

3RD BAT RESEARCH SEMINAR – LEUVEN
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ADAPTING THE BAT INTO HUNGARIAN A STUDY WITH TEACHER SAMPLE

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„THE BURNOUT COMPANION”

1. „Burnout” comes from fiction literature – Graham Greene: The burn-out case → then Freudenberg (psychiatrist practice) and Maslach (big sample researches from the healthcare sector)
2. (One of the) main literature: Schaufeli, Enzmann (1998) – The burnout companion (from beginnings → 1998)
3. Recent research: in the context of Job Demands-Resources, relationships with work engagement, organizational factors

„The dedicated and the committed. Now that may sound foolish. But just think for a minute. Those of us who work in free clinics, therapeutic communities, hot lines, crisis intervention centers, women’s clinics, gay centers, runaway houses, are people who are seeking to respond to the recognized needs of people. We would rather put up than shut up. And what we put up is our talents, our skills, we put in long hours with a bare minimum of financial compensation. **But it is precisely because we are dedicated that we walk into a burn-out trap.**” (Freudenberg – Staff burnout, 1974, p. 161)

BURNOUT ASSESSMENT TOOL



- Need for a new burnout inventory: there are problems with MBI
 - Conceptualization of the syndrome – according to new findings
 - Other symptoms – psychosomatic – are not measured by MBI
 - Efficacy as a part of burnout or consequence?
- BAT: Developed by Schaufeli, Desart and De Witte – 2019
- The BAT is based on interviews with professionals who deal with burnout patients, then it was measured on a 1 500 N flemish employee-sample
- Originally, 4 core and 3 secondary symptoms were introduced, which became 4 core and 2 secondary after creating the best-fit model
- The BAT has good reliability indicators and factor structure

ADAPTING THE BAT INTO HUNGARIAN

- „Bringing” the BAT to Hungary – after the 2019 EAWOP congress in Torino
- Translation process – with Noemi Nagy (University of South Florida)
- Adapting to my own research: Teacher sample
- Personality traits – my degree of influence at the moment
- Final test battery: BAT-C and -S, MBI-ES (Maslach, Jackson, 1981), WHO-5 Well-being index, Self-compassion Scale (Neff, 2003), MMPK (Oláh, 2005) (a hungarian-based coping questionnaire based on Lazarus & Folkman)
- Recruitment method (2021 summer): emails to the school districts all over Hungary; participants came also from the University’s postgraduate program for teachers



RELIABILITY ANALYSIS OF THE BURNOUT SCALES

MBI:

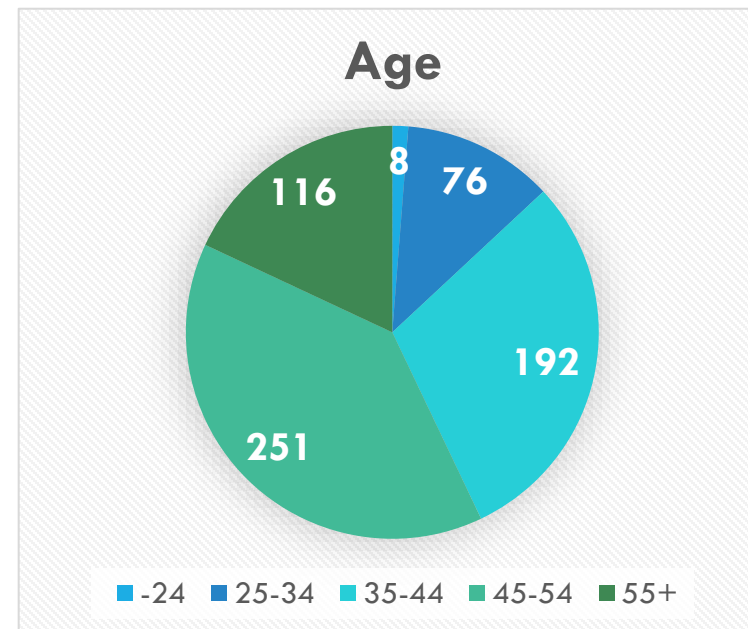
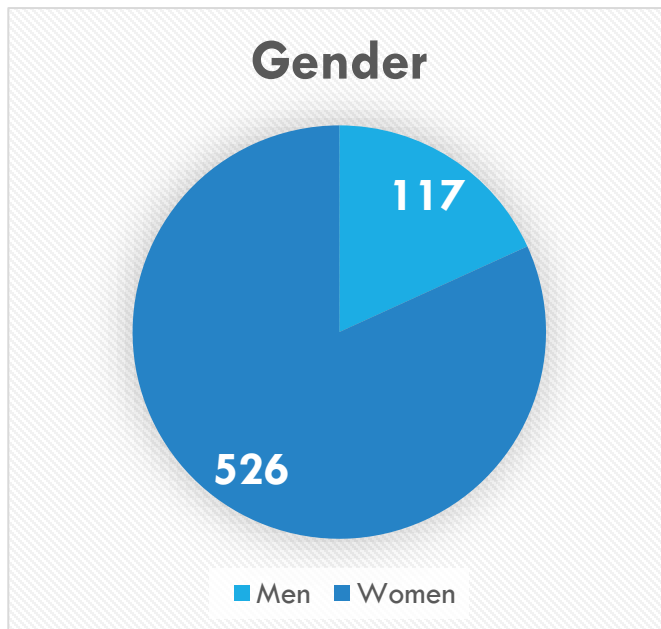
- Emotional Exhaustion: $Cr\alpha=0,886$
- Depersonalization: $Cr\alpha=0,712$
- Decreased Personal Accomplishment: $Cr\alpha=0,831$

