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WORKING DESPITE ILLNESS: WHO AND UNDER WHAT CONDITIONS?

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YOU'LL NEVER WORK ALONE.

This newsletter analyses the phenomenon of presenteeism, i.e. working despite being ill. Around 70% of employees have worked at least once in the last twelve months despite feeling ill. Presenteeism occurs more frequently among female employees than male employees; they also report a higher average number of days of presenteeism. A breakdown by age shows that younger employees in particular are more prone to presenteeism. In terms of occupational groups, presenteeism is particularly prevalent among unskilled labourers, academic professions and office workers. On average, plant operators and unskilled labourers have the highest number of presenteeism days.

Higher values for work-life conflicts, emotional demands and participation and lower values for difficulty in changing jobs increase the probability of presenteeism. In turn, the number of days of presenteeism is related to higher values for physical strain, risk of accidents, emotional demands, bullying, work-life conflicts and difficulty in changing jobs, and lower values for participation, cooperation and income satisfaction. Conversely, high values for job satisfaction, work motivation and general well-being and low values for burnout, health problems, work-related depression and psychological stress reduce both the probability of presenteeism and its extent. As presenteeism can be associated with long-term negative consequences, company measures should be taken to strengthen a health-promoting work culture in which sickness absence is not stigmatised and employees are encouraged to look after their health.

1. Presenteeism: working despite illness

Presenteeism refers to the phenomenon of going to work despite health problems or illness. In contrast to typical absenteeism (being absent from work due to illness), affected individuals remain physically present but are often limited in their ability to perform their duties. Presenteeism is increasingly recognised as a significant problem for individual health, organisational productivity and public health costs. Studies show that presenteeism can be associated with long-term negative consequences – such as the worsening of existing illnesses, increased absenteeism in the future and productivity losses (Johns, 2010; Lohaus & Habermann, 2019). The causes of presenteeism are manifold: pressure at work, fear of losing one's job, a sense of duty or organisational expectations all can influence the decision to work despite illness (e.g. Demerouti et al., 2009; Miraglia & Johns, 2016; Ruhle & Süß, 2020). Presenteeism is now considered a relevant indicator for occupational health management (Johns, 2010; Lohaus & Habermann, 2019). Companies that ignore presenteeism not only risk a loss of productivity, but also higher healthcare costs in the long term (Karanika-Murray & Biron, 2020).

This newsletter analyses in which occupational groups of employees in Luxembourg presenteeism is particularly pronounced. It also reviews which dimensions of work and employment quality are particularly associated with presenteeism. A zero-inflated negative-binomial regression model is used for this purpose (Atkins & Gallop, 2007; Boulton & Williford, 2018; Green, 2021) – a special two-stage procedure that first estimates whether a certain event (e.g. presenteeism) occurs at all and then how often it occurs (e.g. number of days of presenteeism). This model is particularly recommended where significant numbers of people do not experience the event at all (e.g. state that they have never gone to work sick in the last twelve months), which results in a highly skewed distribution (Bierla et al., 2013). The model assumes that the expression is influenced by two different processes: firstly, by factors that influence whether presenteeism occurs at all – such as a sense of duty or work pressure – and secondly, by factors that determine how many days are worked despite illness – such as physical strain or a lack of alternatives.

The *Quality of Work Survey* (QoW; wave 2024; Sischka, 2025a) – an annual, representative survey of employees in Luxembourg (for details, see box: Method) – serves as the data basis.

In this newsletter, only the masculine generic is used for the purpose of clarifying the text. It refers to any gender identity and thus includes both female and male persons, transgender persons as well as persons who do not feel they belong to either gender or persons who feel they belong to both genders.

2. Prevalence and characteristics of presenteeism differentiated by occupational group

Figure 1 shows the prevalence and frequency of presenteeism. Around 70% of respondents stated that they had been off sick at least once in the last twelve months. Among respondents who went to work sick on at least one day in the past year, the median was seven days of presenteeism. Broken down by gender, the proportion of respondents with presenteeism was significantly higher among female employees than among male employees. At the same time, female employees tended to report more days of presenteeism than male employees. Age-related differences are also apparent: the proportion of people who engage in presenteeism is highest in the youngest age groups, while the oldest age group reports the most days of presenteeism. In terms of occupational groups, academic professions, office workers and unskilled labour have a particularly high proportion of respondents with presenteeism. Plant operators and unskilled labourers report a comparatively high number of presenteeism days.

