

# Performance II: Benchmarking job related experiences of staff



Liza Van Eenoo  
Prof. dr. Anja Declercq



# Research questions

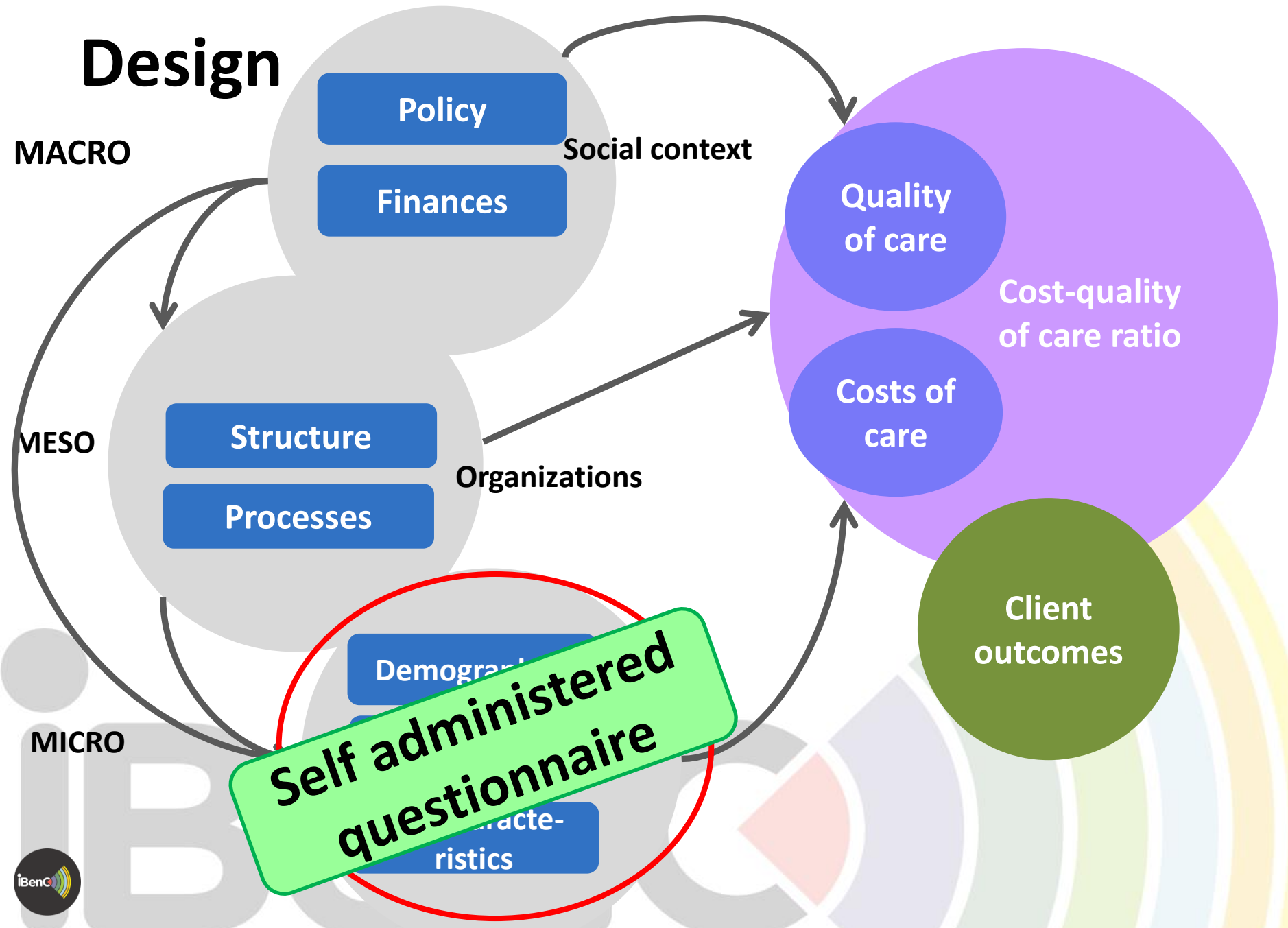
- Work environment elements
  - Differences between the care models?
  - Variables related to quality of care?



# METHODS



# Design



# Methods: Data collection

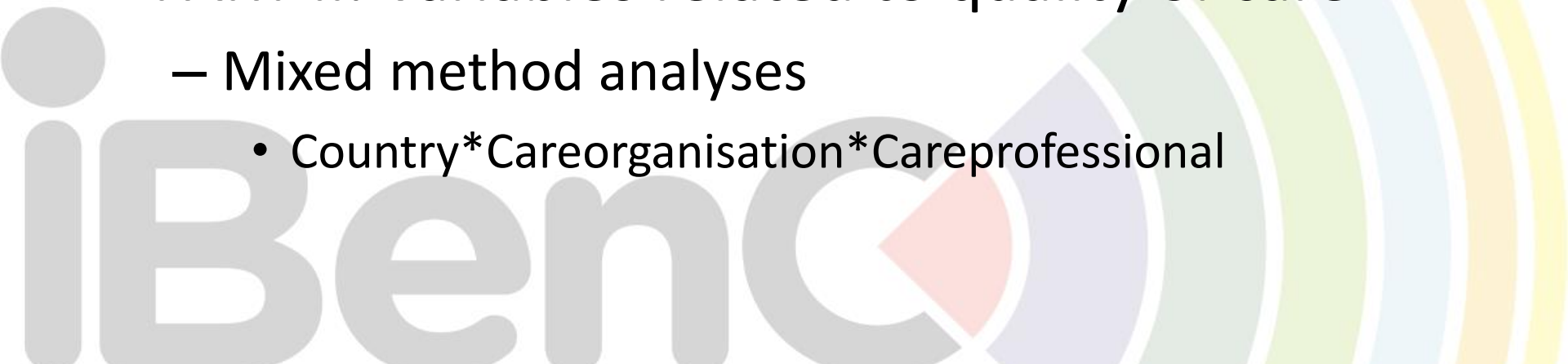
- Care professionals of the included community care organisations
  - Nurses / second level nurses
  - Social workers
  - Home health aides
  - Managers with a leading position
  - Supportive administrative staff
  - Other community care professionals
- Questionnaire on the characteristics of the community care professionals
  - Standardised across the six countries
  - Validated by experts and by back-translations

# Methods: Data collection

- Content of the questionnaire
  - Demographic data
  - Data concerning the social condition
  - Job characteristics
  - Copenhagen Psychosocial questionnaire (COPSOQ) (Kristensen et al. 2005; Pejtersen et al. 2010)
  - Copenhagen Burn-out Inventory (Kirstenen et al ,2005)
  - Job Rewarding Questionnaire (subscale) (Marshall et al, 1991)
  - Intention-to-turnover scale (Cammann, C, 1979)
  - Scheduling Dissatisfaction Scale (Stewart et al, 2011)
  - Physical Workload Scale (Kiss et al, 2012)
  - Individualised Care Scale (Suhonen, 2010; 2012)

# Methods: Analyses

- PART I: Benchmarking across the care models
  - Kruskal-Wallis test
  - Mann-Whitney U test
  - Multilevel analyses
- PART II: Variables related to quality of care
  - Mixed method analyses
    - Country\*Careorganisation\*Careprofessional



# RESULTS PART 1

**Benchmarking across the care models**





# Results: Response

- Overall response rate of 60% (n=1067)
- Benchmarking: 1033 care professionals, 29 organisations

