

Definitions of terms

- Labour/work: Specific activities with rewards (cf. Subsistence activity means major labour)
- Occupation/job: Continuous human activities to get rewards for maintaining life (eg., employee, teacher, ...)
- Industry: Economic activities as business (eg., primary / secondary / tertiary)

Historical view

- No occupation in hunter-gatherer society, no occupation-related disease existed. In general, pre-industrial farmers worked (to live, including unpaid works) shorter than employees in industrialized world (Source: Minge-Klevana W et al.,1980)
- After the mining started, occupational health became important. Ramazzini B published “*De Morbis Artificum Diatriba*” in 1700 (<http://www.historyofinformation.com/detail.php?entryid=3681>; <http://smallbusiness-solution.com/hekint/ramazzini-and-the-birth-of-occupational-medicine/>).
- After the industrial revolution, the problem became more important.
- However, economic development was more important for some governments than protecting workers health. Many tragedies occurred (In Japan, many young female workers at silk mills or cotton mills suffered from tuberculosis and other serious diseases and forced to go back to their home village, then died [http://www.mrbuddhisthistory.com/uploads/1/4/9/6/14967012/japanese_women_at_work.pdf]).
- International Labour Organization (ILO) has been established in 1919 (just after the WWI), to set labour standards, develop policies and devise programmes promoting decent work for all women and men (<https://www.ilo.org/global/about-the-ilo/lang--en/index.htm>).

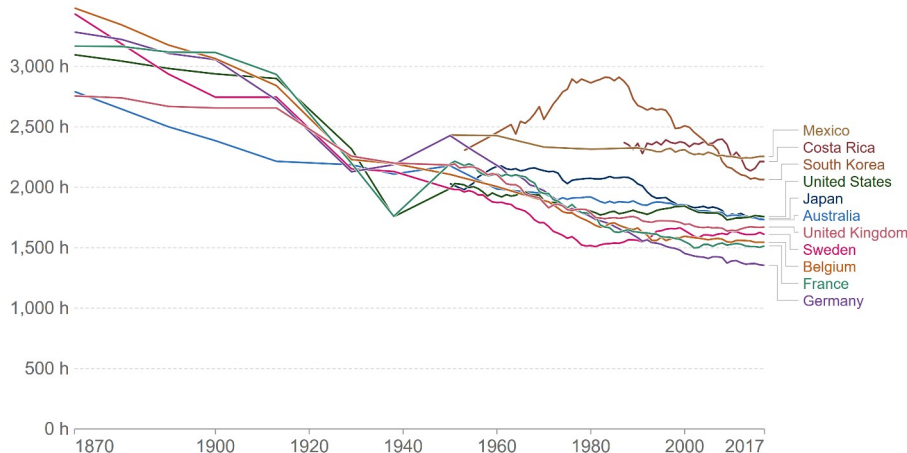
Working hours

- Japan shows relatively longer working hours than European countries, though Korea and Singapore show much longer.
- Hunter-gatherer and horticulturalists generally worked shorter than current Europeans.
- Working more than 48 hours/week is considered too long.

Annual working hours per worker

Average working hours per worker over an entire year. Before 1950 the data corresponds only to full-time production workers (non-agricultural activities). Starting in 1950 estimates cover total hours worked in the economy as measured primarily from National Accounts data.

Our World
in Data



Source: Huberman & Minns (2007) and PWT 9.1 (2019)

OurWorldInData.org/working-hours • CC BY

Note: We plot the data from Huberman & Minns (2007) and extend coverage using an updated vintage of PWT, which uses the same underlying source. Comparisons between countries are limited due to differences in measurement.

(Source: <https://ourworldindata.org/grapher/annual-working-hours-per-worker?country=GBR~DEU~USA~FRA~SWE~AUS~BEL~CRI~MEX~JPN~KOR>)

Please see, <https://clockify.me/working-hours>, too.

