

# COPSOQ IN RELATION TO THE JD-R MODEL

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# BACKGROUND:

## JOB DEMANDS-RESOURCES MODEL

- **Job resources:** physical, psychological, social, or organizational aspects of the job that are functional in achieving work goals; reduce job demands and the associated physiological and psychological cost; stimulate personal growth, learning, and development (Demerouti et al, 2001)
- **Job demands:** physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort and are therefore associated with certain physiological and/or psychological costs (Demerouti et al., 2001).
- **Work engagement** is often studied as part of the JD-R model.
- 7240 hits in Google scholar for the JD-R model

# WORK ENGAGEMENT IS A POSITIVE, RELATIVELY STABLE, AFFECTIVE-MOTIVATIONAL STATE OF FULFILLMENT AT WORK

- **Vigor**

High levels of energy and mental flexibility while working, willingness to put effort into one's work, and persistence when facing difficulties

- **Dedication**

Sense of significance, strong involvement in one's work, enthusiasm, inspiration, pride, and challenge

- **Absorption**

Pleasant state of total immersion in one's work which is characterized by time passing quickly and being unable to detach oneself from the job

(Schaufeli et al, 2002)

# WHY WORK ENGAGEMENT IS IMPORTANT FROM THE EMPLOYER'S PERSPECTIVE

- Business unit-level engagement was positively related to several business unit outcomes in **36 US organizations** and nearly 8000 business units (Harter et al. 2002).
- Work engagement was positively associated with employee performance and customer loyalty among **Spanish restaurant and hotel employees** (Salanova et al. 2005)
- Work engagement negatively predicted the frequency of registered sickness absenteeism among **Dutch telecom managers** (Schaufeli et al. 2009)
- Daily work engagement positively predicted daily financial returns **among Greek fast-food company employees** (Xanthopoulou et al. 2009)
- Work engagement positively associated with clinical productivity and pay level among **dentists in public sector** (Hakanen & Koivumäki, 2014) and it predicted proactive behavior and work-unit innovativeness (Hakanen et al. 2008), organizational commitment (Hakanen et al. 2008b), and intentions and willingness to work longer careers (Hakanen & Perhoniemi 2008) **among Finnish dentists**

