

Integrating a balanced lifestyle in the 24-hour economy



The 24h economy poses multiple threats to a balanced lifestyle:

- As humans, we need **regular and sufficient sleep** for our bodies to function properly. Our bodies **rely on several mechanisms** to assure regular and sufficient sleep. However, these mechanisms are not adjusted for the 24h economy, which is why the latter may result in sleep deprivation and irregular sleep patterns.
- **Disrupted sleep impairs different aspects of our physiology** relevant for a balanced lifestyle, e.g.:
 - **Physical health:** Irregular and insufficient sleep entails an increased risk of developing, among others, cancer, cardiovascular problems, elevated blood pressure, a weakened immune system, or various neurocognitive disorders
 - **Cognitive/mental functions:** Attention, learning, and memory can be acutely and chronically impaired as a result of disrupted sleep. Such impairments affect an individual's functioning at home and at work.



- **Sub-optimal night-shift schedules:** detrimental for sleep quality and at-work performance, lead to health deficits
- **Suboptimal work-place design:** low lights, constant sitting and bad employee habits (too much coffee or taking sleeping pills) increase difficulty to stay awake.
- **Productivity loss:** insufficient performance (due to sleeplessness/shift work) leads to a \$680 billion loss among OECD countries.
- **Occupational accidents:** accidents, including black swan events with significant financial and environmental consequences (e.g. Exxon Valdez oil spill) lead to \$80 billion lost in the aftermath.



- The individual is **involved in family role and work role**, which place **incompatible demands** (expressed in time or resources such as energy and involvement) on the individual
- This makes **participation in either role harder** and leads to **dissatisfaction and conflict** between the two aspects of life: work-family conflict
- Two main demands from the 'work role' that impact family life:
 - **Time-based demand:** time is a fixed resource and can only be allocated in one sphere and irregular night shifts hinder a healthy time allocation for individuals
 - **Strain-based demand:** psychological spill over from the work to the family domain resulting from time pressure and workload pressure amongst workers
- Both these demands **increase stress, tiredness and negative emotions** which are transmitted directly into the family life and undermine the ability of the individual to engage constructively in family responsibilities.



A balanced lifestyle:

"a satisfying pattern of daily occupation that is healthful, meaningful, and sustainable to an individual within the context of his or her current life circumstances"



Example of these regulations, the Dutch labour laws on night shifts:

- Employees cannot work for more than 10 hours per night shift.
- Employees cannot work for more than 40 hours per week when regularly working night-shifts.
- Employees are entitled to at least 14 hours of rest after a night shift ending after 02.00.
- After a series of 3 or more shifts, employees are entitled to at least 46 hours of rest.

But there are several ways how these threats could be avoided:

- **Night Shift schedules should be optimised** for a healthy adjustment of the circadian rhythm. This means creating longer rotational phases.
- **One-time solutions** to avoid sleepiness on the job: bright lights, variable noise and cool temperatures.
- **Better education** for employees and employers on **healthy sleeping patterns**, the costs that stem from ignoring these factors, and optimizing performance through better sleep quality.



- Achieving a **work-family balance is essential** for the well-being of the individual: a balance whereby the individual is "equally engaged in and equally satisfied with their work role and family role".
- **Balanced inputs** (in terms of time and energy) also **lead to balanced outputs** (i.e. satisfaction) stemming from involvement in family and work: not only equal time allocation but also equal involvement in and achieving an equal degree of satisfaction from both
- This is fostered by **regulations placed on the workplace**, controlling working hours and conditions:
 - Global: Conventions of the International Labour Organisation
 - European: the Work Time Directive
 - National: in the Netherlands, the Arbeidstijdenwet



Improving the work environment leads to reduced stress and reduced tiredness on the workplace which in turn lead to **greater involvement in family occupations** and in the fulfilment of family obligations allows the individual to achieve a **pattern of occupations that contributes positively to their health and well-being.**

- Certain occupational patterns are more likely to enhance the well-being and health of the individual
- because they allow to meet essential needs
 - because they help reduce stressful circumstances