

Social and health care worker's OSH in client's home through work system framework

NES 2023

Maria Lindholm, Johanna Pulkkinen

Tampere University



Työsuojelurahasto
Arbetskyddsfonden
The Finnish Work Environment Fund

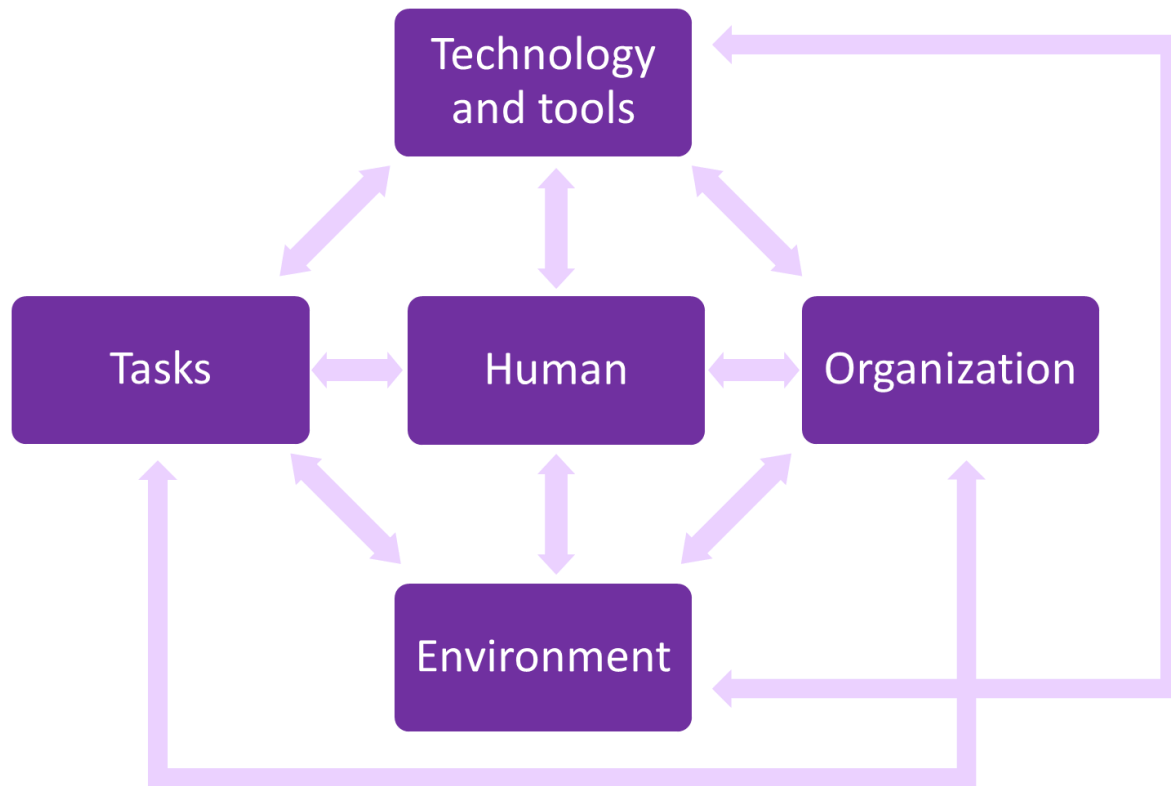
Background – home care sector



(e.g. Eurostat, 2019; Galinsky et al., 2001; Denton et al., 2002; Merryweather et al., 2018; Tarricone & Tsouros, 2008)

→ Contribute to previous discussion by identifying OSH issues through a work system framework

Human factors and ergonomics (HF/E)



- Aims to understand interactions among humans and other system elements (Dul et al., 2012; IEA, 2020; Smith & Carayon-Sainfort, 1989)
- The interactions between various subsystems can be of a physical, cognitive, and psychosocial nature and at different levels, from microergonomics to macroergonomics issues (Carayon, 2006)
- Main focus on prevention and proactivity