# WHY WORK ENGAGEMENT IS IMPORTANT FROM THE EMPLOYEE'S PERSPECTIVE

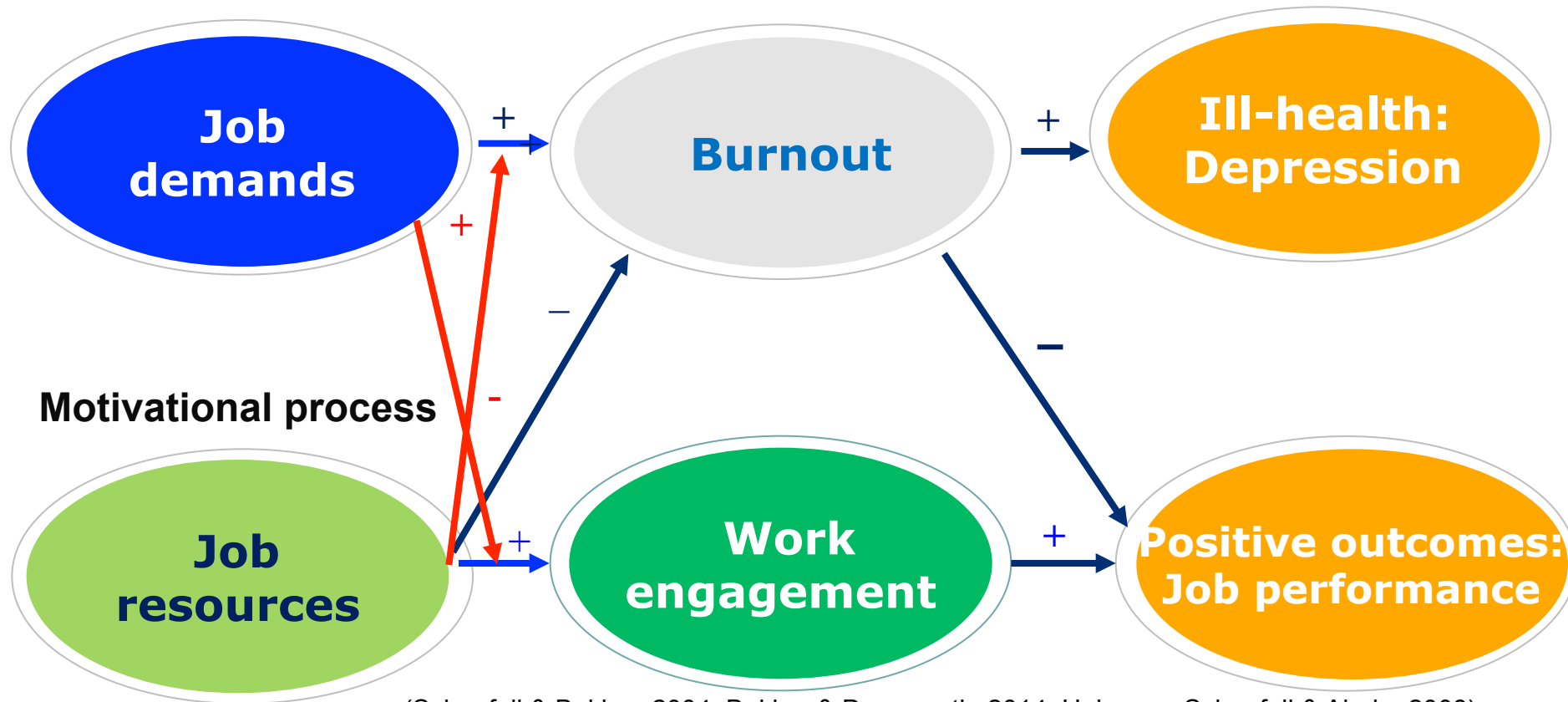
## Engaged employees

- ...are happier and less depressed, even in the long-term (Hakanen & Schaufeli, 2012)
- ...are healthier in terms of healthy cardiac autonomic activity (Seppälä et al. 2012) and have better work ability (Airila et al. 2012)
- ...are more satisfied with their marriages and their roles as parents (Hakanen & Perhoniemi 2006)
- ...sleep better (Hakanen, Rodrigues-Sanchez & Perhoniemi 2012)
- ...experience higher levels of work-family enrichment also in the long-term (Hakanen; Peeters & Perhoniemi 2011) and less work-family conflict (Hakanen & Peeters, 2015)
- ...and do not turn into workaholics over time (Hakanen & Peeters, 2015)

**...and these are of course also positive outcomes for the employer!**

# JOB DEMANDS-RESOURCES MODEL

Health impairment process



(Schaufeli & Bakker, 2004; Bakker & Demerouti, 2014; Hakanen, Schaufeli & Ahola, 2008)