BAT:

- Exhaustion: $Cr\alpha=0,908$
- Mental distance: $Cr\alpha=0,809$
- Emotional impairment: $Cr\alpha=0,866$
- Cognitive impairment: $Cr\alpha=0,784$
- Psychological complaints: $Cr\alpha=0,812$
- Psychosomatic complaints: $Cr\alpha=0,770$

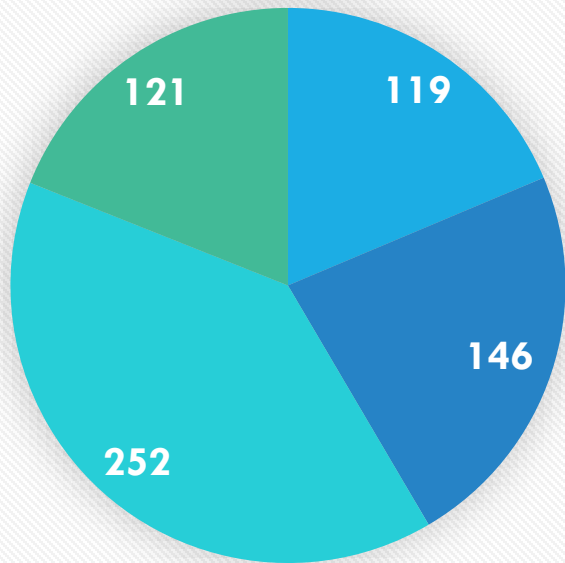
BASIC CHARACTERISTICS OF THE DATA

- Preparing the data: N=667 (original) → N=649 (lie – bogus item) → N=643 (excluding outliers)



