

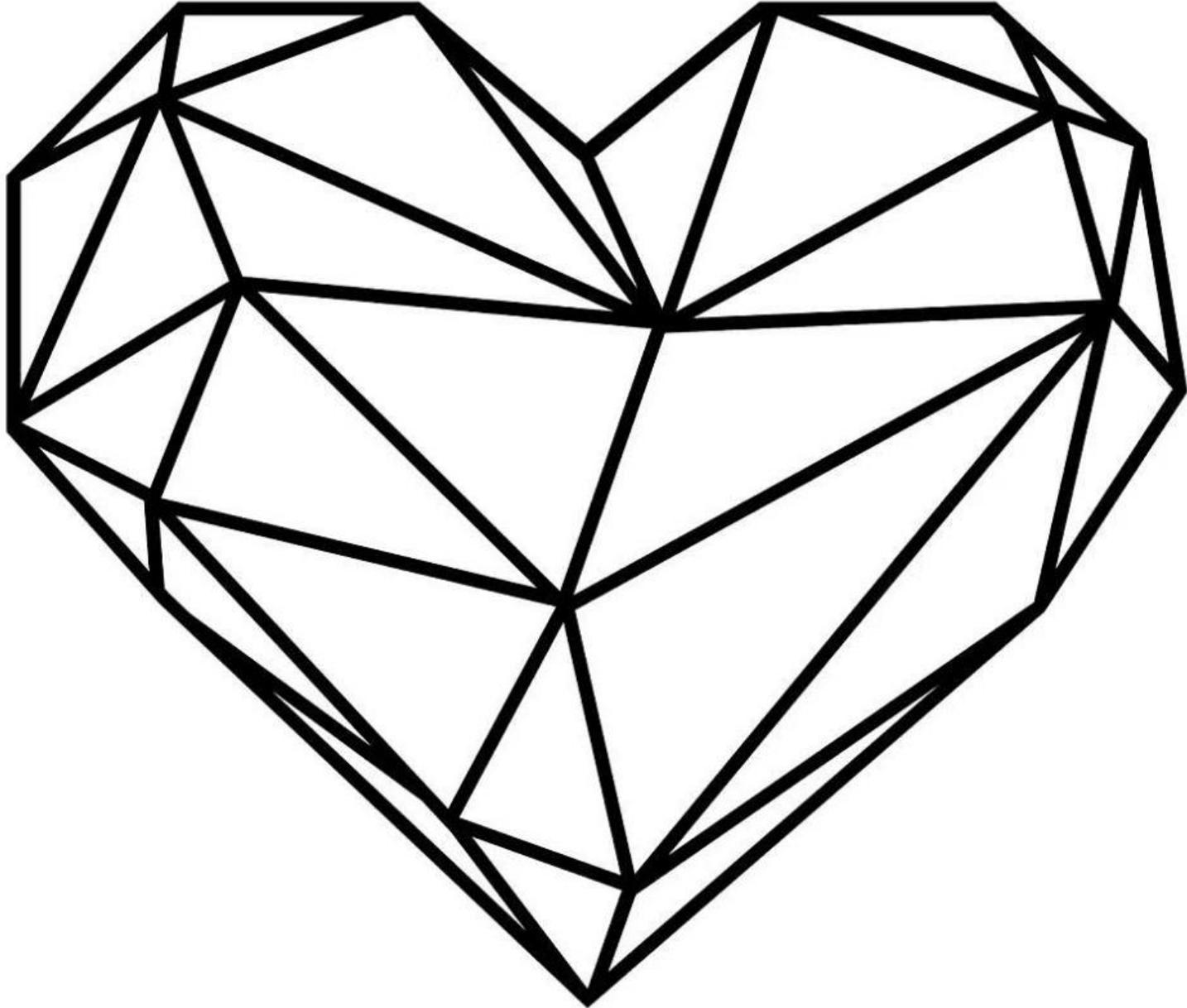


# Working Conditions

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Lecture 12







# Introduction

- Good working conditions contribute to the well-being of workers and the success of enterprises.
- But unbundling the everyday reality of women and men at work is not a simple task.
- This is particularly true in in our changing world of work, where new technologies and new forms of work organisation are continuously being integrated into our workplaces.
- In order to understand working conditions, we must measure them.
- They provide information needed to analyse different work situations, including by job and sector.
- Job quality is increasingly recognised as a major policy concern. It is central to the ILO's Decent Work Agenda and to the European Union's Quality of Work policies.
- For workers, for the enterprises and organisations that employ them and for societies, there are benefits associated with high-quality jobs, and costs associated with poor-quality jobs



# Working conditions

**working conditions:** working environment and all existing circumstance affecting labor in the workplace, including job hours, physical aspects, legal rights and responsibility organizational climate and workload.

