended, especially in light of the growth of simulation training, in which trainees get more realistic practice and opportunity for feedback. Implementing an AAR process in training is likely to improve learning outcomes. Most of the rigorous studies have been done in training contexts, so more research is needed to study them in the workplace, but the evidence suggests they offer a promising means to improve individual and team performance. These benefits might apply not only to intact teams and smaller events but also to ad hoc teams and larger projects and initiatives. Depending on whether reports are created and accessible, the AAR learnings and recommendations could be valuable to future agency efforts by different teams. For further details on the practical aspects of conducting AARs, see the USAID guidance.

QIC-WD Takeaways

- AARs are conducted for actual and simulated events and for teams and individuals.
- The four main questions commonly addressed in an AAR are b) what was expected to happen, c) what actually happened, d) what went well and why, and e) what can be improved and how.
- AARs are valuable because they have positive effects on various learning outcomes, including attitudes (e.g., satisfaction and confidence), knowledge, processes (e.g., communication, leadership, teamwork), and task performance.
- AARs are particularly effective when the review includes objective records of the event, like a video or documents, to avoid relying solely on memory.
- Team AARs focused on team performance are more effective when they are self-led, whereas individual AARs focused on individual performance are more effective when they are led by a content expert. In the latter case, objective records aren’t as necessary.
- Longer AARs (greater than 20 min) are more effective for individual AARs than for teams.
The structure of the review is not important; even less-structured approaches can be effective.
The use of AARs in child welfare training is recommended.
For further details on the practical aspects of conducting AARs, see this USAID guidance.

References


