

Occupational well-being and mental workload of health care educators in relation to professional competence

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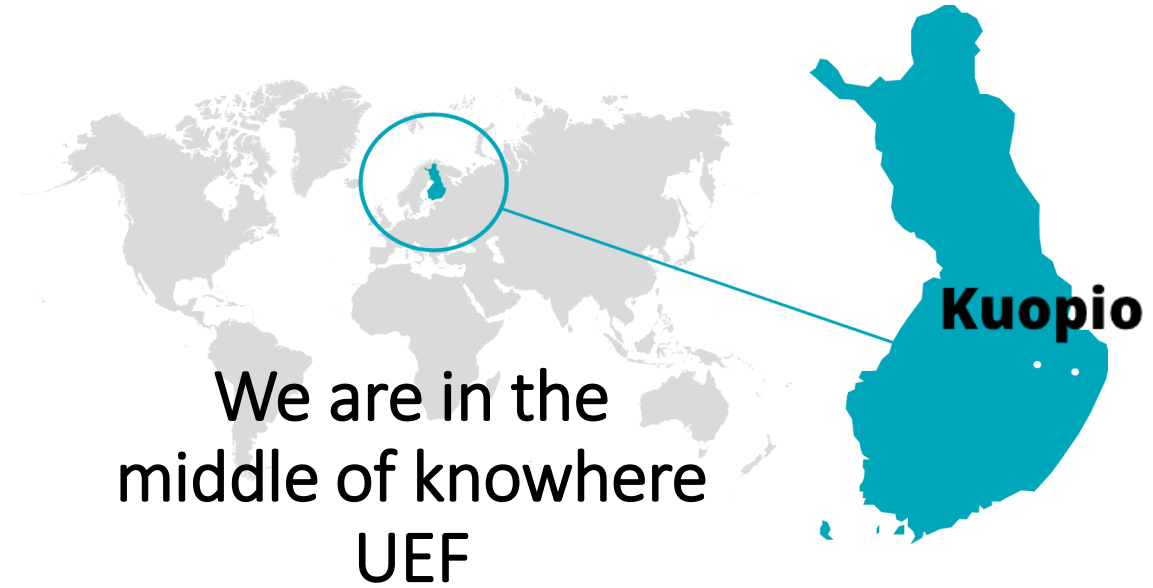