- Managers should **identify** and **deal** with working condition because when employees have negative perception to their environment they sometimes suffer from chronic stress.
- This premise is supported by the **TWO-FACTOR MODEL** theory by Frederick Herzberg (1950s).
- This theory is divided into two (**motivational and maintenance factors**) maintenance factor also known as (hygiene factor) such as working condition and job security. This hygiene factor is de-motivator of employee.
- So, working condition is related to this theory because the absence of maintenance brings high negative feeling, and their presence generally brings employee on neutral state.
- “Working conditions are created by the interaction of employee with their organizational climate, and it includes psychological as well as physical working conditions”



# Working conditions productivity

- **Productivity:** a ratio to measure how well an organization (or individual, industry, country) converts input resources (labor, materials, machines etc.) into goods and services.
- In addition, productivity refers to effort that individuals can produce with the least effort by putting labor, material, and machines.
- **Working conditions:** very important to the organization. **If the employees have negative perception of their working conditions, they are likely to be absent, have stress-related illness, and their productivity and commitment tend to be low.**
- On the other hand, organizations those have a friendly, trusting, and save environment, experience have:
  - ↳ Greater productivity, communication, creativity, and financial health.
  - ↳ Productivity s related working conditions, which in turn related to absenteeism, retention, the adoption of new methods and technologies.
- All these things are related to how people are trained, encouraged are generally treated within the system.



# Seven dimensions of job quality

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According to ILO, 7 dimensions of job quality must be considered

- the physical environment,
- work intensity,
- working time quality,
- the social environment,
- skills and development,
- prospects, and earnings.
- While there are important differences across countries on these job quality dimensions, there are also important similarities.



# Working conditions in a global perspective

- **Exposure to physical risks is frequent.** More than half of workers in many regions and countries covered are exposed to repetitive hand and arm movements, making it the most reported physical risk. One-fifth or more of workers are frequently exposed to high temperatures at work; a similar but lower proportion report exposure to low temperatures. Between one-fifth and one-third of workers, and up to 44% in Turkey, report loud noise.
- **Intensive work**, such as tight deadlines and high-speed work, are experienced by between one-third of workers in the EU, and half in the US, Turkey, El Salvador and Uruguay. Some 25–40% of workers have jobs with emotional demands.
- **Differences in working time quality are stark:** whereas 15% of workers in EU countries work more than 48 hours per week, in China and the Republic of Korea over 40% of workers do so, in Chile over 50% and in Turkey the figure is nearly 60%. Across the countries, at least 10% of workers work during their free time; long hours often come with intense work. While in most countries men report longer hours of paid work than women, when hours of unpaid work are included then, without exception across the world, women work longer hours than men. Over 70% of workers in the Republic of Korea report that it is very easy for them to arrange to take an hour or two off work to take care of personal or family matters; this is the case for 20–40% of workers in the US, Europe and Turkey.

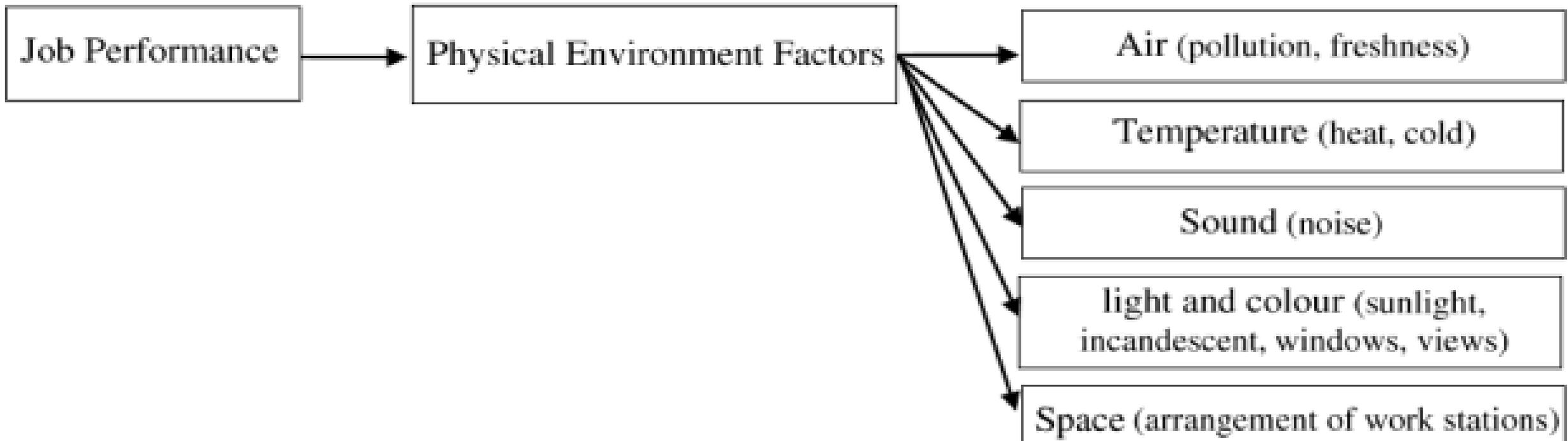
# Working conditions in a global perspective

