

# **The Beneficial Role of Participation in Decision-Making on Workers' Health and Commitment: A Cross-Sectional Study in Belgium's Health and Homecare Sector**

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## **Funding Sources**

Bensliman Rachida (BR), Mahieu Céline (MC) and Casini Annalisa (CA): Wallonia Region, DGO6 Program: Germaine Tillion (grant number: 1318203).

## **Conflict of Interest**

All authors declare that there is no conflict of interest.

## **Acknowledgments**

We would like to thank all the experts and participants from the organizations involved in this study, as well as the non-profit sponsor UNIPSO and the Government of Walloon Region (DG06 Program: Germaine Tillion) for funding the research. We also thank Degavre Florence, Callorda Fossati Ela, Nyssens Marthe, Schmitz Olivier, and Macq Jean, members of the WISDOM project research team. Finally, we extend our gratitude to Dramaix Michèle for her expert advice on the study's statistical analysis.

## **Specific author contributions**

BR, MC, and CA conceptualized the research and developed the methodology. BR, MC, and CA analyzed and interpreted the data. BR, MC, and CA wrote and validated the manuscript. CA and MC supervised the manuscript. All authors read and approved the final manuscript.

## **Data Availability**

The datasets and the questionnaire used during the current study available from the corresponding author on reasonable request and can be viewed on the Openscience platform.

## **EQUATER Network Reporting Guidelines**

N/A

## **AI statements**

We declare that no AI tools was utilized at any stage during research development and design, including data collection, analysis, processing, or the preparation and writing of the manuscript.

## Ethical considerations

The study was approved by the Ethics Committee of the first author's university (Ref. No. P2016/106). We confirm that all data collection methods were carried out in accordance with the relevant guidelines and regulations Ethics Committee of '*Comité d'éthique hospitalo-facultaire Erasme-ULB*'. We confirm that informed consent has been obtained from all participants.

ACCEPTED

## Abstract

**Objectives:** To test the hypothesis of a beneficial role of worker participation in the decision-making process as a buffer against demanding work organisation on mental and physical health and commitment.

**Methods:** A cross-sectional study (N = 1134) was conducted among workers employed in the health and homecare sector. Multiple regressions and moderation analyses were performed to test whether worker participation in decision-making moderates the association between demanding work organisation and health and whether it directly predicts work commitment.

**Results:** As hypothesized, results show that demanding work organisation is negatively associated with the mental and physical health of workers and that participation in the decision-making moderates this negative association. Finally, participation in decision-making is directly related to work commitment.

**Conclusions:** Results are discussed in light of the recent evolution of work conditions in the health and homecare sector.

**Keywords:** Participation in decision-making, work demands, occupational health, commitment, homecare sector

## Learning outcomes

- Managers in the health and homecare sector should consider reducing excessive workload pressures on workers, which significantly impact their mental and physical health, particularly within the context of *ageing in place*.
- Implementing organizational policies that actively involve workers in decision-making processes may help to mitigate the negative impacts of demanding work organization on their health and well-being, while also directly enhancing their commitment.
- These measures are particularly urgent, given that the health and homecare sector currently faces challenging working conditions and high quantitative demands that are difficult to reconcile with the complex care needs of older adults and their caregivers.

## Introduction

Work organisation and working conditions are significant determinants of workers' health and well-being<sup>1-4</sup>. According to DeJoy et al. (2010), work organisation refers “*to the way work processes are structured and managed, such as job design, scheduling, management, organisational characteristics, policies and procedures.*” (p: 140)<sup>5</sup>.

In Belgium, within the pressing socio-political context of '*ageing in place*', the innovations emerging in response to the rapidly evolving demands and care needs of older adults provide an opportunity to study the transformations in work organisation and working conditions within the '*health and homecare sector*', as well as the health and well-being of workers.

Indeed, recent research has shown that working conditions are particularly challenging and negatively impact the health and well-being of health and homecare workers, especially when innovation is oriented towards '*results and objectives*', designed without workers participation<sup>6</sup> and when it is not accompanied by innovation in work organisation<sup>7</sup>. Homecare workers, in particular, find themselves "*squeezed like a lemon*" between the quantitative demands of the organisation and the complex demands and needs of the older adults and caregivers, leading to stress for these workers<sup>8</sup>.

According to Strandell (2019), work intensification in this sector has increased over time, and working conditions are deteriorating<sup>9</sup>. Indeed, health and homecare workers are facing significant organisational pressures to meet the growing demands of older adults to age in place

and to respond to their progressively more complex care needs. As a result, this situation impacts workers' health, as demonstrated by Sayin et al., who showed that work intensification is significantly associated with stress<sup>10</sup>. Moreover, in homecare organisations with traditional pyramidal management, workers' participation in decisions concerning organisation of work and service delivery objectives is very low, and working conditions (e.g., changing schedules, travel between interventions, high workloads) are documented as being unfavourable for workers<sup>8</sup>.

In this highly demanding work context, workers' participation in decision-making can be considered a relevant and timely protective resource for workers' health. Yet, it has received very little attention from researchers, and, to our knowledge, and its impact on workers' health has never been studied in the health and homecare sector.