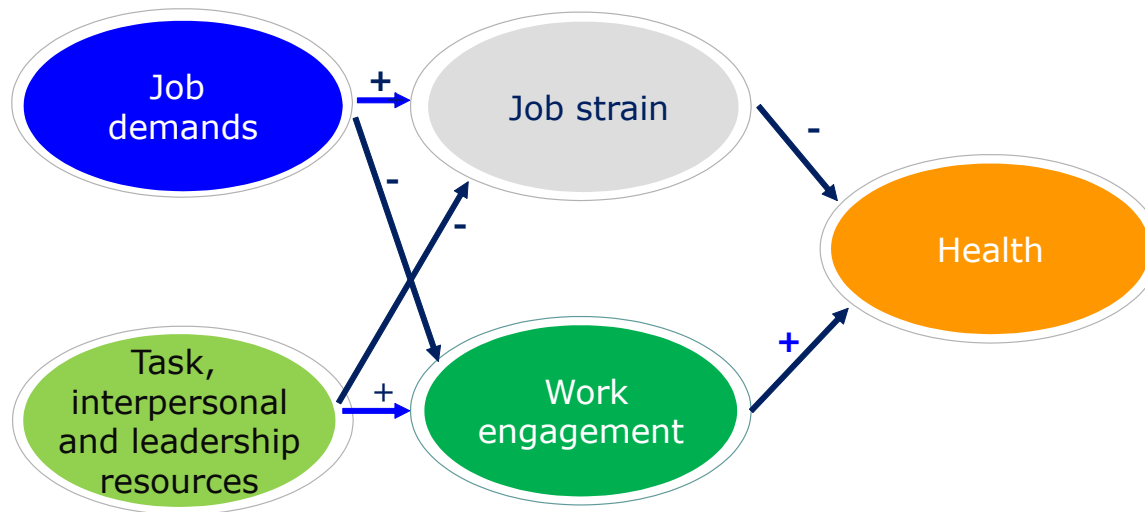
# SOME OPEN ISSUES

- Job resources can exist at task, organization of work, interpersonal and social, and organizational level (Bakker et al., 2003).
- However, there is sparse knowledge about the relative importance of different kinds of job resources and job demands in the JDR model (Hakanen & Luukkonen, 2015).
- Thus far, the role of leadership in the JD-R model has rarely been addressed.
- Work engagement has been found to predict health outcomes as well



# AIMS

- To test factorial validity of the the COPSOQ scales by using the JD-R model (measurement model)
- To test two different mediated JD-R models predicting health and using COPSOQ measures





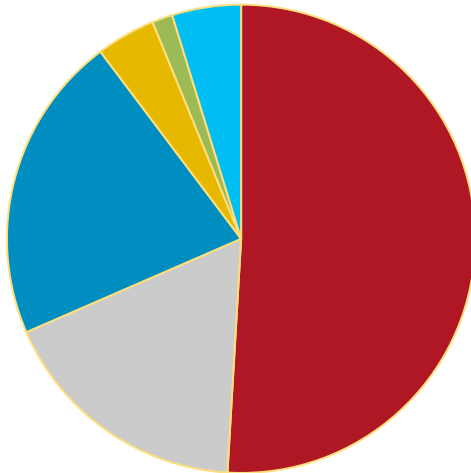
# DATA



All staff from public  
dental organizations  
i 4 Swedish regions



75% response rate  
N=1345



- Dental nurse
- Dentist
- Dental technician
- Dental hygienist
- Specialized dentist
- Others