- **Most workers report a supportive social environment at work.** Around 70% of workers across the countries surveyed give a positive assessment of their managers' performance in managing them, and report high levels of social support from colleagues, (though with some country exceptions). Up to 12%, however, subject to verbal abuse, humiliating behaviour, bullying, unwanted sexual attention or sexual harassment.
- **Regardless of the country, the least-educated get less access to opportunities to grow and develop their skills.** The proportion of workers who report learning new things at work varies between 72% and 84% in the US, the EU and Uruguay, but the proportions are lower in China (55%), Turkey (57%) and the Republic of Korea (32%). The proportion of workers who report having some task autonomy is between 45% and 70%, while the proportion having influence on decisions important for their work ranges from 33% to 66%.
- **Regarding prospects, job insecurity is of concern across many countries,** with one out of six workers in the EU and one out of every ten workers in the US worried that they might lose their job in the next six months. On the positive side, 30–60% report that their job offers prospects for career advancement.
- **Across the countries, women earn significantly less than men and are overrepresented at the lowest end of the earnings distribution.** The level of earnings varies with employment status and occupation.
- **Differences between different groups of workers:** in particular, between men and women, and between workers in different occupations. Differences in job quality between men and women result from multiple interactions between the welfare and family systems, labour market structures, gendered life courses and the division of paid and unpaid labour. Similarly, the data reveal systematic differences between occupations. Many workers in blue-collar occupations are exposed to physically demanding working conditions. Elementary workers and service and sales workers also report both physical and emotional demands

# Work Environment

- Work environment can be anything that exists around the employee and can affect how he performs his duties.
- Alex S. Nitisemito (1992) state that working environment is both an external and an internal condition that can influence working spirit and result in instantly finished jobs.
- According to Sedarmayanti (2003), a decent working environment is a condition where individuals can do their jobs in an ideal, secure, healthy, and comfort way.
- Therefore, many studies classify the work environment into toxic and conducive environments (Akinyele, 2010; Chaddha, Pandey and Noida, 2011; Yusuf and Metiboba, 2012; Assaf and Alswalha, 2013).
- McGuire and McLaren (2007) believes that an organization's physical environment particularly its layout and design can impact employee behaviour in the workplace.
- As indicated by Nitisemito (2001), some of the factors that influence the workplace include: cleanliness, water, lighting, colouring, security and music.





# Work Environment

- Many work environment studies have shown that workers are satisfied with reference to specific work environment features. These features preferred by users significantly contribute to their workspace satisfaction and performance.
- Those features include ventilation rates, lighting, access to natural light and acoustic environment.
- Lighting and other factors like ergonomic furniture have been found to have positive effect on employees' health and so on employees' productivity.
- Hameed and Amjad (2009) in a survey of 31 bank branches confirmed that convenient and ergonomic office design encouraged the employees and increased their performance significantly.
- Chandrasekar (2011) also assert that unhealthy and unsafe work environment in terms of poor ventilation, immoderate noise, inadequate lighting etc. affect employees' productivity and health.

# Safety, health and technical equipment

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# Risks in all workplaces

- There are risks in all workplaces.
- Safety is possible only by knowing these risks and properly guarding ourselves until the risks have been eliminated.
- Technological progress is constantly taking place and while it often brings improvements in both efficiency and safety at work, it also can create new risks.



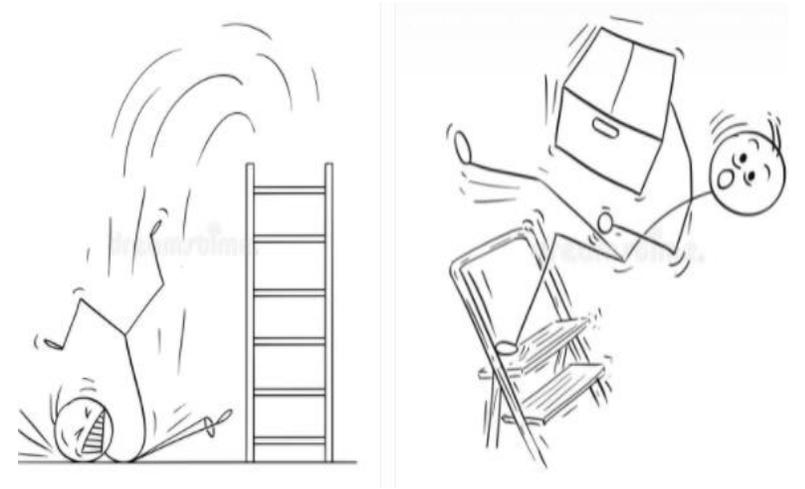
**WORKPLACE  
SAFETY TIPS  
NOT TO BE  
MISSED**



# Causes of accidents

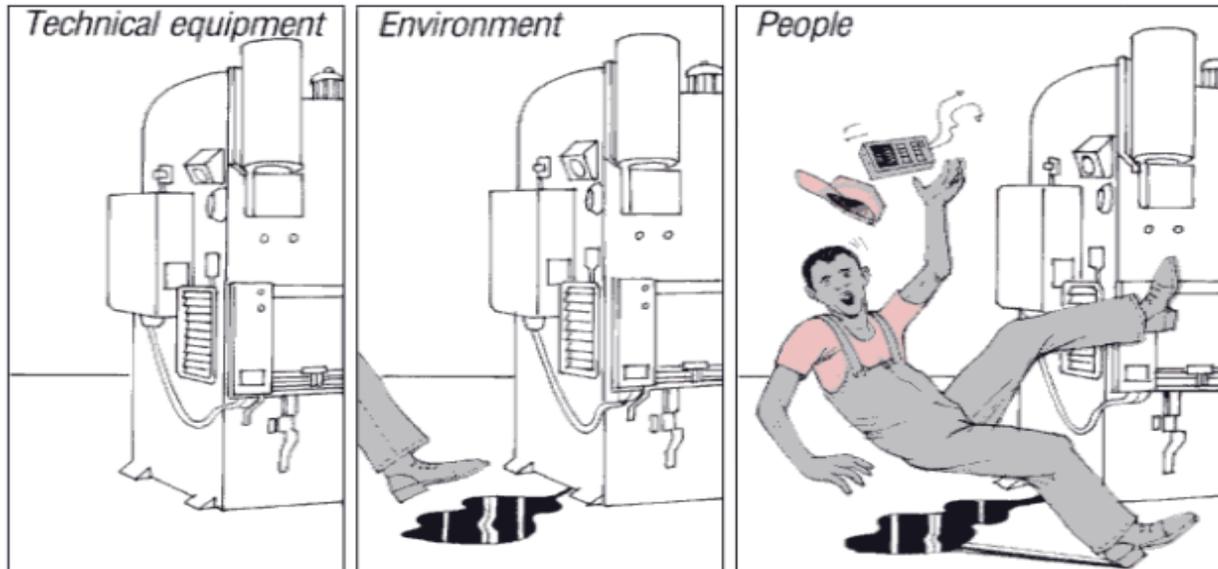
This accident is in many “typical” ways:

