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Abstract

In this paper, I focus on work intensity as an important element of unsustainable work. I briefly discuss some key determinants and outcomes of work intensity. In addition, using the 2010 and 2015 waves of the European Working Conditions Survey (EWCS), I present results on selected predictors of work intensity. These results indicate categories of employees who are experiencing higher levels of work intensity and, therefore, whose ability to stay longer in the workforce might be at greater risk. Results also show that task uncertainty and certain human resource practices seem to be strong positive predictors of work intensity. In contrast, some types of discretion seem to be associated with lower levels of work intensity. Because the analysis is based on cross-sectional data, these findings should be interpreted with caution.

Keywords: Work effort, Work intensity, Employee well-being, Sustainable work, European Working Conditions Survey

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Eurofound (2017) defines sustainable work as existing when "...working and living conditions are such that they support people in engaging and remaining in work throughout an extended working life", which is often measured as "the ability to work up to 60 or later". Working time and work intensity, two dimensions of work effort, are important elements of sustainable work. Working time is the first dimension of employee work effort. The second dimension is work intensity, defined as the amount of effort per unit of working time, or the rate of physical and/or mental input to work tasks performed during the working day (Green, 2001: 56). In the literature, the first type of work effort, often called extensive work effort, is measured as the number of hours of work or overtime. The second type, work intensity, is often measured as the frequency of having to work at high speed, and the frequency of having to work to tight deadlines (Avgoustaki and Frankort, 2019). Prior literature examining the implications of work effort for employee well-being has linked both effort dimensions to inferior well-being.

In this paper, I focus on work intensity as an important element of unsustainable work. I briefly discuss some key determinants and outcomes of work intensity. In addition, using the 2010 and 2015 waves of the European Working Conditions Survey (EWCS), I present results on selected predictors of work intensity. These results indicate categories of employees who are experiencing higher levels of work intensity and, therefore, whose ability to stay longer in the workforce might be at greater risk. I conclude with some practical implications for human resource managers and those in leadership roles, listing initiatives that they could implement as well as avoid in order to maintain a more sustainable workforce, and become more socially responsible towards their employees.

Important antecedents and consequences of work intensity

The literature has identified several contributing factors behind high employee work intensity. In a recent study, Green et al. (2021) listed a number of important antecedents of work intensity, such as technology, including computer and mobile use, new forms of industrial organization including outsourcing and joint ventures, management practices such as teamwork and flexible working, changing forms of employment such as temporary work and self-employment, the degree of competition in the market, declining union power and rise in job insecurity, as well as the regulation of working hours in different countries, among other factors. Although there is work examining the reasons that employees experience intensified work, work intensity has not received sufficient attention, at least not as much as working hours, the other dimension of work effort, and particularly overtime. Yet, focusing on work intensity is imperative because of its harmful effects on employee health and general well-being, which appear to be worse than the effects of overtime work. In our study titled "Implications of Work Effort and Discretion for Employee Well-Being and Career-Related Outcomes: An Integrative Assessment" published in ILR Review, using the EWCS 2010 and 2015, Dr. Frankort and I examined the implications of work effort, expressed both as overtime work and work intensity, and found that in regards to employee well-being, work intensity is associated with increased stress and fatigue and decreased job satisfaction. Compared to overtime work, work intensity is generally a stronger predictor of unfavourable outcomes, even when employees have discretion to decide how and when to carry out their work. Given the negative consequences of work intensity, employees who are constantly working under high intensity may be at particular risk. If governments and employers want to achieve a sustainable workforce that can remain in work throughout an extended working life, they should first identify those employees who are working constantly with

high work intensity and, second, design policies and practices that can relieve them from such kind of work effort.

Which categories of employees are working with higher intensity?

In the same study published in ILR Review, we examined whether differences exist across occupations in how the two types of work effort are associated with well-being. In regards to work intensity, we found that it is higher in low-skilled blue collars compared to high-skilled white collars. A report by Eurofound (2019), analyzing data from the EWCS 2015, also revealed differences between blue-collar employees (e.g. plant and machine operators, craft and related trades workers, elementary occupations) and white-collar employees (managers, professionals, service and sales workers). The report revealed additional differences among the following categories of employees: a) younger employees report higher work intensity than older employees; b) those with job insecurity (i.e., ones that might lose their job in the next six months) work with higher intensity compared to those with no job insecurity; c) employees with fixed-term contracts experience greater work intensity, compared to those with other types of contract or no contract; d) employees with low working time predictability, experience higher work intensity compared to those with high working time predictability; e) employees in large firms (with 250 or more employees) experience higher work intensity compared to employees working in SMEs (10–249 employees) or micro enterprises (1–9 employees); f) employees who work in understaffed companies (defined as a reduction in the number of employees at the workplace during the three years prior to the survey) also report higher work intensity compared to employees working in companies who are less understaffed; and g) construction employees experience higher work intensity compared to employees in all other industries corresponding to NACE Rev. 2 sectors in the sample (e.g. education, public administration and defense).