Nonetheless, there are experiences from the field that suggest that participation in decision-making process could be one of the primary keys to substantially improving workers' health. For instance, the Buurtzorg Model (i.e., neighbourhood care model), which originated in the Netherlands, is a very inspiring example of a work organisation based on self-managed teams of nurses and has produced positive results in improved quality of care and satisfaction of the people receiving care. This model is so successful that it is replicated in several countries worldwide<sup>11</sup>. To our knowledge, no study has directly analysed the effects of the participation in the decision-making process of workers within the Buurtzorg type of work organisation this model on the health and wellbeing at work of health and homecare staff.

Another indication of the beneficial potential of participation in decision-making process can be found in the European Foundation for the Improvement of Living, and Working Conditions

Report, assessing the evolution of work organisation patterns in the EU27. For statistical purposes, this report differentiates three levels of employees' participation: strategic participation, organisational participation, and discretion task. Results show that employee participation is associated with higher levels of psychological well-being and a significant decrease in physical symptoms due to stress, as well as higher motivation to engage in tasks and to contribute to the organisation<sup>12</sup>.

Building on two seminal theoretical frameworks, the Job-Demand-Control (JD-C) Model<sup>13</sup> and the Job-Demand-Resource (JD-R) Model<sup>14</sup>, this contribution will focus on two specific organisational psychosocial factors: *demanding work organisation* and *participation in decision-making process*, and their association with the health and well-being of workers in the health and homecare sector.

The Job Demand-Control model, developed by Karasek (1979) is considered a benchmark in the medical, epidemiological, public health, and psychological literature for studying psychosocial risks in the workplace. It is a theoretical model of work-related stress that predicts professional stress factors, referred to as '*Job Strain*', based on two key dimensions linking the individual to their work environment<sup>13</sup>. The first dimension is '*Job Demand*', which includes quantitative demands from the work organization (e.g., workload or intensification of work rhythms) and psychological demands (e.g., due to task complexity). The second dimension, '*Job Control*', refers to "*the potential control an individual has over their tasks and conduct during the working day*"<sup>13</sup> (p: 289-290). It pertains to the degree of freedom and autonomy workers have in participating in decisions about the execution of daily tasks and the use of their skills.

As Karasek describes, high levels of autonomy positively affect mental health, while a highly demanding work organisation has adverse consequences for workers' health<sup>13</sup>. Indeed, according to Kivimäki, higher demands increase stress and may elevate the risk of cardiovascular disease<sup>15</sup>. As shown in Bowling's meta-analysis (2015), an increased workload is negatively associated with mental well-being, strain, overall health, physical symptoms, and emotional exhaustion<sup>16</sup>. In contrast, a high level of decision latitude reduces the adverse effects of high demands on workers' wellbeing. Furthering this model, a systematic review by Egan et al. (2007) identified evidence demonstrating that specific organisational-level participation interventions can benefit employees' mental health<sup>17</sup>.

The JD-C Model, as previously explained, addresses a limited aspect of participation in decision-making processes through 'decision latitude', which focuses solely on the content of work rather than organizational or strategic aspects. This narrow focus means that the JD-C Model does not fully capture the broader organizational and strategic participation that is crucial for understanding its impact on worker health and well-being.

For this reason, our study integrates Karasek's JD-C Model with the 'Job Demand-Resource' (JD-R) Model developed by Bakker and Demerouti<sup>14</sup>. The JD-R Model provides a more comprehensive perspective by emphasizing the 'resource' dimension, which includes organizational and strategic factors.

In agreement with the JD-C Model, the JD-R Model suggests that certain organisational factors, such as autonomy, should be considered as occupational resources that, by moderating the effect of work demands, are beneficial to workers' health<sup>18</sup>. More precisely, this model identifies two interrelated psychological processes that may have an impact on occupational health: on the negative side, excessive and prolonged work demands would lead to burnout and poor health of

workers, and on the positive side, work resources would foster a motivational dynamic leading to workers' commitment<sup>19</sup>. Yet, besides their beneficial effect *per se*, job resources also act as a buffer against the negative impact of job demands on workers' health and well-being.

This model defines two interactive processes. On the one hand, when job demands (psychological, emotional or physical) are high, stress increases, leading to adverse outcomes for the organisation. This relationship is moderated by professional resources (such as social support, autonomy, positive evaluation, etc.), meaning that the negative impact of high demands is less intense when workers have professional resources. On the other hand, when professional resources are high, worker motivation increases, resulting in improved outcomes for the organisation. This relationship is also moderated by high demands, indicating that the motivation derived from the presence of resources is attenuated due to intense job demands<sup>18</sup>.

The JD-R Model has been successfully applied to the homecare sector. For example, in 2003, Bakker et al. showed that high work demand was predictive of burnout and that resources such as autonomy and social support were positively associated with job effectiveness in four homecare organisations<sup>20</sup>. We aim to build on this same model to analyze the health and well-being of the professionals in the health and homecare sector in Belgium.

Following these results directly, the present study will focus on the two specific aforementioned organisational factors and their direct and indirect impact on workers' health and well-being: (1) demanding work organisation, corresponding to the work overload and pace intensification, and

(2) participation, referring to workers' influence on workload, work organisation, as well as and on strategic decisions (service production and delivery objectives).

According to the theoretical framework of JD-R Model and this gap in the literature, the present study aims to (1) explore the associations between demanding work organisation (i.e., work overload and pace intensification) and mental and physical health (self-reported health, stress, somatic stress), (2) assess whether this relationship is moderated by participation in decision-making process, and (3) evaluate whether participation predicts workers' commitment.

