

Fatigue in visually impaired employees

insight in a model of fatigue & effect of a 2-day intervention

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Introduction

2 day training "Energy managing in your job"

67 Employees Mbo+ / Hbo / WO with a visual impairment

Training much appreciated in 2014:
57% valued the training with 9 or 10

Questions:

- How strong is the fatigue in this group?
- What factors contribute to fatigue?
- What is the effect of the training?

Are they tired?

Fatigue: Emotional Exhaustion (scale 0-6)

Working Dutch population 1.78

Working Dutch with burn-out : 3.80

Visually impaired workers: 3.41

Sign. more than normal Dutch t(66)= 8.82, p < .001

Sign. less than burn out workers t(66)= -2.14, p < .036

The model

Work stressors:

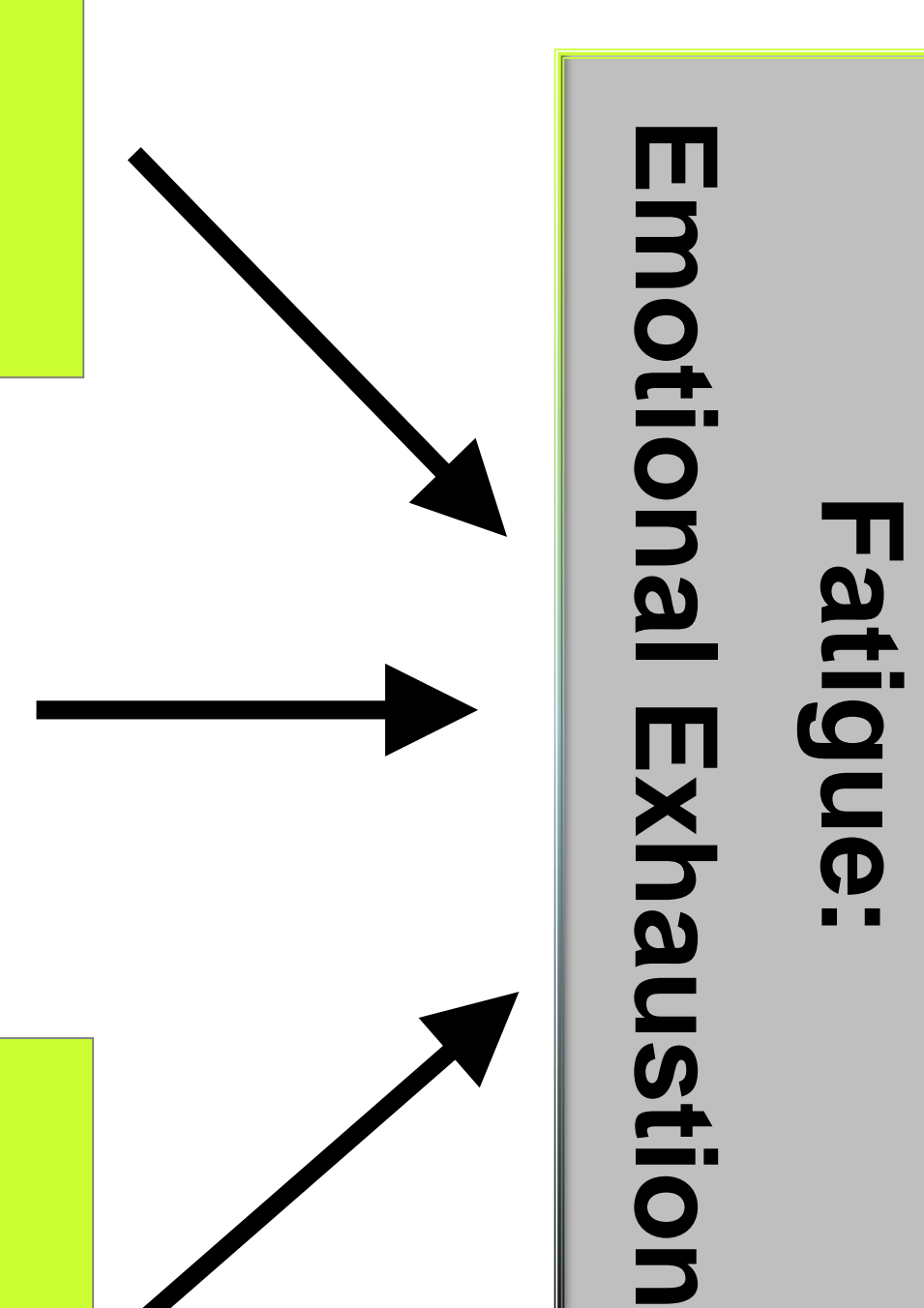
1. Travel & Mobility
2. Working pace
3. Visual effort
4. Physical effort
5. Social implications

Individual factors:

6. Achievement motivation
7. Personality (N & E)
8. Coping style

Energy sources:

9. Social support
10. Inspiring work
11. Adjustments & accessibility tools
12. Routines



What influences fatigue?