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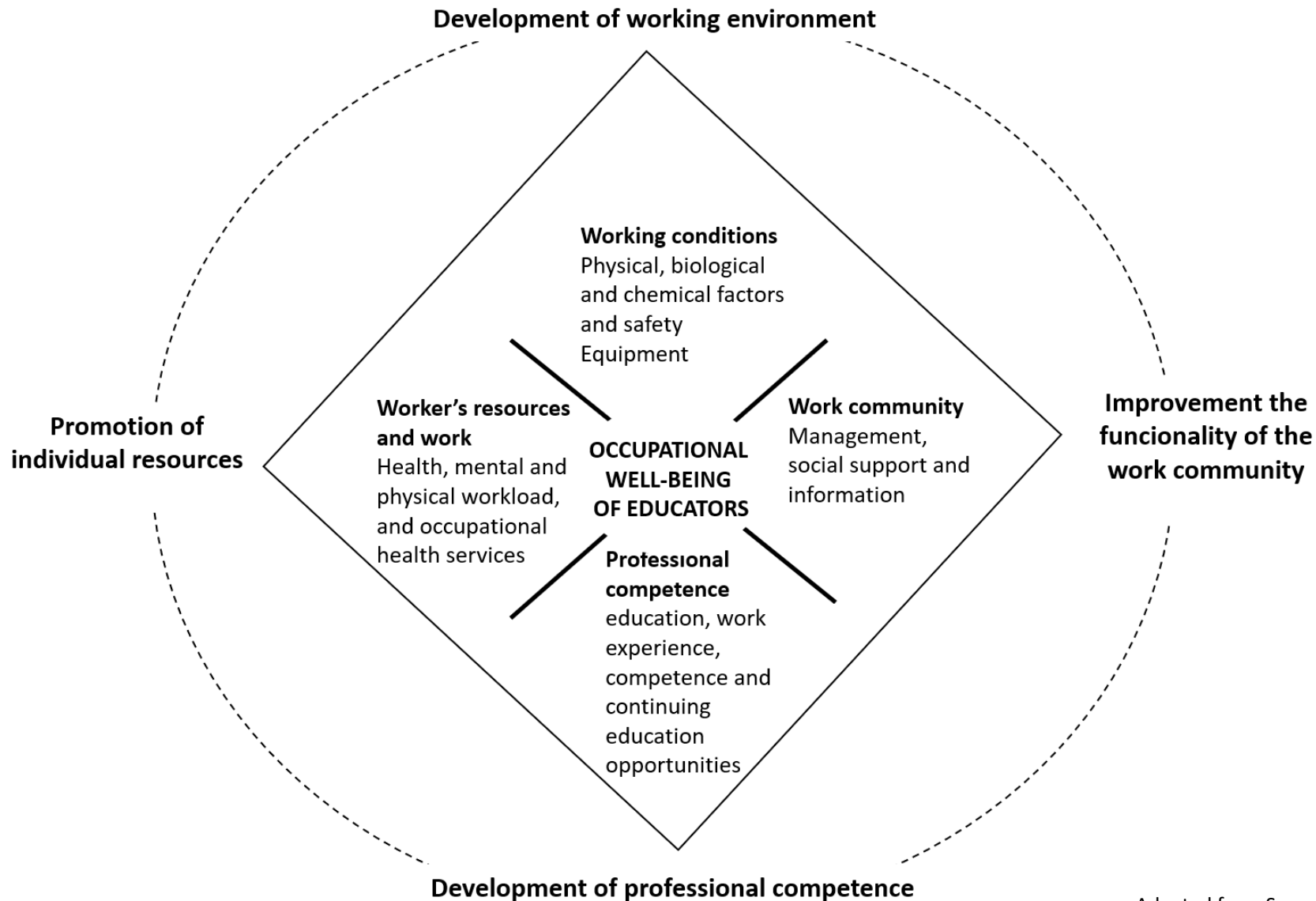
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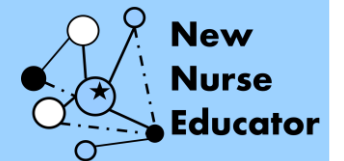
Background