We formulate the following hypotheses regarding the health and homecare sector:

**H1:** 'Demanding work organisation' (measured as work overload and pace intensification) is negatively associated with health and homecare workers' 'Mental and physical health'.

**H2:** 'Participation in decision-making process' moderates the association between 'Demanding work organisation' and workers' 'Mental and physical health'.

**H3:** 'Participation in decision-making process' is positively associated with health and homecare workers' 'Work commitment'.

Figure 1. Research hypotheses adapted from the JD-R Model

## Method

### a) Participants and Data Collection

The present cross-sectional study relies on a database issued from the interdisciplinary, inter-university, and partnership research project '*WISDOM Research, a tool for social innovation processes in homecare for the older adults in the Walloon Region*'. Conducted between 2015 and 2018 in the Walloon and Brussels regions of Belgium, this research focuses specifically on the dynamics and emergence processes of 'social innovations' in health and homecare for the older adults, developed by organisations to meet the socio-political challenges of *ageing in place*. Three areas are being studied by the interdisciplinary scientific teams: the 'socio-economic' area, the 'local professional care network' area and the 'health and well-being at work' area. This third area is precisely the focus of the present paper, which aims to analyse the working conditions and psychosocial risks affecting the health and well-being of health and homecare workers in organisations providing innovative services.

The selection of the organisations was based on a Delphi procedure conducted in the initial phase of the WISDOM Research. These innovations cover seven fields of intervention classified into the following clusters: alternative housing; community projects; psychological support; respite for caregivers; multidisciplinary approaches; projects with a technological component; other small-scale services<sup>21</sup>.

The sampling for the present study involved selecting 14 case studies from among 42 identified innovations. The management of each organisation was contacted by email and telephone to invite them to take part in the study. Of these, ten organizations voluntarily agreed to participate in the cross-sectional study selected by WISDOM.

In total, 2793 questionnaires (online or paper/pencil format) were distributed between December 2015 and June 2016. Workers were encouraged by their management to complete the questionnaire without any obligation or financial compensation. Participation was voluntary. We obtained a response rate of 40.6%, representing 1134 completed questionnaires.

The study, including the questionnaire and data collection procedure, was approved by the Ethics Committee of the first author's university (Ref. No. P2016/106).

## **b) Measures**

The WISDOM Research questionnaire was mainly based on the Belgian French version of the Copenhagen Psychosocial Questionnaire (COPSOQ II). This internationally validated questionnaire assesses psychosocial risk factors at work and workers' health and well-being. Besides, the questionnaire included several questions on potential confounding variables (socio-demographic variables such as age, gender, diploma level and working conditions variables, type of contract, hierarchical level).

Professional categories were recorded based on the International Standard Classification of Occupations (ISCO)<sup>(Note a)</sup>. Seven categories were retained for our study:

1. Managers (senior officials)
2. Professionals (health professionals: medical doctors, paramedical practitioners, nursing professionals)
3. Technicians and associate professionals (nursing, legal, financial, or social associates professionals, administrative and specialised secretaries)
4. Clerical support workers (secretaries, tellers, client information workers)
5. Service and sales workers (cooks, hairdressers, beauticians, personal care workers in health and care services)
6. Craft and related trades workers (handicraft workers)
7. Elementary occupations (domestic and office cleaners and helpers).

For the current study, we will focus on four specific measures: 1/ Mental and physical health, 2/ Work commitment, 3/ Demanding work organisation, and 4/ Participation in decision-making process.

#### **- Mental and physical health**

This variable was calculated by combining several health indicators, namely: general health perception, stress, and somatic stress symptoms. A single item measured the general health perception: ‘In general, would you say your health is...’ with a 5-point Likert scale going from 1 (excellent) to 5 (poor). This item was reversed for computing the global score.

The stress scale was composed of four items: ‘During the last four weeks, how often have you experienced difficulties relaxing?’, ‘How often have you felt irritable?’, ‘How often have you felt tense?’, and ‘How often have you been stressed?’.

The somatic stress symptoms scale comprised four items: ‘Over the previous four weeks, how often have you had stomach aches or gastric problems?’, ‘How often have you had headaches?’, ‘How often have you had heart palpitations?’, and ‘How often have you experienced muscle tension?’. Both scales were accompanied by a 5-points Likert scale ranging from 1 (all the time) to 5 (never) as response options.

A principal component factorial analysis showed that the selected items loaded on a single factor explaining 47.84% of the variance and possess a good reliability index (Cronbach’s alpha = .86)

The global score for mental and physical health was computed by averaging the entire set of items and has a score going from 1 (poor health) to 5 (excellent health).

#### **- Work commitment**

The commitment scale was composed of two items: ‘Do you feel motivated and involved in your work?’ and ‘Do you think the work you do is important?’ with a 5-points Likert scale going from 1 (always) to 5 (rarely). These items were averaged to obtain a final score ranging from 1 (low commitment) to 5 (high commitment) (Cronbach’s alpha = .70).

### - **Demanding work organisation**

This measure was obtained by averaging one item from the COPSOQ II Workload subscale: ‘Do you have enough time for your work tasks?’ and three items from the pace at work subscale: ‘Do you have to work very quickly?’, ‘Do you work at a high pace throughout the day?’ and ‘In your work, is it necessary to continuously work at a high pace?’. All the Items were associated with a 5-points Likert scale going from 1 (always) to 5 (never). Before averaging the four items, where necessary, we reversed the individual scores to obtain a final demanding work organisation score going from 1 (low demanding) to 5 (high demanding). A principal component factorial analysis showed that the selected items loaded on a single factor explaining 61.34% of the variance. The Cronbach’s alpha for the demanding work organisation scale is equal to .79.