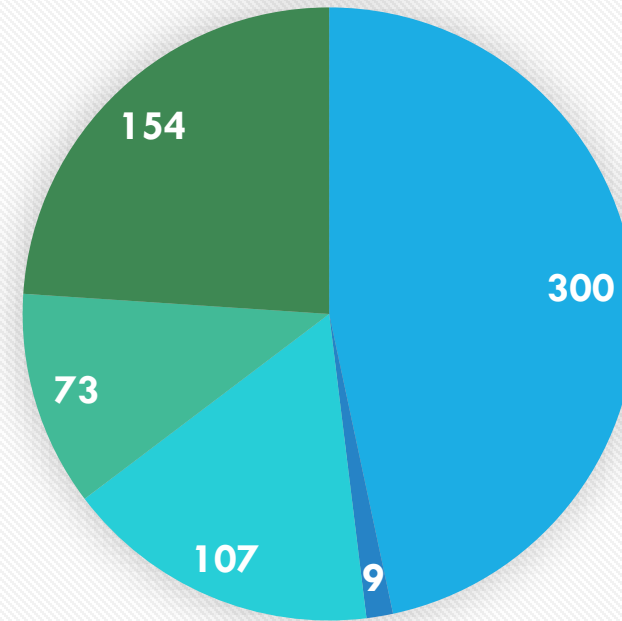
BASIC CHARACTERISTICS OF THE DATA

Residence of school



■ Capital city ■ Chief town of a county ■ Town ■ Village

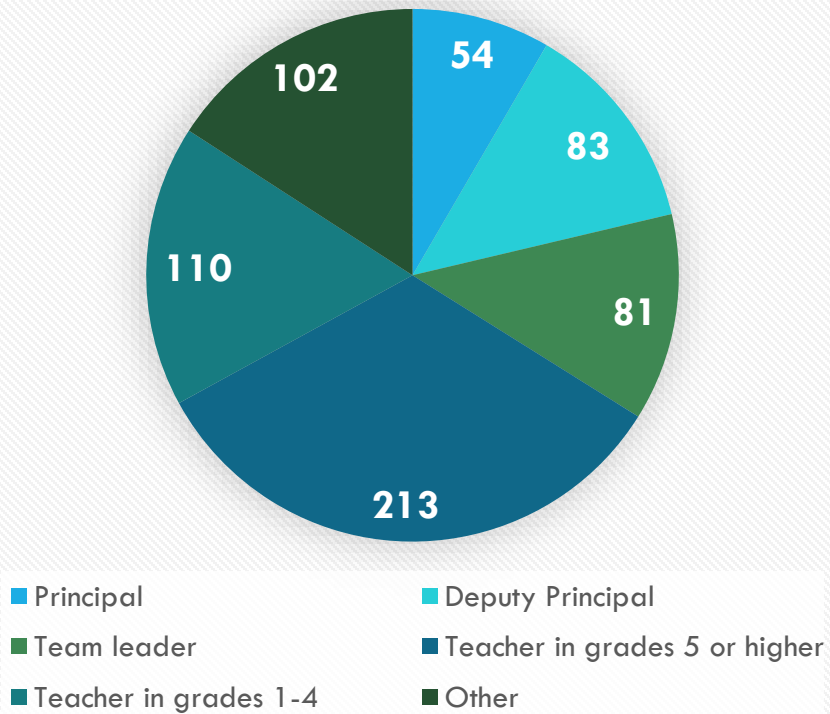
School type



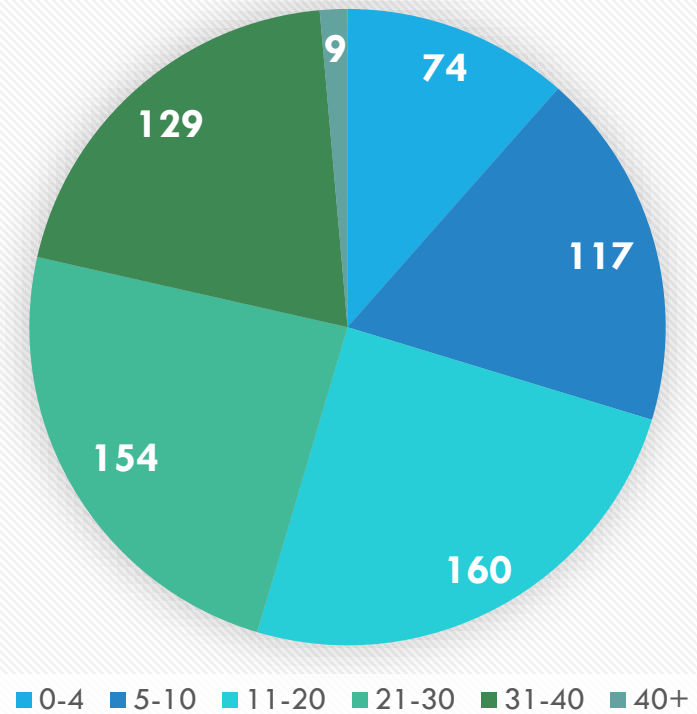
■ Primary school ■ Secondary grammar school
■ Vocational high school ■ Vocational school
■ Other

BASIC CHARACTERISTICS OF THE DATA

Status (role)

