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VIth Leipzig-Evora-Zwickau Scientific Meeting in Psychology and Health Sciences:

“New Horizons, New Paradigms in Health and Human Development”

HEALTHY SCHOOL, HEALTHY TEACHERS: MEDIATING EFFECT OF OPTIMISM



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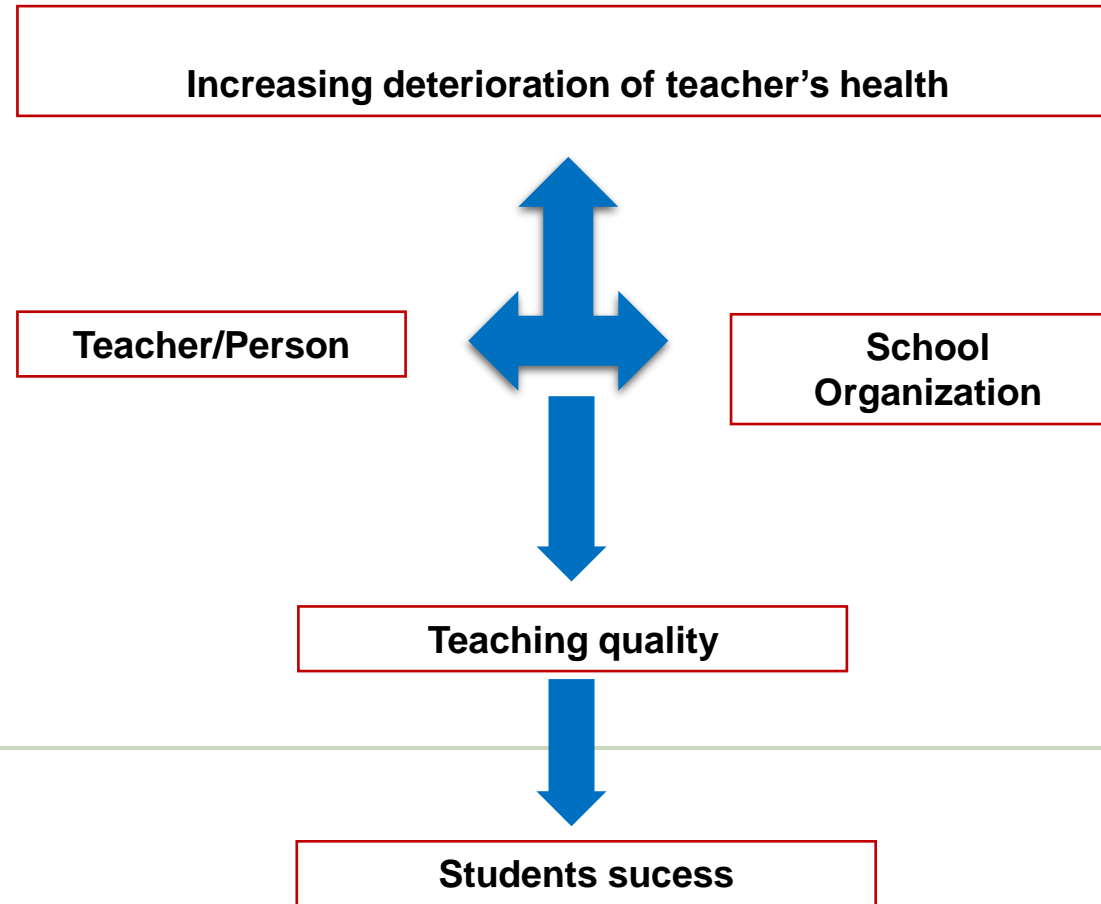
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19th October, 2023