- The worker was working on a ladder, and fell suddenly.
- There are several basic factors behind accidents of this kind.
- Through accident investigation we can find out why accidents happen and how they can be prevented in the future.
- As the starting point for any accident investigation, we must examine how the work procedure deviated from the correct routine.
- Factors causing such deviation include elements such as broken or malfunctioning machinery, incorrect working materials, incorrect work procedures, blocked aisles or passages, and liquids spilled on floors.
- One of the most common causes of accidents is falling from ladders or work platforms, often causing serious injury.
- We must learn more about the many and varied causes of accidents. For example, ladders seldom fall over on their own.



# Three main causes of accidents at workplace

In order to carry out an effective investigation and prevent accidents, we have to know why the various deviations in work procedure occurred. The three main contributory factors are:



**1. Technical equipment:** Examples: lack of equipment or faulty design leading to a sequence of unexpected events which finally result in an accident.

**2. Working conditions:** The working conditions can influence us indirectly thereby causing accidents. Such factors include: disorder at the workplace, noise, temperature, ventilation, lighting.

**3. People:** Your own performance can increase the risks of having an accident. Consequently, all work should be planned from the point of view of the worker.

- The employer has the primary responsibility for the planning and layout of the workplace. Important factors include:
  - *Job experience.* It is the first stages of a new job or a new procedure that are usually the most critical. The same applies when a person changes jobs.
  - *Information* and instructions on the working methods and risks involved.
  - *Age.* Older people are more easily injured e.g. when falling. In general, eyesight and hearing decline with age.

These are just a few of the factors which can contribute to causing industrial accidents.



**AIR (temperature, humidity, ventilation, and cleanliness)**

# Air factor



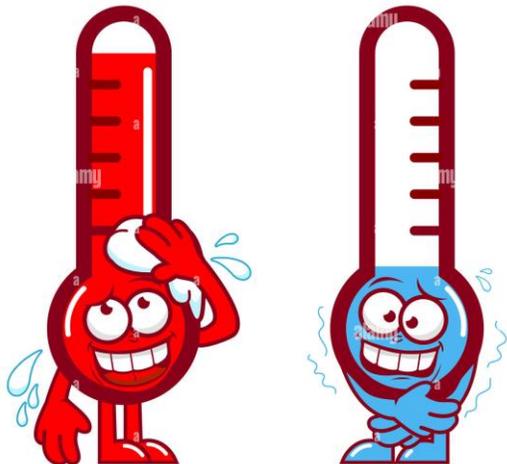
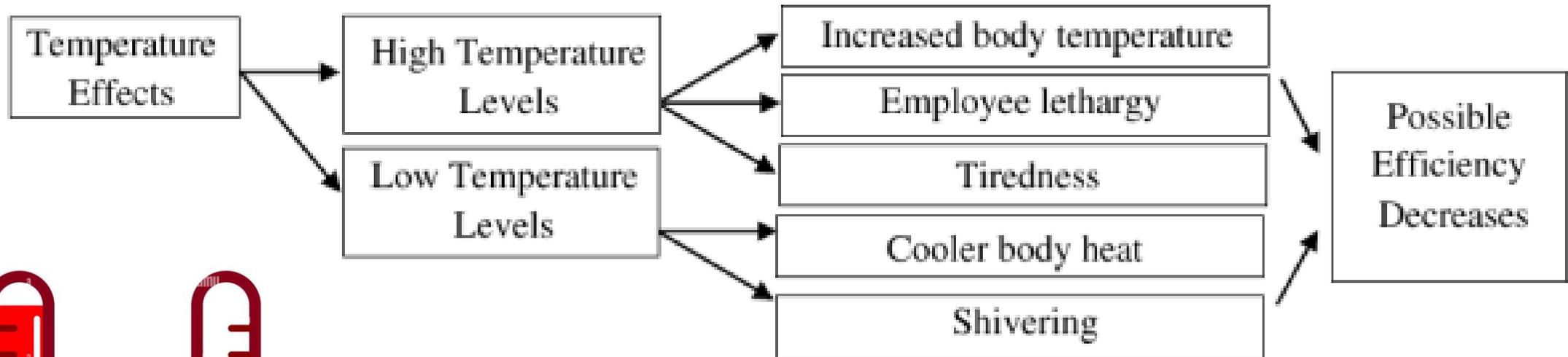
- The air in the work environment especially its components can play a considerable function in relation to the work behaviour, specifically job performance.
- Air quality is very significant to the health, comfort, and job performance among employees.
- Indoor contamination levels frequently exceed open air levels and most of the time workers might spend up to 90% of time alone inside.
- Most possibly perilous indoor air pollutants are radon, asbestos, inorganic material, environmental tobacco smoke, organics, biological and nonionizing radiation.
- Other pollutants such as odours and dusts can cause critical discomfort and feelings of unwillingness, that may lead to a reduction in productivity and job performance.