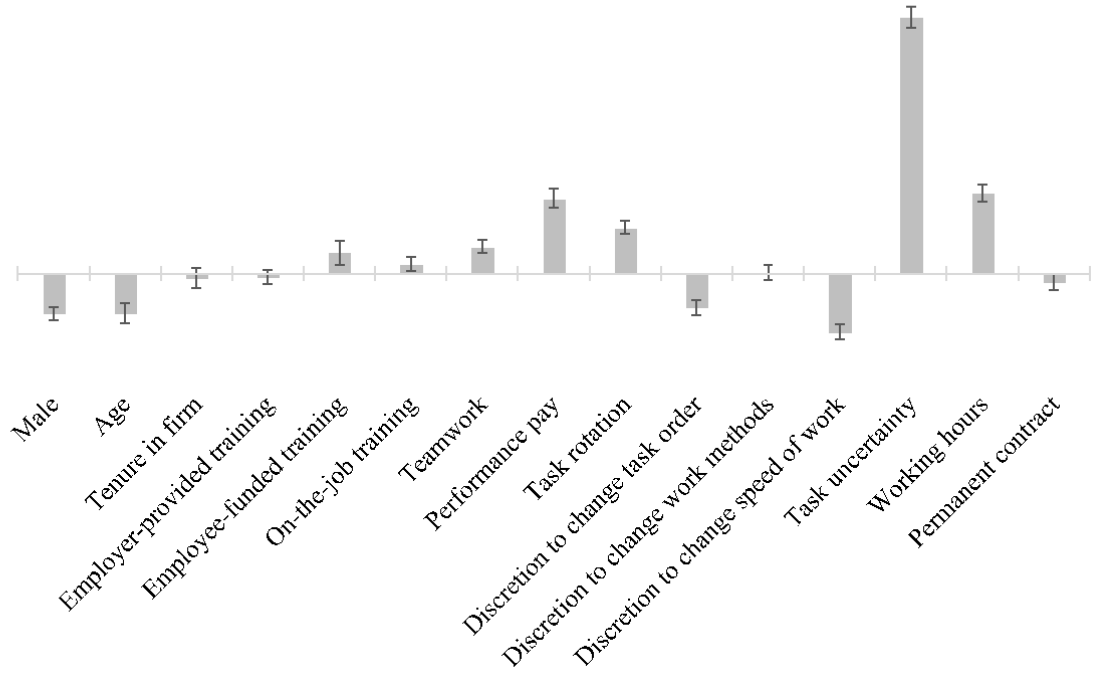
Additional antecedents of work intensity

In an earlier study titled "Work Uncertainty and Extensive Work Effort: The Mediating Role of Human Resource Practices" also published in ILR Review, I focused on how work uncertainty and the use of human resource practices are associated with extensive work effort, using data from the 2005 and the 2010 EWCSs. Following this study, in this paper, I focus on a similar set of antecedents but I link them instead to work intensity. Specifically, I examine how employee characteristics (gender, age, tenure in the firm), human resource practices (training, teamwork, performance pay, task rotation, discretion), task uncertainty, working hours, and type of contract are associated with work intensity. The analysis is based on pooled data from the two most recent waves of EWCS, the 2010 and 2015. The two waves contain a total of 87,666 individuals covering 34 countries in 2010—the EU 27, Albania, Croatia, the Former Yugoslav Republic of Macedonia, Kosovo, Montenegro, Norway, and Turkey; and 35 countries in 2015—the EU 28, Albania, the Former Yugoslav Republic of Macedonia, Montenegro, Norway, Serbia, Switzerland, and Turkey. Certain categories of employees were omitted from the analysis – i.e., self-employed individuals, individuals below 16 and above 65 years old, and individuals whose tenure in their firm exceeded 50 years – supplying a sample of 51,418 employees from 36 countries.

Results and interpretation

The figure shows 'effects' of selected predictors on work intensity. All effects are estimated using OLS regression and based on models incorporating fixed effects for firm size, occupations, sectors, industries, countries, and survey year (2010 and 2015). Confidence intervals are calculated based on robust standard errors. All variables except Age, Tenure in firm, Task uncertainty, and Working hours, are binary variables. For all binary variables, the

effects represent differences between the two categories. For example, the effect of Male represents the work intensity of men relative to women, which is negative in this data set. Effects for Age, Tenure in firm, Task uncertainty, and Working hours are obtained by differencing the effects at the 10th percentile from the 90th percentile. For example, the effect of Task uncertainty represents the work intensity differential between employees at the 90th percentile for Task uncertainty and those at the 10th percentile.