- **Health care educators face challenges** (Howard et al., 2022; Jarosinski, 2022; Rinne et al., 2022; Saaranen et al., 2020, 2021; WHO, 2021)
 - Excessive workload
 - Mental strain at work
 - Digitalisation
 - Labour shortages
- Research on occupational well-being of health care educators is limited

The concept of occupational well-being



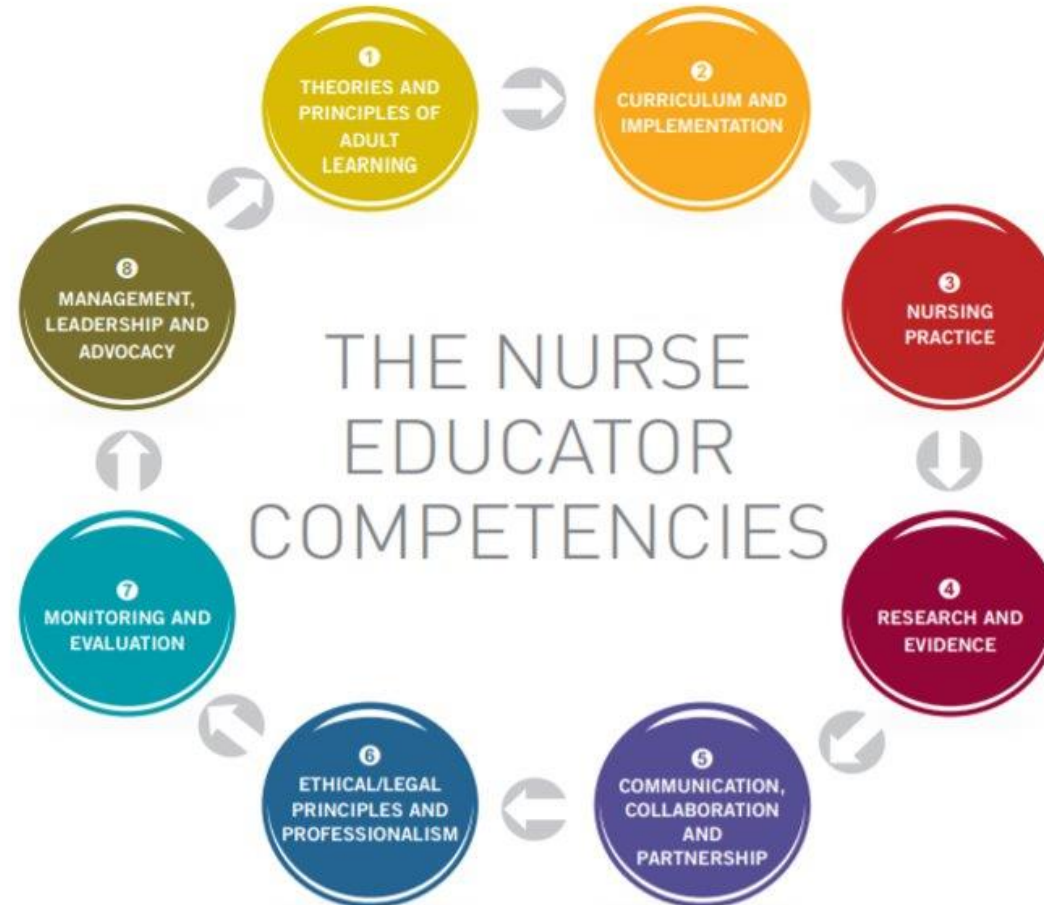
Adapted from Saaranen et al. (2015).



Professional competence

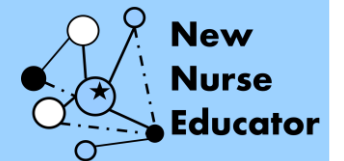
NURSE EDUCATOR CORE COMPETENCIES (WHO 2016)

1. Competence in evidence-based practice
2. Pedagogical competence in teaching and guidance
3. Administrative and curriculum competence
4. Education technology competence
5. Networking and social competence
6. Cultural competence



Based on HeSoEduCo-instrument (Mikkonen et al., 2020). See more Vauhkonen et al. (2024).

Figure: WHO 2016



The results of two research projects

- European New Nurse Educator project, 2020-2023



- Social and Health Care Teachers' Occupational Well-being in Finland project, 2020-2023



Study aim

- To analyse occupational well-being and mental workload among health care educators in relation to professional competence.



Methods

Cross-sectional survey data collection in Finland September 2020

- Finnish health care educators (n=489)
- The Occupational well-being of social and health care teachers—index questionnaire* (Rautiainen et al., 2023)
 - 18 items measure areas of professional competence Likert 1-5
 - Personal occupational well-being continuous 0-5
 - Balance of mental workload Likert 1-5

Cross-sectional survey data collection May 2021 and February 2022

- Finnish, Spanish, Slovakian and Maltese nurse educators (n=302)
- The Health and Social Care Educator's Competence instrument (Mikkonen et al., 2020)
 - 43 items which measure areas of professional competence
 - + Personal occupational well-being continuous 0-5
 - + Balance of mental workload Likert 1-5