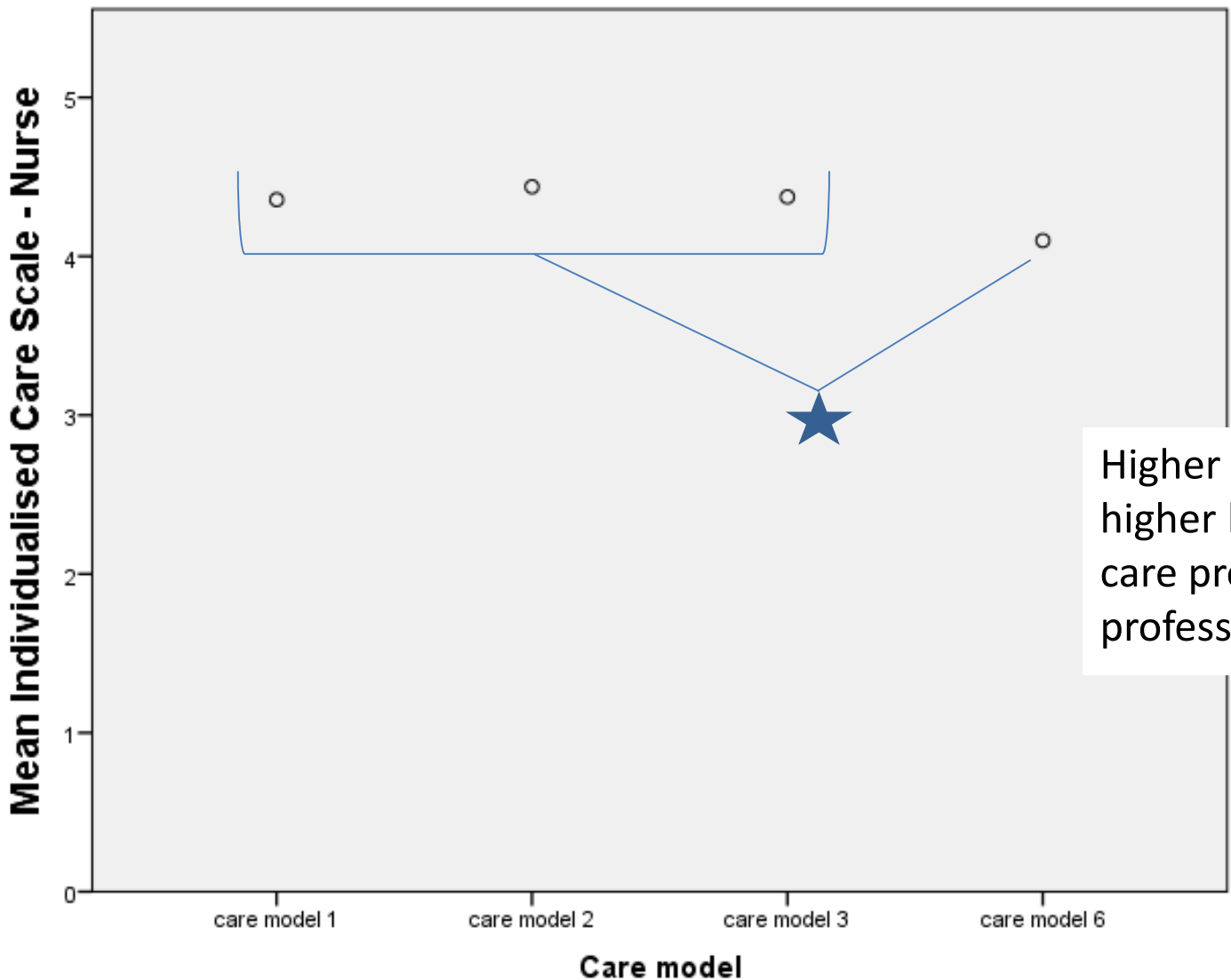
	Country	Care professionals (n)
Care model 1	Italy	43
	Netherlands	34
	Belgium	257
	Iceland	105
	Finland	172
	<b>Total</b>	<b>611</b>
Care model 2	Netherlands	132
	Finland	100
	<b>Total</b>	<b>232</b>
Care model 3	Belgium	87
	<b>Total</b>	<b>87</b>
Care model 6	Belgium	23
	Germany	80
	<b>Total</b>	<b>103</b>
<b>TOTAL</b>		<b>1033</b>

# Results: Description of the care professionals

		care model 1	care model 2	care model 3	care model 6	Total
		%	%	%	%	%
Function at your current employer	Nurse	60%	83%	59%	80%	67%
	Secondary nurse	26%	8%	5%	1%	18%
	Social worker	1%	0%	0%	1%	1%
	Home health aide	3%	0%	0%	9%	3%
	Manager with a leading position	5%	1%	21%	6%	5%
	Supportive administrative staff	2%	0%	16%	3%	3%
	Other	3%	8%	0%	1%	4%
Gender	Female	95%	94%	95%	83%	93%
	Male	5%	6%	5%	17%	7%
Agegroup	20-29 years	17%	13%	26%	18%	17%
	30-44 years	31%	24%	40%	28%	30%
	45-59 years	45%	56%	33%	49%	47%
	>= 60 years	7%	8%	0%	5%	6%
Highest education	lower than Bachelor degree	63%	61%	53%	94%	65%
	Bachelor degree or higher	37%	39%	47%	6%	35%

# Results: Individualised care

Care model	1	2	3	6
Patient-centered care	+(+)	++	+(+)	-
Specialised care professionals	++	(+)	++	(+)
Monitoring care performance	+(+)	++	-	++



Higher score represented higher level of individualised care provision in the care professionals point of view

★  $p < 0,05$

# Results: Work environment

(COPSOQ, CBI, PWS, SDS)

## **Demands at work**

- Physical workload
- Emotional demands
- Quantitative demands
- Work pace
- Job insecurity
- Work-family conflict

## **Support at work**

- Social support of supervisors
- Social community at work
- Recognition at work
- Quality of leadership
- Trust regarding management
- Justice at work