# Air quality



- The last element of the work environment, which has impact on employee productivity, is air quality.
- Poor air quality can raise a negative impact on employee health in the form of respiratory problems, headaches, and, fatigue, which in the long periods will reduce productivity.
- The air quality contains four factors that are: temperature, humidity, ventilation, and cleanliness.
  - **High Temperature Levels** - Employee lethargy and tiredness as a result of increased body temperature lead to possible efficiency decreases.
  - **Low Temperature Levels** - Low Temperature Levels decrease in efficiency due to cooler body heat and shivering.
  - **High Humidity** - In itself may not be a direct problem, but it does increase our susceptibility to high temperature levels as evaporation of body sweat is impeded.
  - **Low Humidity** - Levels have a debilitating effect on our ability to breathe and swallow without discomfort as our mouths and noses can become dry due to the increased level of evaporation in the surrounding environment.

# Possible Effects of Temperature Levels on job performance



# Air Comfortable Environment



- A comfortable work environment is a **building or room in which workers can generate their work properly as it clean, with proper range of temperature, enough ventilation, and an adequate humidity.**
- Too little humidity level may causes magnetic tapes and disks to stick during processing operation, whereas too much humidity, on the other hand, produces condensation on the electronic parts of the equipment and causes shortcircuiting.
- Ventilation is important for the control of dust, fumes, gases, aerosols, climate and thermal comfort factors. Exposure to different types of dust can result in fibrosis of the lung, allergic reactions and asthma attacks.
- Various vapours, gases and aerosols have the ability to cause respiratory and skin damage. Extremes of heat can reduce concentration and motivation and cause a number of heat-related illnesses.

# Noise



- Noise is element of the work environment, which has an important role in affecting employee productivity.
- Too much noise, such as sound from equipment, tools, and people' s conversation, may prevent workers concentrating on their jobs, consequently decreasing their productivity.
- However, people cannot achieve good performance in a silent environment, because at some level, sound may generate a healthy background and can also assist employees accomplish their work.
- In general, noise can influence employees while doing their work and the impact can be both positive and negative.
- If there is soft background sound, which is coming from instrumental music, and there is an employee who has to tackle claims from some inpatient customers, the background sound in turn, will assist him/her to become more relaxed in solving the customer s problems.
- In contrast, if the sound background is quite hard, which may develop from the telephone ringing and loud conversation among people in the same room, this situation can hamper both the employee and customers.
- There are several methods for controlling the noise in the office : proper contraction, sound-absorbing materials, sound-absorbing devices, and masking.

# Sound

- Noise defined as unwanted sound, is the most common complaint in offices workplace. Many researchers indicate that noisy places and exposing employees to such conditions can affect their job performance quality.
- Exposure to high levels of sound may lead to several diseases such as cardiovascular disease, endocrine and digestive reactions particularly in complex jobs not in straightforward jobs.
- Companies today tend to use an open-office design to increase teamwork, productivity, and communication; however, researchers' studies indicate that these open interactive spaces boost noise in the workplace.
- Noise can affect task performance by office workers. assignments needed reading comprehension and memory are the most sensible to noise, especially noise sources related to workers' conversations.
- Noise can distract office workers more likely when workers do not have control of the noise source and it is unpredictable.
- The raised noise in the workplace is caused by common office equipment, for example, PCs, printers, phones, copiers, heating and air conditioning unites, and conversations of office workers.

