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What is TEAMWORK?

The abilities to work and communicate as a team are highly important in relation to safe and effective performance¹, with the applications of both skills having been studied within a range of high-risk domains.

A team can be defined as "a set of two or more individuals interacting adaptively, independently and dynamically towards a common and valued goal"². When a team works effectively together as a unit toward a task, they have the potential to offer increased level of productivity, creativity and adaptability than an individual could working in isolation³.

Behavioural elements of effective teamwork include4:

Supporting other members of the team

Solving conflicts within the team

Exchanging information

Co-ordinating team based activities

Working in teams allows members to utilise nontechnical skills as a unit which can facilitate situation awareness and decision-making.

What is COMMUNICATION?

Communication is defined as the "exchange of information, feedback or response, ideas and feelings"². Effective communication can be considered as a key component of effective teamwork⁵ and can be broken down into four components⁴:

- 1. WHAT what is information that needs to be communicated?
- 2. HOW in what way will this information be communicated?
- 3. WHY why is the communication taking place?
- 4. WHO Who is the recipient of the communicated information?

Behavioural elements of effective communication include4:

Sending information in a concise and clear manner

Including relevant details such as context and intended outcomes

Being receptive to others communications

Identifying and correcting any issues impacting communication

Failures in communication and teamwork have been identified as causal factors in catastrophes such as the Piper Alpha and Tenerife airport disasters^{6,7}.

GOOD AND BAD EXAMPLES

OF TEAMWORK AND COMMUNICATION

Here's a list of behavioural markers from various high-risk industries^{8,9}, how do your teamwork and communication skills checkout?

Exchanging information

- √ Communicates task related information and progress to other team members
- √ Listens to other team members
- ✓ Indicates when help is needed
- √ Fails to communicate concerns with others
- x Tries to resolve issues alone
- x Doesn't listen to team members / ignores suggestions
- x Isn't clear of what support is needed from team member

Establishing shared understanding

- Makes sure team members are aware of task plans and are comfortable proceeding
- √ Encourages team input
- √ Reviews task with team and discusses any problems
- Does not communicate plans with team
- x Does not facilitate collective discussion and review
- x Does not review task after with team members

Team building / consideration

- ✓ Does not compete with other team members
- ▼ Tries to be aware of the state of other team members
- ✓ Offers assistance to team members when needed
- Competes with other team members
- Does not take into account state of other team members
- Does not offer help to other team members when needed

Co-ordinating team activities

- √ Checks all team members are ready to proceed with task
- √ Checks equipment is ready for task
- X Does not check other team member is ready to proceed
- Does not check equipment is ready for task

Resolving Conflict

- √ Keeps calm when in disagreements
- √ Suggests solutions to address disagreements
- √ Focuses on correcting error over blaming other team members
- × Over-reacts in disagreements
- x Doesn't compromise
- Accuses others of making errors

TEAMWORK & COMMUNICATION in Agriculture

Previous research has aimed to identify the categories of nontechnical skills (NTS) used by farmers¹⁰. Most farm workers reported that they frequently work as part of a team, and that they used different NTS when working in a team as opposed to when working alone. Five categories of NTS were identified: situation awareness, decision-making, leadership, teamwork and task management. Only three of these were identified for when farmers were working alone: situation awareness, decisionmaking and task management.

All the farmers interviewed considered teamwork to be integral to operating a farm efficiently. Aspects of teamwork

included co-ordination and communication, which are closely linked. Co-ordination refers to workers each having a specific task to complete to ensure that a goal is accomplished successfully. The research also found that coordination was generally enhanced by good communication, whether this was face-to-face or via mobile phones/radio transmissions. Communication allowed farmers to share information about their location, activities and progress of their task. If communication failed, there was normally an adverse effect on a particular outcome.

This research indicates that teamwork is vital for efficient farm operation. Communication is a sub-category of teamwork and normally enhances coordination.



References

- McQueen, C., & Thies, K. (2015). Teamwork and Communication. In A. Low & J. Hulme (Eds), ABC of Transfer and Retrieval Medicine (pp. 111). West Sussex: BMJ Books.
- Salas, E., Dickinson, T.L., Converse, S.A. and Tannenbaum, S.I. (1992). Toward an understanding of team performance and training. In Swezey, R.W. and Salas, E. (Eds), Teams: Their Training and Performance (pp.3-29). Norwood, New Jersey: Ablex.
- 3) Salas, E., Sims, D. E., & Burke, C. S. (2005). Is there a "big five" in teamwork? *Small Group Research*, *36*, 555-599.
- 4) Flin, R. H., O'Connor, P., & Crichton, M. (2008). Safety at the sharp end: A guide to non-technical skills. Ashgate Publishing, Ltd.
- Nieva, V. F., Fleishman, E. A., & Rieck, A. (1985). Team dimensions: Their identity, their measurement and their relationships. Washington, DC: U.S. Army, Research Institute for the Behavioural and Social Sciences.
- 6) Paté-Cornell, M. E. (1993). Learning from the piper alpha accident: A postmortem analysis of technical and organizational factors. *Risk Analysis*, *13*, 215-232.
- Weick, K. E. (1990). The vulnerable system: An analysis of the Tenerife air disaster. *Journal of Management*, 16, 571-593.
- 8) Yule, S., Flin, R., Paterson-Brown, S., Maran, N., & Rowley, D. (2006). Development of a rating system for surgeons' non-technical skills. *Medical Education*, 40, 1098-1104.
- Flin, R., Martin, L., Goeters, K., Hoermann, J., Amalberti, R., Valot, C. & Nijhuis, H. (2003). Development of the NOTECHS (non-technical skills) system for assessing pilots' CRM skills. *Human Factors and Aerospace Safety*, 3, 95-117.
- 10) Irwin, A., & Poots, J. (2015). The human factor in agriculture: An interview study to identify farmers' non-technical skills. *Safety Science*, 74, 114-121.





