

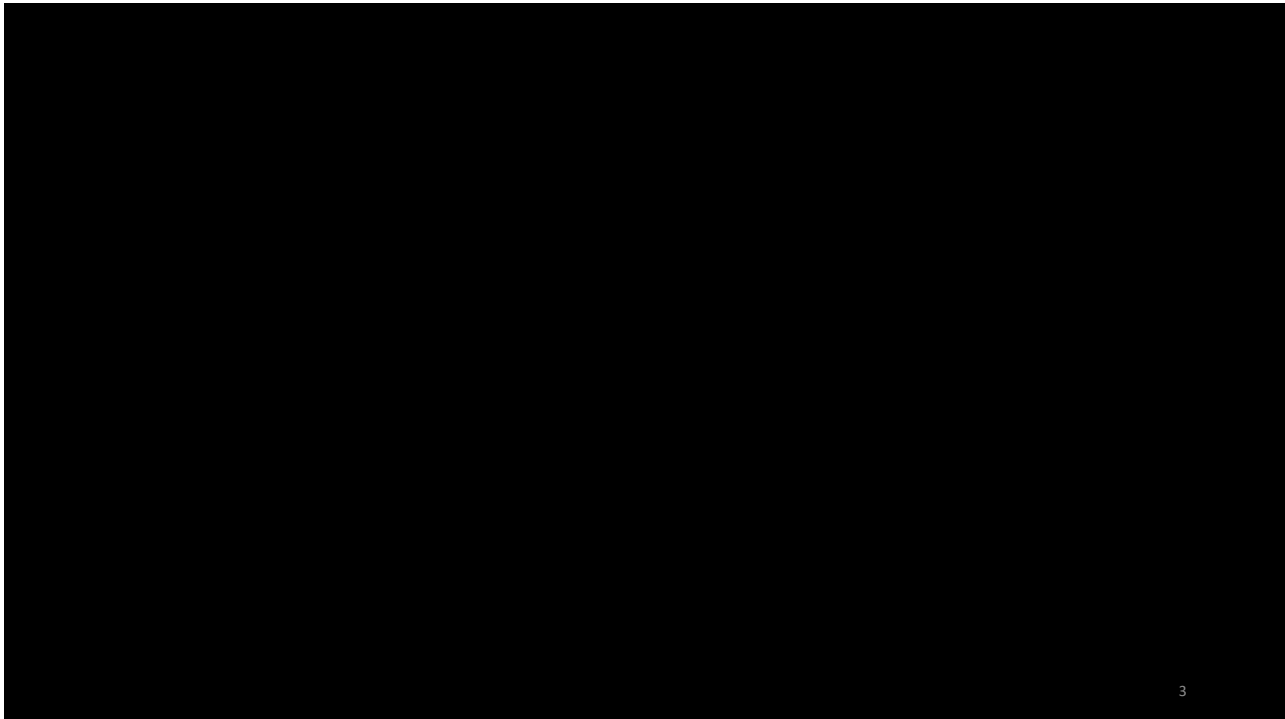
'Mindfulness in Aviation – its getting personal?'



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What is mindfulness

Being in the present moment

Centering our inner self

Here and now!

Mindfulness can be defined as **nonjudgmental attention to the present moment** (Kabat-Zinn, 1994)

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Mind wandering

Some categorize mind-wandering episodes in terms of a relationship to an agent's intention: mind wandering might occur intentionally or unintentionally (Giambra 1995; Seli et al. 2016)

One might here distinguish between distraction, when the mind is prompted to wander by external stimuli, and mind wandering, when the mind is prompted to wander by internal processes, independently of any particular stimuli (see Stawarczyk et al. 2013).

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How much distracted we are today?



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Mind wandering, automation and Flight Safety

During periods in which the automation is used and things are going well, pilots might engage in what psychologists have referred to as “task-unrelated thought” or “mind wandering” (Schooler et al., 2011; Smallwood & Schooler, 2006) and cease to meaningfully follow the events that are transpiring in front of them.

