Mindfulness among Norwegian F-16 fighter pilots

-A 12 month intervention study-

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Aims

• To test the viability and subjective effect of mindfulness-based mental training among high performing individuals
Mindfulness=Attention training

"Paying attention, on purpose, in the present moment, and doing it non-judgmentally."

Jon Kabat-Zinn (1990)

"Trait"

"State"
Why spend time on something you are already good at?

- Attention:
  - Limited capacity
  - Demanding
  - Susceptible to age
  - Susceptible to stress

FLIGHT SAFETY!
The training

Self-regulation:

Concentration

"Switching"

Monitoring:

Quriousity

Openness

Accept

(Bishop et al., 2004)
Intervention:

- Intervention group:
  - 331 squadron  approx. 30 (pilots and mission support)

- Control group:
  - 338 squadron

- 20 min formal training (approx 2-3 times pr week)

- Informal training?

- Fourteen ½ day sessions (every 3rd week)

- Approx. six 10-20 min individual counseling sessions

- Summaries, literature, CDs etc.

- Armed Forces funding: EURO 90.000,-
Measurements

- Validated Norwegian versions of:
  - *Stress and anxiety scale*
    (SAS; Smith Smoll & Schutz, 1990)
  - *Competitive state anxiety inventory-2*
    (CSAI-2; Martens Vealey & Burton, 1990)
  - *Perception of Success Questionnaire*
    (POSQ; Roberts & Ommundsen 1996)
  - *Mental skills*
    (Pensgaard & Hollingen, 1996)
Measurements

- Validated Norwegian versions of:
  - Job engagement
    (Schaufeli & Bakker, 2003)
  - Total workload
    (TAB; Maardberg, Lundberg & Frankenhauser, 1990)
  - Maslach Burnout Inventory
    (MBI; Maslach, Jackson & Leiter, 1996)
  - Survey Work Home Interaction - Nijmegen
    (SWING; Geurts, 2001)
Some preliminary results from the semi-structured interviews...
95% experienced important effect/learning from the intervention
Examples of cognitive effects:

“I can more easily concentrate, refocus and get in the ‘zone’”

“I am more aware of distracting thoughts and how to deal with them”

“I am more aware of my thoughts and how they affect what I do”

“I am better at planning and prioritizing”

“I am better at clearing my head”

“I don’t worry much about the future anymore”

“It has ’opened’ my eyes”
Examples of ”physiological” effects:

”I have become more calm and relaxed ”

”I feel as if my breathing has improved ”

”I use mye energy more efficiently”

”It has given me a surplus of energy”

”It has made me feel good more often”

”I take better care of myself”
Examples of effects on relations:

"I am more aware and observant"

"I am more aware of people and how I choose to react"

"Now I see people for who they really are"

"I connect better at home"

"I am more aware of my reactions towards my kids"

"My confidence and calmness is contagious"
75% say they will keep practising formal mindfulness training after the intervention
The 20% who participated less than half the project + the 10% who felt ’demotivated’ through the whole intervention

- Experienced no/little effect
- Less satisfied with their own effort
- Less satisfied with the intervention in general
- Less likely to keep practising after the intervention
”Without being able to describe it I have done this before, but doing it systematically gave me a clear view of methodology”
A planned study on high performing individuals 2011-2015

-Testing the effect of mindfulness-based interventions on visual attention-
Questions?