Enhancing mental health of employees working long hours through flexible time arrangements

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One of the most consistent findings of the four EWCS' over the last 15 years is the relative intensification of the pace of work (Burchell, et al., 2009). According to same resource, since 1991 there has been a clear trend in Europe towards a reduction in paid working hours. However this trend slowed down in 2005 when the New Member States working longer hours joined the EU in 2004.

The return of the long hours culture is now being observed in many European countries, e.g. in the Netherlands the number of reported overtime hours has increased substantially (from 4 hours to 6 hours) over the period from 2003 to 2007 (Bakhuys Roozenboom, et al. 2008). As the Trade Union in the United Kingdom announced in June 2008 the incidence of long working hours had increased among UK workers from 2007 to 2008 and "after a decade of progress, the battle against the long hours culture has stalled" (http://www.tuc.org.uk/extras/longhoursreturn.pdf). Poland is the second top country of the EU-25, where weekly working time exceeds 48 hours (ESWC, 2007).

The existing research clearly shows that the outcomes of long working hours are deterioration in both physical and mental health (Sparks et al., 1996; van der Hulst, 2003; Taris & all., 2007; for reviews). Long work hours and overtime have been found to be associated with adverse physical health problems, such as cardiovascular and musculoskeletal problems, immunological impairments, depression and anxiety. It has also been shown that overtime has an adverse effect on worker lifestyle, lack of physical activity and enough sleep or improper diet (van der Hulst, 2003). Working long hours impose a threat for ability to fulfill familiar duties and other personal goals. Work-life balance problems are widely recognized as connected to long working hours, and the amount of time that is

occupied by the job is one of the most obvious antecedents of Work-Family Imbalance (Geurts & Demerouti, 2003; Harma, 2006).

Flextime arrangements or worktime control is commonly regarded as an organisational practice to enhance worker's health. Flextime arrangements can generally be divided into two schedules. According to one schedule employees are allowed to decide when to start and end time of work on a day-to-day basis, and when to take a brake but not allowed for variations in the length of the daily work schedule (Costa et al., 2001). The second type of flextime allow for a much broader variability of working time, even in the length of the working day or working week.

High worktime control has been found to be related to a lower cholesterol level (Thomas & Gangster, 1995), fewer physical symptoms as well as lower levels of distress and burnout, (Galinsky, Bond & Friedman, 1996; Jansen & Nachreiner, 2004). On the other hand, low worktime control has been shown to increase the risks of subjective ill-health and sickness absence, especially among women. Ala-Marsula et all (2005) in their prospective study on 16 139 public sector employees who had no medically certified sickness absence in the year proceeding the survey, have found that control over working time moderates the effects of work strain and effort-reward imbalance.

However, longitudinal studies exploring the link between worktime control and health are still very rare, particularly in workers working long hours. Despite substantial practical interest, the evidence base linking flexibility to health-related outcomes is still relatively weak.

The aim of the present study was to examine the potential role of flexible working time on different health dimensions such as: somatic complaints, anxiety, social dysfunction and depression. It has been also attempted in the study to answer the question which age and gender group of employees working long hours do benefit form flexible worktime the most.

The data for this study came from 309 Polish employees performing clerical work for more than 8 hours daily with longitudinal data resulting from having completed

the questionnaires in both 2008 and 2009. The sample was composed of 159 men and 150 women. The average age was 41,3 (*SD*=5,7).

Perceived flexibility was measured as the ability to decide when a worker starts and finishes his/her work and whether he/she can decide when to make a break during his/her work. Mental health was diagnosed with the Polish version of *The General Health Questionnaire-28* (Goldberg & Williams, 1991) Both the total indicator of the scale and the indicators of the four subscales were taken into account. These were: somatic complaints, anxiety and insomnia, social functioning and depression.

The longitudinal effects of changes in flexibility on health-related outcomes were investigated by fitting a series of linear regression models. Each change score outcome (health dimensions) was regressed on variables reflecting change in perceived flexibility and covariates (age and gender).

In order to compare the influence of flexibility on different age and gender groups a series of ANOVA' were performed, where age, gender, flexibility and their interaction were independent variables, and changes in health dimensions were dependent variables. The three following age categories were analyzed: 1- age 18-29, 2 – age 30-39, 3 – age 40-60.

The results have shown that increased worktime flexibility was associated with decreased overall indicator of health complaints, in particular with decreased somatic complaints and social dysfunction. Moreover, it has also been found that worktime flexibility had a significant influence on decreased depression in the youngest group of female workers aged 18-29.

The results of this prospective study indicate that individuals whose flexibility increased showed favorable improvements in two health-related outcomes: less somatic complaints, and less social dysfunction. The result related to decreased somatic complaints as a consequence of flexibility is consistent with studies showing that long, rigid working hours are associated with less time for recovery and difficulties to unwind after work and may result in serious health consequences (Geurts & Sonnentag, 2006, for review).

The result showing decreased social dysfunction as a consequence of flexibility is in line with studies showing that long weekly work hours are associated with higher levels of work-family imbalance across time (Geurts & Sonnentag, 2006; Jansen & Nechreiner, 2004) and with difficulties to fulfill social commitments (Costa et all., 2006).

In the present study, it has also been shown that flexibility was the most beneficial for mental health of the youngest woman working long hours. This outcome corroborate and extend the Ala-Mursula and colleagues' findings showing that control over worktime reduces the adverse effect of work stress on sickness absence especially among female employees (Ala-Mursula et all., 2005).

Key messages:

1. Even in the presence of objectively existing psychosocial risks, such as long working hours, programs that promote worktime flexibility may have beneficial effect for workers' mental health. Thus, providing employees with worktime control may promote health in strenuous work life.

2. Men and woman are not homogenous groups on matters related to workplace flexibility. Female workers, especially in the youngest age group, seem to need flexible time arrangements even more than men in terms of preserving their mental health in long run and maintain it until a delayed retirement age.

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