

STRESS: JOHANSSON ET AL. (1978)
STRESS IN THE WORKPLACE

Aim: to investigate whether work stressors such as repetitiveness, machine-regulated pace of work and high levels of responsibility increase stress-related physiological arousal and stress-related illness

Procedures:

- ❑ The researchers identified a high-risk group of 14 “finishers” in a Swedish sawmill. Their job was to finish off the wood at the last stage of processing timber. The work was machine-paced, isolated, very repetitive yet highly skilled, and the finishers’ productivity determined the wage rates for the entire factory
- ❑ The 14 “finishers” were compared with a low-risk group of 10 cleaners, whose work was more varied, largely self-paced, and allowed more socialising with other workers
- ❑ Levels of stress-related hormones (adrenaline and noradrenaline) in the urine were measured on work days and rest days
- ❑ Records were kept of stress-related illness and absenteeism

Findings:

- ❑ The high-risk group of 14 finishers secreted more stress hormones (adrenaline and noradrenaline) on work days than on rest days, and higher levels than the control group
- ❑ The high-risk group of finishers also showed significantly higher levels of stress-related illness such as headaches and higher levels of absenteeism than the low-risk group of cleaners

Conclusions:

- ❑ A combination of work stressors- especially repetitiveness, machine-pacing of work and high levels of responsibility – lead to chronic (long-term) physiological arousal. This in turn leads to stress-related illness and absenteeism
- ❑ If employers want to reduce illness and absenteeism in their workforce, they need to find ways of reducing these work stressors, for example by introducing variety into employees’ work and by allowing them to experience some sense of control over the pace of their work

Criticisms:

- ❑ Some important variables, such as individual differences, are not controlled in this study; it may be that certain people who are vulnerable to stress (e.g. those exhibiting Type A behaviour) may be attracted to high-risk demanding jobs, such as finishing in a sawmill
- ❑ In addition, the study does not identify which of the various work stressors may be the most stressful. The high risk group was exposed to low levels of control through repetitive machine-paced work, physical isolation and high levels of responsibility. To separate out the effects of these different factors, a more controlled experimental study would have to be carried out, but this would be at the expense of ecological validity