



Communicating in Teams

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www.buksa.com/halifax

Communication at work

In a poll of 800 employees, 25% reported witnessing workplace rudeness daily (Pearson & Porath, 2005).

Does rude, aggressive communication or arguing have any impact on cognition?

'Distracted' pilots fail to land



An inquiry has begun after a US plane heading from San Diego to Minneapolis missed the airport it was meant to land at by 150 miles (240km).

Contact with the Northwest Airlines plane was lost for an hour as it flew at 37,000ft, sparking hijack fears. The crew said they had been distracted by a "heated discussion" but officials will check if they had fallen asleep. Flight 188, carrying 147 passengers, landed safely at Minneapolis after contact was resumed. A statement released by the National Transportation Safety Board said: **"The crew stated they were in a heated discussion over airline policy and lost situational awareness."**

BBC October 23rd 2009

Aggression and Distraction in Operating Theatres?



Quality of teamwork in OR

- Teamwork of all groups with Consultant Anaesthetists
– 1% Low; 13% Adequate; 86% High
- Teamwork of all groups with Consultant Surgeons
– 22% Low; 42% Adequate; 36% High

222 Anaesthetists, 192 Surgeons, 187 Theatre nurses
Flin et al (2003; 2006) *Anaesthesia; The Surgeon*

“Have you received aggressive behaviour from any of the following in the past 6 months?”

• Staff group	n	%
• Nurse/ODP	256	66
• Consultant surgeon	209	53
• Consultant anaesthetist	131	33
• Surgical registrar	124	32
• Anaesthetic registrar	55	14
• Line manager	52	13

Survey of 391 OR staff (227 OR nurses, 70 ODP, 38 surgeons, 56 anaesthetists) - England NHS. (Coe & Gould (2007) *Journal of Advanced Nursing*, 61, 609-618).

Effects of experiencing rudeness



- In an experimental study, two groups of students were recruited to complete a number of personality and cognitive tests.
- On the way to the test session, students in one group were spoken to rudely by a professor or a peer.
- The group who experienced aggression performed significantly worse on cognitive tasks than the control group.
- Being the **victim** of rude or aggressive communication impairs cognitive performance.

Porath & Erez (2007) *Academy of Management Journal*, 50,1181-1197

Rudeness effect



- Experiencing rudeness/ aggression
- ↓
- Causes negative emotions/ distraction
- ↓
- Impairs cognition, impairs task performance

Effects of Witnessing Rudeness



- In an experimental study, two groups of students were recruited to complete a number of personality and cognitive tests.
- A (confederate) student arrived late and was spoken to rudely by a professor or a peer.
- The group who witnessed the rudeness performed significantly worse on cognitive tasks than the control group.
- Being the **witness** of rude or aggressive communication impairs cognitive performance.

Porath & Erez (2009) *Organizational Behaviour & Decision Processes*, 109, 29-44

Rudeness effect



- Witnessing rudeness/ aggression



- Causes negative emotions/ distraction



- Impairs cognition, impairs task performance

Surgeons' interview data

- *they [scrub nurses] need to have the ability to be quite focused on the procedure and not be distracted by what else is going on*
- *if I'm really concentrating hard on a task I'll forget the names of instruments I use every day*
- *a lot of what you need arrives in your hand without you actually having got as far as asking for it, it's almost telepathy, it's smooth, it runs*

Nurses' interview data

"You just know when something is going wrong, it's either... you can physically see that something's happened but sometimes you can't see. You can just recognise the surgeon's body language or see them clenching their jaw .. that things are not going well."

"...when they [surgeons] ask for something and you give them what you think it is that they need and it's not the thing they said but you know it is what they actually want."

"The surgeon said "give me the buzzy thing.. "

Non-Technical Skills

- Reinforcing 'Good behaviour' for safety
- Discouraging 'bad' behaviours that are bad for safety
- Protecting other people's cognition (counting swabs, planning, remembering the next drug etc)
- Appreciating the links between communication → emotion → cognition

Pilots' Non- Technical Skills

- Term non-technical skills first used in European civil aviation (1990s).



Non-technical skills are the cognitive and social skills that complement technical skills, and contribute to safe and efficient task performance.

Aka: Crew Resource Management (CRM) skills

Formally trained and assessed in aviation and nuclear industries

Pilots' Non-Technical Skills

NOTECHS system (1998)

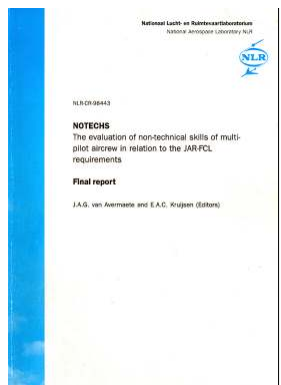
Pan-European

Behaviour rating method to assess a pilot's non-technical (CRM) skills.