Figure 1: Presenteeism differentiated by occupational group

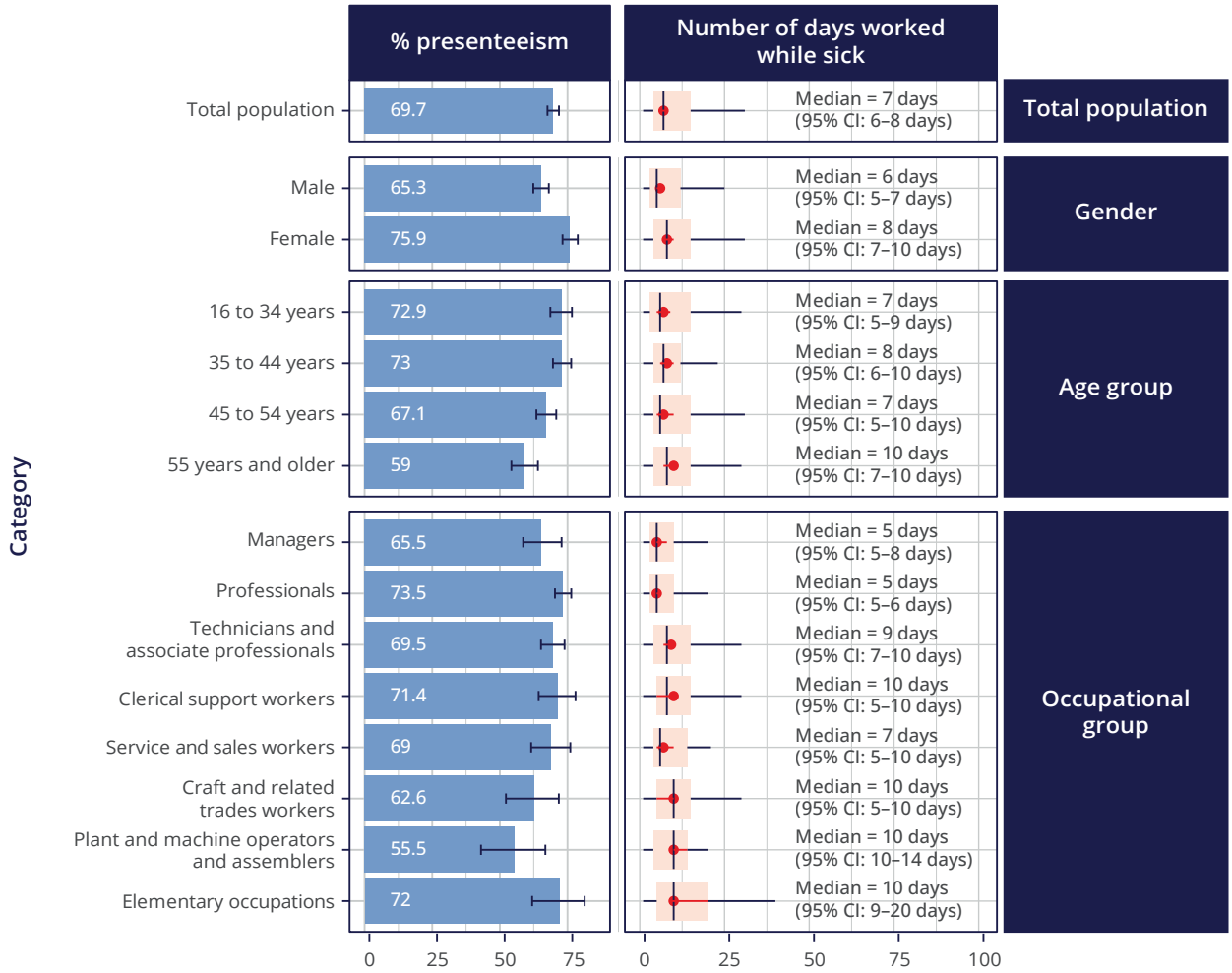
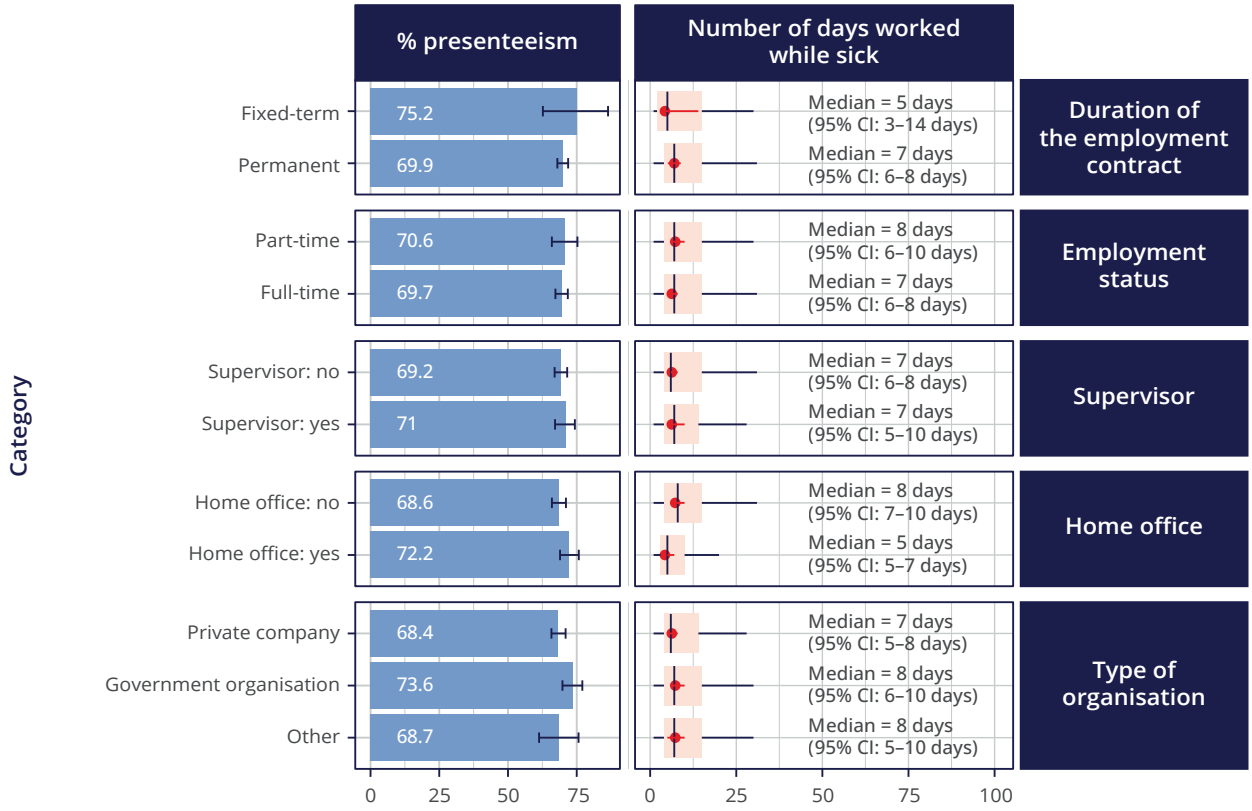


