

# *Sydney Health & Work Research Network (SHWRN)*

*Developing Models of Sustainable Work:  
Enhancing Health and Productivity*

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## The greatest problems of our time?

### › Sustainability

- Climate change has got this billing
- But issue of sustainability pervades many domains
- We are especially concerned with the connections between work, well-being + sustainability

### › This is a report on work in progress

- What we are concerned with
- What we are doing

### › Disclaimer - this is my account of collective thinking so far

- Not all members of the network would necessarily agree with all that follows
  - All the imperfections are mine
  - All the good insights are those of my colleagues

- › Generating new knowledge
  - Especially by actively coordinating research from the medical, health and social sciences
  
- › To help understand big problems
  - Sustainability, especially for individuals, organisations and society
  
- › By contributing to the revitalisation of an old analytical + ethical tradition
  - Aristotle's notion of 'practical wisdom'
  - Beyond 'the academic' v 'practical' dichotomy

## Sustainability is a problem at many levels

- › For the natural world
  - eg the emergence of a carbon constrained future
  
- › For the social and economic world
  - Declining fertility rates + population reproduction
  - Skill 'shortages' + economic growth
  
- › For individuals
  - Physical health (eg chronic diseases like obesity, diabetes + cardiovascular disease)
  - Psychological health (eg mental illness)

## Sustainable development

- › *"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:*
- *the concept of **needs**, in particular the essential needs of the world's poor, to which overriding priority should be given; and*
  - *the idea of **limitations** imposed by the state of technology and social organization on the environment's ability to meet present and future needs."*

Brundtland Report, *Our common future*, OUP, 1987

Sustainable work creates contexts in which *“individuals are productively employed in jobs that sustain psychological and economic well-being over time as well as balance the diverse interests of employers, workers and families”* (Ernst-Kossek & Berg)

- It focuses on long-lasting improvement.
- It requires that key resources are nurtured and renewed.
- It aims to promote productivity & lead to sustainable growth and opportunities for individuals and societies to flourish.
- Important factors include job quality, control at work, working hours

- › **Approach to knowledge (epistemology)**
  - Conceptual minimalism + empirical resourcefulness
  
- › **minimalist categories**
  - Context, causation + connections
  
- › **disparate empirical regularities**
  - 'natural' + 'social' facts
  
- › **research program – focus on research design not just methods**
  - Process is defining + not merely 'accommodating' or 'self-evident'
  - Central concern: identifying questions of interest, not disciplinary linkages
  