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Piloting skills require ultimate levels of
ATTENTION – CONCENTRATION - CALMNESS



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Mindfulness enhances
concentration and calmness



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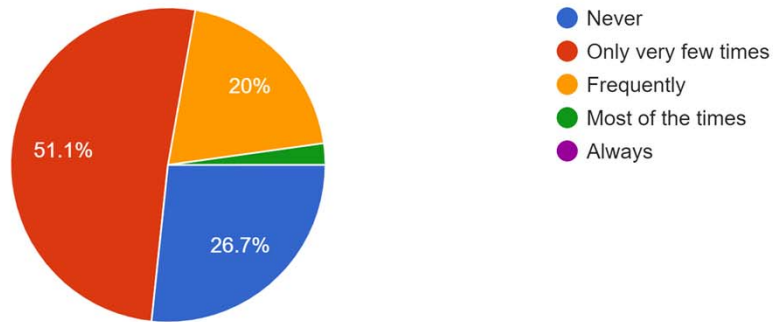
Do pilots need mindfulness training?
-A Pilot study was conducted-



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While going to the aircraft in a transport or while walking towards the parked aircraft, (before you are able to see the aircraft), are you thinking about the flight or your mind is involved into thoughts that are not related to the task ahead (i.e. flying)

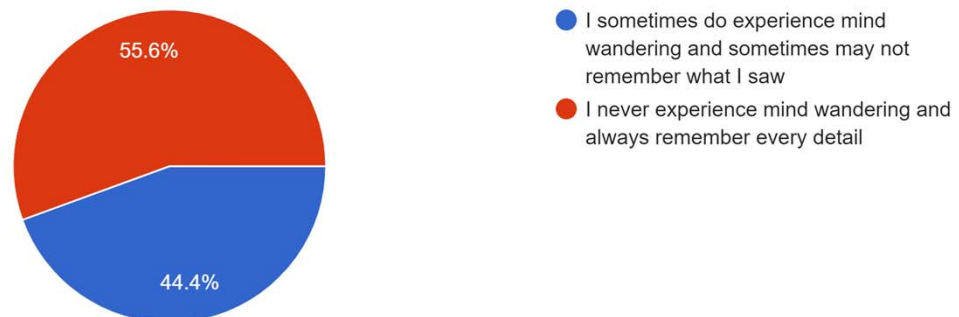


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During an external walk around or pre-flight exterior inspection, is it that your mind never wanders away and you exactly can remember what you saw?

45 responses

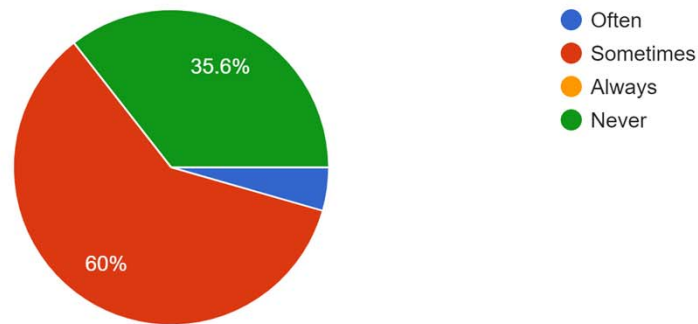


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During taxi, especially if there is a waiting time or during period of low workload during taxi, my mind wanders away outside the flying related thoughts

45 responses

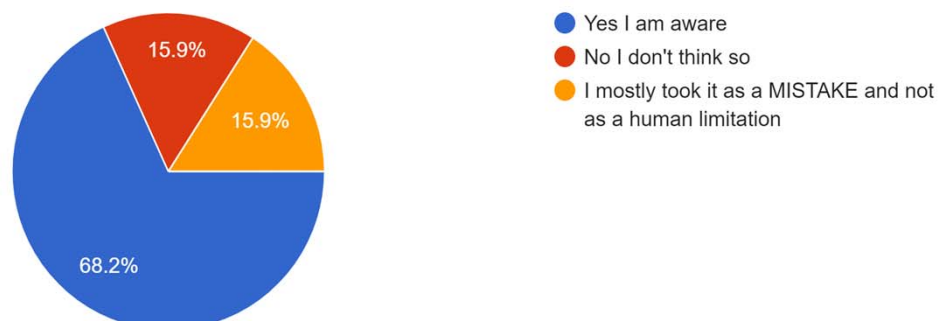


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During weather avoidance during descent if I get distracted and miss out checklists or other procedures, I am aware that this could be due lack of distraction management of my brain?