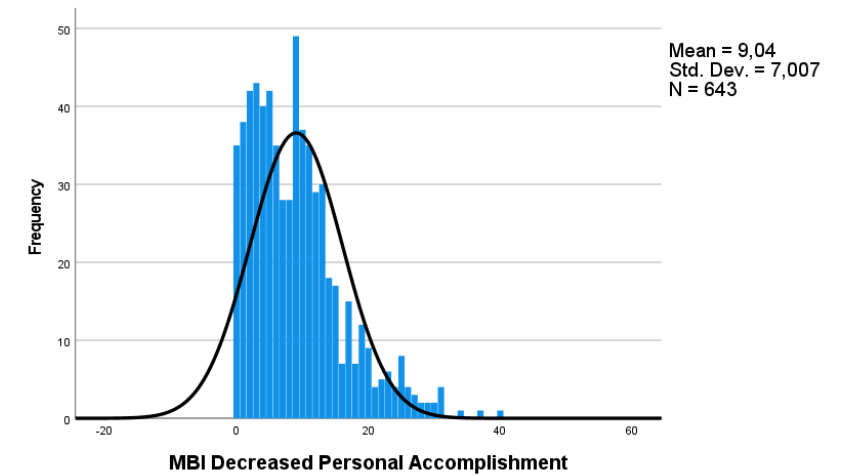
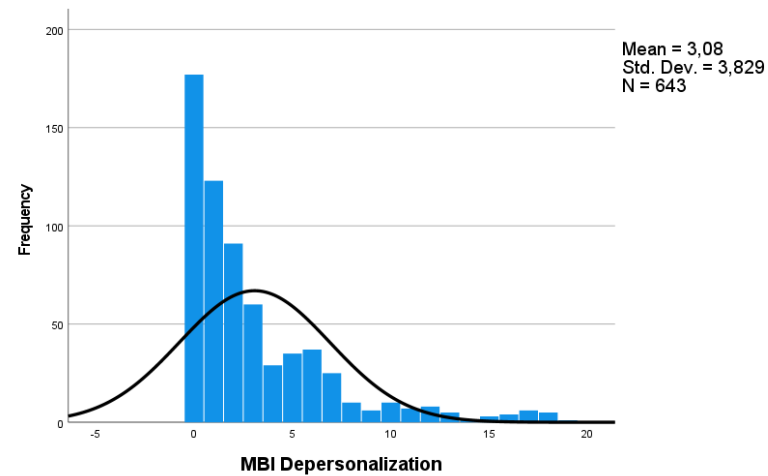
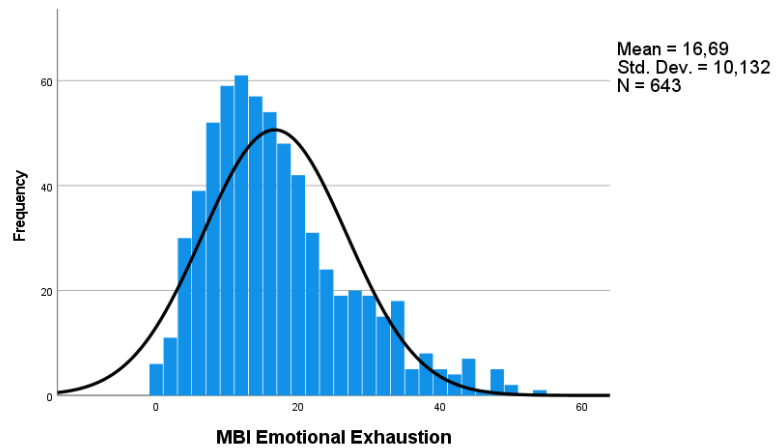