*contains altogether 73 items + 5 open-ended questions

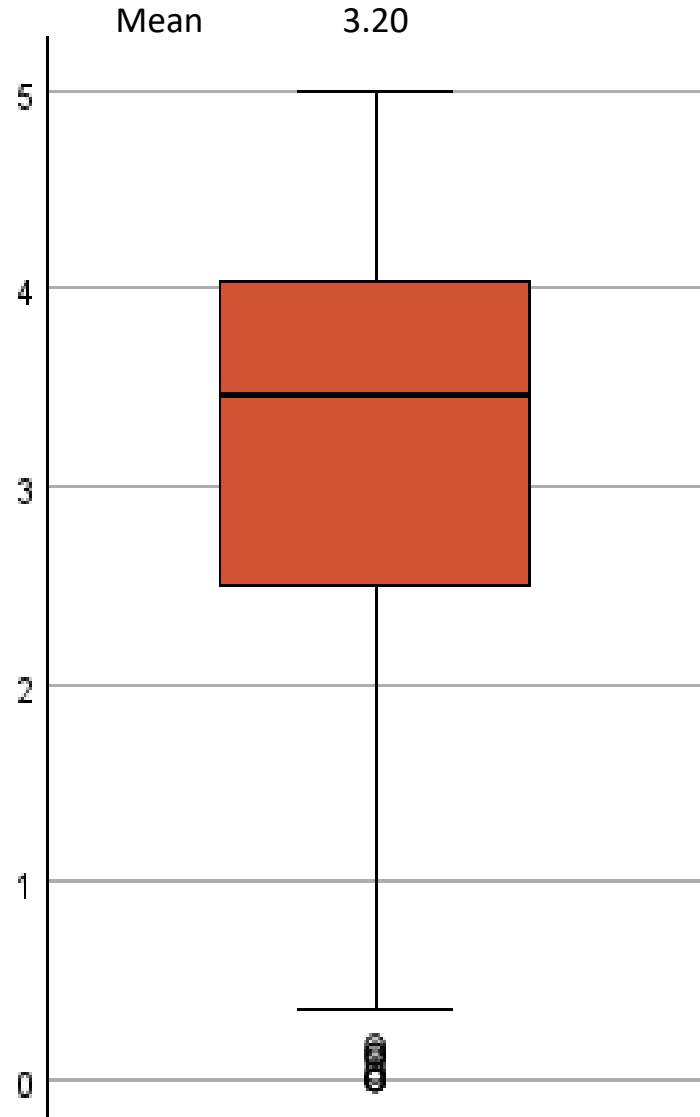
Analyses

- The descriptive analysis
- Exploratory factor analysis EFA
- Kruskal-Wallis test
- Multiple regression modelling