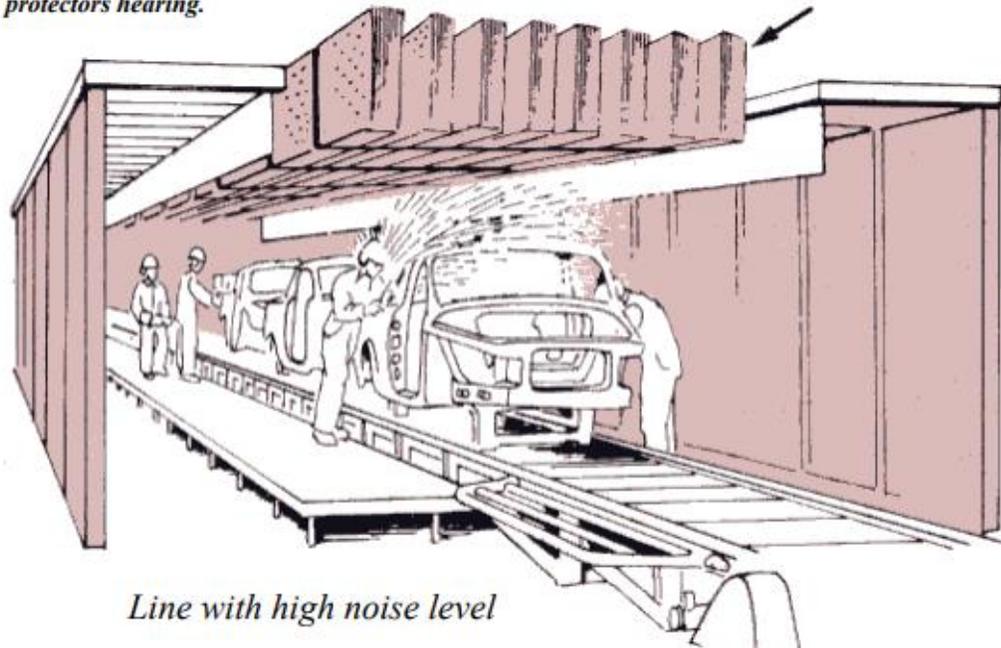
Effect on human beings	Sound level in dB(A)	Sound source
Highly injurious	140	Jet engine 
	130	Rivet hammer
----- PAIN THRESHOLD -----		
Injurious	120	Propeller plane
	110	Rock drill 
	100	Chain saw
	90	Sheet-metal workshop Heavy truck 
Risk	80	Heavily-trafficked street
Speech-masking Irritating	70	Saloon car 
	60	Normal conversation 
	50	Low conversation
	40	Quiet radio music 
	30	Whispering
	20	Quiet urban apartment
	10	Rustling leaves 
----- HEARING THRESHOLD -----		

# Sound

## Noise absorption - example

### MEASURES

Putting up fight partitions along the sides of the production line and hanging sound absorbing baffles over the opening above, cuts off the other production lines from the grinding noise. But you still have to use protectors hearing.

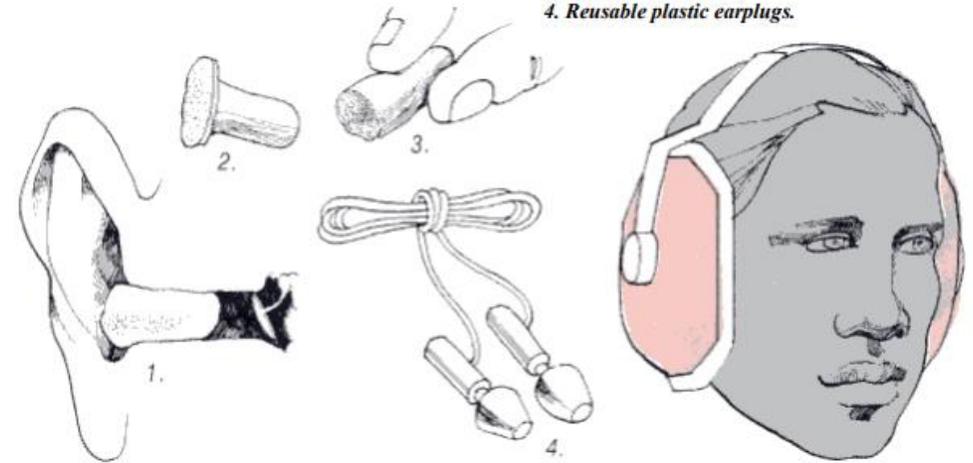


Walls of sound absorbing material

## Hearing protections – Example

Disposable earplugs.

1. Formable wedging – acoustical fibres.
2. Plastic covered acoustical fibres.
3. Expandable plastics.
4. Reusable plastic earplugs.



# LIGHT and COLOUR factor



- Regardless of fitout design or building type, daylight, is considered to be the number one wanted natural feature in the workplace as researchers always discovered that exposure to natural light in an office space impacts employees' quality of life.
- The amount of light needed in the workplace depends on the kind of tasks being performed, either outdoors or indoors, or when they are performed, in the day, or at night.
- Therefore, it will either increase or decrease the performance. Inconvenient lighting is a source of distress, thus leading to poor job performance.
- That happens when the employee is exposed to uncomfortable working environment in which there is a high glare, or dim bulk, or a lack of natural light in the office.
- The brightness of office light influences concentration, alertness, and task performance.
- Modifying the quality and nature of light can appreciably enhance working experience and productivity.
- Moreover, colour has been found to increase productivity and performance, and raise employees' spirits.
- It plays a role in the workplace by simply providing a pleasant working environment.
- Mental reviews have showed that colours can impact individuals' mood and stimulate feeling.
- Cool colours might awaken unhappy and depressive feelings, while warm colours generally motivate a warming and positive emotions.

# LIGHT and COLOUR factor



- Working in dim or overbright work environments can result in eyestrain, headaches, irritability and, inevitably, reduced productivity. Light sources, including the sun, can create unwanted reflections, **glare and shadows in the workplace that can cause discomfort and distraction, and can interfere with the performance of visual tasks.**
- Low levels of lighting can cause depression, which for some people may be severe.
- Two kinds of light available to office: **natural light** and **artificial light**.
- **Natural light:** free resource that enters the office through window or skylight; **artificial light:** light produced and designed by manufacturing.
- **A poor lighting system may reduce employee performance as well as productivity, because those who have to work related with reading might have a serious problem with their vision,** which in turn may cause fatigue or eyestrain point out that Administrative Office Managers should also take into account the amount of light as well as the quality of lighting.
- **More lights, for some workers, may be helpful in overcoming their tasks.** However, for the rest of them, especially those who have to work in front of computers, excessive light may cause difficulties viewing the characters on the screen.
- In addition, those employees who work in a better quality of lighting are likely to create faster work with fewer errors, compared to those work in a poor lighting.