Materials and methods

Survey

- n = 160
- Employment relationship
 - Permanent 118 (74%)
 - Other 42 (26%)
- Gender
 - Female 136 (85%)
 - Male 23 (14%)
 - Other 1 (1%)
- Age
 - 20–30 years 17 (11%)
 - 31–40 years 28 (18%)
 - 41–50 years 24 (15%)
 - 51–60 years 43 (27%)
 - 61 years and over 48 (30%)

Interviews

- 55 interviews
- 98 interviewees
- Teams, face-to-face, phone
- Individual interviews (n = 34), group interviews (n = 21)
- Average: 45 minutes (± 16)

Workshops

- 9 workshops
- 36 participants

Results

Assistive equipment and work tools

Technology
and tools

Safety orientation,
guidance, and instructions

Physical ergonomics

Organization of work

Threats of physical
and psychosocial
violence

Education

How the employee calls for and
receives help in emergency situations

Tasks

Human

Organization

Psychosocial, mental,
and ethical loads

Information about customer

Filming employees

Making sure that employees leave
their customer visits safely

Environment

Psychosocial, mental,
and ethical loads

The home as a working environment

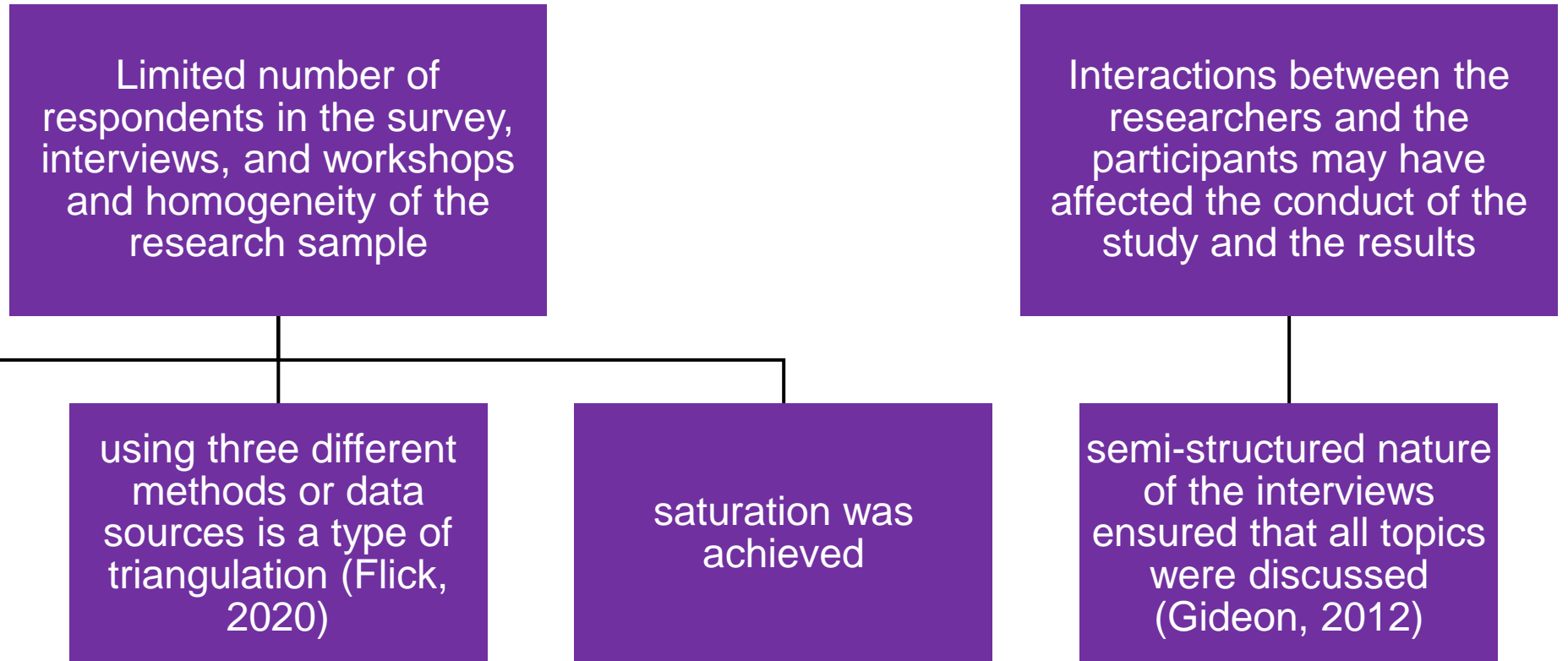
Discussion

- A wide variety of OHS development needs
 - Organization highlighted

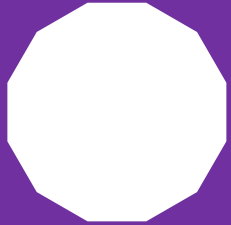
→ There is a need for professionals who can utilize HF/E theory, principles, and standards as part of their daily work



Limitations



Conclusions

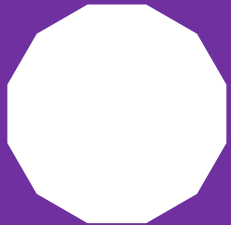


Health and social care workers have many risks

Related to organization, lack of information about the client, and scheduling the working day were identified

Related to tasks, workers are asked to perform tasks outside their job description

Related to tools and technologies, workers may not have proper tools especially



Further research is required to develop effective intervention programs and make working conditions more desirable

Traditional solutions may not be applicable

Preventive measures, risk assessments, and the participation of all parties (including employers, employees, customers, customers' relatives, and the government)