### - **Participation in decision-making process**

This measure was built by averaging three items concerning respectively the possibility for health and homecare workers to influence their work: ‘Can you influence the amount of work assigned to you’, to participate in decision-making about the work conditions offered by the organisation: ‘Do you have a say in the organization and working conditions of your workplace?’, and to participate in the organisational choices about the production goals and services: ‘Do you have a say in defining the production goals of goods/services within your organization?’. The scale shows an acceptable reliability index (Cronbach’s alpha = .67). The final score goes from 1 (low participation) to 5 (high participation).

### c) Statistical Analyses

To describe the data and test the three hypotheses, we performed descriptive statistics (t-test and ANOVA followed post-hoc Tukey multiples comparisons), correlations (Pearson), multiple regressions, and moderation analyses using IBM SPSS statistics V. 27. The confounding variables included in the models were those significantly associated with outcome ('Mental and physical health' and 'Work commitment'). For the moderation analysis specifically, we relayed on the PROCESS Procedure for SPSS Version 4.0. Hayes (2022). All data and the questionnaire used for data collection are available on request from the author and can be viewed on the OpenScience platform.

## Results

### a) Descriptive statistics

For the present analysis, the sample consisted of **1134** workers in health and homecare workers, of which 1075 (94.8%) were women, 44 (3.9%) men and 15 (1.3%) did not indicate their gender. The mean age is of 43.24 years (SD = 10.80). The large majority of participants had a permanent contract (N = 1010, 89.1%), worked as service workers (e.g., nurses, care assistants, and homecare workers) (N = 756, 66.7%), and had an upper secondary school diploma (N = 727, 64.1%). A detailed description of the sample is presented in Table 1.

Table 1. Description of the sample

Concerning the variables of interest (dependent and independent), we found that, overall, participants reported having relatively good mental and physical health (mean = 3.58), being highly engaged at work (mean = 4.28), facing a slightly above the mean levels of demanding work organisation (mean = 3.18) and exercising average participation in decision-making process (mean = 2.45). Means, standard deviations and ranges of these variables according to the subject's characteristics are reported in Table 2.

Table 2. Comparison of means of the variables of interest as a function of the confounding variables

The means of the study population for the variable of interest 'Mental and physical health' (mean = 3.58, sd = 0.73) and 'Demanding work organisation' (mean = 3.18, sd = 0.75) varies between neutral points 3 and 4. Variable 'Work commitment' is high (mean = 4.28, sd = 0.71) and varies between point 4 'often' and point 5 'always'. In contrast, the general mean of 'Participation in decision-making process' is low and below the neutral point of the scale (mean = 2.45, sd = 1.01) (Table 2).

We find a statistically significant difference between the mean scores of the four variables of interest according to the 'Diploma level'. The mean scores of 'Work commitment' and 'Demanding work organisation' are also statistically different according to the confounding variables 'Professional category', 'Contract type' and 'Diploma level'. There is also a significant difference in the mean score for 'Participation in decision-making process' by 'Gender', 'Profession category' and 'Diploma level'. There are significant differences in the mean score

for all variables according to ‘Diploma level’. The post-hoc means comparison showed that the mean score of ‘Participation in decision-making process’ is significantly higher ( $< .001$ ) for the professional category comprising managers and medical doctors compared to all other occupational categories. Also, ‘Participation in decision-making process’ is higher among workers with a Master+ degree than all other diploma levels. Thus, the higher the ‘Professional category’ and ‘Diploma level’, the higher the ‘Participation’. In contrast, there is no statistical difference between professional categories for the ‘Mental and physical health’ variable.

Table 3. Correlation of variables of interest

The correlations among the entire set of variables of interest are reported in **Table 3**. All the variables are highly correlated in the expected direction. More specifically, ‘Mental and physical health’ and ‘Work commitment’ go hand in hand, i.e., the better the ‘Mental and physical health’, the higher the ‘Work commitment’. Similarly, the higher the ‘Participation in decision-making process’, the better the ‘Mental and physical health’. On the other hand, the more ‘Demanding work organisation’, the lower the ‘Mental and physical health’ and the lower the ‘Participation in decision-making process’.

## **b) Hypotheses testing**

To test our hypothesis 1, we ran a linear regression analysis using ‘Mental and physical health’ as the outcome variable and the ‘Demanding work organisation’ (normalised data) as the predictor. The data were controlled for gender and the type of contract. Results confirm our

hypothesis 1 that is, ‘Demanding work organisation’ is negatively associated with health and homecare workers’ ‘Mental and physical health’ ( $\beta = -.23$ ,  $p < .001$ ,  $R^2 = .106$ )

Moreover, we hypothesised that ‘Participation in decision-making process’ moderates the relationship between ‘Demanding work organisation’ and workers’ ‘Mental and physical health’ (H2). The moderation analysis ( $R^2 = .114$ ,  $F(5,887) = 22.92$ ,  $p < .001$ ) carried out to test this hypothesis confirmed the existence of an interaction between ‘Demanding work organisation’ and ‘Participation in decision-making process’ ( $\beta = .05$ ,  $p < .05$ ). Thus, in line with the JD-R Model, ‘Participation in decision-making process’ attenuates the negative relationship between work ‘Demanding work organisation’ and ‘Mental and physical health’, especially when workers are confronted with a high level of ‘Demanding work organisation’ (**Fig. 2**).