Experience in years



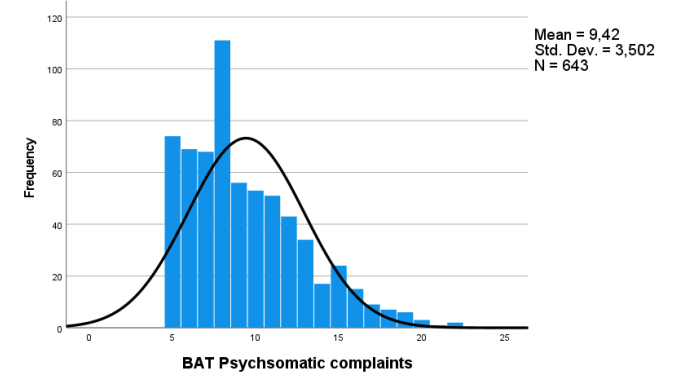
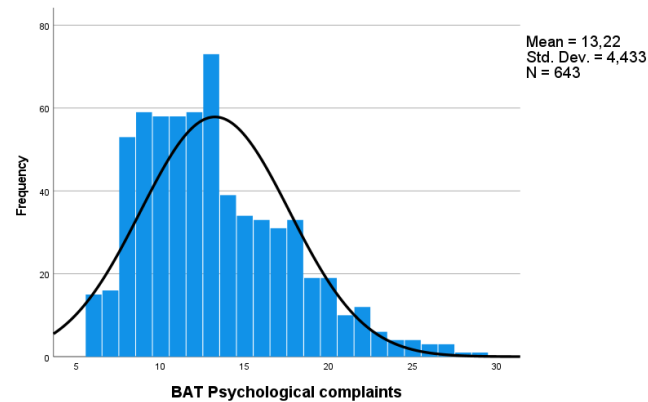
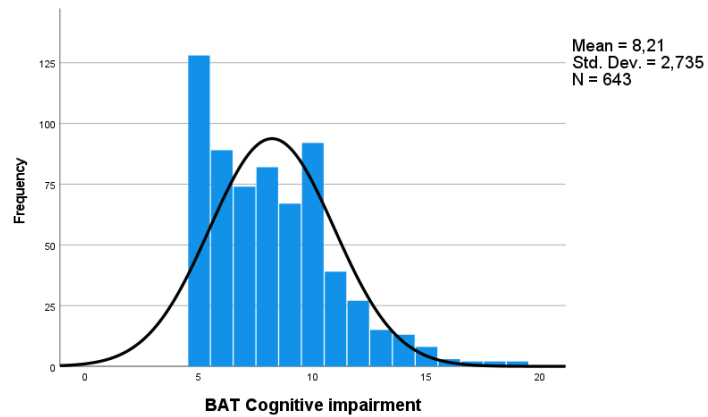
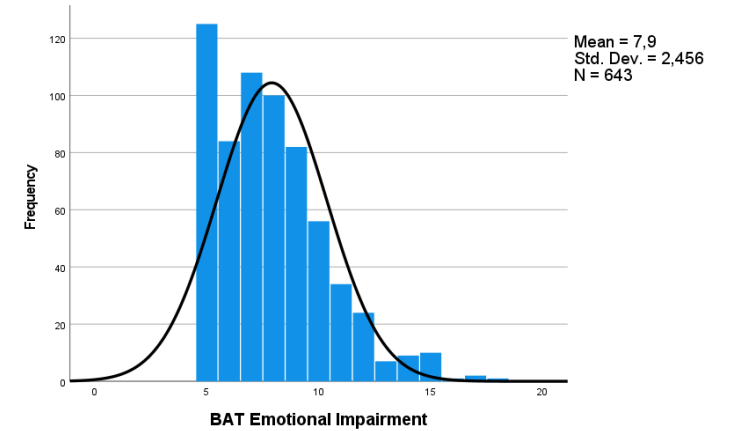
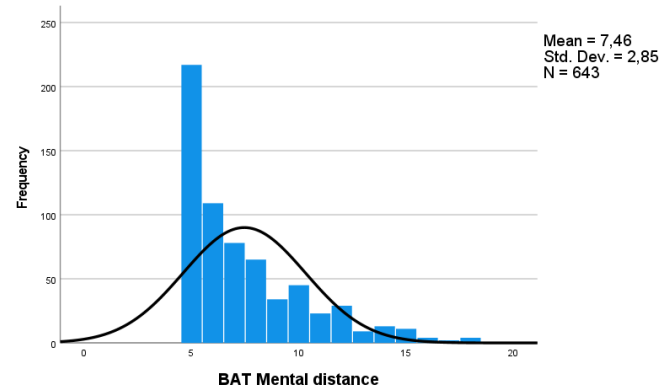
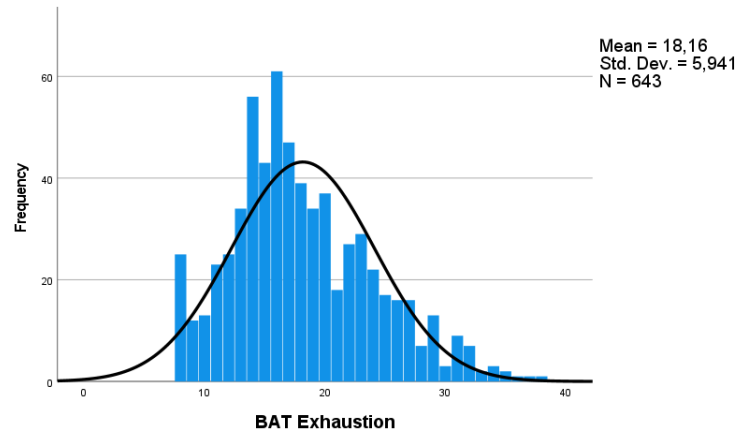
DISTRIBUTION OF BURNOUT SCORES

