Training to Failure and Other Unlikely and Highly Effective Training Strategies

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Agenda

1. Schema and sensemaking
2. Motivated behaviour model
3. Training to non normal and failure
Bottom line:

• Spending training time in ‘normal’ in no way prepares one for non-normal

• Meaningful interaction with inherent risk defines non normal and builds coping skills at the boundaries

• Safe Failure needs to replace Fail Safe
Seven Systems of Risk Management Planning

- Business Management System
- Organization Planning System
- Program Planning System
- Client Information System
- Equipment Management System
- Crisis Management System
- Staffing/Human Resource System

Program Activity
Question:

• Do you teach decision making? How?
Conscious Mind, Choice

Unconscious Mind, Programming
Schema

Using what I already know to help me understand new information.

I know alligators live in swamps.
Schema

• template for recognizing a particular class of relevant environmental threats or opportunities
Schema v. Sensemaking

- **Schema:**
  - Categories (of memory?)

- **Sensemaking**
  - Ongoing process to categorize ambiguous cues
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Motivated Behaviour Model:

Schema & sensemaking

Mobilize response (authority and patterned)

DM&J

Skills (KSA)

Motivated behaviour or action
Can you find the mistake?

1 2 3 4 5 6 7 8 9
Motivated Behaviour Model:

Schema & sensemaking

Mobilize response (authority and patterned)

DM&J

Skills (KSA)

Motivated behaviour or action
“Human error is a consequence, not a cause.”

Reason (1997)

...decision making as “continuous control task”

Rasmussen (1997)
Question:

- Do you teach decision making? How?
- Do you teach how to fail?
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“…rather than striving to control behaviour by fighting deviation…

Control behaviour by making the boundaries explicit and known and by giving opportunities to develop coping skills at boundaries.”

Rasmussen (1997)
Boundary of functionally acceptable performance

Error margin

Counter gradient from campaigns for 'safety culture'

Resulting perceived boundary of acceptable performance

Gradient toward Least Effort

Management Pressure toward Efficiency

Experiments to improve performance creates 'Brownian movements'

Boundary to Economic Failure

Boundary to Unacceptable Work Load

Space of Possibilities: Degrees of Freedom to be Resolved According to Subjective Preferences
Normal vs Non Normal

Meaningful interaction w inherent risk

Random events
Training for critical events

1. Tech. skill competence
   - Metered progression

2. Peer leadership
   - Coached exp.

3. Understand normal
   - Normal
   - Non Normal

4. Respond to non normal
   - Decision making
   - Sensemaking

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Training for critical events

• Meaningful interaction w inherent risks

• Train to failure

• Define boundaries

Non Normal

• Sensemaking
Accelerated Training

• ‘What’s going on here?’

• Meaning over deciding

Coping skills at the boundaries;

Schema selection

• Non Normal

Sensemaking

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Accelerated Training

- Situational awareness
- Recognize patterns
- Defined roles
- Empowerment to act
- Non Normal

Sensemaking
Motivated Behaviour Model:

Schema & sensemaking

Mobilize response (authority and patterned)

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Skills (KSA)

Motivated behaviour or action

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Safe failure v. fail safe
Ends vs Means

- Outcomes and boundaries
- Critical events; failure

1. Identify program specific inherent risks: provide meaningful interaction
2. Make boundaries clear; build coping skills
3. Case study org IRF’s
Take away points:

1. multiple schema > a single durable schema
2. Focus on non-normal and boundaries
3. define roles and authority to act
4. Safe failure over fail safe


Managing Risk
Systems Planning for Outdoor Adventure Programs

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