

Work Ability in the Context of the JD-R Model: Pathways to Promote the Well-being of Teachers

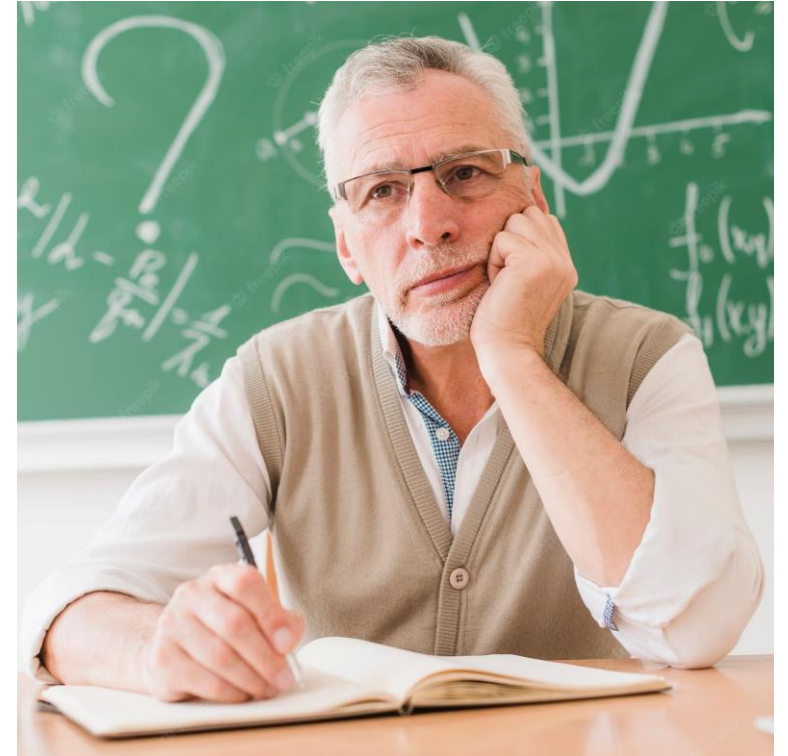


Petr Hlad'o

Masaryk University, Faculty of Arts
Department of Educational Sciences
e-mail: hlado@phil.muni.cz

Background

- teaching is an increasingly **demanding profession**
- many European countries face or will face a **teacher shortage** in the near future
- EU: 39% aged 50 years and older (Eurostat, 2022)
- CZ: average age 45.7 years (Zatloukal et al., 2019), 41% of teachers are in the age category 50+ (MEYS, 2022)
- **high level of work ability** is associated with satisfied and longer/active working life (Tuomi et al., 2001; Ünlü & Filiz, 2019)