MBI-ES



DISTRIBUTION OF BURNOUT SCORES

BAT



BAT CORRELATION WITH MBI

N=643	MBI – Emotional Exhaustion	MBI – Depersonalization	MBI – Decreased Personal Accomplishment
BAT – Exhaustion	,797**	,441**	,506**
BAT – Mental distance	,613**	,547**	,604**
BAT – Emotional impairment	,480**	,430**	,431**
BAT – Cognitive impairment	.480**	,409**	,438**
BAT – Psychological complaints	.581**	,363**	,406**
BAT – Psychosomatic complaints	,469**	,222**	,321**

** Correlation is significant at the 0,01 level



BURNOUT RELATIONS WITH DEMOGRAPHIC VARIABLES



DIFFERENCES IN BURNOUT LEVEL DEMOGRAPHIC

- **Teacher status** and **residence of school** variables didn't differ significantly regarding the burnout scores
- The Age categories created significant differences in the BAT scales
 - 25-34, a lower level could be observed, that raised until the 45-54 age category, then it went lower again at the last (55+) age category
- School type created significant differences in the MBI dimensions
 - „Other” school type has the lowest mean rank
 - Both primary and secondary schools are at risk of high burnout levels (high mean ranks)



N=643	Gender – Men	Gender – Women	Experience – 0- 4 y. (N=74)	Experience – 5- 10 y. (N=117)	Experience – 11-20 y. (N=160)	Experience – 21-30 y. (N=154)	Experience – 31-40 y. (N=129)	Experience – 40+ y. (N=9)
MBI – Emotional exhaustion	296,21	327,74	301,16	272,44	333,92	357,69	325,34	267,33
MBI – Depersonalization	353,65	314,96	323,64	288,93	320,74	352,98	322,74	220,00
MBI – Decreased Personal Accomplishment	330,47	320,12	371,30	295,89	324,79	339,66	297,19	259,94
BAT-C – Exhaustion	289,53	329,22	285,72	295,28	313,94	369,32	325,02	258,00
BAT-C – Mental distance	335,09	319,09	312,82	294,26	340,91	341,08	310,85	255,22
BAT-C – Emotional impairment	297,62	327,42	300,84	281,21	331,93	348,74	331,75	252,44
BAT-C – Cognitive impairment	321,57	322,10	302,32	299,57	315,84	351,11	327,59	306,61
BAT-C – Psychological complaints	271,10	333,32	296,74	284,75	315,42	368,28	329,67	229,17
BAT-C – Psychosomatic complaints	274,80	332,50	284,91	288,74	333,89	356,65	319,27	294,22

DIFFERENCES IN BURNOUT LEVEL
DEMOGRAPHIC

CONFIRMATORY FACTOR ANALYSIS OF THE 6 SEPARATE DIMENSIONS

❖ $N=643$

❖ $\chi^2=932,347$ $df=480$ $p<0,001$

❖ $CFI=0,994$ $TLI=0,994$

❖ $RMSEA=0,041$ $SRMR=0,050$

❖ Original validation (Schaufeli, Desart, De Witte, 2020):

❖ $CFI=0,88$

❖ $TLI=0,86$

❖ $RMSEA=0,09$

CONFIRMATORY FACTOR ANALYSIS 2 FACTOR (CORE AND SECONDARY) MODEL

- ❖ $N=643$
- ❖ $\chi^2=3320,375$ $df=526$ $p<0,001$
- ❖ $CFI=0,972$ $TLI=0,971$
- ❖ $RMSEA=0,088$ $SRMR=0,081$


CONFIRMATORY FACTOR ANALYSIS 1 FACTOR MODEL

- ❖ $N=643$
- ❖ $\chi^2=4762,329$ $df=527$ $p<0,001$
- ❖ $CFI=0,958$ $TLI=0,956$
- ❖ $RMSEA=0,112$ $SRMR=0,097$