- › **achievements so far**
  - Five research realms
  
- › **inclusive leadership** => how you can get involved

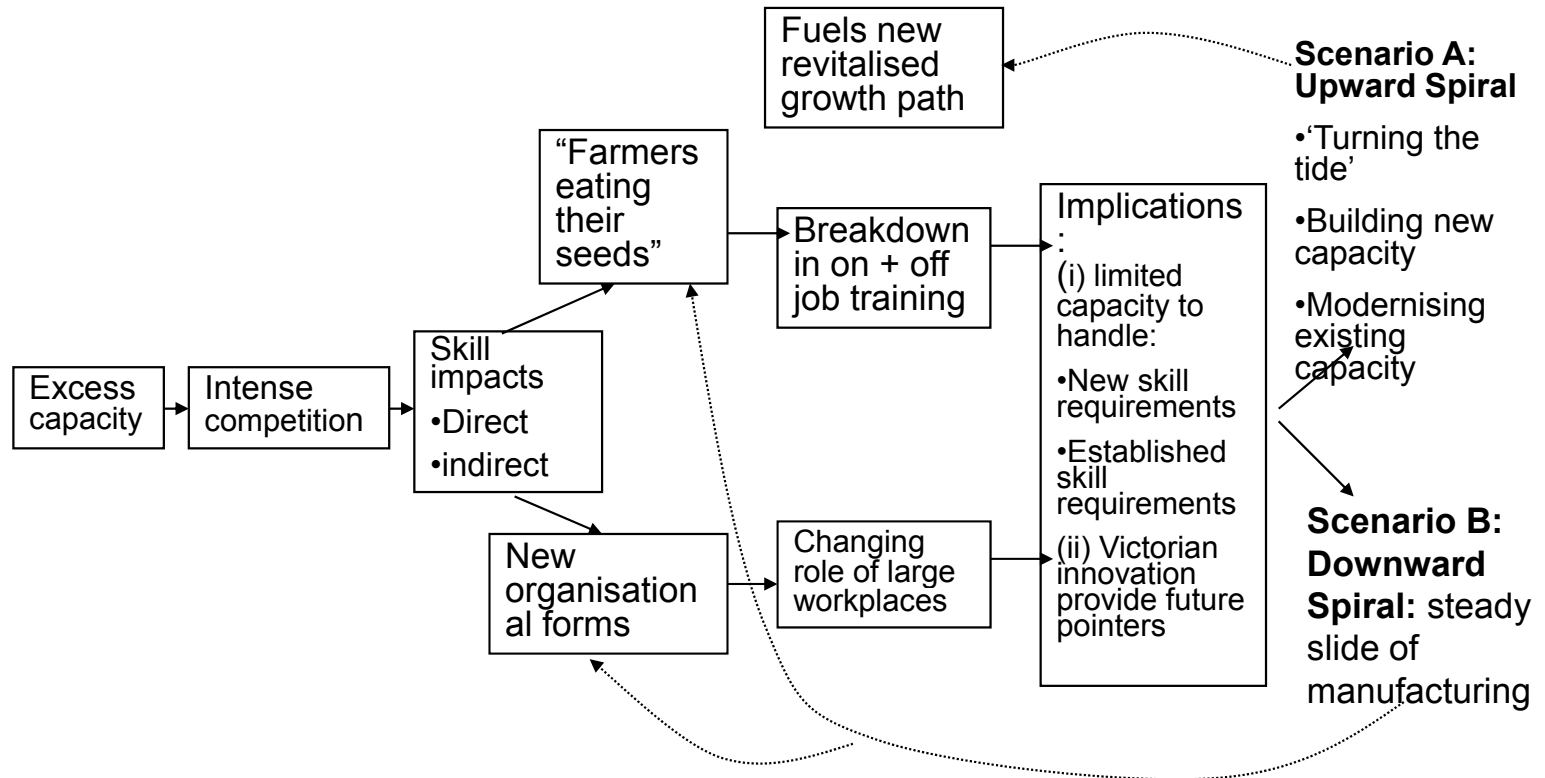
We need non-linear models of causation => our initial guiding precepts

- › Context is often constitutive, not ‘background’
- › The notion of ‘eco-systems’ and their evolution potentially offers a helpful way of understanding connections in the natural, social + individual domains
- › The evolution of political-economic eco-systems appear to play a critical role in nurturing or undermining those associated with nature + individuals conceived as biological beings
  - Feedback effects from natural and individuals’ eco-systems can then have major implications for political-economic eco-systems themselves





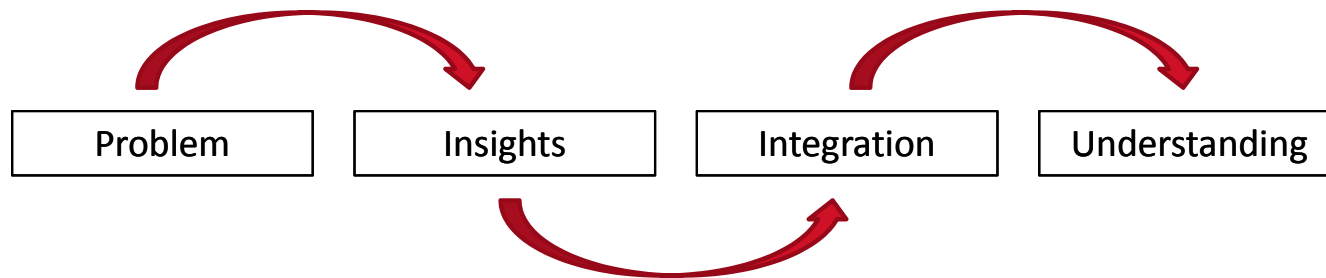
# An example of our approach- skill eco-systems + understanding changing skill requirements