References

- Carayon, P. (2006). Human factors of complex sociotechnical systems. *Applied Ergonomics*, 37(4), 525–535. <https://doi.org/10.1016/j.apergo.2006.04.011>
- de Jong, T., Bos, E., Pawlowska-Cypriasiak, K., Hildt-Ciupińska, K., Marzena, M., Nicolescu, G., & Trifu, A. (2014). Current and emerging issues in the healthcare sector, including home and community care. European Agency for Safety and Health at Work. Luxembourg: Publications Office of the European Union. <https://doi.org/10.2802/33318>
- Denton, M. A., Zeytinoğlu, I. U., & Davies, S. (2002). Working in Clients' Homes: The Impact on the Mental Health and Well-Being of Visiting Home Care Workers. *Home Health Care Services Quarterly*, 21(1), 1–27. https://doi.org/10.1300/J027v21n01_01
- Dul, J., Bruder, R., Buckle, P., Carayon, P., Falzon, P., Marras, W., Wilson, J., & van der Doelen, B. (2012). A strategy for human factors/ergonomics: Developing the discipline and profession. *Ergonomics*, 55(4), 377–395.
- Eurostat. (2019). Projected old-age dependency ratio. European Commission. <https://ec.europa.eu/eurostat/web/products-datasets/-/tps00200>
- Galinsky, T., Waters, T., & Malit, B. (2001). Overexertion Injuries in Home Health Care Workers and the Need for Ergonomics. *Home Health Care Services Quarterly*, 20(3), 57–73. https://doi.org/10.1300/J027v20n03_04
- Gideon, L. (2012). *Handbook of Survey Methodology for the Social Sciences*. Springer Science+Business Media.
- Merryweather, A. S., Thiese, M. S., Kapellusch, J. M., Garg, A., Fix, D. J., & Hegmann, K. T. (2018). Occupational factors related to slips, trips and falls among home healthcare workers. *Safety Science*, 107, 155–160. <https://doi.org/10.1016/j.ssci.2017.07.002>
- Smith, M., & Carayon-Sainfort, P. (1989). A balance theory of job design for stress reduction. *International Journal of Industrial Ergonomics*, 4(1), 67–69.
- Tarricone, R., & Tsouros, A. (Ed.). (2008). *Home care in Europe*. Copenhagen: World Health Organization.