THEORETICAL FRAMEWORK

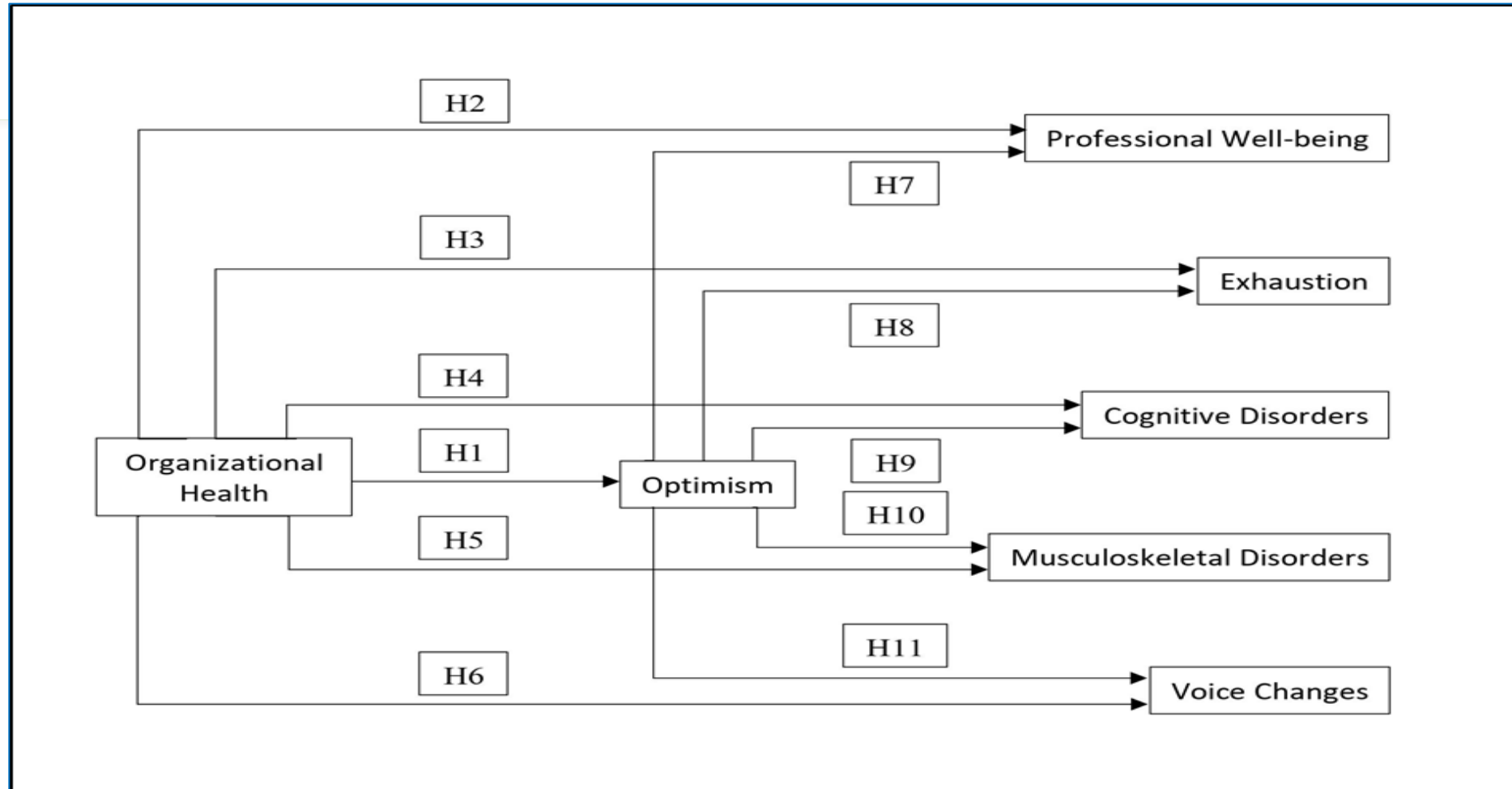


(Borralho et al., 2020; Gadermann et al., 2021; Jesus, 2007; Klusmann, Richter & Lüdtke, 2016; Rumschlag, 2017; Scheuch et al., 2015; Vega-Fernandez et al., 2021)