## Extending the empirical regularities of interest

- › The economic costs of poor health
    - Non-communicable disease will cost >\$30 trillion over the next 20 years due to lost output alone (WEF 2011, Harvard School of Public Health)
  - › Work as a hazard (especially psychosocial dimensions)
    - Control + the social gradient
    - Precariousness as health hazard
    - The hidden costs of hours + work intensification regimes
  - › Rehabilitation + participation
    - 2.2 million disable 15 – 64 (20% workforce participation cf 80% for remainder)
  - › Structure of support + work related transitions
    - Especially a problem at beginning + end of working life (eg apprenticeships)
  - › Work and well being
    - Flourishing at work closely associated with flourishing in life
-

## A Model of the Interdisciplinary Research Process (Repko, 2006)



### A. Drawing on disciplinary insights

1. Define the problem or state the research question
2. Justify using an interdisciplinary approach
3. Identify relevant disciplines
4. Conduct the literature search
5. Develop adequacy in each relevant discipline
6. Analyse the problem and evaluate each insight or theory

### B. Integrating disciplinary insights

1. Identify conflicts between insights or theories and their sources
2. Create common ground between concepts and theories
3. Construct a more comprehensive understanding
4. Reflect on, test, and communicate the understanding

- › *1. Economic costs and categories*
- › *2. Understanding the health hazards arising from work (Work as Hazard)*
- › *3. Designing work and workplaces that optimise health, wellbeing and productivity (work as enhancement)*
- › *4. Participation and rehabilitation*
- › *5. Healthy and sustainable work structures and pathways*

- Provide **policy makers** with a better understanding of the health and work connection to inform policies which can:
  - improve health through work
  - improve productivity by nurturing health at work
  - reduce the burden of work-related ill health and injury
  - improve rehabilitation and participation in quality employment
- Reconfigure **the productivity debate** to one seeking to improve productivity by designing healthy work in which people thrive
- **Identify** and raise awareness of the **real costs of unsafe and unhealthy work**
- **Help organisations**
  - to **improve both health and productivity** through sustainable work
  - by proposing **evidence based and innovative ways** to improve work

- › Engaging with end users to understand needs
- › Engaging with partners to support innovative research that addresses big problems
- › Consolidation of existing research across multiple disciplines
- › Working across disciplines to create new insights
- › Translation and dissemination of research
- › Informational and Networking Events
- › Website and Newsletter

## › **Network Leader**

- Prof John Buchanan (Workplace Research Centre, Business School)

## › **Executive Group**

- Prof Phil Bohle (Ageing, Work and Health Unit, Faculty of Health Sciences)
- Prof Stephen Colagiuri (Boden Institute, Sydney Medical School)
- Prof Ian Hickie, Assoc Prof Nick Glozier, Sebastian Rosenberg (Brain & Mind Research Centre, Sydney Medical School)
- Prof Deborah Schofield (NHMRC Clinical Trials Centre, Sydney Medical School)
- Prof Tim Shaw (Workforce Education Development Group, Sydney Medical School)

## › **Network includes members from a diverse range of disciplines**

- Business, Medicine, Health Sciences, Law, Arts & Social Sciences, Psychology, Nursing, Pharmacy, Architecture, IT

- › Visit the Network's new website:  
<http://sydney.edu.au/research/healthandwork/>
- › Sign up to the Network's newsletter
- › Come along to Network events
- › Send us news & events to be published in the e-news & website



More detailed information of relevance to the work-health research network

- › More details on work-health nexus
  
- › More details on the flows of production, consumption and the problem of inequality compromising the sustainability of such flows
  - Especially matters of:
    - Work-spend cycle
    - Culture of competitive consumption
    - Changing hours regimes in household as well as the labour market.

- *The Research Portfolio's Sydney Research Networks Scheme (SyReNS) has provided funding to develop "large and productive collaborations that enable high quality multidisciplinary research, at scale on significant and complex problems"*
- The Sydney Health and Work Research Network's mission is to consolidate knowledge and expertise from multiple disciplines to develop integrated models of sustainable work.
- These complex relationships cannot be effectively understood within individual disciplines.

*There are important, and complex, relationships between health and work*

- Non-communicable disease will cost >US\$30 trillion over the next 20 years due to lost output alone (WEF 2011, Harvard School of Public Health).
- In Australia, work-related ill health and injury cost over \$60billion annually – approx. 5% of GDP (Safe Work Australia 2012).
- Key changes in the nature of work have generally had negative effects on health.
  - particularly work intensification, the growth of precarious (contingent, insecure) work, and the expansion of sedentary work (Bohle et al. 2008).
- Ill health and disability limit participation in quality paid work, constraining the contributions and potential of many individuals.
  - e.g. the workforce participation of people with mental illness is only 29%, compared to 76% for the general working-age population (ABS 2009).
- It is possible to do better – work can improve health as well.