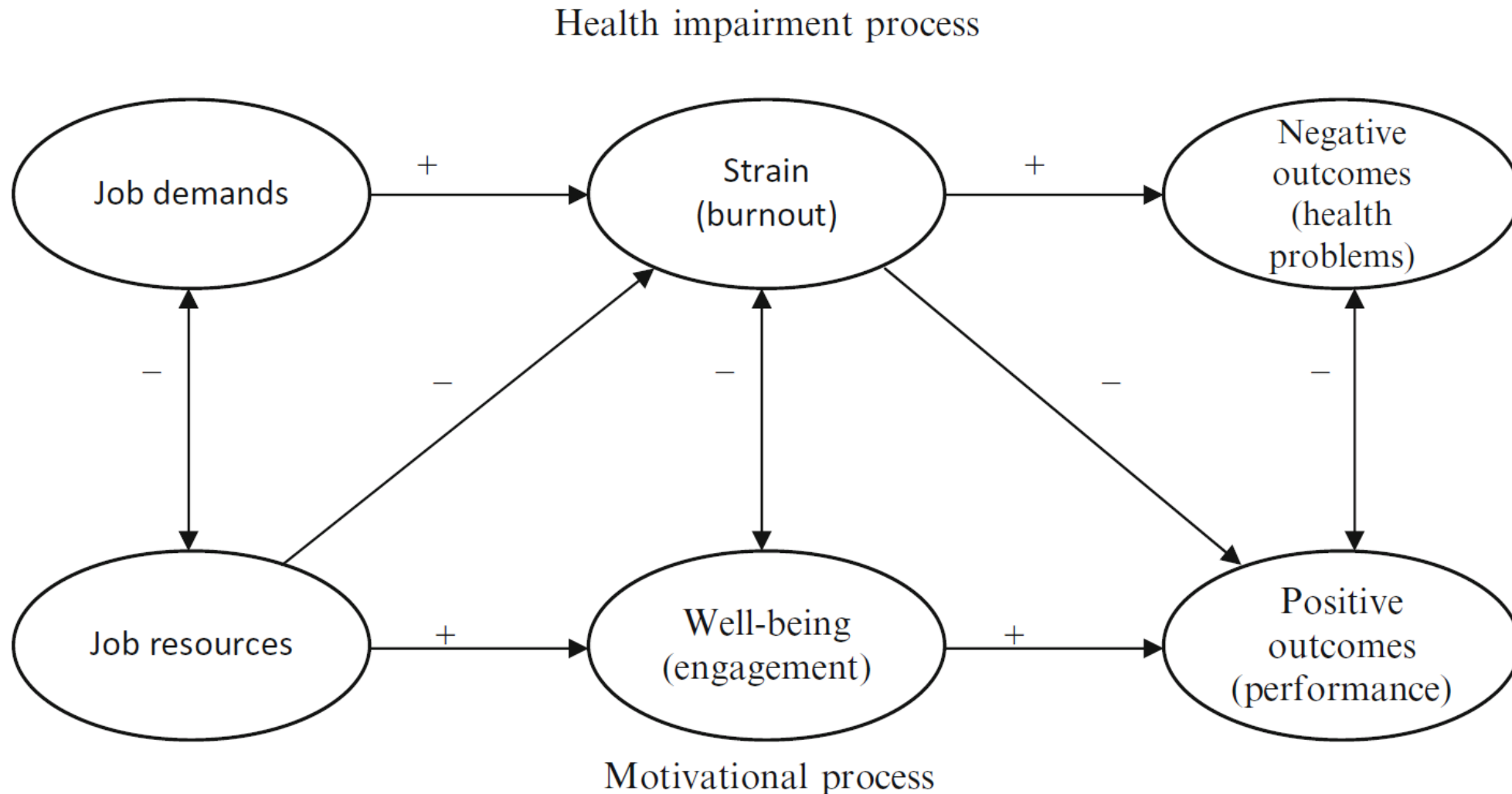


Work Ability (WA)

- **individual capacity to complete required work tasks and cope with the job demands successfully** (Ilmarinen et al., 1997)
 - *objective WA*: strictly based on evaluating the employee's health and functional limitations (McGonagle et al., 2015)
 - *perceived WA*: employee's self-perception or self-assessment of their ability to continue working in the current job (Brady et al., 2020)
- **Work Ability Index (WAI)**: most frequently used diagnostic tool, which has been criticized (e.g., length, factor structure, sensitive health information) (Cadiz et al., 2019)



Health impairment process (JD-R)



Expected relationships

- burnout → work ability (Hlado et al., 2020)
- burnout → job satisfaction (Tarcan et al., 2017)
- work ability → job satisfaction (Tuomi et al., 2001)
- **burnout → work ability → job satisfaction**
- **H1:** Burnout is negatively related to perceived work ability among lower secondary school teachers.
- **H2:** Burnout is negatively related to job satisfaction among lower secondary school teachers.
- **H3:** Perceived work ability serves as a mediator of the association between burnout and job satisfaction.



