

## The effect of scents on alertness

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# The Effect of Scents on Alertness



## Background

Scents can affect the moods of people (Diego, 1998).

Some have significant effect on alertness level. (Raudenbush, 2009)

Different aspects of alertness, e.g. wakefulness, attentiveness, cognitive performance (B.S. Oken, 2006).



## Objectives

1. To determine if scent helps to increase alertness and wakefulness levels in humans.
2. To investigate how administering scent at intervals will affect alertness levels.
3. To investigate the effect of scent intensity on alertness levels.

## Methodology

Self report measures and task performance measures for alertness and wakefulness are taken when participants are subjected to the following scent conditions:

(I) Effect of 3 exposures with different intervals on alertness levels.

Intervals of: •10 seconds  
•60 seconds

Peppermint	→	1 (interval)	2 (interval)	3 (rest)
Eucalyptus	→	4 (interval)	5 (interval)	6 (rest)
Lavender	→	7 (interval)	8 (interval)	9 (rest)
Ylang Ylang	→	10 (interval)	11 (interval)	12

(II) Effect of scent intensity on alertness levels.

Scent Condition \ Intensity	Scent			
	Highly arousing scent 1 (E.g., Peppermint)	Highly arousing scent 2 (E.g., Eucalyptus)	Calming scent 1 (E.g., Lavender)	Calming scent 2 (e.g., Ylang Ylang)
Very low	Cell 1	Cell 2	Cell 3	Cell 4
Low	Cell 5	Cell 6	Cell 7	Cell 8
High	Cell 9	Cell 10	Cell 11	Cell 12
Very high	Cell 13	Cell 14	Cell 15	Cell 16



## Applications

Makes soldiers more alert and vigilant to their surroundings.  
Increase the task performance of soldiers.