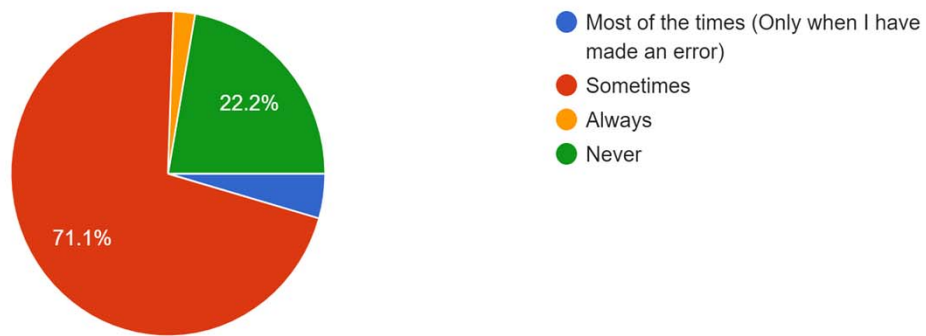
44 responses



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During simulator sessions or training flights, when I make an error, I feel that my mind gets entangled in that error (thinking about the reason of error or consequences of error or failure related thoughts) while the simulator / flight moves ahead. This can be a factor for further mistakes or errors as my mind may enter a catch-up loop. 47 responses

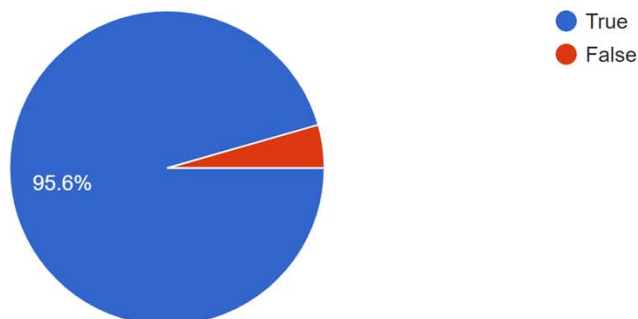


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Mind wandering can cause startle and surprise during flight operations or abnormal / emergency situations?

45 responses

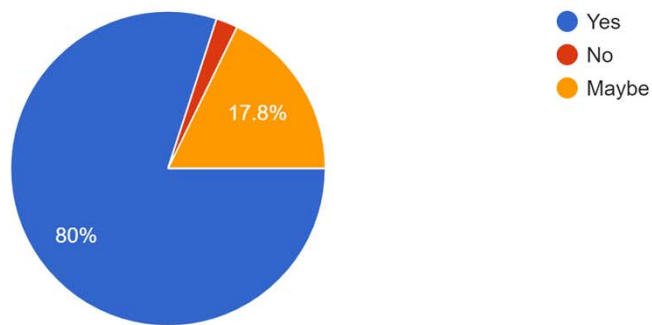


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Do you think, Mindfulness exercises could be helpful to enhance attention?

45 responses

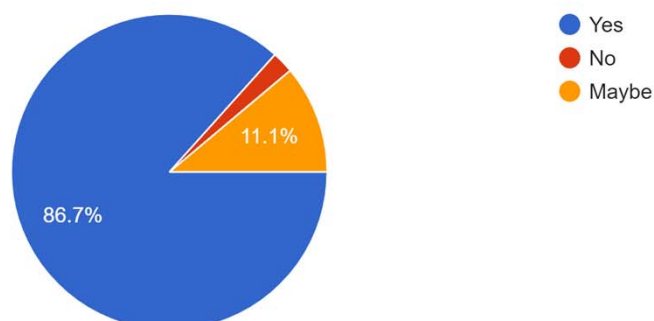


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In your opinion, is there a need to review the training curriculum for pilots to make place for mindfulness and attention enhancing scientific tools in CRM/Human Factors syllabi?

45 responses



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Mindfulness in Health and Safety

Incorporation of mindfulness training in the workplace increases safety and can be used as an intervention to enhance safety performance (Nolan, 2017)

Investigations into the benefits of mindfulness have shown a positive interaction between dispositional mindfulness and task, and between dispositional mindfulness and safety performance in complex work environments (Zhang et al., 2013)

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Rembrandt - 1632



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'Breathing' is not Respiration only

Breathing is a precursor to mindfulness

An effective breathing enhances the CENTERING of individuals

How we practice breathing

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Takeaways

Distraction is external – Mind-wandering is internal

We can be blind to our mind-wandering in aviation

Mindfulness improves performance in stressful flights Ops

Mindfulness improves mental health among pilots

Art, Breathing and meditation are tools of Mindfulness

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