Participants and Procedures

- a cross-sectional study was conducted among **lower secondary school teachers** in the Czech Republic
- the data collection took place **from May to June 2023**
- database of teachers from all schools in the Czech Republic
- teachers were contacted by email to complete an **online questionnaire**
- **821 teachers** (83.3% females); response rate 12.6%
- the mean age of the participants was 45.6 years
- average time spent in the teaching profession was 17.5 years

Measure

– Work Ability:

- Teacher Work Ability Scale (TWAS; Hlad'o et al., 2023)
- 29-item inventory (7-point Likert type scale); four subscales; $\alpha = 0.95$ (subscales 0.85–0.90)

– Burnout:

- *Shirom-Melamed Burnout Questionnaire* (SMBQ; Ptáček et al., 2017)
- 14-item inventory (7-point Likert type scale); three subscales (physical, cognitive, emotional exhaustion) ; $\alpha = 0.93$ (subscales 0.87–0.94)
- *e.g., I have no energy for going to work in the morning. I have difficulty concentrating. I have difficulty thinking about complex things.*

– Job Satisfaction:

- *Copenhagen Psychological Questionnaire: Job Satisfaction Scale* (COPSOQ; Llorens et al., 2019)
- instrument designed for the assessment and improvement of psychosocial conditions in workplaces and for research purposes; $\alpha = 0.80$
- 5 items (5-point Likert scale), *e.g., How pleased are you with: Your work prospects? The way your abilities are use?*

Teacher Work Ability Scale

- *Your overall (physical and mental) capacity for:*
- **F1_Planning and Organization of Teaching**
 - 2. Preparing tools for teaching
 - 8. Differentiation of teaching according to the needs of pupils
- **F2_Teaching and Assessment**
 - 11. Keeping pupils' attention in the lesson
 - 15. Assessment of pupils
- **F3_(Collegial) Professional Communication and Sharing**
 - 22. Communication with school management
 - 29. Sharing of professional experience in a collegial manner
- **F4_Out of Class Duties**
 - 20. Supervision of pupils outside the classroom (e.g. corridors, canteen)
 - 31. Administrative work

Odpořídání

ČÁST A1: KAPACITA PRO UČITELSKOU PRÁCI

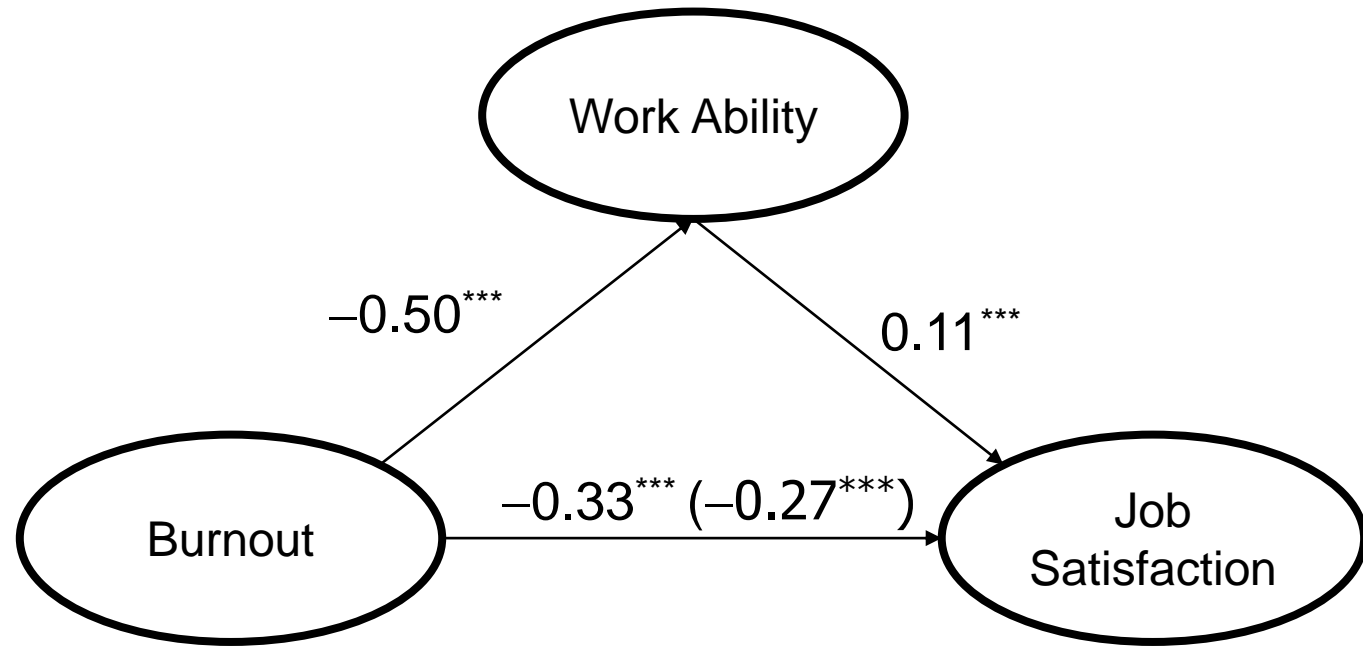
Když přemýšlíte o všech požadavcích Vaší učitelské práce, jak hodnotíte svou fyzickou a psychickou kapacitu k tomu, abyste mohli těmto pracovním nárokům dostát? Na stupnici vždy označte Vaše současnou celkovou (fyzickou a psychickou) kapacitu pro plnění konkrétních pracovních požadavků.

