

## EFFECT OF PHYSICAL EXERCISE ON WORK ABILITY AMONG MIDDLE-AGED WOMEN- A RANDOMIZED AND CONTROLLED TRIAL

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## BACKGROUND OF THE STUDY

- Physical capacity declines with age and this could increase work strain
- A good physical capacity helps to compensate the decrease in physical capacity
- Physical activity and exercise is known to be associated with women's psychological wellbeing
- There is little knowledge about the effects of exercise on work ability and strain at work among menopausal working women

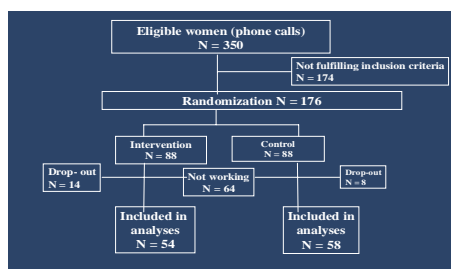
## AIM OF THE STUDY

- to investigate effects of increased leisure-time physical exercise
  - on work ability and daily physical and mental strain
  - on menopausal symptoms
  - sleep quality

## STUDY METHODS

- Women with daily menopausal symptoms recruited to the trial by a newspaper ad
- Questionnaires (Baseline and after 6 month)
  - Work Ability Index WAI (7 poor- 49 excellent)
  - Work ability compared to mental and physical work demands (1 very poor- 5 very good)
  - Work satisfaction (0 poor-10 excellent)
  - Stress (0 no stress-10 a lot of stress)
- Mobile phone diary (twice/day)
  - physical and mental work strain ( 1 very low-5 very high)
  - menopausal symptoms (hot flushes during day and night)
  - sleep quality