Figure 2. Interaction between ‘Participation in decision-making process’ and ‘Demanding work organisation’ (standardised data) on ‘Mental and physical health’

Finally, we tested the hypothesis that ‘Participation in decision-making process’ is positively associated with health and homecare workers’ ‘Work commitment’ (H3). Specifically, in line with the JD-R Model, we expect to find a positive direct effect between these two variables. A linear regression analysis fully confirmed our prediction ( $R^2 = .032$   $F(2, 994) = 17,575$ ,  $p < .001$ ) after adjusting for the confounding variable ‘contract type’. Indeed, results reveal a main effect for ‘Participation in decision-making process’ ( $\beta = .114$ ,  $p < .001$ ) on commitment. That is to say, the greater the ‘Participation in decision-making process’, the stronger the ‘Work commitment’.

## Discussion

The main objective of our study was to verify the existence of a negative relationship between demanding work organisation in the health and homecare sector and workers' mental and physical health, as well as the moderating role of participation in decision-making process in this relationship and its direct association with work commitment.

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First, it should be noted that most participants in our study were women (94%), and this characteristic has not changed over time. Bakker's study already showed a similar rate in 2003<sup>20</sup>, and Ree & Wiig in 2019, a slightly higher rate<sup>22</sup>.

Moreover, regarding 'Mental and physical health' (self-reported health, stress and somatic stress), the overall means reveal good health in all workers, regardless of their occupational status. However, our results confirm Hypothesis 1, that 'Demanding work organisation' is negatively associated with workers' mental and physical health. This finding is consistent with most studies on occupational health in the homecare sector. Indeed, Sjöberg (2020) found that workload is high among homecare workers<sup>23</sup>. Similarly, recent literature confirms that homecare workers experience occupational stress due to the impact of schedule changes<sup>24</sup>, as well as due to difficult working conditions<sup>25</sup>. In addition, the work pressure placed on home-based workers during the Covid-19 pandemic aggravated this stress<sup>26</sup>.

Following the JD-R Model, our results confirm our second hypothesis, namely that, as an organisational resource, participation in the decision-making process concerning the work

organisation and strategic decisions moderates the negative association between demanding work organisation and the mental and physical health of workers. In this sense, Ruotsalainen et al. (2020) showed that if home-based workers could influence their work, this could positively impact their well-being. These results then support the idea that creating self-organised homecare teams could be a very beneficial strategy for enhancing occupational health<sup>27</sup>.

However, in the Belgian health and homecare sector, participation in decision-making process by health and homecare workers is uncommon. Indeed, our results showed that participation is relatively low (score between 'sometimes' and 'rarely') and below the general average (2.45) among nurses, employees, homecare workers. This is particularly true for workers with a lower level of education than for highly qualified occupations. In other words, these occupational categories do not have much opportunity to participate in decision-making to influence the amount of work, the general organisation of work or working conditions, nor on more strategic decision-making issues such as the definition of service delivery targets. Only professional and scientific occupations and managers have significant latitude in decision-making.

The overall average for work engagement varies by occupational category and degree. Still, the average engagement scores are high (between 'often' and 'always') in most occupations, with an overall average of 4.28. This may be explained by the relational nature of care occupations, where workers are generally highly invested and involved and derive much of their work motivation from the care relationship<sup>28</sup>.

Finally, results reveal a main effect of participation in decision-making process as a resource on work commitment, thus confirming hypothesis 3. To our knowledge, few studies have investigated participation in decision-making process as a resource in the sector. According to Mockli (2020), work resources among homeworkers in Switzerland were positively correlated with work engagement<sup>29</sup>. Ree & Wiig (2020) investigated the positive association between transformational leadership and work engagement<sup>22</sup>.

### **Towards more participation in the health and homecare sector: contributions and focal points**

Based on the results of our study in the health and homecare sector, we postulated that developing a more participatory management approach that incorporates workers in decision-making process about work organisation, work conditions, and strategic decisions would be a resource to improve workers' mental and physical health and moderate the adverse effects of demanding environment on workers' health. Participation in decision-making process regarding work organisation is also a resource for worker commitment.

Workers' participation, therefore, seems to be a crucial matter, especially in a sector where working conditions are documented to be degraded. The urgency to implement participatory practices is all the more acute in a sector constantly innovating in providing services to improve the well-being and quality of older adults and caregivers. Indeed, this makes it very difficult to recruit and retain health and homecare workers whose skills are evolving and necessary to enable

*ageing in place*. Ensuring greater participation could therefore be a very successful strategy for the organisation's good functioning and the workers' well-being.