1 Kapacitou je myšlena Vaše **aktuální** schopnost pracovat a podávat pracovní výkon, která odráží především Vaše zdraví, ale i Vaši kvalifikaci, postoj, motivaci, pracovní podmínky aj.
Příklady: Zdravotní potíže s hlasivkami mohou snížovat kapacitu pro zprostředkování učiva žákům. Fyzická únava může snížovat kapacitu pro chystání pomůcek na výuku. Psychické vyčerpání může snížovat kapacitu pro řešení problémových situací se žáky, motivování žáků ap.

Vaše celková (fyzická a psychická) kapacita pro:

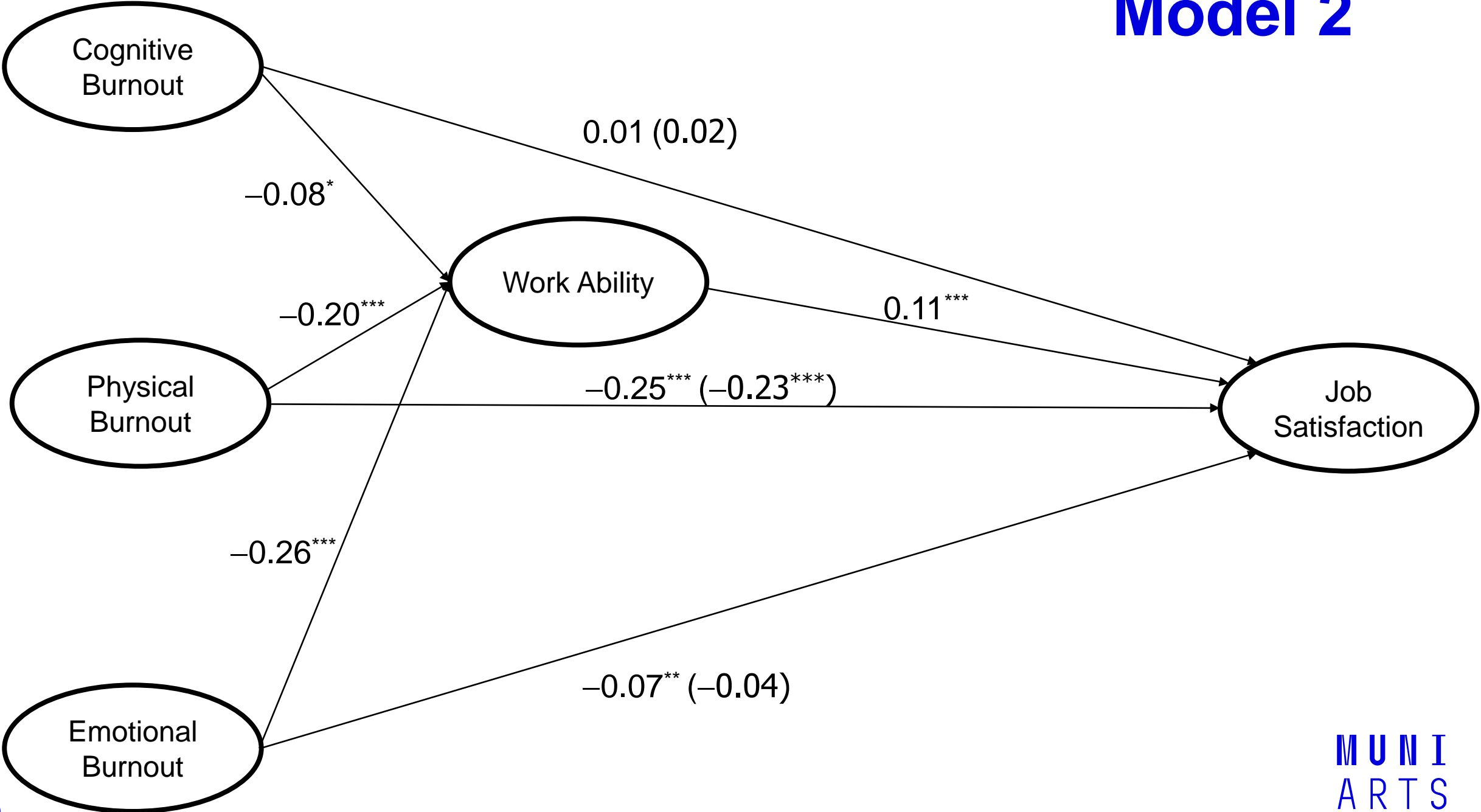
1. Plánování a přípravu obsahu výuky	1 - nízká	2	3	4	5	6	7 - vysoká
2. Chystání pomůcek pro výuku *	1 - nízká	2	3	4	5	6	7 - vysoká
3. Přípravu učebny na výuku *	1 - nízká	2	3	4	5	6	7 - vysoká
4. Zprostředkování učiva žákům *	1 - nízká	2	3	4	5	6	7 - vysoká
	1 - nízká	2	3	4	5	6	7 - vysoká