Figure 1: Presenteeism differentiated by occupational group (continued)



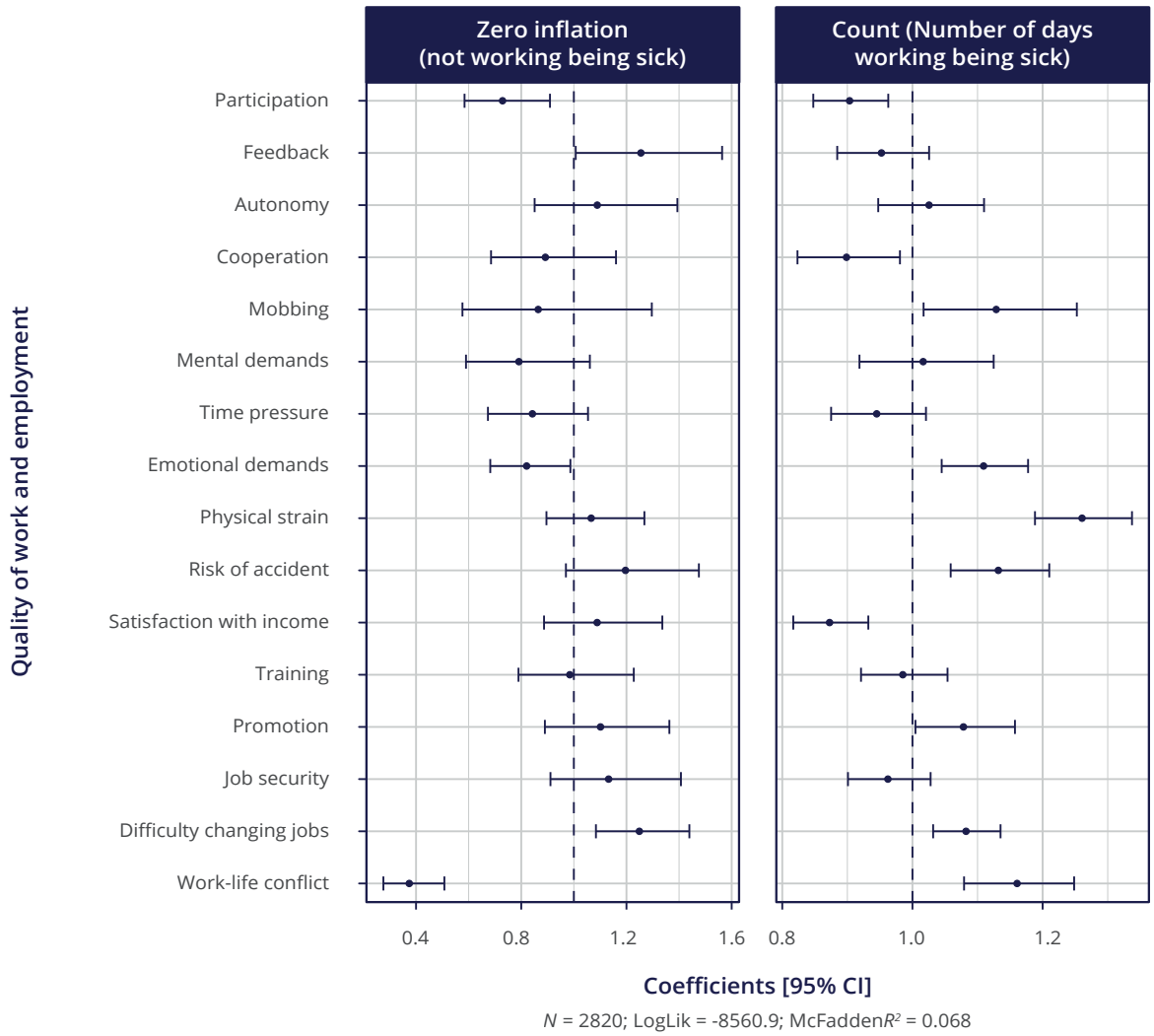
Note: Data from the 2024 QoW survey. The first part of the chart shows the percentage (with 95% confidence interval) of employees who reported presenteeism. The second part of the chart shows a breakdown of the number of days worked despite illness for those who reported at least one day of presenteeism (for presentation reasons, the X-axis in the second panel is limited to a maximum of 100 days; higher values were therefore cut off). The. The red dots and lines represent the median (with 95% confidence interval). Confidence intervals were determined through bootstrapping (n = 1000; percentile method).