- **Working pace** r = .49** (beta = .447, t(61) = 4.20, p < .001),
- **Visual effort** r = .34** (beta = .225, t(61) = 2.14, p = .037)
- **Adjustments** r = -.33** (beta = -.279, t(62) = -2.32, p = .024)
- **"I am inclined to burden myself too heavily"** r = .31** (beta = .317, t(64) = 2.06, p = .044)

Stressors explained 31 % of variance in fatigue

Personal factors explained 11% of variance in fatigue

Energy sources explained 13% of variance in fatigue

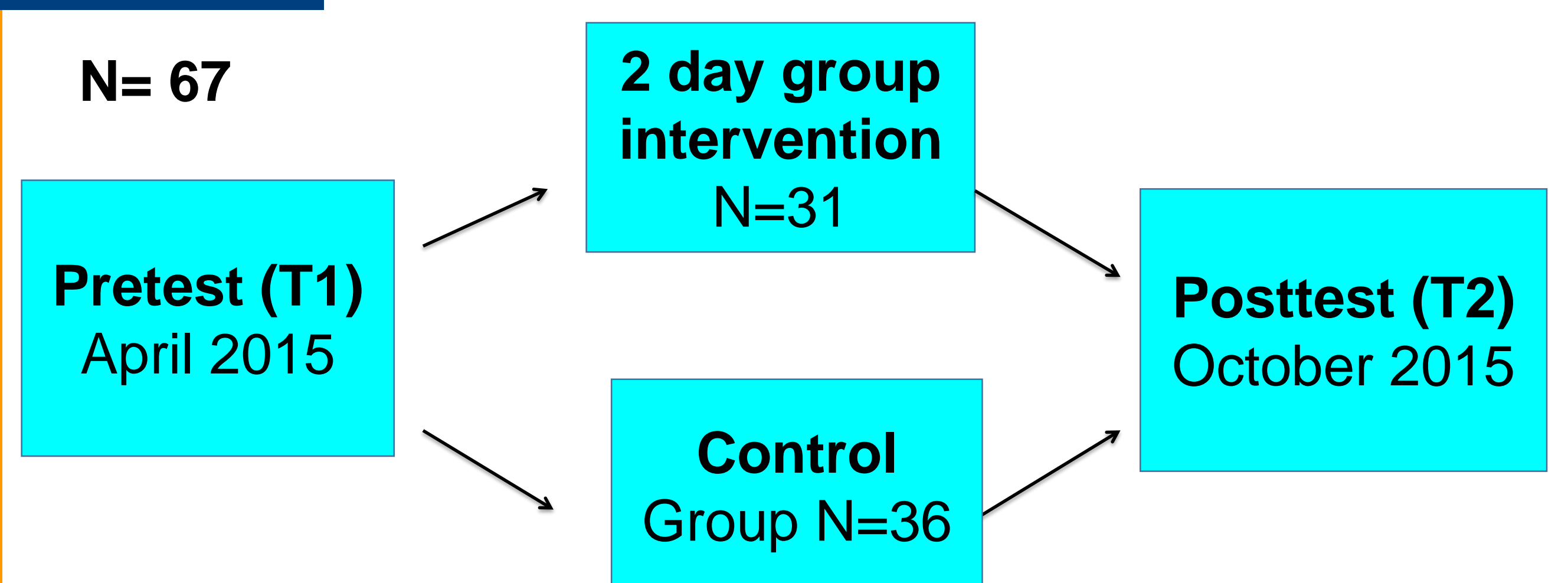
NO influence found of:

- Individual personal factors like **Neuroticism & Extraversion & coping style** had no effect on fatigue.
- **Social Support** correlated r = -.31* but did not attribute to fatigue in regression analysis. But it did relate to problems with **working pace** and use of **adjustments**. Extraverts experienced more social support
- **Routines** are used more often when vision is more impaired, but no association with fatigue was found.

Surprising:

- 82% found their work strenuous in some degree. But that did not relate to **hours behind a computer**
- **10 finger typing** did not relate to fatigue.

Method



Effect of the training?

- Decrease was significant over time, but no difference between groups was found in fatigue.
- Intervention group **adjusted their tasks** more often to what inspires them.
- Decrease in fatigue was bigger when action was taken to diminish visual effort, and when the **number of actions** taken to counter fatigue was bigger.

	Fatigue T1	Fatigue T2	Decrease
Intervention group	3,31	2,96	-11 %
Control group	3,46	3,18	- 8 %