The example of the Buurtzorg Model is very interesting. Considered a “social innovation”, Buurtzorg has the potential to change the traditional model of the healthcare sector, whose founder promotes the slogan: "Humanity above bureaucracy"<sup>30</sup>. Based on a logic of self-management and team autonomy, the innovative ‘Buurtzorg’ initiative emphasises the participation of homecare nursing workers in decision-making processes at the organisational level, particularly in terms of planning without reliance on hierarchy. There are neither managers nor middle management, but rather 'regional coaches' who have no decision-making power but serve as facilitators and trainers for the teams<sup>31</sup>. Buurtzorg is inspiring many countries, particularly Belgium, to rethink their governance and management systems for health and homecare. In the Walloon region, two health and homecare organizations have recently begun testing and implementing the Buurtzorg model for home nursing activities. This pilot project aims to redistribute decision-making power to homecare nurses, with the goal of enhancing organizational efficiency, job satisfaction, and the quality of care by structuring the entire work organization around the life projects and network of older adults.

The scoping review of Hegedüs et al. (2022) found an increase in staff satisfaction with the Buurtzorg Model outside the Netherlands, among other things, due to the possibilities to participate in organisational decisions, self-governance and autonomy in scheduling, decreasing time pressure, and the collective problem-solving approach of field team work<sup>11</sup>.

Therefore, this model opens interesting perspectives on participatory management of work organisation. According to Gray (2015), self-regulating teams promote flexibility in the organisation of work to meet the needs of nurses and patients in a balanced way<sup>32</sup>. This is what Bensliman et al. (2022) showed in their study analysing the experience of workers employed in health and care social innovations that are not designed with the participation of workers in the health and homecare sector in the context of *ageing in place*. In this framework, the authors were able to show that the lack of participation generated a double tension and imbalance between, on the one hand, the well-being of the older adults and the caregivers and the well-being of the workers and, on the other hand, the strategic objectives of the non-profit organisations in terms of rationalisation of resources. The author proposes an analysis model called the "*Squeezed Lemon Model*", which intends to balance and regulate these tensions by including workers' participation in the decision-making process<sup>8</sup>.

However, implementing a participatory management process requires considering several human and structural factors hindering this form of organisational leadership. For instance, in the context of nursing in the hospital system, Ballard has pointed out that participation can be accompanied by role blurring, lack of social support, lack of recognition and staff apathy<sup>33</sup>. It is, therefore, reasonable to assume that these problems could also arise in health and homecare organisations. Similarly, according to the Buurtzorg Model, the self-management of a team that combines health care and homecare staff has advantages for the quality of care and job satisfaction but also some challenges. Indeed, Leask et al. (2020) report problems of inter- and intra-team collaboration, which may be due to personality conflicts, blurring of roles and

responsibilities, competitiveness, fear in decision-making and risks of conflicts between workers<sup>34</sup>.

Thus, for the transition from a traditional hierarchical management system in a bureaucratic organisation to a team-based participatory system to be successful, a framework for implementation is needed, as well as sufficient time to allow for a better understanding of what this shift implies in terms of organisational change and redistribution of power as managers have to accept that they will lose some of their power, and teams that they will become more autonomous and take on more responsibility<sup>31,34</sup>. In sum, the vision encouraged for this sector is to move from a system of work organisation based on surveillance and control to one based on the trust, participation in decision-making and commitment of workers.

### **Limitations, strengths of the study and future research**

Certain limitations of the present study should be mentioned. First, our study is a cross-sectional observational study conducted in a given period that does not demonstrate a causal association between variables. Second, the COPSOQ II questionnaire does not cover a comprehensive and detailed range of variables relating to participation in terms of forms, modalities, levels, or types of participation.

It would be interesting to carry out a longitudinal follow-up study with specific health and homecare professional categories based on validated and multifactorial measures to assess participation in decision-making process.

Furthermore, to deepen the analysis, it might be interesting to assess the impact of participation in decision-making process on other outcomes such as the meaning of work, the care relationship, turnover intention, exhaustion or work-life balance, which have been pointed out by recent qualitative studies<sup>8</sup>.

In addition, it would be relevant to identify the variables linked to the implementation of organisational innovation in the field of health and homecare aimed at enhancing workers' participation or to carry out action research in this direction to study their impact on workers' health and well-being.

Finally, it should be stressed that our study addresses the critical issue of occupational health and working conditions in a largely understudied occupational sector. Yet, this is a sector that is under pressure from the increasing demands and complex care needs of an ageing society that is undergoing considerable innovation in an attempt to meet them. Furthermore, in the present study, using the scientifically validated COPSOQ questionnaire, we were able to collect psychometrically robust data. Thus, the study makes a significant contribution to filling the gap in the scientific literature on the issue of participatory decision-making process, occupational health and work commitment in this sector.

## **Conclusion**

Our study has demonstrated the importance of considering workers' participation in work organisation and strategic decisions in the health and homecare sector to mitigate the negative

impact of highly demanding work on workers' mental and physical health. Similarly, participation in decision-making process is seen as a resource for motivation and commitment to work in occupations where the quality-of-care relationship is fundamental to improving the well-being of older adults and caregivers.

It seems thus crucial for health and homecare organisations to set up specific times and spaces to discuss well-being at work and work organisation adjustment in the medium and short term and to reflect more deeply on more structural reforms of health and homecare organisations in Belgium, including more participative management. Some initiatives have already been implemented, like the Buurtzorg Model, but we still lack information on their impact on the well-being and health of health and homecare workers, particularly scientific studies analysing the impact of working conditions and participation on worker health.

The results of our study contribute to fulfilling this gap and, in this sense, constitute a fundamental piece of literature. We recommend that organisations and decision-makers in the sector pay particular attention to the issue of workers' participation in decisions that affect them and their work experience.