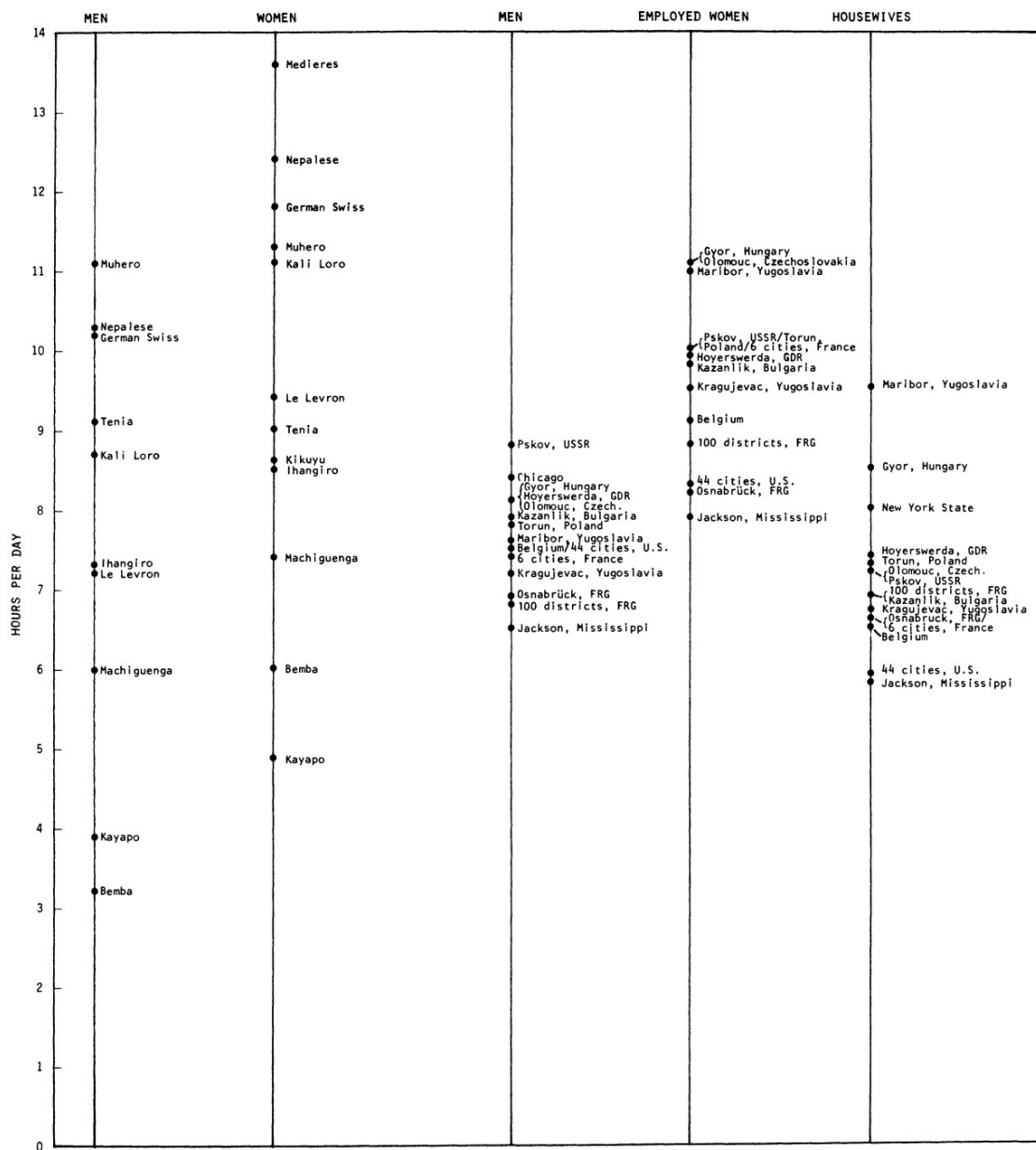


FIG. 1. Labor time inside and outside the home, as recorded in studies shown in tables 1-3; *left*, agricultural societies; *right*, postindustrial societies.

(Source: Minge-Klevana W et al. 1980. <https://doi.org/10.1086/202455>)

| Stressful characteristics of work | |
|--|---|
| Work characteristics | Condition defining hazard (demands, control and support) |
| CONTEXT | |
| Organizational function and culture | Poor task environment and lack of definition of objective Poor problem solving environment Poor development environment Poor communication Non-supportive culture |
| Role in organization | Role ambiguity Role conflict High responsibility for people |
| Career development | Career uncertainty Career stagnation Poor status or status incongruity Poor pay Job insecurity and redundancy Low social value to work |
| Decision latitude/control | Low participation in decision-making Lack of control over work Little decision-making in work |
| Interpersonal relationships at work | Social or physical isolation Poor relationships with supervisors Interpersonal conflict and violence Lack of social or practical support at home Dual career problems |
| CONTENT | |
| Task design | Ill-defined work High uncertainty in work Lack of variety of short work cycles Fragmented or meaningless work Underutilization of skill Continual exposure of client/customer groups |
| Workload/work pace | Lack of control over pacing |
| Quantities and quality | Work overload or underload High levels of pacing or time pressure |
| Work schedule | Shift working Inflexible work schedule Unpredictable working hours Long or unsociable working hours |
| Consensus from literature outlining nine different characteristics of jobs, work environment and organization which are hazardous. | |
| Source: HSE Contract Research Report No. 61/1993. Cox T. <i>Stress Research and Stress Management: Putting Theory to Work</i> . | |

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