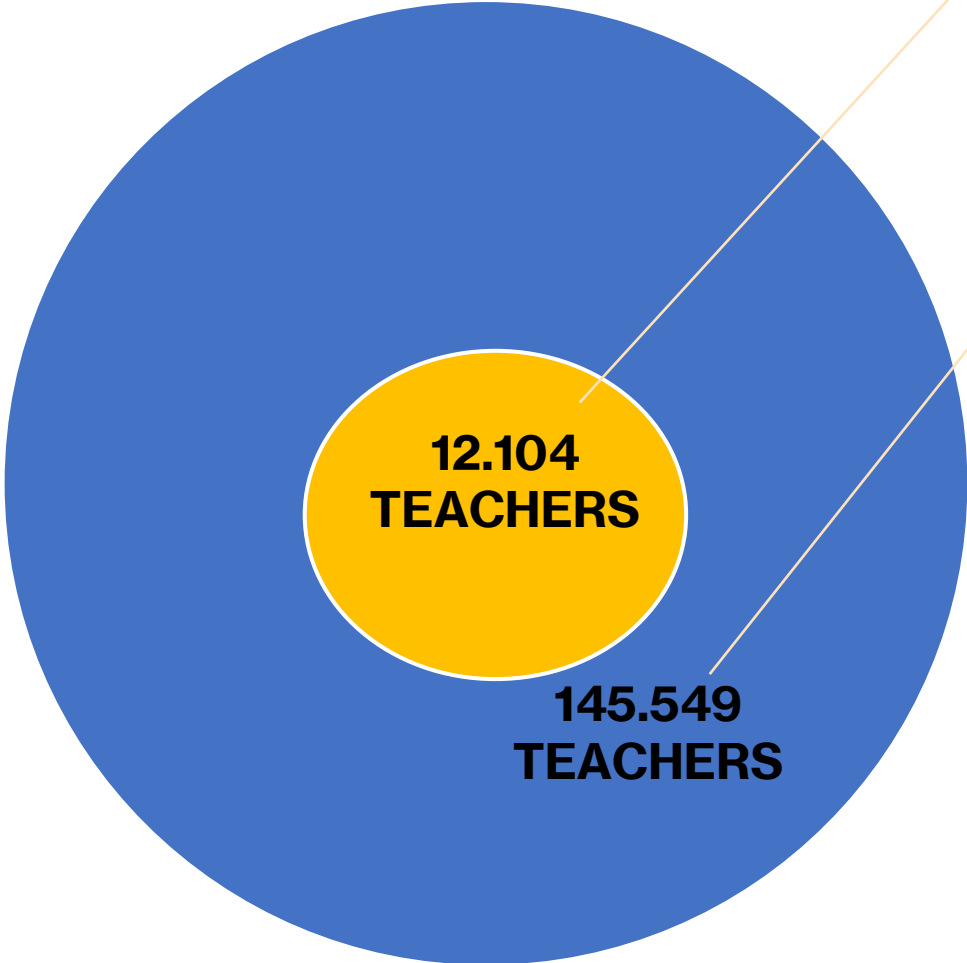
Aim: To study the relationship between organizational health, teacher's health and optimism.

Keywords: Professional wellbeing; Teacher's health; Organizational health; Optimism.