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**Note a:**

ISCO Classification: International Labour Organization (2010). Resolution Concerning Updating the International Standard Classification of Occupations (ISCO).

Available : <https://www.ilo.org/public/english/bureau/stat/isco/index.htm>

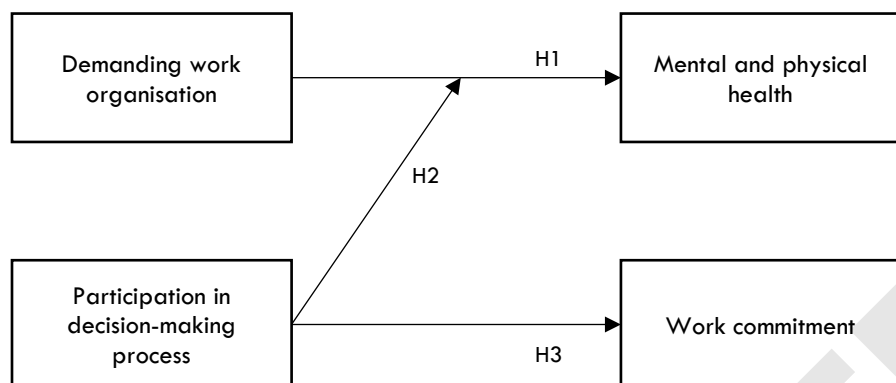
## Figure Legend Section

Figure 1. Research hypotheses adapted from the JD-R Model

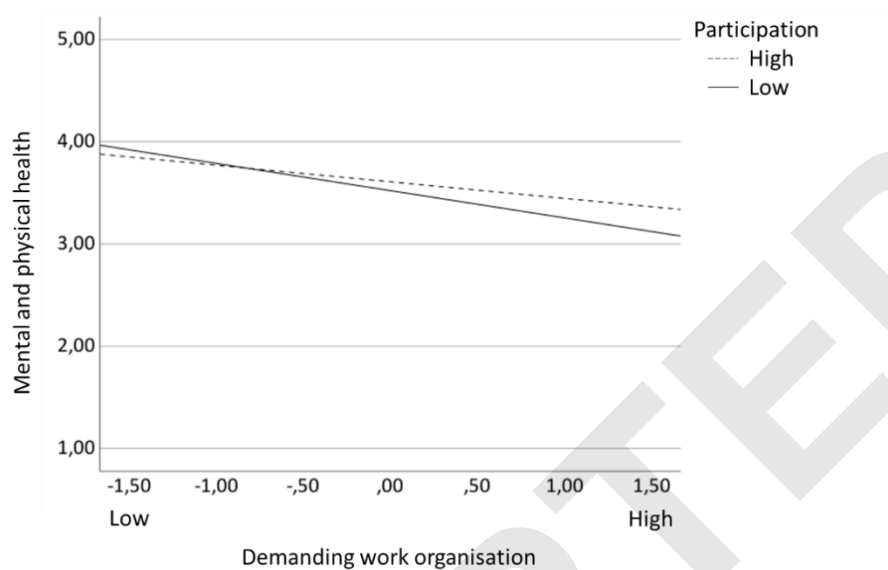
Figure 2. Interaction between ‘Participation in decision-making process’ and ‘Demanding work organisation’ (standardised data) on ‘Mental and physical health’

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**Figure 1.** Research hypotheses adapted from the JDR model



**Figure 2** – Interaction between ‘Participation in decision-making process’ and ‘Demanding work organisation’ (standardised data) on ‘Mental and physical health’



**Table 1.** Description of the sample

| Variables                                       | Range   | General mean (sd)<br>Frequency * | %    |
|-------------------------------------------------|---------|----------------------------------|------|
| <b>Sex</b>                                      |         |                                  |      |
| Women                                           | -       | 1075                             | 96.1 |
| Men                                             | -       | 44                               | 3.9  |
| <b>Age (years)</b>                              | 17 - 67 | 43.24 (10.80)                    |      |
| <b>Professional category/grade</b>              |         |                                  |      |
| Cat 1 - Manager                                 | -       | 25                               | 2.3  |
| Cat 2 - Professionals                           | -       | 35                               | 3.2  |
| Cat 3 - Technicians and associate professionals | -       | 106                              | 9.8  |
| Cat 4 - Clerical support workers                | -       | 40                               | 3.7  |
| Cat 5 - Service and sales workers               | -       | 756                              | 70.1 |
| Cat 6 - Elementary occupations                  | -       | 117                              | 10.8 |
| <b>Contract type</b>                            |         |                                  |      |
| Permanent                                       | -       | 1010                             | 92.2 |
| Fixed-term                                      | -       | 85                               | 7.8  |
| <b>Diploma level</b>                            |         |                                  |      |
| No degree or primary education                  | -       | 41                               | 3.7  |
| Lower secondary education                       | -       | 128                              | 11.6 |
| Upper secondary education                       | -       | 727                              | 66   |
| Bachelor                                        | -       | 179                              | 16.2 |
| Master and PhD                                  | -       | 27                               | 2.5  |