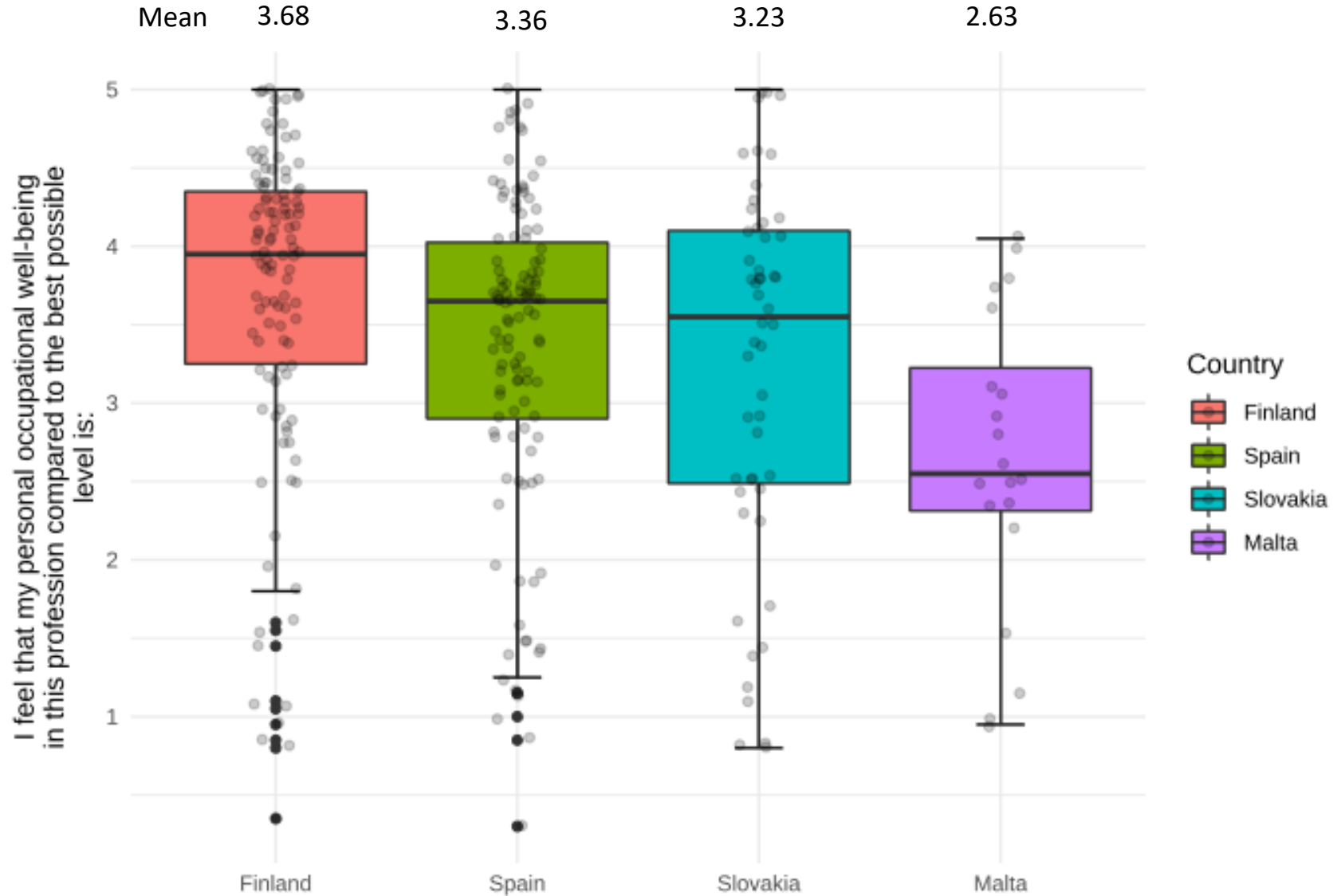


Personal occupational well-being

Finnish results 2020



European results 2021-2022



Occupational well-being and workload

	Finnish results 2020	European results 2021-2022*					
Variable			Mean (SD)				
	Total Finnish	Total European	Finland	Spain	Slovakia	Malta	p-value ¹
12. Personal occupational well-being *	3.20 (1.15)	3.41 (1.08)	3.68 (1.04)	3.36 (1.00)	3.23 (1.19)	2.63 (0.95)	< .001
14. The balance of the mental workload **	2.63 (1.20)	3.23 (1.12)	3.41 (1.07)	3.23 (1.14)	2.85 (1.17)	3.20 (1.01)	.027

Note. *continuous scale 0 – 5, 0 = very poor, 5 = very good; ** Likert scale 1 – 5, 1 = totally disagree, 5 = totally agree, 1 Kruskal-Wallis test.

*Ref: Vauhkonen et al. (2024).



European model: Connections to personal occupational well-being

	B	SE	p-value
Model 1, R² = .363			
Constant	.371	.720	.607
Total competence scale	.434	.185	.020
Balance of the mental workload	.477	.055	< .001
Model 2, R² = .387			
Constant	.874	.810	.281
1. Competence in evidence-based practice	-.099	.189	.602
2. Pedagogical competence in teaching and guidance	-.196	.216	.367
3. Administrative and curriculum competence	.484	.182	.008
4. Education technology competence	.083	.125	.504
5. Network and social competence	.193	.123	.118
6. Cultural competence	-.075	.114	.513
Balance of the mental workload	.455	.057	< .001

Note: B = unstandardized coefficients, SE = standard deviation, Country, age, work experience as an educator, attend to continuous education courses, and highest education level are controlled.

Ref: Vauhkonen et al. (2024).

Finnish model: Connections to personal occupational well-being

	B	SE	p-value
Model 1, R² = .373			
Constant	1.566	.509	.002
Total competence scale	.225	.094	.017
Balance of the mental workload	.538	.038	< .001
Model 2, R² = .419			
Constant	1.507	.502	.003
1. Teaching competence and collaboration with students	-.159	.093	.098
2. Research and project expertise	-.029	.070	.682
3. Language and teaching technology competence	.029	.063	.646
4. Professional competence and training	.420	.072	< .001
Balance of the mental workload	.509	.037	< .001

Note: B = unstandardized coefficients, SE = standard deviation, Age, work experience as an educator, and highest education level are controlled.