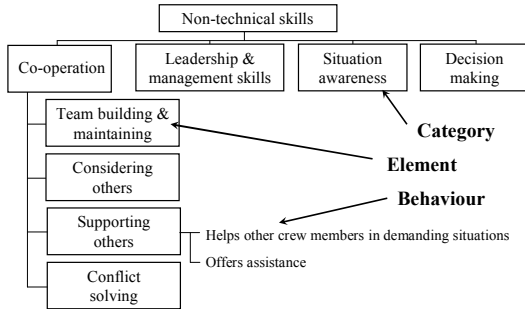
Recommended by JAA/ CAA

Adopted by some airlines, adapted by others.

Flin et al (2003) *Human Factors & Aerospace Safety*, 3, 95-117

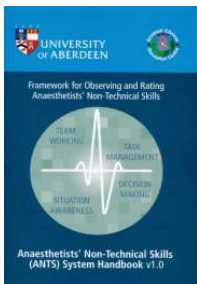


The NOTECHS framework



Anaesthetists' Non-Technical Skills

Flin, Fletcher, Glavin, Maran, Patey (2004)

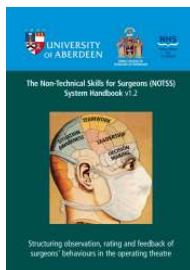


Anaesthesia (2002)
British Journal of Anaesthesia (2003; 2004)
Cognition, Technology & Work (2004)

Available from
www.abdn.ac.uk/iprc/ants

Non-Technical Skills for Surgeons (NOTSS)

Flin, Yule, Paterson-Brown, Rowley, Maran (2006)



Yule et al
 (2006) *Surgery*;
 (2006) *The Surgeon*
 (2008) *World Journal of Surgery*
 (2009) *ANZ J Surgery*

Available from
www.abdn.ac.uk/iprc/notss

NOTSS (surgeons) skills taxonomy

Categories	Elements
Situation Awareness	Gathering information Understanding information Projecting and anticipating future state
Decision Making	Considering options Selecting and communicating option Implementing and reviewing decisions
Communication and Teamwork	Exchanging information Establishing a shared understanding Co-ordinating team activities
Leadership	Setting and maintaining standards Coping with pressure Supporting others

Flin, Yule, Paterson-Brown, Rowley, Maran (2006)

NOTSS rating scale

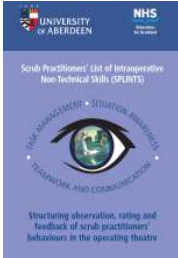
- 1 Poor** Performance endangered or potentially endangered patient safety, serious remediation is required
 - 2 Marginal** Performance indicated cause for concern, considerable improvement is needed
 - 3 Acceptable** Performance was of a satisfactory standard but could be improved
 - 4 Good** Performance was of a consistently high standard, enhancing patient safety; it could be used as a positive example for others
- N/A Not Applicable. Skill was not required or not relevant in this case or scenario



NOTSS rating form

Category	Category rating	Element	Element rating	Feedback on performance and debriefing notes
Situation Awareness	3	Gathering information	2	
		Understanding information	4	
		Projecting and anticipating future state	3	
Decision Making	3	Considering options	2	Consider discussing the decision to convert with the anaesthetist next time
		Selecting and communicating option	3	
		Implementing and reviewing decisions	3	
Leadership	2	Setting and maintaining standards	3	Ensure you delegate tasks appropriately
		Supporting others	2	
		Coping with pressure	N/A	
Communication and Teamwork	1	Exchanging information	2	Be more precise when asking for instruments
		Establishing a shared understanding	1	Brief theatre personnel beforehand about the operation and your expectations
		Co-ordinating team activities	4	

Scrub Practitioners' Non-Technical Skills (SPLINTS)



Mitchell, Flin et al (in prep)

www.abdn.ac.uk/iprc/splints

The Patient Safety Board:
Royal College of Surgeons of Edinburgh
Prof George Youngson et al



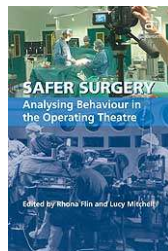
**Safer Operative Surgery
Masterclass**
Non technical Skills for the theatre team
“why we do what we do
& how we do it!”

Safer Surgery. Analysing Behaviour in the Operating Theatre

27 chapters on tools & studies on analysing behaviour of individuals and teams

Flin & Mitchell (Eds.)
(2009) Ashgate.

www.ashgate.com



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Further information r.flin@abdn.ac.uk

- www.abdn.ac.uk/iprc
lists of projects and papers and reports

Scottish Patient Safety Research Network

- www.spsrn.ac.uk