# LIGHT and COLOUR factor

- Another element of the work environment, which has impact on employee productivity, is color.
- Many workers are only concerned about the physical effect of color, while others do not pay much attention to its psychological impact.
- Color plays a very important role on the human body, mind, and spirit, because it can impact both productivity and wellness.
- For some people, different colors can have a different meaning; for example, those who prefer red color means that the people are energetic, aggressive, and brave.
- Those who like the blue color mean that they are very loyal people or faithful. In the work environments, different colors can also have a different impact, specifically for those involved in particular rooms.



*Example of boring colors at workplace*

# LIGHT and COLOUR factor

- Choosing inadequate colors may impact on worker health, such as, eyestrain, headache, and fatigue.
- However, it is very difficult for Administrative Office Managers (AOM) to facilitate desirable colors for every worker.
- There are three factors which AOM need to aware of before choosing an appropriate color for the office environment these are: work functions, physical location, and type of emotion desire .
- **Different activities need a different color environment.** Activities which need more concentration, such as accounting, will be best with cool color, for instance, blue and green, while some creative work, such as, advertising, software design, and fashion design, will be successful with warm color environments, for example, red and orange.
- **An intelligent choosing of color environments in turn will enhance creativity, as well as productivity, while at the same time reducing fatigue and other health problems.**





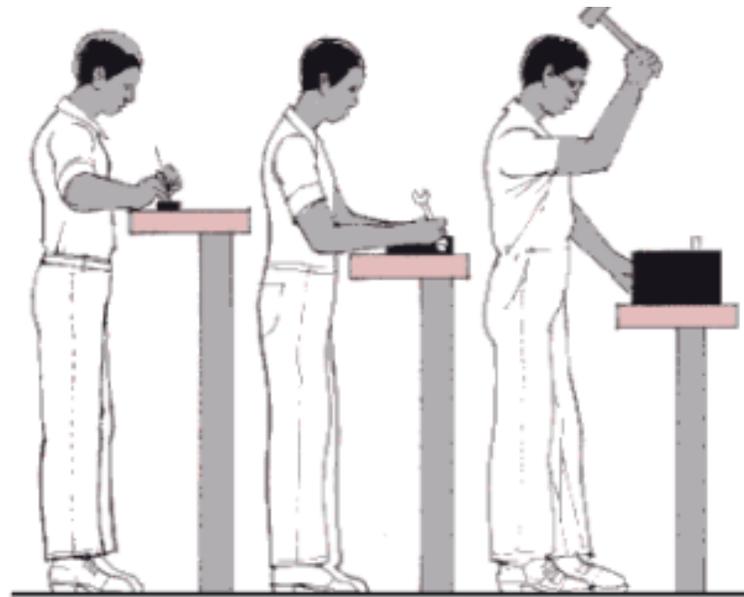
**SPACE - workplace welfare- Ergonomics**

# Space factor

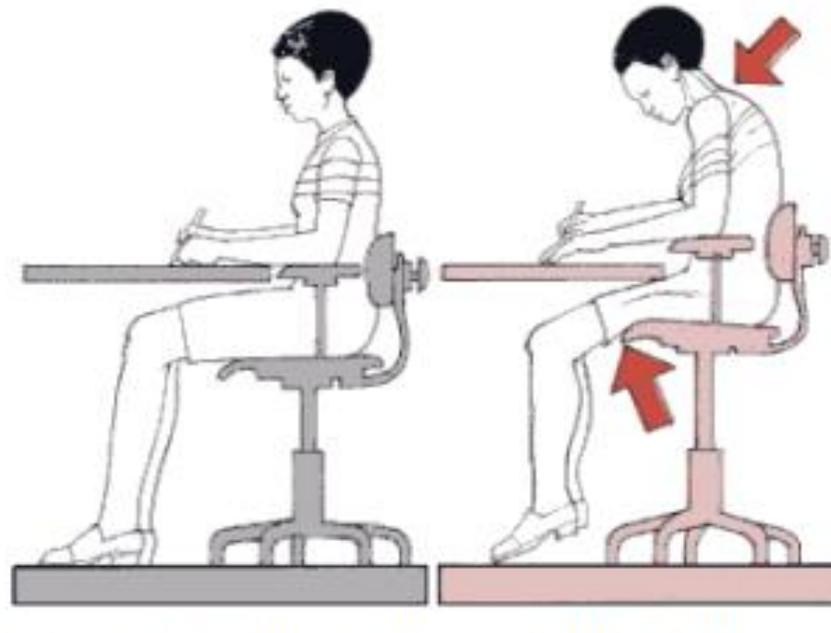


- The actual physical layout of an office is highly important when it comes to maximizing productivity among employees.
- Nowadays, work environments support new ways of working and flexible workplaces which displays ease of communication and interpersonal access contrasted with fully enclosed private offices, and this change to open plan office has boosted employee's productivity paralleled to closed office spaces.
- The individual workstation too crowded and restricted, will lead to stress, pressure and other psychological effect.
- An individual employee may feel unstable and have lack of freedom and motivation, on the short-run, it may lead to a very stressful environment, which decreases the quality of the job performance.
- Employees whose work requires supervisory-professional and privacy are unhappy with an open-plan office.
- Employees adapt to uncongenial workspace when spatial arrangements are inappropriate, and they may even not realize their surroundings could be better.
- Space components like (furniture comprises of desks chairs, the filing system, shelves, drawers, etc.) have a specified part to play in the productivity and the efficiency of the employees and the suitable functioning of any office.
- Also, one of the most essential things to be guaranteed is whether the workplace furniture is ergonomic or not.
- Ergonomic office furniture guarantees that every worker gets well with the things around him, like chairs, desks, PC arrangement and even environmental factors.