3. Correlation between quality of work / employment and presenteeism

Figure 2 shows the results of the zero-inflated negative-binomial regression model. The zero-inflation component describes the probability of not working a single day sick at all. A positive value means that if the relevant dimension (e.g. feedback) has a high value, then the probability of not engaging in presenteeism will also be higher. Conversely, a negative value indicates that the corresponding variable increases the probability of presenteeism. This model shows that a higher level of participation in the workplace is associated with an increased probability of presenteeism. The results also show that higher emotional demands and greater work-life conflicts also increase the probability of going to work despite illness. Interestingly, a higher value for the *"difficulty of changing jobs"* dimension is associated with a lower probability of presenteeism.

With regard to the number of days worked despite illness (count data), it can be seen that lower values for participation, cooperation and income satisfaction and higher values for bullying, emotional demands, physical strain, risk of accident, promotion, difficulty in changing jobs and work-life conflicts are associated with an increased number of days of presenteeism.

Figure 2: Zero-inflated regression model with presenteeism as outcome variable



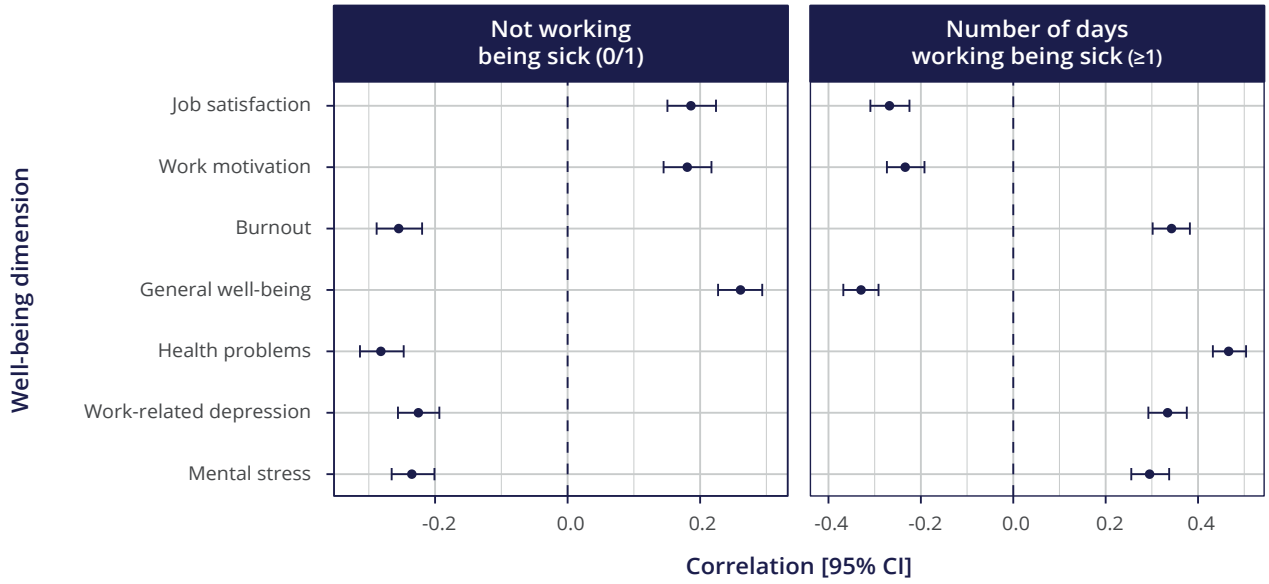
Note: Data from the 2024 QoW survey. In the left-hand panel ("Zero inflation"), the effects are presented as odds ratios (OR) and relate to the probability of not having worked a single day sick. In the right-hand panel ("Count"), the effects are based on a negative binomial model with log link and indicate how the expected number of days worked sick multiplies with a unit change in the respective predictor (e.g. OR < 1 = fewer days, OR > 1 = more days). Coefficients with 95% confidence intervals. Confidence intervals were determined through bootstrapping (n = 1000; percentile method).

4. Well-being and presenteeism

Figure 3 shows the correlations between various dimensions of well-being and the occurrence of presenteeism as well as the number of days worked despite illness.