Model 1



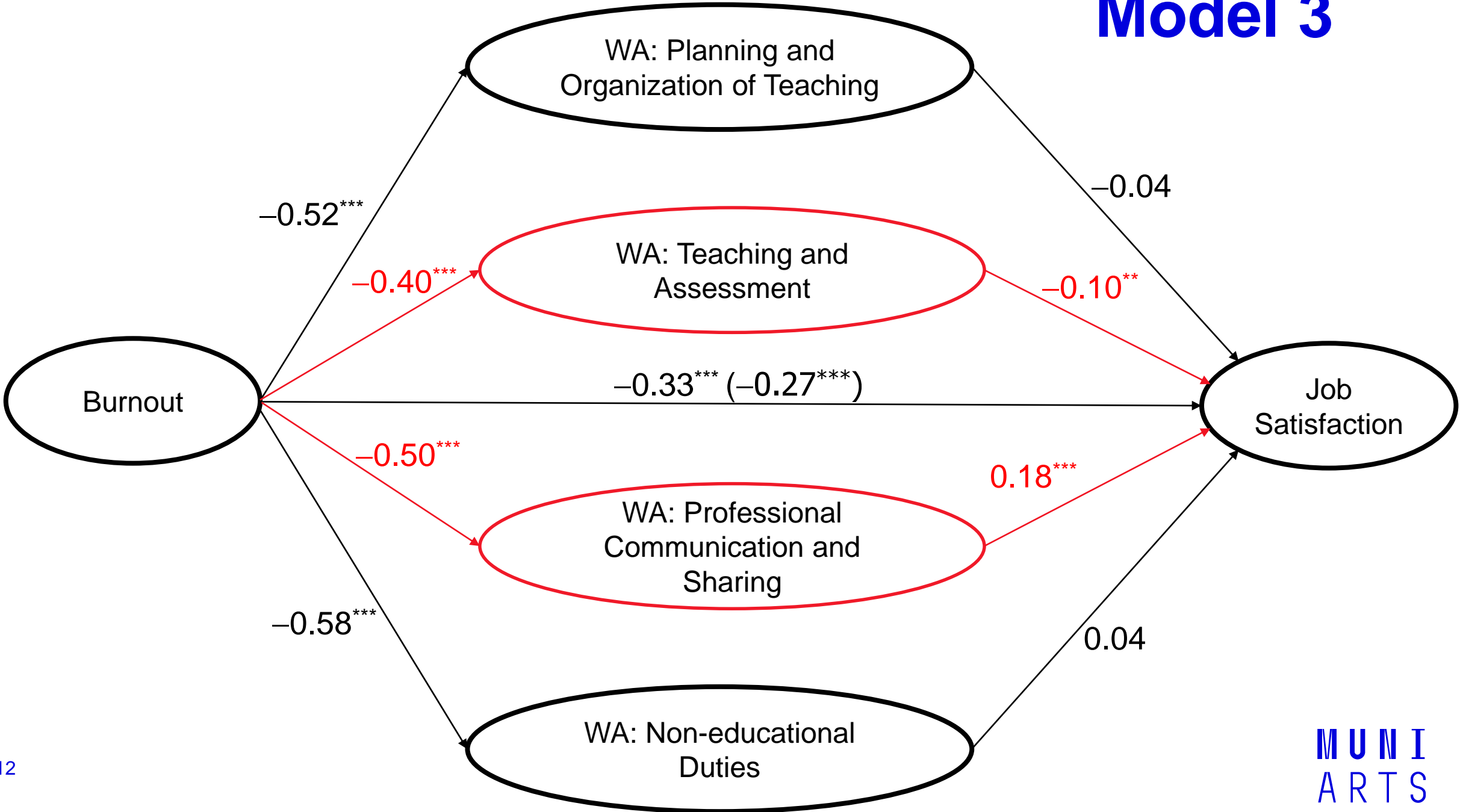
	Effects	95% CI	p
Total Effect	-0.325	[-0.369; -0.285]	0.000
Direct Effect	-0.271	[-0.325; -0.224]	0.000
Indirect Effect	-0.054	[-0.077; -0.029]	0.000
Proportion mediated	0.165	[0.091; 0.252]	0.000

Model 2



X -> Y effects	Est.	SE	p
<i>Total effects</i>			
SMBM_FU -> JSatis	-0.25	0.02	<0.001
SMBM_KU -> JSatis	0.01	0.02	0.732
SMBM_EV -> JSatis	-0.07	0.02	0.003
<i>Direct effects</i>			
SMBM_FU -> JSatis	-0.23	0.02	<0.001
SMBM_KU -> JSatis	0.02	0.02	0.495
SMBM_EV -> JSatis	-0.04	0.02	0.09
X -> M effects			
SMBM_FU -> A1_WA	-0.2	0.03	<0.001
SMBM_KU -> A1_WA	-0.08	0.04	0.03
SMBM_EV -> A1_WA	-0.26	0.03	<0.001
M -> Y effects			
A1_WA -> JSatis	0.11	0.02	<0.001
Indirect effects			
<i>Total indirect effects</i>			
SMBM_FU	-0.02	0.01	[-0.035; -0.01]
SMBM_KU	-0.01	<0.01	[-0.017; -0.001]
SMBM_EV	-0.03	0.01	[-0.042; -0.014]
<i>Specific indirect effects</i>			
SMBM_FU -> A1_WA	-0.02	0.01	[-0.035; -0.01]
SMBM_KU -> A1_WA	-0.01	<0.01	[-0.017; -0.001]
SMBM_EV -> A1_WA	-0.03	0.01	[-0.042; -0.014]

Model 3



Conclusions

- our findings are consistent with the JD-R model and bring new empirical support for the model
- burnout in the teaching profession is linked to negative occupational consequences
- improving teacher well-being (represented by job satisfaction) is possible through the prevention of burnout and the promotion of work ability
- support teachers in these domains appears to be a way to help retain teachers in the profession



M U N I
A R T S