## **Controls at work**

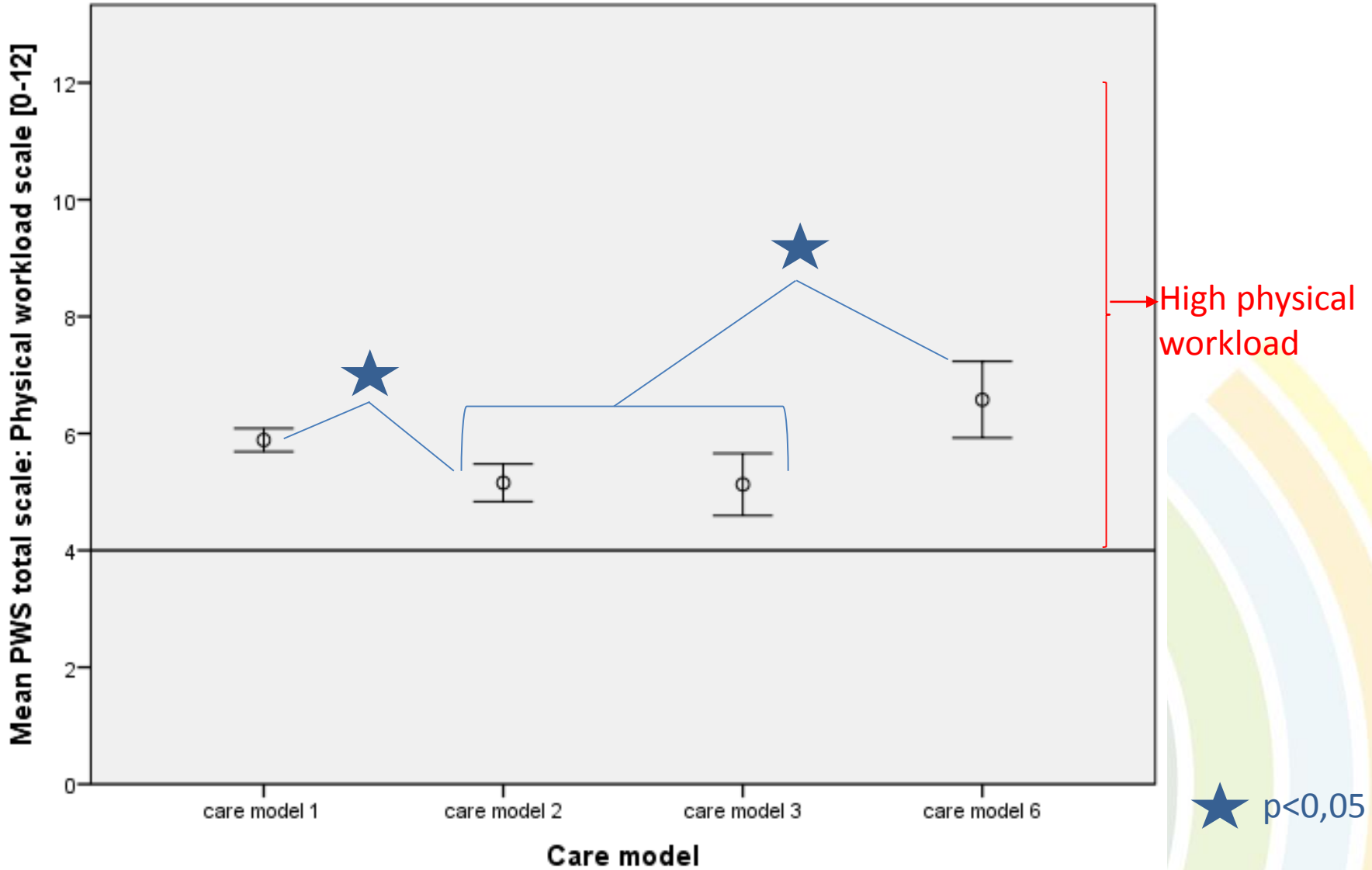
- Possibilities for development
- Role clarity
- Influence at work
- Control of working time
- Predictability
- (Payment)

## **Job outcomes care professionals**

- Scheduling Dissatisfaction
- Meaning of work
- Commitment to the workplace
- Job satisfaction
- Burn-out
  - Personal
  - Work related
  - Client related

# Results: Demands at work

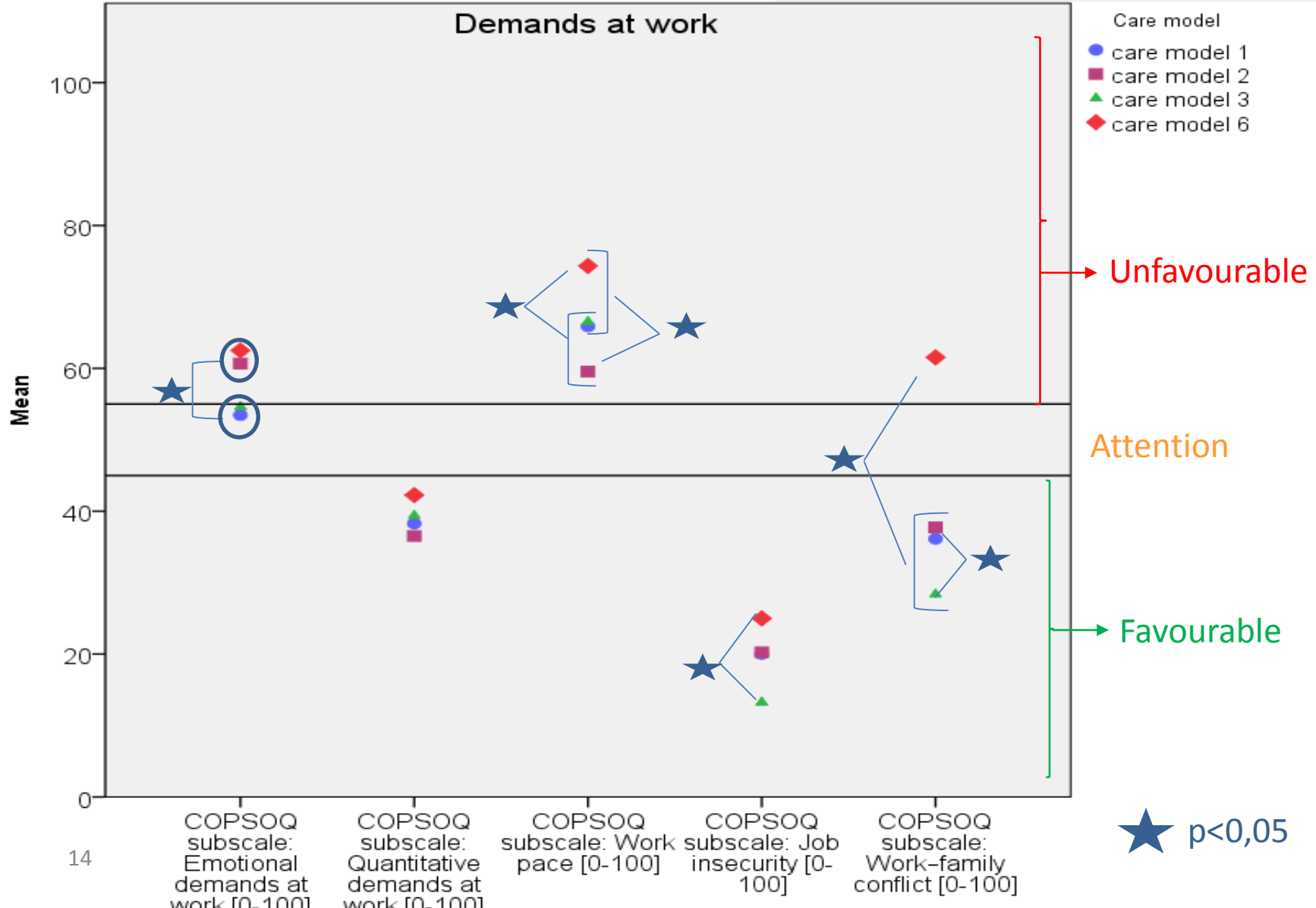
Care model	1	2	3	6
Patient-centered care	+(+)	++	+(+)	-
Specialised care professionals	++	(+)	++	(+)
Monitoring care performance	+(+)	++	-	++