Higher values for job satisfaction, work motivation and general well-being are associated with a lower probability of presenteeism. These dimensions also show negative correlations with the number of days of presenteeism. Conversely, burnout, health problems, work-related depression, and psychological stress show negative correlations with the absence of presenteeism – in other words, people with higher scores on these stress dimensions are more likely to turn up sick to work. At the same time, these stresses are also associated with a higher number of presenteeism days.

Figure 3: Relationship between well-being dimensions and presenteeism



Note: Data from the 2024 QoW survey. The left panel shows point-biserial correlations, the right panel Spearman's rho coefficients with 95% confidence intervals. The confidence intervals were determined through bootstrapping (n = 1,000, percentile method).

5. Summary and conclusion

The prevalence of presenteeism varies between occupational groups. It is particularly common among female employees, younger employees, unskilled labour, academic professions and office workers.

Furthermore, presenteeism is related to various dimensions of work and employment quality. The likelihood of engaging in presenteeism is higher with greater participation, emotional demands, work-life conflicts, and when it is easier to change jobs. The number of days of presenteeism is negatively associated with participation, cooperation and income satisfaction, and positively associated with bullying, emotional and physical stress, risk of accidents, promotion opportunities, difficulty in changing jobs and work-life conflicts.

Various dimensions of well-being also show clear correlations with presenteeism: higher scores for job satisfaction, work motivation, and general well-being are associated with both a lower likelihood of presenteeism and a lower number of presenteeism days.

Presenteeism can be reduced through organisational measures. A supportive corporate ethos in which sickness-related absences are not stigmatised is crucial, as is clear communication on the importance of health in the workplace (Johns, 2010; Ruhle et al., 2020). Managers play a central role here, as appreciative leadership and psychological safety can demonstrably reduce presenteeism behaviour (Karanika-Murray & Biron, 2020).

Flexible working conditions and a health-promoting working environment also have a preventive effect (Lohaus & Habermann, 2019). Finally, targeted education of employees about the possible consequences of presenteeism – for example within the framework of company health programmes – can also contribute to reducing presenteeism.

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Method

For the *"Quality of work Index"* study on the work situation and quality of work of employees in Luxembourg, around 1,500-3,000 interviews (CATI; CAWI) have been conducted annually since 2013 by Infas (since 2014) on behalf of the Chambre des salariés Luxembourg and the University of Luxembourg (Table 1). The findings presented in this report relate to the 2024 survey (Sischka, 2025a)

Table 1: Methodological background of the QoW survey

Aim of the survey	Analysis of the labour situation and quality of work of employees in Luxembourg
Conception, realisation, analysis	University of Luxembourg: Department of Behavioural and Cognitive Sciences, Chambre des salariés, Luxembourg since 2014 Infas Institute, previously TNS-ILRES
Type of survey	Telephone survey (CATI) or online survey (CAWI; since 2018) in Luxembourgish, German, French, Portuguese or English
Sample size	2024: 2,939
Presenteeism	How many days have you worked in the last 12 months even though you felt ill?

Work quality scales

Scale	Number of items	Cronbach's Alpha	Scale	Number of items	Cronbach's Alpha
Participation	2	0.80	Mental load	4	0.75
Feedback	2	0.79	Time pressure	2	0.79
Autonomy	4	0.79	Emotional demands	2	0.85
Cooperation	4	0.84	Physical stress	2	0.75
Mobbing	5	0.79	Risk of accident	2	0.79

Employment quality scales

Scale	Number of items	Cronbach's Alpha	Scale	Number of items	Cronbach's Alpha
Satisfaction with income	2	0.88	Job security	2	0.71
Training	2	0.81	Difficulty in changing jobs	2	0.83
Promotion	2	0.89	Work-life conflict	3	0.81

Well-being scales

Scale	Number of items	Cronbach's Alpha	Scale	Number of items	Cronbach's Alpha
Job satisfaction	3	0.83	Health problems	7	0.78
Work motivation	3	0.76	Work-related depression	9	0.92
Burnout	6	0.89	Psychological stress	5	0.89
General Well-Being (WHO-5)	5	0.91			

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