90% women  
Age mean 48.5 (s.d. 11.3)  
98% permanent employment  
11% leaders

# Measures in the model JDR-model

## Demands

Quantitative Demands  
Work Pace  
Emotional Demands

## Strain symptoms

Stress  
Burnout  
Sleeping troubles

## Leadership Resources

Social Support Superior  
Quality of Leadership  
Justice and Respect

## Engagement

Vigor  
Dedication  
Absorption

## Interpersonal Resources

Social Support Colleagues  
Work-related Community  
Horizontal trust

## Health

Work ability score  
Prospective work ability  
General Health

## Task Resources

Influence  
Opportunities for development  
Variation

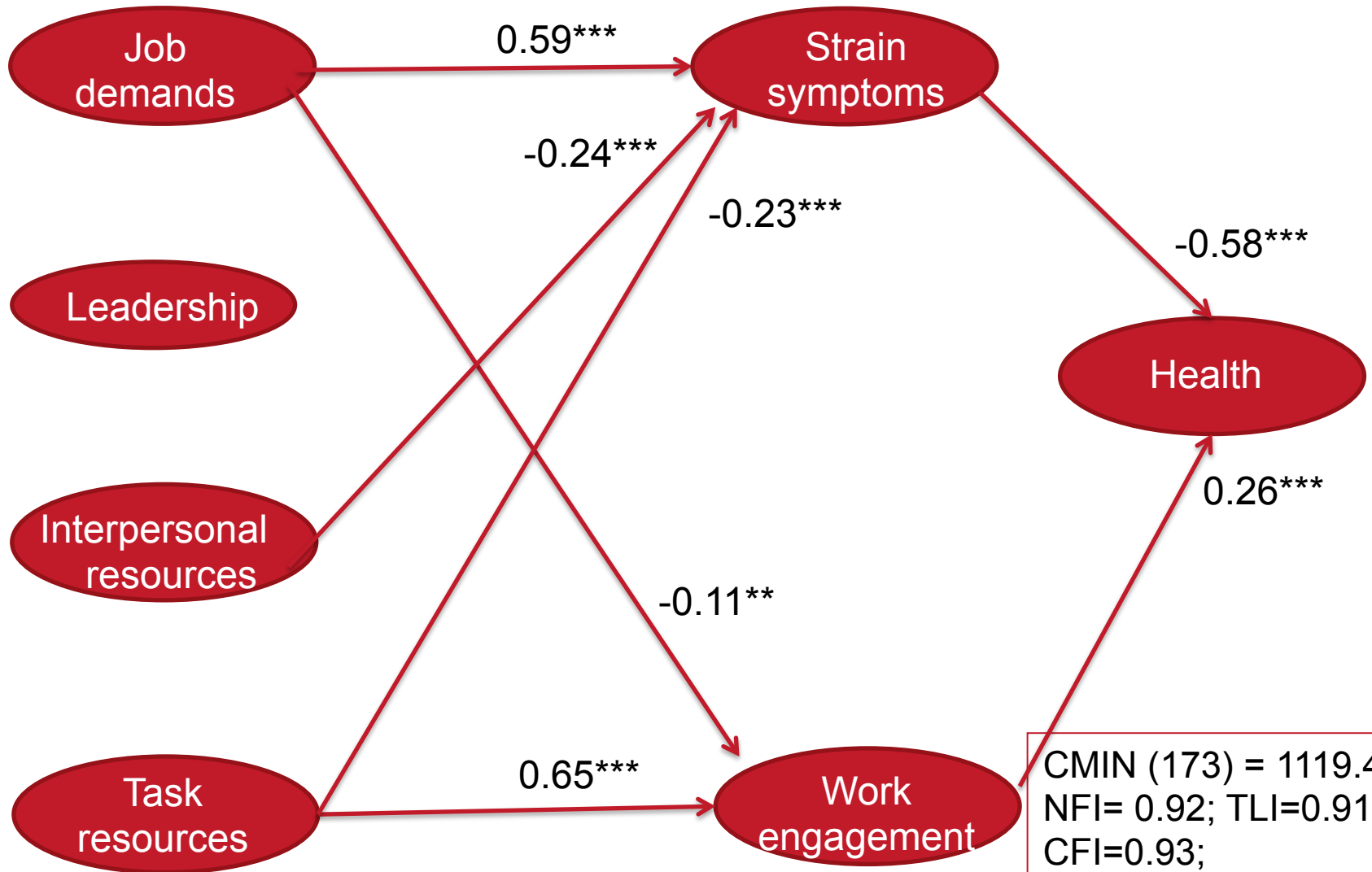
### Measurement model:

$\chi^2(168)=1114.57$ ,

CFI=0.93, NFI =0.92

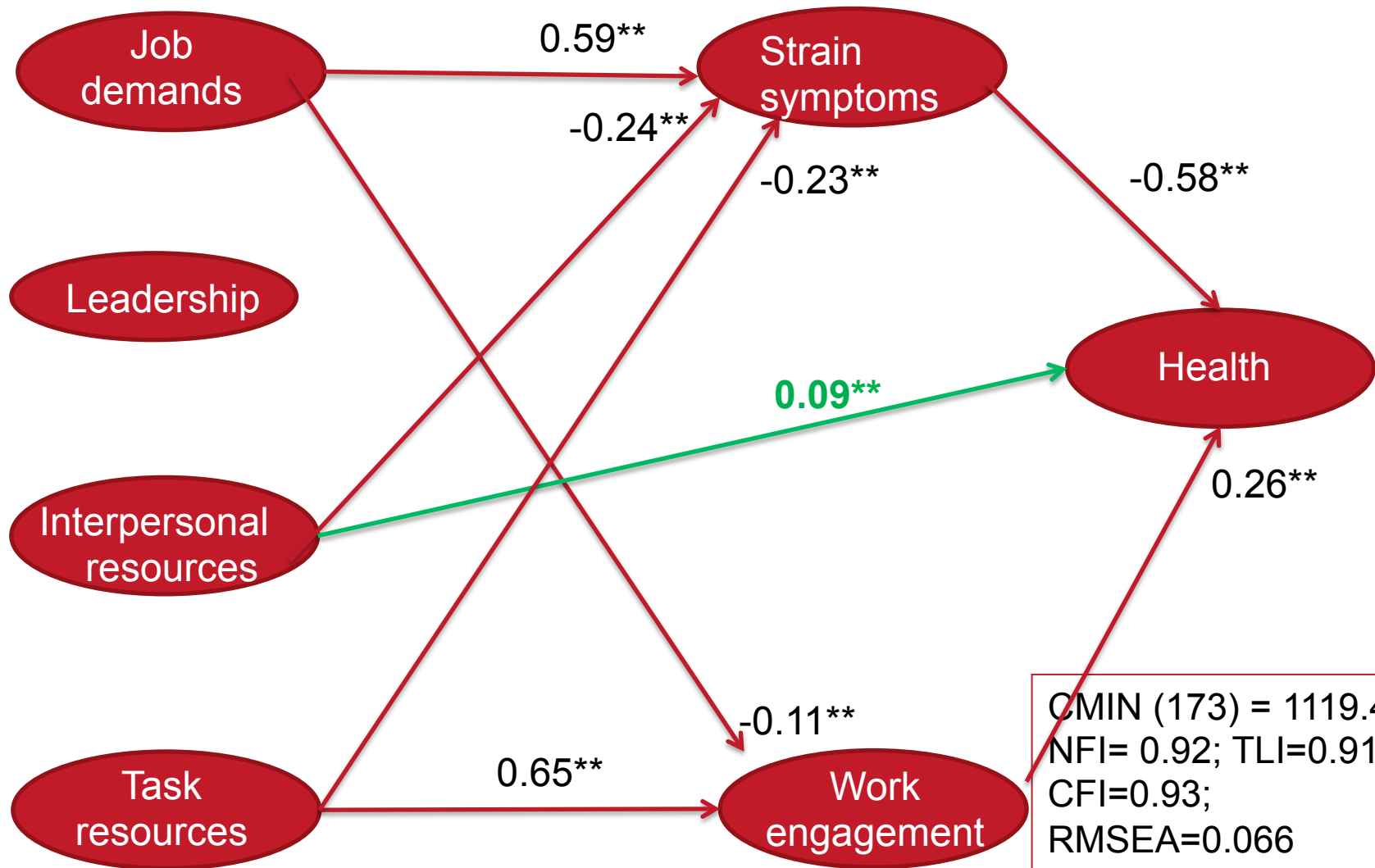
RMSEA=0.067

# JD-R model 1 using COPSOQ (N = 1281)

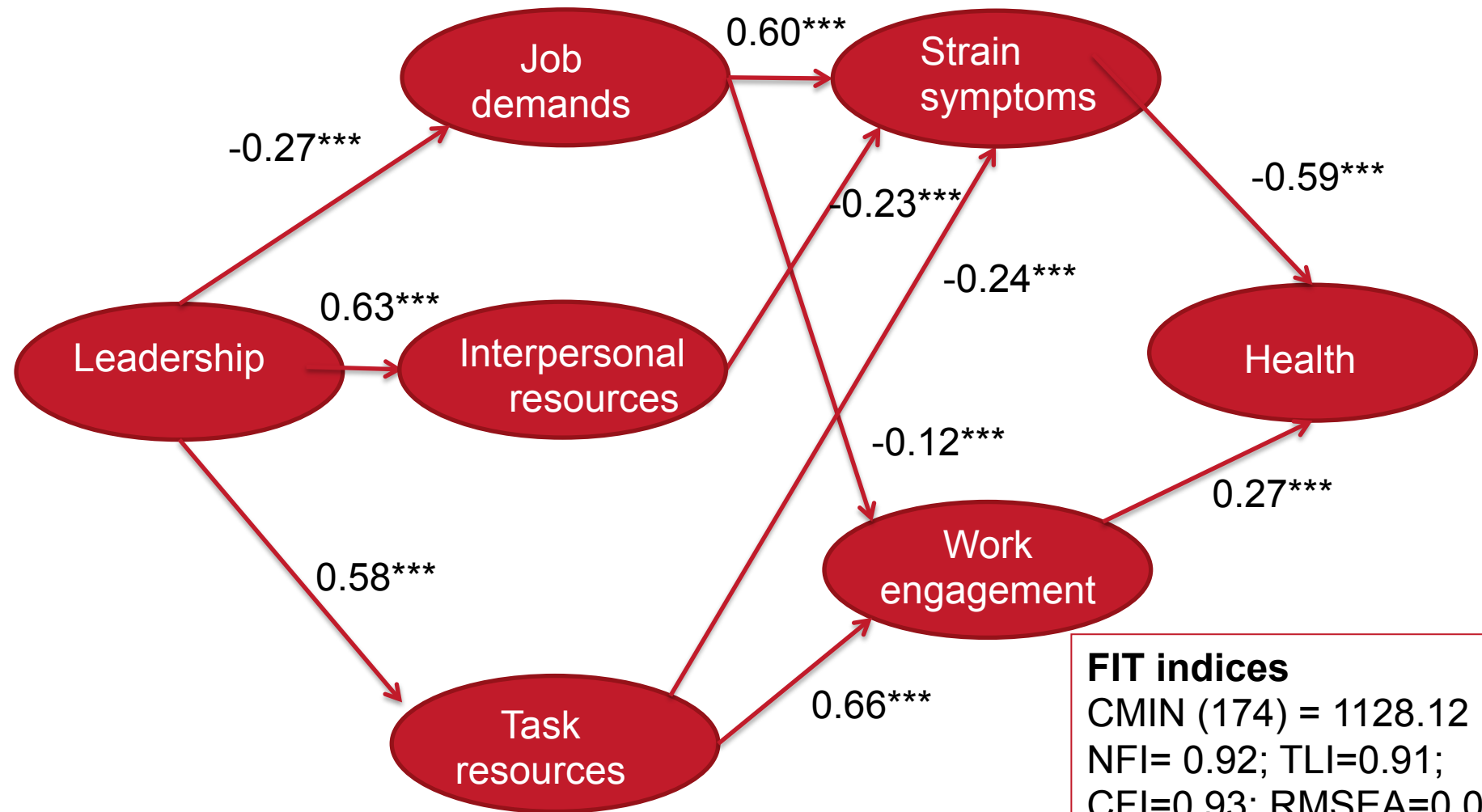


CMIN (173) = 1119.43;  
NFI= 0.92; TLI=0.91;  
CFI=0.93;  
RMSEA=0.066  
AIC = 1277.43

# JD-R model 1 using COPSOQ (N = 1281)



# JD-R model 2 using COPSOQ (N = 1281)



## FIT indices

CMIN (174) = 1128.12

NFI = 0.92; TLI = 0.91;

CFI = 0.93; RMSEA = 0.066

AIC = 1242.12

# CONCLUSION

- The factorial structure of job resources existing at different levels and job demands was good.
- The role of leadership in the JD-R model should be investigated longitudinally (one of the job resources OR a driver of other job resources?)
- COPSQ includes many job demands and job resources and outcomes and thus can be utilized flexibly in different occupational contexts to test different aspects of the JD-R model

Next step:

- Multilevel analyses and inclusion of register data from organisations in future analyses

**Merci beaucoup!**  
**Tack så mycket!**  
**Kiitos!**

## **ETHICS**

The study has been approved by the  
Regional Ethics Board in Southern Sweden



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