Conclusions and implications for future

- Occupational well-being and the balance of mental workload varies in different countries
- Competence and balance of mental workload are positively related to personal occupational well-being
 - Moderate level of occupational well-being which prevailed amongst the educators, the mental workload on health care educators requires further attention.
 - Interventions are needed to reduce mental workload and increase occupational well-being

References:

- Howard A., Antczak R., & Albertsen K. (2022). Education – Evidence from the European Survey of Enterprises on New and Emerging Risks (ESENER). The European Agency for Safety and Health at Work (EU-OSHA). https://www.bollettinoadapt.it/wp-content/uploads/2022/10/Education%E2%80%93Evidence-ESENER_en.pdf
- Jarosinski, J. M., Seldomridge, L., Reid, T. P., & Willey, J. (2022). Nurse faculty shortage: Voices of nursing program administrators. *Nurse Educator*, 47(3), 151–155. <https://doi.org/10.1097/NNE.0000000000001139>
- Mikkonen, K., Tuomikoski, A. M., Sjögren, T., Koivula, M., Koskimäki, M., Lähteenmäki, M. L., Mäki-Hakola, H., Wallin, O., Sormunen, M., Saaranen, T., Koskinen, C., Koskinen, M., Salminen, L., Holopainen, A., & Kääriäinen, M. (2020). Development and testing of an instrument (HeSoEduCo) for health and social care educators' competence in professional education. *Nurse Education Today*, 84, 104239. <https://doi.org/10.1016/j.nedt.2019.104239>
- Rautiainen, I., Vauhkonen, A., Salminen, L., Rinne, J., & Saaranen, T. (2023). The occupational well-being and promoting factors of social and health care educators – a cross-sectional survey study in Finland 2020. *Journal of Nursing Science* 33(2), 211–223. (Abstract in English)
- Rinne, J., Leino-Kilpi, H., Saaranen, T., Pasanen, M., & Salminen, L. (2022). Educators' occupational well-being in health and social care education. *Occupational medicine (Oxford, England)*, 72(5), 289–297. <https://doi.org/10.1093/occmed/kqac024>
- Saaranen, T., Tossavainen, K., Sormunen, M., Laine, S., Turunen, H. (2015). Developing and Testing d Health Promotion Theory – An Example of Creating a Model of Scheel Staff's Occupational Well-Being. In Simovska, V, & Mannix-McNamara, P. (ed.) *Schools for Health and Sustainability*. Springer, 380–422.
- Saaranen, T., Kankkunen, P. & Juntunen, A. (2020). The status and promotion of the occupational well-being of health care teachers – the perspective of workers and their work. *Journal of Nursing Science*, 32(3), 154–165. (Abstract in English)
- Saaranen, T., Kankkunen, P., & Mönkkönen, A. (2021). Occupational wellbeing through community factors – a questionnaire survey to health educators. *Tutkiva Hoitotyö*, 19(3), 32–39. (Abstract in English)
- Vauhkonen, A., Saaranen, T., Cassar, M., Camilleri, M., Martín-Delgado, L., Haycock-Stuart, E., Solgajová, A., Elonen, I., Pasanen, M., Virtanen, H., & Salminen, L. (2024). Professional competence, personal occupational well-being, and mental workload of nurse educators - A cross-sectional study in four European countries. *Nurse education today*, 133, 106069. <https://doi.org/10.1016/j.nedt.2023.106069>
- Vauhkonen, A., Honkalampi, K., Hult, M., Hujo, M., & Saaranen, T. (2023). Occupational well-being of the work community in social and health care education during the COVID-19 pandemic-A cross-sectional study. *Nursing open*, 10(6), 3992–4003. <https://doi.org/10.1002/nop2.1658>
- WHO (2021). The WHO Global Strategic Directions for Nursing and Midwifery 2021–2025. World Health Organization. <https://www.who.int/publications/i/item/9789240033863>



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