# Results:

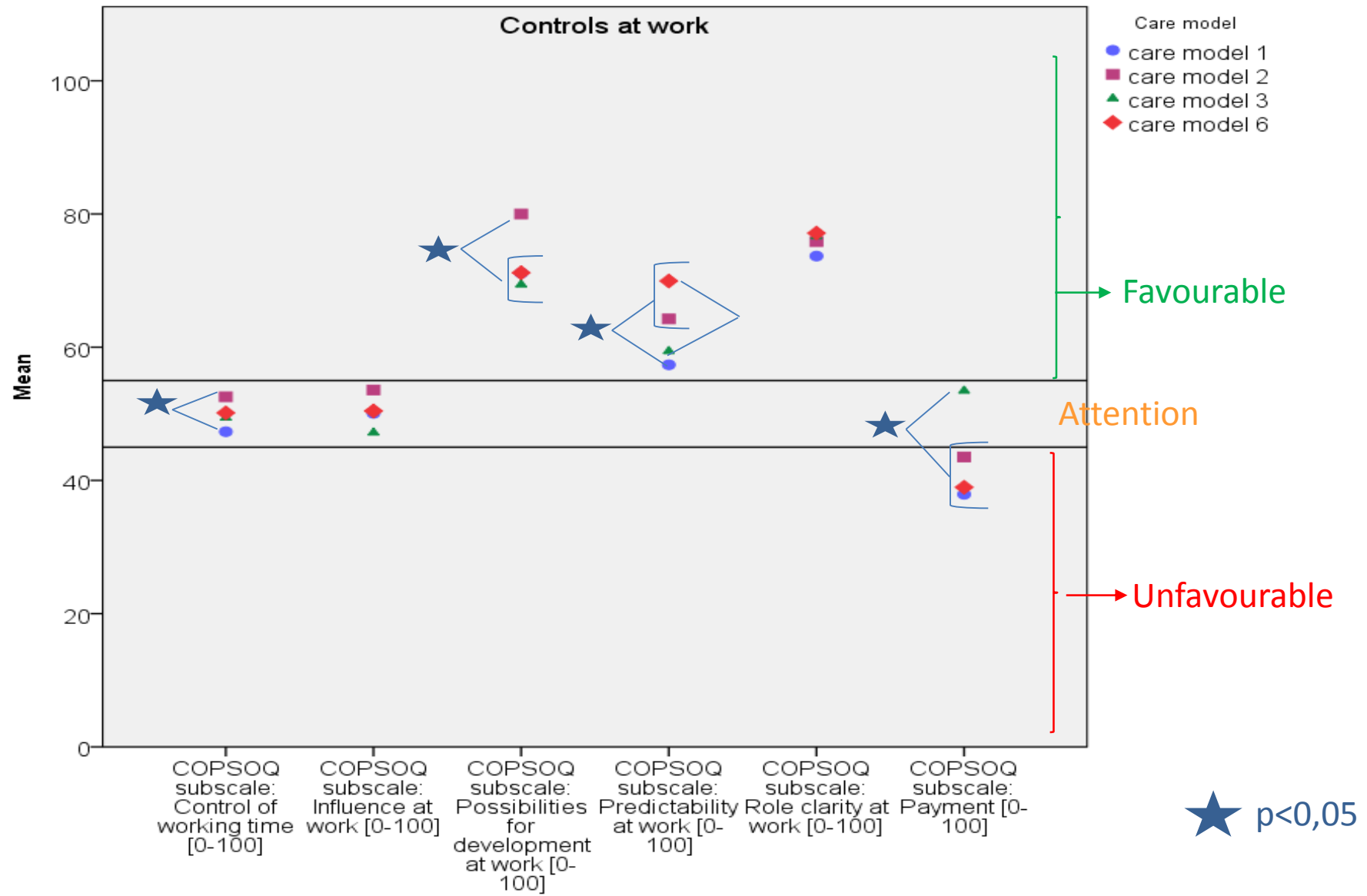
## Demands at work-COPSOQ

Care model	1	2	3	6
Patient-centered care	+(+)	++	+(+)	-
Specialised care professionals	++	(+)	++	(+)
Monitoring care performance	+(+)	++	-	++



# Results: Controls at work-COPSOQ

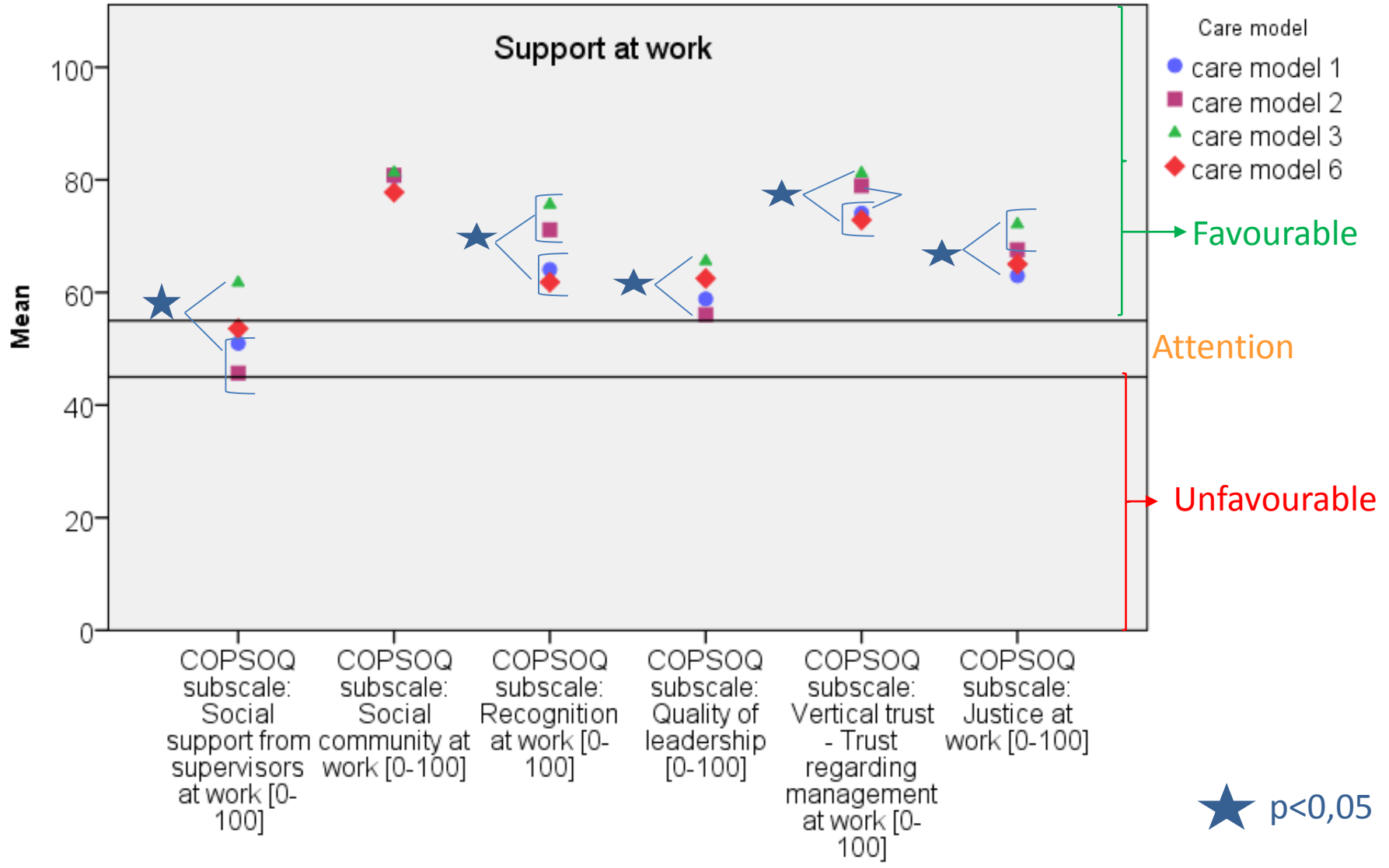
Care model	1	2	3	6
Patient-centered care	+(+)	++	+(+)	-
Specialised care professionals	++	(+)	++	(+)
Monitoring care performance	+(+)	++	-	++



# Results:

## Support at work-COPSOQ

Care model	1	2	3	6
Patient-centered care	+(+)	++	+(+)	-
Specialised care professionals	++	(+)	++	(+)
Monitoring care performance	+(+)	++	-	++