## PARTICIPANTS FLOW



## BACKGROUND INFORMATION OF THE PARTICIPANTS

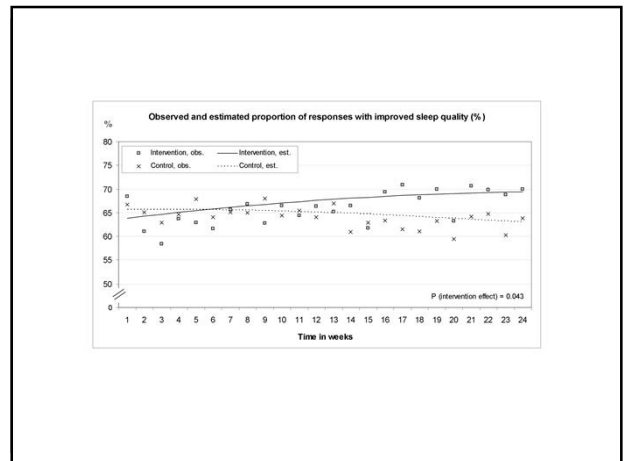
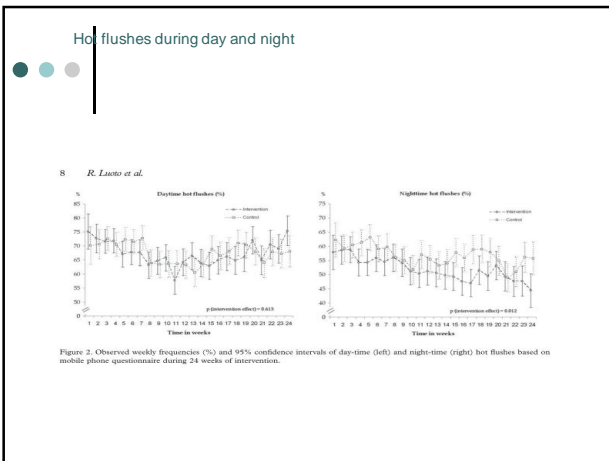
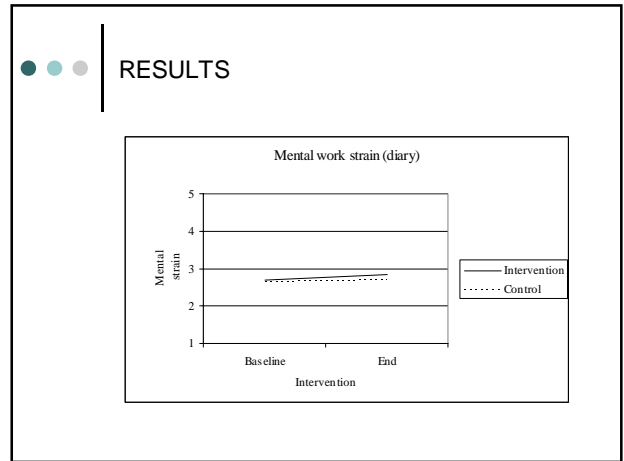
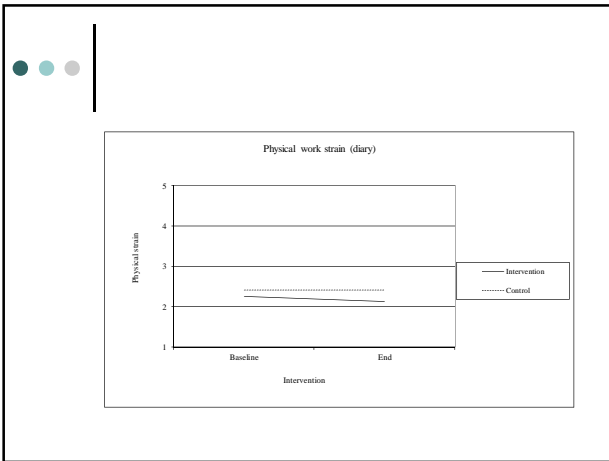
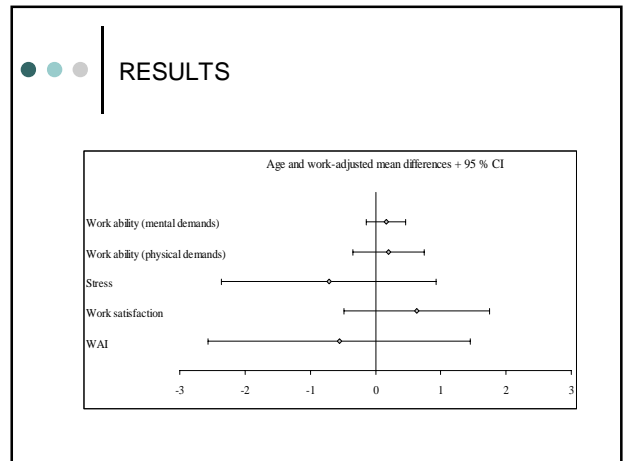
- Age, weight, body mass index (BMI), nature of the work and working hours per week at baseline in the control and intervention groups.

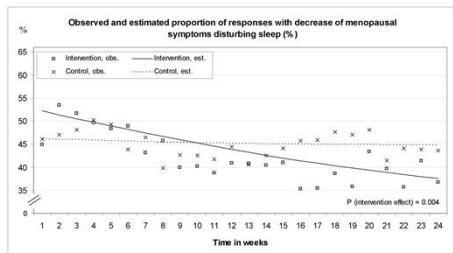
	Intervention group (n=54)	Control group (n=58)
Age (years)	54.1±3.36	53.6±3.44
Weight (kg)	72.2±11.91	73.25±13.9
BMI (kg/m <sup>2</sup> )	26.7±4.00	27.4±4.69
Nature of the work (%)		
physical	13.0	13.8
mixed	25.9	24.1
mental	61.1	62.1
Working hours/week	37.3±12.5	36.0±14.1

## RESULTS

- Baseline variables of the WAI, work satisfaction, stress and work ability (physical and mental demands) in the control and intervention groups.

	WAI	Work satisfaction	Stress	Work ability (physical demands)	Work ability (mental demands)
Scale	(7-49)	(0-10)	(0-10)	(1-5)	(1-5)
Intervention	30.84±4.62	7.08±2.04	4.76±2.47	3.85±0.72	3.87±0.73
Control	31.20±4.10	7.72±1.99	4.53±2.72	3.83±0.75	3.88±0.75





## CONCLUSION

- Among working women the exercise intervention was effective in decreasing perceived physical strain at work but had no significant effect on perceived work ability and perceived well-being at work
- Among all women the exercise also reduced menopausal symptoms during the night and increased the sleep quality

Thank you for your attention!

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