THEORETICAL MODEL TESTED AND RESEARCH HYPOTHESES PROPOSED



METHOD - POPULATION AND SAMPLE

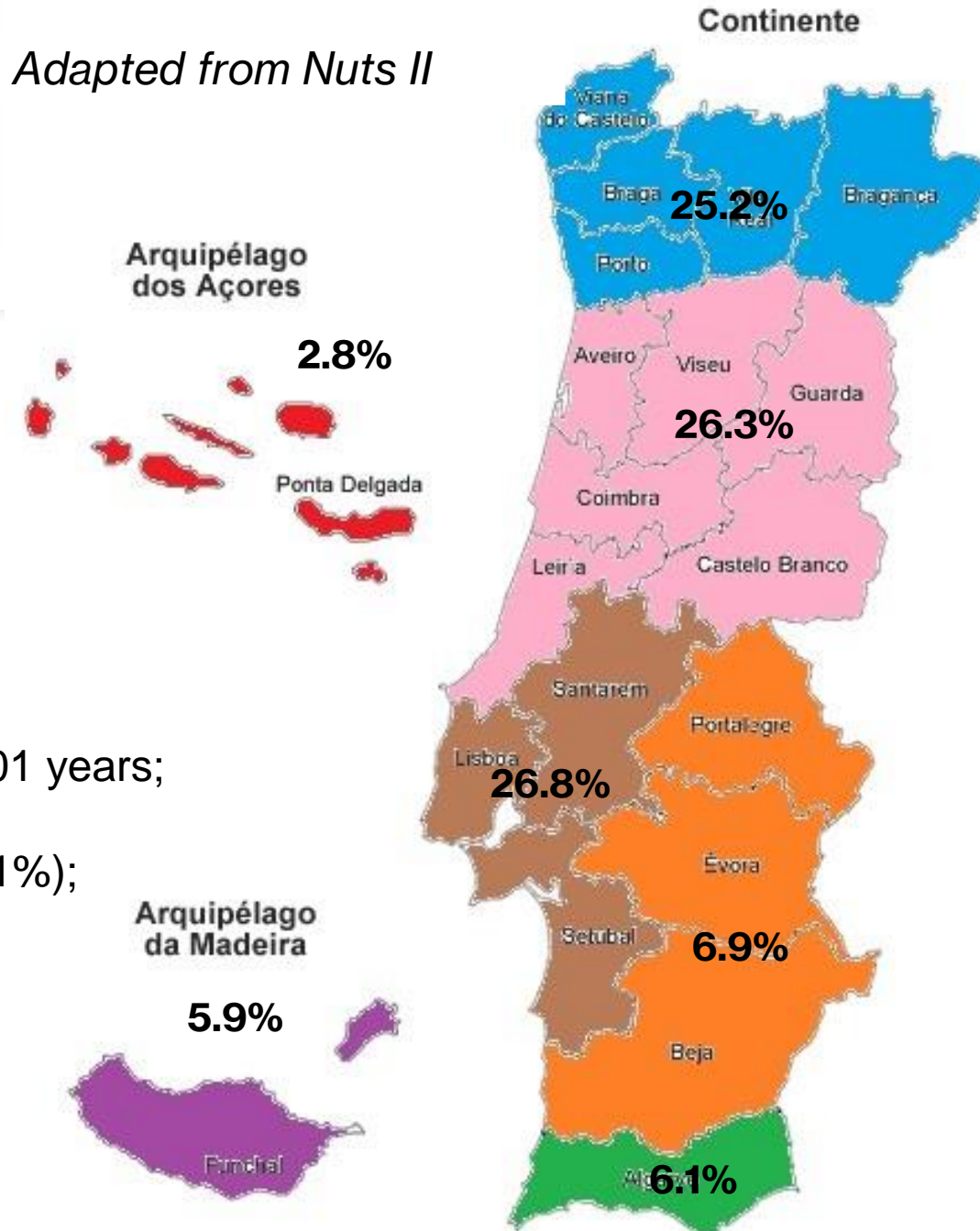


Collected in 2018
(≈ 9% of the population)

DGEEC/MEd -
MCTES,
PORDATA, (last
update on 2019)

METHOD - DISTRIBUTION OF SAMPLE

Adapted from Nuts II



- Female – 9010 (77.9%);
- Average age – 49.04 years;
- Average years of service – 24.01 years;
- Public education – 10.886 (94.1%);
- 3rd BE/Sec – 6.971 (60.3%).

VARIABLES	INSTRUMENTS	DIMENSIONS
Sociodemographic and Professionals	Sociodemographic and professional questionnaire.	Age; Gender; Type of institution; Years of service.
Teacher's health	Teachers' Health Questionnaire (Fernández-Puig, V., Mayayo, J, Lusal, A & Tejedor, C, 2015). Portuguese adaptation of: Borralho, L., Jesus, S., Candeias, A. & Viseu, J., 2020.	Professional well-being; Exhaustion; Cognitive disorders; Musculoskeletal disorders; Voice changes.
Organizational health	Organizational Health Perception Scale (Júnior, G. & Fernandes, M., 2008). Portuguese adaptation of: Jesus, S., Viseu, J., Lobo, P., Orgambidez-Ramos, A., Moura, D., Santos, J., Pereira, J., Borralha, S. & Rus, C., 2016.	Integration of people and teams; Flexibility and adaptability to external demands.
Optimism	Optimism Scale (Barros, J., 1998).	Optimism.