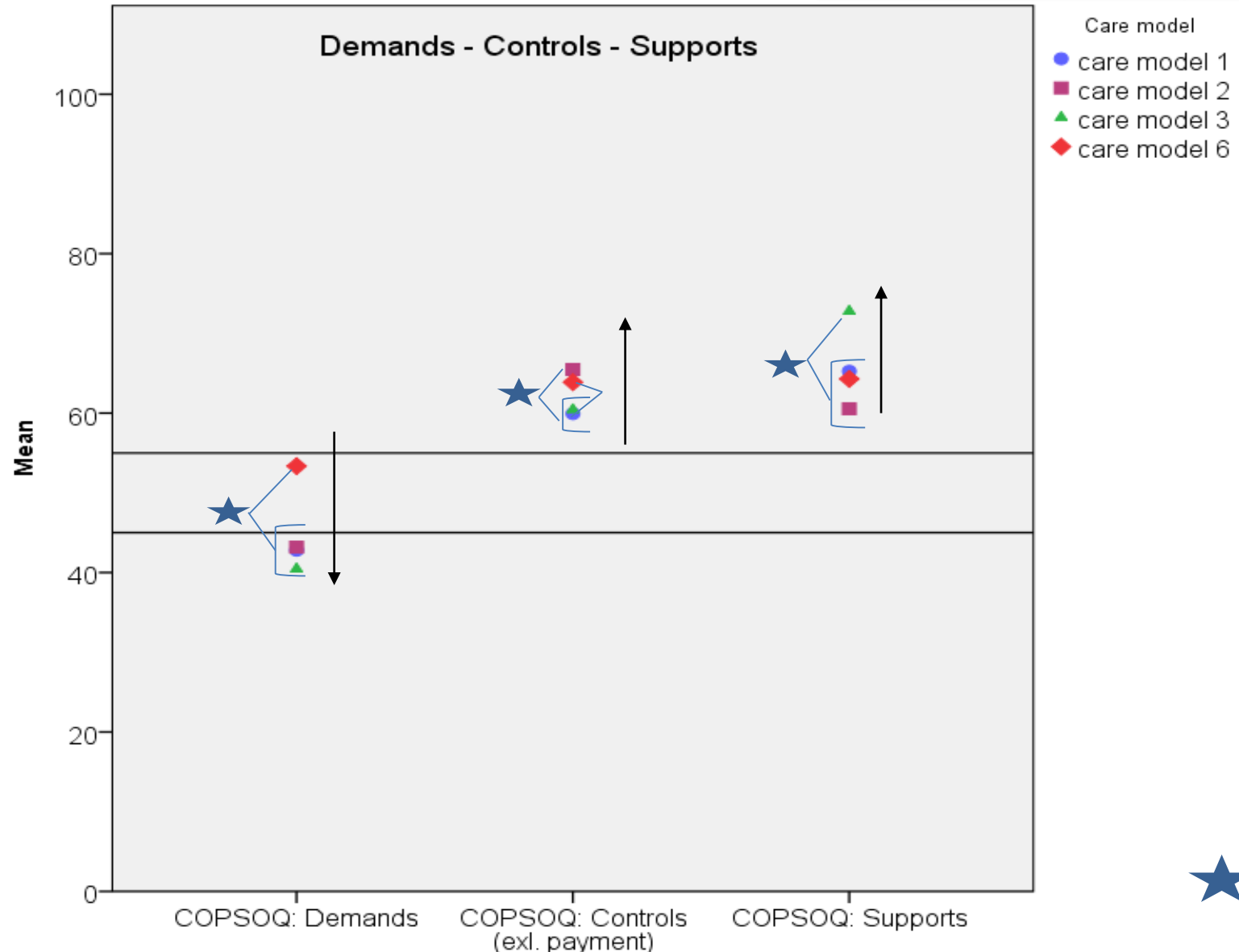




# Results:

## Total scores - COPSOQ

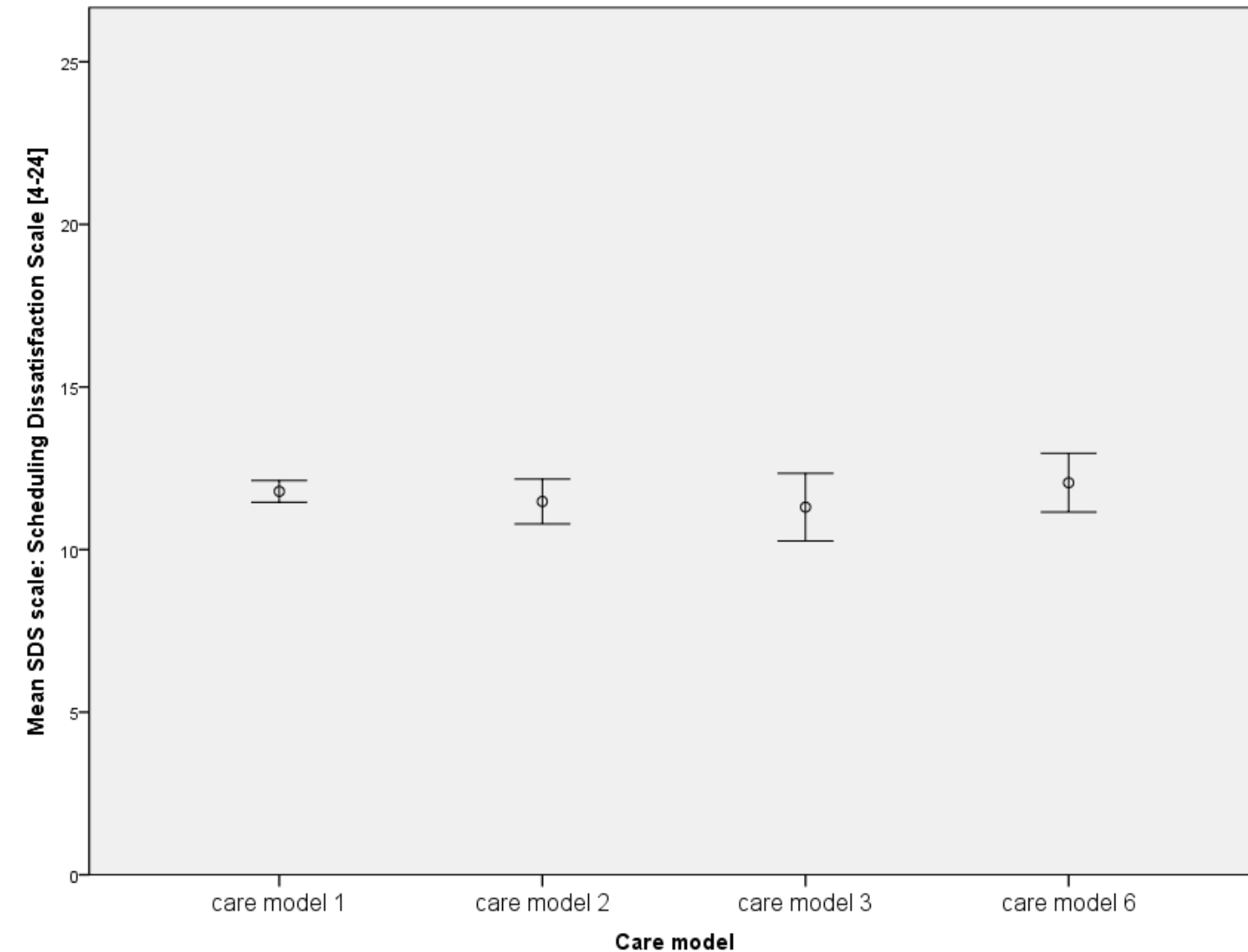
Care model	1	2	3	6
Patient-centered care	+(+)	++	+(+)	-
Specialised care professionals	++	(+)	++	(+)
Monitoring care performance	+(+)	++	-	++