After controlling for firm size, occupations, sectors, industries, countries, and survey year, results show that women tend to experience higher work intensity relative to men. In unreported descriptive analysis men show higher levels of work intensity but once adjusting for the aforementioned set of controls, results show that women experience higher levels of work intensity than men. Younger employees also tend to experience higher levels of work intensity relative to older employees. Furthermore, the figure shows that employees exposed to human resource practices such as Employee-funded training, On-the-job training, Teamwork, Performance pay, and Task rotation experience higher work intensity relative to employees who are not exposed to these practices. In contrast, employees who are provided human resource practices such as Discretion to change task order and Discretion to change speed of work seem to experience less work intensity compared to employees who do not have such discretion. The predictor that stands out is Task uncertainty, as employees who report having Task uncertainty – defined as interruptions to their regular work tasks because of unforeseen tasks – experience higher work intensity than employees who do not face such uncertainty. Finally, employees who work more hours and those who do not have a permanent contract, seem to experience higher work intensity relative to employees who work fewer hours and ones without a permanent contract. The other variables – i.e., Tenure in firm, Employer-funded training and Discretion to change work methods – do not seem to be associated with work intensity.

These results are generally in line with what has been reported previously in the study titled "Work Uncertainty and Extensive Work Effort: The Mediating Role of Human Resource Practices" (Avgoustaki, 2016), which instead examines predictors of extensive work effort. For example, task uncertainty and certain human resource practices seem to be strong

positive predictors of both types of work effort. In contrast, providing employees with discretion does not seem to increase work intensity or extensive work effort, while in the case of work intensity, some types of discretion seem to be associated with lower levels of work intensity. Because the analysis is based on cross-sectional data, these findings should be interpreted with caution.

Implications for managers and those in leadership roles

Because research has shown that work intensity is related to negative employee outcomes, and particularly deteriorating health and well-being, human resource managers and those in leadership roles need to implement policies and practices that discourage work intensity while avoiding practices that encourage it. First, they need to be aware that certain human resource practices, and in particular pay for performance, although possibly bringing performance gains, may also be counterproductive as the gains may come at the expense of the employee, through higher work intensity. This implies a trade-off and so if managers want to build a more sustainable workforce, they need to be aware of the negative implications of certain practices. Other human resource practices such as discretion might not intensify work and may even decrease it. This suggests that managers should design jobs that allow flexibility, especially for the categories of employees that have been reporting higher levels of work intensity in their occupation. Based on the EWCS, blue collar employees seem to experience higher levels of work intensity relative to other types of occupations and, therefore, may benefit from having discretion over their tasks and the speed of their work.

A significant factor predicting higher work intensity is the amount of task uncertainty employees experience at work. Employees often face uncertainty because they have little or no information about their tasks, or because they are unable to predict the number and nature of tasks that need to be completed. Human resource managers and those in leadership roles should try to proactively manage employee workload and plan carefully the tasks that employees need to perform, while they should try to avoid unnecessary interruptions of regular work or assigning them tasks that were unexpected. Some interruptions might be unavoidable as oftentimes uncertainty is external and certain tasks or requests might be difficult to plan. Employees will probably be able to deal with such uncertainty if it is the exception rather than the rule.

Overall, given the detrimental consequences of work intensity, there is a need to focus more on initiatives that suppress work intensity if we want to build a sustainable workforce. Employers, as well as policy makers, have tried to take steps to protect employees from working overtime, the other dimension of work effort. Yet far less has been done about work intensity. Also, certain initiatives to suppress overtime have overlooked the potential impact of reduced overtime on work intensity. For example, in February 2021 a group of junior investment banking analysts explained to management the challenges they are facing with their workload. Some of their quotes mentioned in the popular press include: "*There was a point where I was not eating, showering or doing anything else other than working from morning until after midnight*" and "*The sleep deprivation, the treatment by senior bankers, the mental and physical stress… I've been through foster care and this is arguably worse*". In response, the CEO said that the bank would reinforce the "Saturday rule", forbidding junior bankers from working from Friday at 9pm until Sunday morning. This seems a positive step towards reducing work effort. However, a reduction in hours might translate into higher work intensity, which can be more harmful than overtime, as Dr. Frankort and I found in our study and further explain in the popular press. Therefore, it is important to take into consideration work intensity when designing initiatives aimed at suppressing working hours. Otherwise employee well-being will continue to suffer. The same applies for policymakers. For example, France reduced mandatory working hours from 39 to 35 and

Portugal from 44 to 40 hours per week. These are all great initiatives, as long as employees do not have to compensate the reduced hours with higher work intensity.

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