sd: Standard deviation

\* After excluding missing values

**Table 2:** Comparison of means of the variables of interest as a function of the confounding variables

| Variables                                        | Mean/SD**                  |                 |                             |                                          |
|--------------------------------------------------|----------------------------|-----------------|-----------------------------|------------------------------------------|
|                                                  | Mental and physical health | Work commitment | Demanding work organisation | Participation in decision-making process |
| <b>Gender</b>                                    |                            |                 |                             |                                          |
| Women                                            | 3.56                       | 4.28            | 3.18                        | 2.44                                     |
| Men                                              | 3.83                       | 4.26            | 3.30                        | 2.77                                     |
| P-value                                          | .022                       | .877            | .355                        | .039                                     |
| <b>Professional category/grade</b>               |                            |                 |                             |                                          |
| Managers and professionals (Cat 1 & 2)           | 3.71                       | 4.18            | 3.55                        | 3.29                                     |
| Technicians, associated and clerical (Cat 3 & 4) | 3.52                       | 4.01            | 3.54                        | 2.34                                     |
| Personal service workers                         | 3.55                       | 4.33            | 3.15                        | 2.44                                     |
| Elementary occupations                           | 3.67                       | 4.24            | 2.90                        | 2.28                                     |
| P-value                                          | .184                       | < .001          | < .001                      | < .001                                   |
| <b>Contract type</b>                             |                            |                 |                             |                                          |
| Permanent                                        | 3.55                       | 4.26            | 3.22                        | 2.44                                     |
| Fixed-term                                       | 3.86                       | 4.54            | 2.82                        | 2.59                                     |
| P-value                                          | < .001                     | < .001          | < .001                      | .193                                     |
| <b>Diploma level</b>                             |                            |                 |                             |                                          |
| No degree or primary education                   | 3.56                       | 4.08            | 2.91                        | 2.38                                     |
| Lower secondary education                        | 3.47                       | 4.32            | 3.12                        | 2.37                                     |
| Upper secondary education                        | 3.58                       | 4.32            | 3.14                        | 2.42                                     |
| Bachelor                                         | 3.55                       | 4.14            | 3.52                        | 2.51                                     |
| Master and PhD                                   | 3.97                       | 4.05            | 3.05                        | 3.48                                     |
| P-value                                          | .034                       | .013            | < .001                      | < .001                                   |
| <b>General Means* (sd)</b>                       | 3.58 (0.73)                | 4.28 (0.71)     | 3.18 (0.75)                 | 2.45 (1.01)                              |
| <b>N</b>                                         | 1033                       | 1051            | 1031                        | 1103                                     |

SD : Standard deviation

\*\* Range of Minimum – Maximum: 1 – 5

- For 'Mental and physical health' → 1 = poor health; 2 = quite good; 3 = good; 4 = very good; 5 = excellent health

- For 'Work commitment', "Demanding work organisation" and "Participation in decision-making process" → 1 = low; 5 = high (1 = never; 2 = rarely; 3 = sometimes; 4 = often; 5 = always)

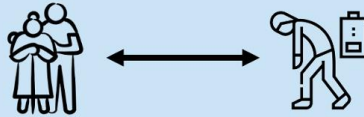
**Table 3:** Correlation of variables of interest

| Variables                                |         | Mental and physical health | Work commitment | Demanding work organisation | Participation in decision-making process | Age |
|------------------------------------------|---------|----------------------------|-----------------|-----------------------------|------------------------------------------|-----|
| Mental and physical health               | r       | 1                          |                 |                             |                                          |     |
|                                          | P-value |                            |                 |                             |                                          |     |
|                                          | N       | 1033                       |                 |                             |                                          |     |
| Work commitment                          | r       | .156                       | 1               |                             |                                          |     |
|                                          | P-value | < .001                     |                 |                             |                                          |     |
|                                          | N       | 960                        | 1051            |                             |                                          |     |
| Demanding work organisation              | r       | -.313                      | -.114           | 1                           |                                          |     |
|                                          | P-value | < .001                     | < .001          |                             |                                          |     |
|                                          | N       | 943                        | 1014            | 1031                        |                                          |     |
| Participation in decision-making process | r       | .127                       | .155            | -.79                        | 1                                        |     |
|                                          | P-value | < .001                     | < .001          | .12                         |                                          |     |
|                                          | N       | 1010                       | 1025            | 1007                        | 1103                                     |     |
| Age                                      | r       | -.016                      | .032            | .079                        | -.001                                    | 1   |
|                                          | P-value | .619                       | .317            | .014                        | .969                                     |     |
|                                          | N       | 967                        | 983             | 965                         | 1035                                     |     |

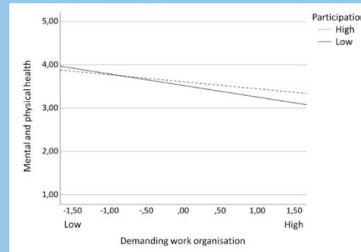
*r* = Pearson's correlation coefficient

# Does worker participation in the decision-making process mitigate the negative impacts of demanding work organization on workers' health and associate with their work commitment?

In Belgium, the pressing socio-political context of ageing in place leads to difficult working conditions for health & homecare workers, particularly in services and innovations primarily aimed at meeting the needs of older adults and their caregivers.



According to the JD-R model, participation in decision-making, as an organizational resource, moderates the negative relationship between demanding work organization and workers' health



We recommend reducing excessive workload pressures to protect workers' health and implementing policies to foster worker participation in decision-making.



The beneficial role of participation in decision-making on workers' health and commitment in demanding work environments: A cross-sectional study in Belgium's health and homecare sector

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