# Results:

## Job outcomes - SDS

Care model	1	2	3	6
Patient-centered care	+(+)	++	+(+)	-
Specialised care professionals	++	(+)	++	(+)
Monitoring care performance	+(+)	++	-	++



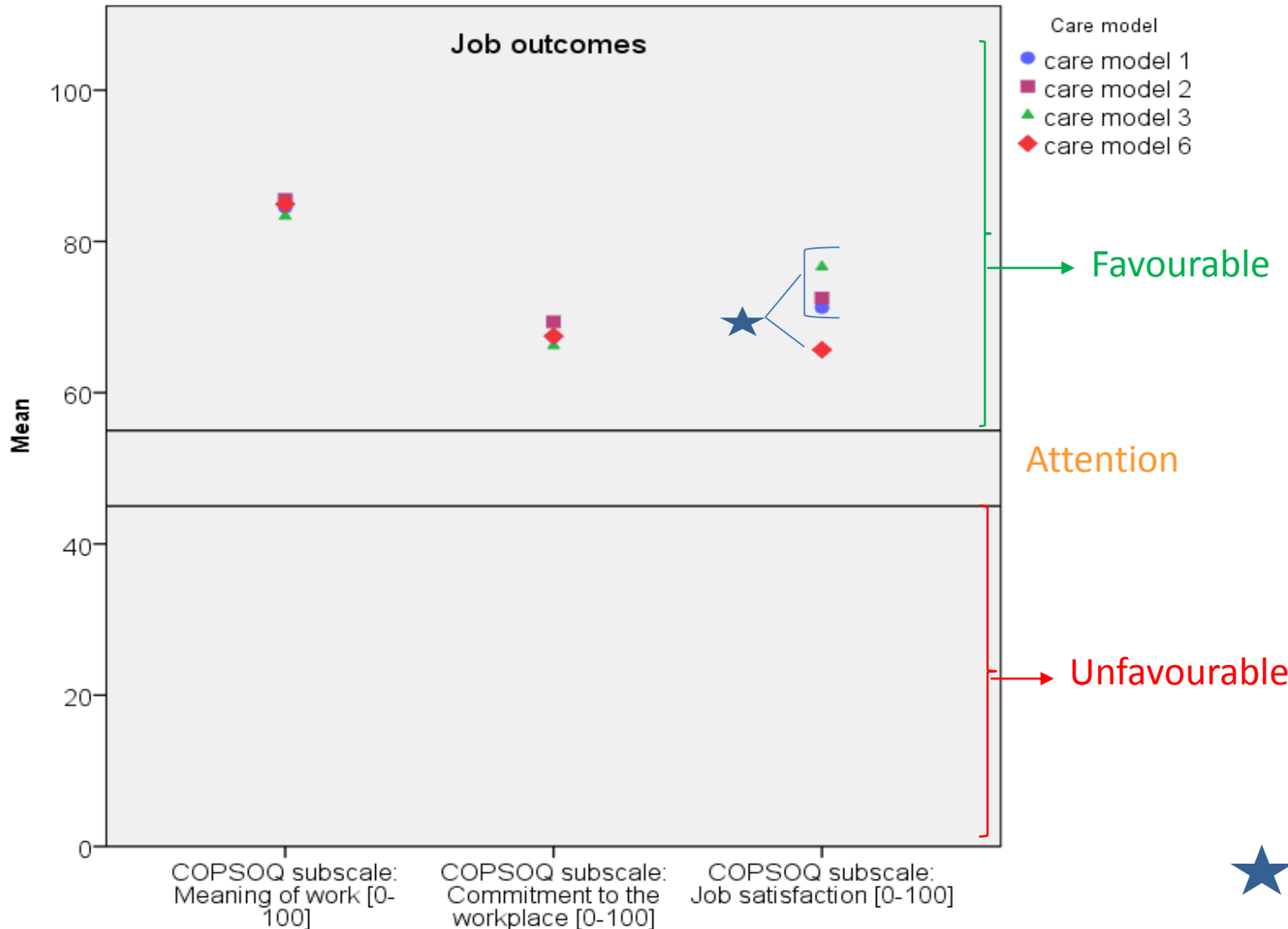
Error Bars: 95% CI

★  $p < 0,05$

# Results:

## Job outcomes-COPSOQ

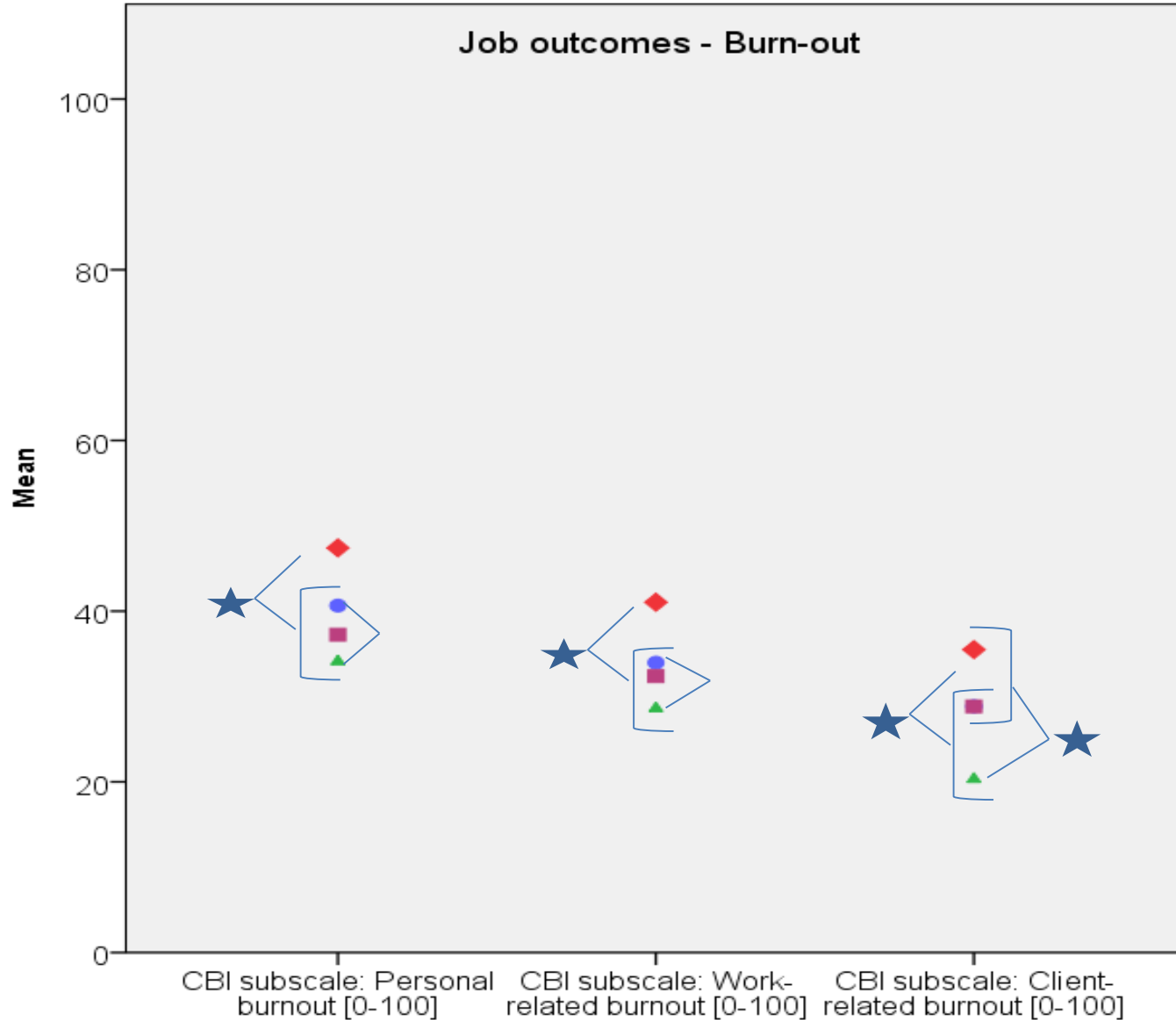
Care model	1	2	3	6
Patient-centered care	+(+)	++	+(+)	-
Specialised care professionals	++	(+)	++	(+)
Monitoring care performance	+(+)	++	-	++