TEST-RETEST RELIABILITY OF THE BURNOUT ASSESSMENT TOOL

- Repeated measure with BAT, 6 months apart
- N=49
- BAT core symptoms:
 - Exhaustion: $r=0,723^{**}$
 - Mental distance: $r=0,665^{**}$
 - Cognitive impairment: $r=0,701^{**}$
 - Emotional impairment: $r=0,980^{**}$
- BAT secondary symptoms:
 - Psychological complaints: $r=0,634^{**}$
 - Psychosomatic complaints: $r=0,770^{**}$

******: Pearson correlation is significant at the 0,01 level (two-tailed)



Repeat

CORRELATIONS WITH OTHER VARIABLES

N=643	WHO-5	MMPK- Problem focus	MMPK- Seeking support	MMPK- Stress control	MMPK- Attention distraction	MMPK- Emotion focus	MMPK- Emotion blow-out	MMPK- Self punishment	MMPK- Resignatio n
BAT – Exhaustion	-,540**	-,257**	,001	-,192**	,106**	,056	,300**	,337**	,260**
BAT – Mental distance	-,420**	-,294**	-,074	-,243**	,130**	,051	,272**	,277**	,322**
BAT – Emotional impairment	-,342**	-,291**	,043	-,287**	,082*	,023	,430**	,334**	,188**
BAT – Cognitive impairment	-,403**	-,264**	-,018	-,275**	,093*	,061	,286**	,326**	,274**
BAT – Psychological complaints	-,481**	-,233**	-,029	-,169**	,089*	,082*	,312**	,418**	,200**
BAT – Psychosomatic complaints	-,434**	-,248**	-,025	-,181**	,036	,013	,181**	,298**	,142**

* Correlation is significant at the 0,05 level

** Correlation is significant at the 0,01 level

CORRELATIONS WITH OTHER VARIABLES

N=643	SCS- Kindness to self	SCS-Self- criticism	SCS-Common humanity	SCS-Isolation	SCS- Mindfulness	SCS-Over- identification
BAT – Exhaustion	-,254**	-,336**	-,053	,489**	-,322**	,481**
BAT – Mental distance	-,193**	,245**	-,070	,386**	-,252**	,407**
BAT – Emotional impairment	-,176**	,329**	-,076	,365**	-,286**	,547**
BAT – Cognitive impairment	-,185**	,291**	,018	,411**	-,232**	,434**
BAT – Psychological complaints	-,241**	,388**	-,029	,484**	-,317**	,562**
BAT – Psychosomatic complaints	-,212**	,248**	-,021	,318**	-,270**	,379**

* Correlation is significant at the 0,05 level

** Correlation is significant at the 0,01 level

CORRELATIONS WITH OTHER VARIABLES

N=643	WHO-5	MMPK-Problem focus	MMPK-Seeking support	MMPK-Stress control	MMPK-Attention distraction	MMPK-Emotion focus	MMPK-Emotion blow-out	MMPK-Self punishment	MMPK-Resignation
MBI – Emotional Exhaustion	-,504**	-,268**	-,004	-,178**	,099*	,016	,278**	,324**	,258**
MBI - Depersonalization	-,265**	,241**	-,038	-,189**	,139**	,032	,211**	,254**	,286**
MBI – Decreased Personal Accomplishment	-,428**	-,407**	-,121**	-,356**	,011	-,041	,152**	,279**	,275**

N=643	SCS-Kindness to self	SCS-Self-criticism	SCS-Common humanity	SCS-Isolation	SCS-Mindfulness	SCS-Over-identification
MBI – Emotional Exhaustion	-,255**	,296**	-,103**	,417**	-,304**	,436**
MBI - Depersonalization	-,159**	,222**	-,008	,321**	-,227**	,300**
MBI – Decreased Personal Accomplishment	-,270**	,207**	-,141**	,343**	-,382**	,337**

* Correlation is significant at the 0,05 level ** Correlation is significant at the 0,01 level

CONCLUSIONS

- The BAT had good reliability indicators and the BAT-C and BAT-S concept was proven in the hungarian sample of teachers
- Similarities in the BAT and MBI scale „behaviors”
- The BAT had stronger connotations with the „other” scales (e.g.: SCS) than the MBI – maybe worth to measure with this instead of the MBI in the future





FURTHER DIRECTIONS

1. More in-depth analysis of the results
 - a) Personality variables
 - b) Comparing the different regions of Hungary (is there a place where it goes better?)
2. Organizational and personality characteristic analysis, interactions with each other



**THANK YOU FOR YOUR
ATTENTION!**