- Research protocol - online (recommendations by Eysenbach, 2014)
- Structural equation analysis (maximum likelihood method) - *Amos software* (v. 27, SPSS, An IBM Company, Chicago, IL)
- Confirmation of the assumptions for the use of SEM:
 - $|Sk| < 3$ and $|Ku| < 7$ (Marôco, 2014);
 - Outliers (D^2) (Hair, Black, Babin, Anderson, & Tatham, 2009)
- Model fit (two-step strategy):
 - 1st Adjustment of the measurement model
 - 2nd Adjustment of the structural model
- Model quality:
 - Factor weights > 0.5 (Marôco, 2014)
 - Model fit indices (absolute, relative and parsimony) (Marôco, 2014)
 - Re-specifying the model - Correlation of measurement errors ($IM > 11$, $p < .001$, Marôco, 2014)
- Model reliability and validity analysis (cronbach's alpha, composite reliability, average variance extracted) (Marôco, 2014)
- Structural model analysis (observation of the sign and significance of direct and indirect effects) (Baron & Benny, 1986; Marôco, 2014)

Quality indices of the mediation model

	Indices	Observed value	Comments (Marôco, 2014)
Absolute	GFI ^a	.92	Good
	RMSEA ^b	.04	Very good
	SRMR ^c	.05	Good
Relative	CFI ^d	.94	Good
	TLI ^e	.94	Good
Parsimony	PCFI ^f	.88	Very good
	X ² /df ^g	20.403*	Bad

Notes: ^a Goodness of Fit Index; ^b Root Mean Square Error of Approximation; ^c Standardized Root Mean Square Residual; ^d Comparative Fit Index; ^e Tucker-Lewis Index; ^f Parsimony Comparative Fit Index; ^g Normed Chi-squared.

RESULTS

Reliability and Validity Values (N=12104)

Variables	α	CR	AVE
Integration of people and teams	.92	.92	.57
Flexibility and adaptability to external demands	.92	.92	.62
Knowledge of objectives by hierarchies	.92	.91	.57
Optimism	.92	.92	.74
Professional Wellbeing	.90	.91	.54
Exhaustion	.88	.88	.71
Cognitive disorders	.80	.81	.61
Musculoskeletal disorders	.81	.81	.51
Voice changes	.85	.85	.73

Notes: α = Alpha Cronbach (>.70); CR = Composite reliability (>70); AVE= Average variance extracted (>.50) (Marôco, 2014)

Mediation analyses

Causal relationships	Direct effects	Indirect effects
H7: Organizational health → Optimism → Professional wellbeing	.180 ($p=.000$)	.184 ($p=.001$)
H8: Organizational health → Optimism → Exhaustion	-.128 ($p=.000$)	-.132 ($p=.001$)
H9: Organizational health → Optimism → Cognitive disorders	-.103 ($p=.000$)	-.155 ($p=.001$)
H10: Organizational health → Optimism → Musculoskeletal disorders	-.094 ($p=.000$)	-.098 ($p=.001$)
H11: Organizational health → Optimism → Voice Changes	-.079 ($p=.000$)	-.092 ($p=.001$)

Notes: Resampling method by *Bootstrap*, $p \leq .005$ (Marôco, 2014). Software Amos (v. 27, SPSS, An IBM Company, Chicago, IL)



CONCLUSIONS

- The health of the school organization has a significant impact on the health (especially in the dimensions of exhaustion and cognitive disorders) and well-being of Portuguese teachers.
- The results obtained confirmed the tested hypotheses:
 - Organizational health and optimism have a positive association with professional well-being and a negative association with other health dimensions. We therefore, propose applying of **joint/simultaneous intervention programs** for the health and well-being of teachers and the school organization.
 - Optimism mediates the relationship between organizational health and all dimensions of teacher's health, so it should be considered in intervention programs with teachers.

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THANK YOU FOR THE ATTENTION

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