# Results:

## Job outcomes - CBI

Care model	1	2	3	6
Patient-centered care	+(+)	++	+(+)	-
Specialised care professionals	++	(+)	++	(+)
Monitoring care performance	+(+)	++	-	++



Higher score representing burn-out

★ p<0,05

# CONCLUSIONS PART 1



# Conclusions PART 1

Care model	1	2	3	6
Patient-centered care	+(+)	++	+(+)	-
Specialised care professionals	++	(+)	++	(+)
Monitoring care performance	+(+)	++	-	++

Care model 6, care model with a low focus on patient-centered care → Lower level of individualised care provision in the care professionals point of view

## ■ Demands

- Unfavourable scores:
  - Physical workload
  - Work pace
  - Emotional demands – care model 2 and 6
  - Work-family conflict – care model 6
- Care model 6 → highest demands at work

## ■ Support

- Attention:
  - Social support from supervisors
- Care model 3 → highest support at work

## ■ Controls

- Unfavourable scores :
  - Payment
- Attention:
  - Control of working time
  - Influence at work

## ■ Job outcomes

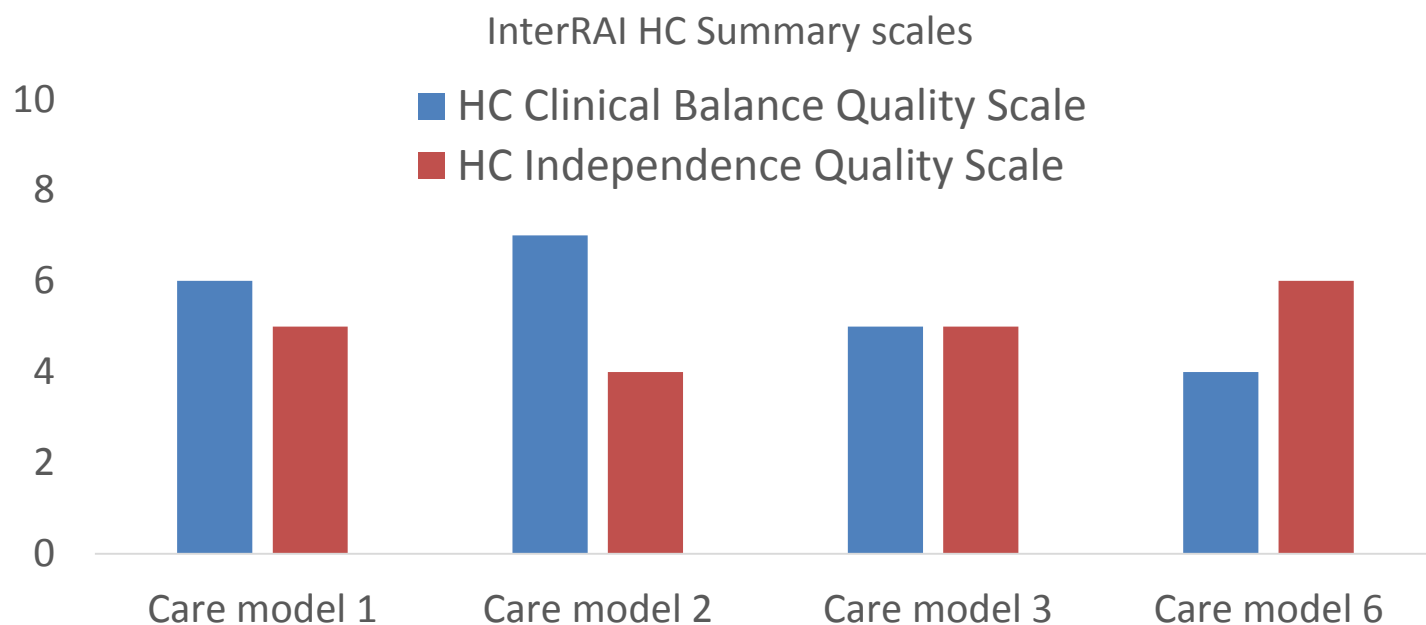
- Care model 6
  - Lowest job satisfaction (but favourable!)
  - Highest burn-out scores
- Care model 3:
  - Lowest client-related burn-out score

# Conclusions PART 1

Care model	1	2	3	6
Patient-centered care	+(+)	++	+(+)	-
Specialised care professionals	++	(+)	++	(+)
Monitoring care performance	+(+)	++	-	++

The care models with the best quality of care do not seem to offer the best work environment to the care professionals

➤ Variables related to quality of care?



# PRELIMINARY RESULTS PART 2

Variables related to quality of care





## Independent variables

Country code  
Care model  
Identification of organisation  
Function at your current employer  
educationbis  
Age group  
Gender  
Individulised Care-nurse

### DEMANDS

PWS total scale: Physical workload scale [0-12]  
COPSOQ subscale: Emotional demands at work [0-100]  
COPSOQ subscale: Quantitative demands at work [0-100]  
COPSOQ subscale: Work-family conflict [0-100]  
COPSOQ subscale: Work pace [0-100]  
COPSOQ subscale: Job insecurity [0-100]

### CONTROLS

COPSOQ subscale: Control of working time [0-100]  
COPSOQ subscale: Influence at work [0-100]  
COPSOQ subscale: Possibilities for development at work [0-100]  
COPSOQ subscale: Role clarity at work [0-100]  
COPSOQ subscale: Predictability at work [0-100]  
COPSOQ subscale: Payment [0-100]

### SUPPORT

COPSOQ subscale: Social support from supervisors at work [0-100]  
COPSOQ subscale: Social community at work [0-100]  
COPSOQ subscale: Recognition at work [0-100]  
COPSOQ subscale: Vertical trust - Trust regarding management at work [0-100]  
COPSOQ subscale: Justice at work [0-100]  
COPSOQ subscale: Quality of leadership [0-100]

### OUTCOMES

COPSOQ subscale: Meaning of work [0-100]  
COPSOQ subscale: Commitment to the workplace [0-100]  
COPSOQ subscale: Job satisfaction [0-100]  
CBI subscale: Personal burnout [0-100]  
CBI subscale: Work-related burnout [0-100]  
CBI subscale: Client-related burnout [0-100]  
SDS scale: Scheduling Dissatisfaction Scale [4-24]

# Methods

HC Clinical Balance Quality  
Scale\_6months

Mixed model analysis  
Country\*Organisation\*Careprofessional

HC Independence Quality  
Scale\_6months

# Response

- Data on the QOC AND the work environment: 820 care professionals, 17 organisations



# Results

HC Clinical Balance Quality Scale	HC Independence Quality Scale
Country	Country
Care model	Care model
Organisation	Organisation
Individualised Care-nurse (+)	
Work pace (-)	Work pace (+)
Physical workload (-)	Physical workload (+)
	Job insecurity (-)
Control of working time (-)	
Recognition at work (-)	Recognition at work (+)
	Quality of leadership (-)
	Social support from supervisors at work (-)
Client-related burnout (+)	Client-related burnout (-)
Job satisfaction (+)	

# Next steps

- Which variables on the country level predict QOC?
- Which variables on the organisational level (structure and care processes) predict QOC?
- First analyse the predictive variables per level, than combined in one model.
- Ideas?