### *The psychosocial work environment and health*

- Whitehall studies demonstrate important effects
- “... **the psychosocial environment at work is an important determinant of health and contributor to the social gradient in ill health**”
- “Having little **control over one’s work** is particularly strongly related to an increased risk of low back pain, sickness absence and cardiovascular disease. These risks have been found to be independent of the people studied. In short, **they seem to be related to the work environment**”
- Studies have shown combined effects of demands and control: “**Jobs with both high demand and low control carry special risk**”

(Wilkinson & Marmot)

- › ***Costa, Sartori & Akerstedt (2006) identified control as a critical factor, defining two categories of irregularity:***
  - *variable' hours: primarily controlled by the employer*
  - *flexible' hours: primarily controlled by the employee*
- › ***Higher flexibility & lower variability were each associated with better physical health, psychological well-being & job satisfaction***
  - *using simple, categorical, self-report measures of variability & flexibility*
- › ***More objective measures of irregularity may provide more efficient testing of flexibility/variability effects***

(Prof Phil Bohle and Work and Health Unit, Faculty of Health Sciences)

### *Precarious work as a hazard*

- Precarious work, and the irregular hours often associated with it, are widely associated with higher injury & fatality rates and poorer health and wellbeing (Quinlan et al., 2001; Quinlan & Bohle 2008, 2009).
- ... '**poor job security**' and 'fear of the future' **accentuate the effect of physical risk factors...** 'Longer working hours', 'increased work-pace' and 'older working age' are also risks for musculoskeletal disorders (European Agency for Safety and Health at Work).
- Poorer training & induction, shorter employment tenure and less willingness to report hazards & incidents increase risk among precarious workers (Bohle et al. 2008, WRC).

## Helsinki Health Study

- › Frequent sleep problems (21% workers)
  - 38-50% higher absenteeism
  - 3.2 x higher disability retirement due to all causes
  - Insomnia symptoms rather than reported sleep hours
- › > x2 higher rates of injury in workers with sleep problems
- › Higher rates of “burnout” in workers with sleep disorders

(Prof Ron Grunstein, Woolcock Institute)

- › ABS, 2009:
  - 2.2 million Australians aged 15-64 years with disability, up from 1.7 million in 1993.
  - Just over half of all people with a disability participate in the labour force compared with four in five people without a disability.
  - Workforce participation for those with psychological disabilities is only 29%
  - Figures don't say how many of these are quality jobs
- › Discrimination and stigma still create effective barriers
- › Concurrently, occupational ill health and injury now cost over \$60billion annually or 4.8% of GDP over the same period (Safe Work Australia 2012)
- › Questions raised as to whether return to work interventions may do more harm than good
- › Perhaps the dichotomy of in/out of work may be harmful and that we should be working to establish and protect a continuity of engagement



- › Changes to and erosion of many supportive work structures like secure employment and workplace training.
- › Rise of business models that do not emphasise employee welfare.
- › Employment initiatives intended to increase participation that are not adequately evaluated.
- › Mental health issues are a growing concern.
- › Young people are particularly vulnerable. The transition period between study and work (or unemployment) comes at a critical time in the mental health of young people. Have the changes to the structures of work led to increased mental health risks in the young?
- › Ageing and “Sandwich” generations raise their own concerns for wellbeing.
- › Can we improve work structures to support health better?

## ***Key Research Aims:***

- Increase understanding of the links between health and work.
- Discover ways to improve health and wellbeing through work.
- Identify ways to improve productivity through health-enhancing work.
- Help reduce the heavy financial and social costs of work-related ill health by improved prevention and rehabilitation.
- Assist those vulnerable workers, and those disadvantaged by ill health or disability, to realise their potential to participate in healthy, satisfying and productive employment.

## More paid labour to keep households afloat

	1907	2006/08	2006/08
Budget Standard	'Frugal comfort' [\$4.20 pw?]	'Low cost' \$779.00	'Modest but adequate' \$1,112.00
Weekly wage	\$4.20	\$543.78	\$543.78
Standard hours	48	38	38
Hours need for budget standard	48	57	76