

OVER 65 AND WORKING: THE IMPACT OF WORKING BEYOND RETIREMENT AGE ON HEALTH AND WELLBEING

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Percentage of the population over 655 SURREY





Ageing of the workforce

- ageing of the workforce will be the most significant development in the labour market over the next 25 years
- estimated that approximately one third of the European labour force will be aged 50 or over by the year 2020
- default retirement age (varies across Europe) is being phased out and most individuals are legally entitled to work as long as they wish
- An increasingly ageing population means it is fiscally unlikely that the state could continue to fund pensions at the current level, and it is likely that more people <u>will</u> have to continue working past the traditional retirement age.

Aims of the talk...



- By working later in life, are we reducing older workers quality of life and increasing their risk of discomfort, fatigue and disease?
- What are the effects of working later in life on health and well-being?
- What are the idea work-rest ratios for people working later in life?



Recovery Model







Cycle of work and rest



- Fatigue and recovery are related concepts: fatigue is the state that results from having been exposed to demands, and recovery is the process that replenishes the resources again.
- Recovery is important because allows us to prepare for new demands
- Lack of recovery, or insufficient recovery may result in accumulation of fatigue, and eventually may lead to ill-health.



Symptoms of fatigue



- Sleepiness
- Depression
- > Irritability
- Headache
- Reduced cognitive ability
- Reduction in alertness
- Memory and concentration lapses
- Giddiness
- Loss of appetite
- Digestive problems
- Decreased resistance to illness

Increased risk of accidents





Can we work later in life (past 65 yrs) and still have a high quality of life?



Still rocking at 70+





The Rolling Stones





Silvio Berlusconi





Bill Dudley, 88 yrs

"I look forward to the days when I'm working here, and seeing all of the staff members...they think the world of me, we are like a family and I am like their father...I am going to carry on until I drop."





Bridge employment



Paid Employment



Retirement

> Individuals accept bridge employment in the same industry/field

Accept bridge employment in a different industry/field

60-64% of older workers do some form of bridge employment

Why do people work past 65yrs?



- Enjoy it
- Gives people a purpose in life
- Social aspects
- Challenge
- Financial reasons



Is working good for us?





Cortisol & Cardiovascular Mortality 5 SURREY

High or Prolonged Cortisol levels:

- Impaired cognitive performance
- Suppressed thyroid function
- Blood sugar imbalances such as hyperglycemia
- Decreased bone density
- Decrease in muscle tissue
- Cardiovascular risk factors (higher blood pressure)
- Lowered immunity and inflammatory responses in the body
- Increased abdominal fat

(Vogelzangs et al., (2010) Urinary cortisol and six-year risk of all-cause and cardiovascular mortality. J Clin Endocrinol Metab. 95(11):4959-64) www.surrey.ac.uk

Cortisol & Cardiovascular Mortality 5 SURREY

Does cortisol predict cardiovascular mortality in older workers?

- Longitudinal study over 6yrs
- > 861 older person
- Age = 65 yrs and older from the general population
- Mortality data from the Mortality General Registry and death certificates

(Vogelzangs et al., (2010) Urinary cortisol and six-year risk of all-cause and cardiovascular mortality. J Clin Endocrinol Metab. 95(11):4959-64)







Is there an increased negative risk to health of people working past 65yrs?







Labour Force Survey, ONS





Reductions in physical capacity with age SURREY

Older adults work closer to aerobic capacity when unfit

(Baum et al., 2009)

- Lower postural stability
- ➢ Joint mobility can be lower by 30-40%
- Potential loss of isometric knee and elbow strength by 50% in healthy workers
- Average 20% loss of hand grip strength in males age 65 yrs compared to males age 20 yrs



Workplace mortality







In U.S.A, 9.9 fatalities per 100,000 workers aged 65

Mostly transportation incidents and falls

The Age Recovery Relationship



Do older workers with high work demands need more recovery from work?







Do older workers with high work demands need more recovery from work?

- Longitudinal study of work stress and work-related musculoskeletal and psychological disorders
- 8,000 workers (baseline) & 3,139 workers (15 months)
- Age (17-69yrs)

(Devereux, & Rydstedt, 2009)





Need for Recovery (Sluiter et al., 2001)

- 11 items rated as yes or no, e.g.,
- 'my job causes me to feel rather exhausted at the end of the working day'
- 'after the working day I am too tired to start other activities'

Groups: 17-29yrs, 30-39yrs, 40-49yrs, & 50-69yrs



Need for Recovery





Need for Recovery





Psychological factors





Organizational attitudes towards older workers

Psychological Recovery



How do older workers 'mentally' unwind from work?

- 1 Cardiovascular disease (Kivimaki, et al., 2006; Suadicani, et al., 1993)
- 1 Cortisol (Rydstedt et al., 2008, 2009; Cropley, et al., 2012)
- 1 Fatigue (Cropley & Zijlstra, 2011; Querstret & Cropley, 2012).
- 1 Negative mood problems (Pravettoni, et al., 2007)
- 1 Psychiatric Symptoms (Cropley & Zijlstra, 2011)
- 1 Sleep disturbance (Akerstedt, et al., 2002; Cropley, et al., 2006)

What we need to know?





What is the best work/recovery pattern for older workers?



















Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday





Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
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> 65 years _____

The 24/7 Economy



How do older workers adapt to the needs of the 24/7 Economy?

- Sleep of older workers more easily disturbed
- Older workers prefer day shifts as they are less adaptable to activity during night shifts
- > Older workers tend to wake up earlier in the mornings.



Other questions we need to know



- Matching age and work/recovery patterns
- Working in a new area of work
- Working inside or outside (e.g., vitamin D)
- Work for fun or money
- How do older workers psychologically 'switch-off' and unwind post work
- Are leisure activities compromised by having to work.





None paid work tasks

Domestic duties and looking after grandchildren or parents!

















Summary...

- The ageing workforce will be the most significant development in the labour market over the next 25 years and we do not really know what effects working in later life has on health.
- There is a large body of evidence to suggest that working is beneficial not only financially but also for health and well being
- Conversely, there is also evidence that older workers have an increased likelihood of reporting fatigue from work and a higher need for rest and recovery
- We urgently need to develop and test different work/recovery models for the ageing working population in order to prevent overload from the physical and psychological demands of working past 65yrs.



Conclusion

As the ageing population increases and the need to work longer into older age takes effect, it will become more important to understand and identify the optimal work/recovery patterns of the older workforce.

By doing this, it is hoped we will be one step closer in our understanding of the Secrets of Longevity!





Thank you for listening

Email: mark.cropley@surrey.ac.uk http://www.psy.surrey.ac.uk/people/staff/MCropley.htm http://www.ias.surrey.ac.uk/reports/recovery-report.html









Older male office workers had higher evening saliva cortisol levels than younger male office workers (p<0.05)

(Rydstedt, et al. Anxiety, Stress and Coping, 22(4) 2009)





w.surrey.ac.uk

Soure: OECD





Source: UN (2009)

FIG. 1-16 HEALTH CONDITIONS AMONG WORKERS AGE 55 AND OVER: 2002





Figure 9 Proportion of employed population who report having a long term health problem or disability: by age and gender, April-June 2008 Labour Force Survey (ONS, 2008)



Cortisol



≻Glucose metabolism

- ➢ Regulation of blood pressure
- ➢Insulin release for blood sugar maintenance
- Immune function
- >Inflammatory response



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Need for Recovery