# Contact

[Liza.VanEenoo@kuleuven.be](mailto:Liza.VanEenoo@kuleuven.be)

[Anja.Declercq@kuleuven.be](mailto:Anja.Declercq@kuleuven.be)



# Conclusions

- **4 variables with the highest predictive value for both scales**

1) Organisation (n=17)

- Clinical Balance scale
  - 3 organisations of Belgium the lowest
  - 1 organisation of Italy the highest
- Independence Quality scale
  - 1 organisation of Italy the lowest
  - 4 organisations of Belgium the highest

2) Care model (1-2-6)

- Clinical Balance scale
  - Care model 1 the lowest
- Independence Quality scale
  - Care model 2 the lowest

3) Country

- Clinical Balance scale
  - Belgium and Iceland the lowest
  - Italy the highest
- Independence Quality scale
  - Italy the lowest
  - Belgium the highest

4) Emotional demands

- The higher emotional demands, the higher the QOC

# Methods: Instruments

## ■ Copenhagen Psychosocial Questionnaire (COPSOQ)

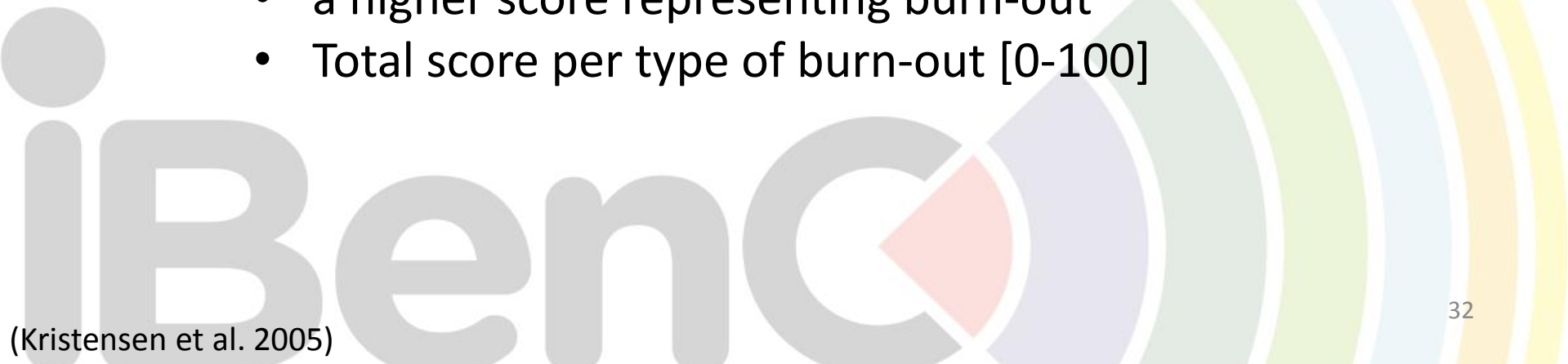
→ psychosocial work environment

- General health
- Stress
- Possibilities for development
- Job satisfaction
- Meaning of work
- Commitment to the workplace
- Work pace
- Quantitative demands
- Emotional demands
- Role clarity
- Work-family conflict
- Influence at work
- Degree of freedom
- Predictability
- Quality of leadership
- Social support from supervisors
- Trust regarding management
- Justice
- Recognition
- Sense of community
- Offensive behavior
- Insecurity at work

- 5 or 4 response categories
- Total score per subscale [0-100]

# Methods: Instruments

- Copenhagen Burn-out Inventory (CBI)
  - Personal burn-out (6 items)
  - Work-related burn-out (7 items)
  - Client-related burn-out (6 items)
  - 5 response categories
  - a higher score representing burn-out
  - Total score per type of burn-out [0-100]





# Methods: Instruments

- Physical Workload scale (PWS)
  1. My job requires fast and sustained physical efforts
  2. My job involves repetitive movements of the same part of my body (muscle, tendon, joint,...)
  3. During my work I have to move or lift heavy loads
  4. I have to work for long periods in awkward postures
  
- 4 response categories
- A higher score means higher physical workload
- Total score [0-12]
- Cut-off 4 → high physical workload

# Methods: Instruments

- Scheduling Dissatisfaction Scale (SDS)

→ the level of (dis)satisfaction of the work schedule of nurses

In my work situation...

...my work schedule is satisfactory

...I am satisfied with the number of hours I work

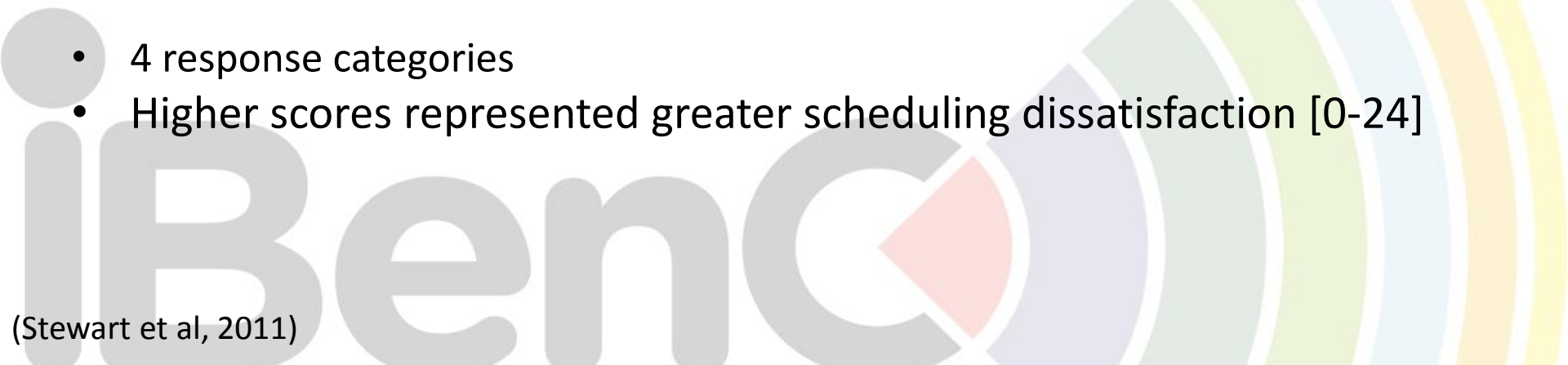
...I am satisfied with the flexibility in overall scheduling

...I am satisfied with the shifts I work

...I am satisfied with the flexibility in scheduling weekends/days off

...I am satisfied with amount of overtime I'm required to work

- 4 response categories
- Higher scores represented greater scheduling dissatisfaction [0-24]



# Methods: Instruments

- Individualised Care Scale-nurse B (ICS-nurse)
  - to what extent the care professionals provide individualised care in the care professionals point of view
  - 17 items
  - 5 response categories
  - Total score [1-5]
  - Higher score represented higher level of individualised care provision in the care professionals point of view