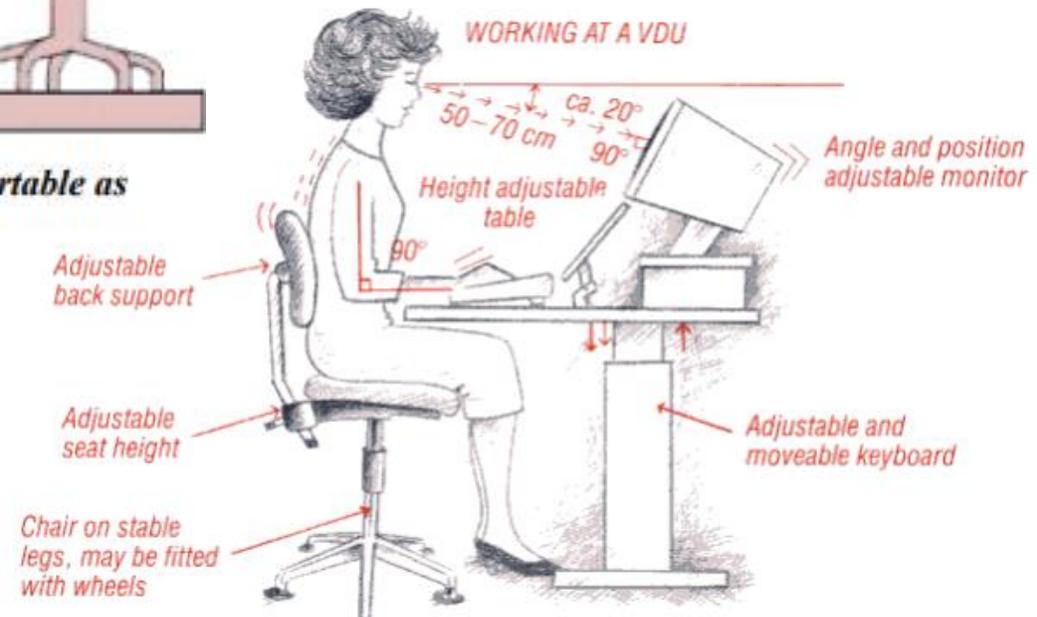
# Ergonomics in different types of work



*Different types of work require different working heights. The working surface should be considerably higher for precision work than for heavy work.*



*The working position should be as comfortable as possible.*



# Office furniture

- Office furniture comprises of desks chairs, the filing system, shelves, drawers, etc.
- All these components have a specific role to play in the proper functioning of any office and the productivity and the efficiency of the employees. And, one of the most important thing to be considered while buying office furniture is to ensure whether it is ergonomic or not.
- Ergonomics of office furniture is important because an employee has to work with them for the entire time that he is on office, and if they are uncomfortable and not user friendly, their working style and efficiency gets hampered considerably, in turn affecting the overall organizations.
- **Non-ergonomic office furniture can also lead to health problems of employees, which again has an adverse effect on the productivity.**
- Ergonomic office furniture ensures that each employee gels well with the things around him, like desks, chairs, computer alignment and even environmental factors.



# Chemicals – special issue in agriculture



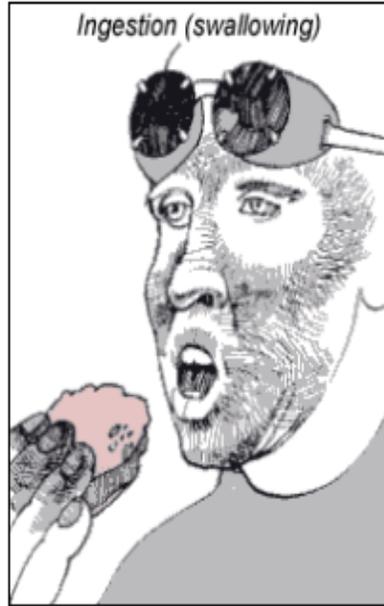
# Chemicals – Dangerous Substances



- **Dangerous substance** — any liquid, gas or solid that poses a risk to workers' health or safety — can be found in nearly all workplaces.
- Across Europe, millions of workers come into contact with chemical and biological agents that can harm them. In fact, in 2015, 17% of workers in the EU reported being exposed to chemical products or substances for at least a quarter of their working time, a proportion practically unchanged since 2000, and 15 % report breathing in smoke, fumes, powder or dust at work.
- Some highly dangerous substances — such as [asbestos](#) or polychlorinated biphenyls (PCBs) — are now banned or under strict control.
- However, other potentially harmful substances are still widely used, and legislation is in place to ensure that the risks associated with them are properly managed.

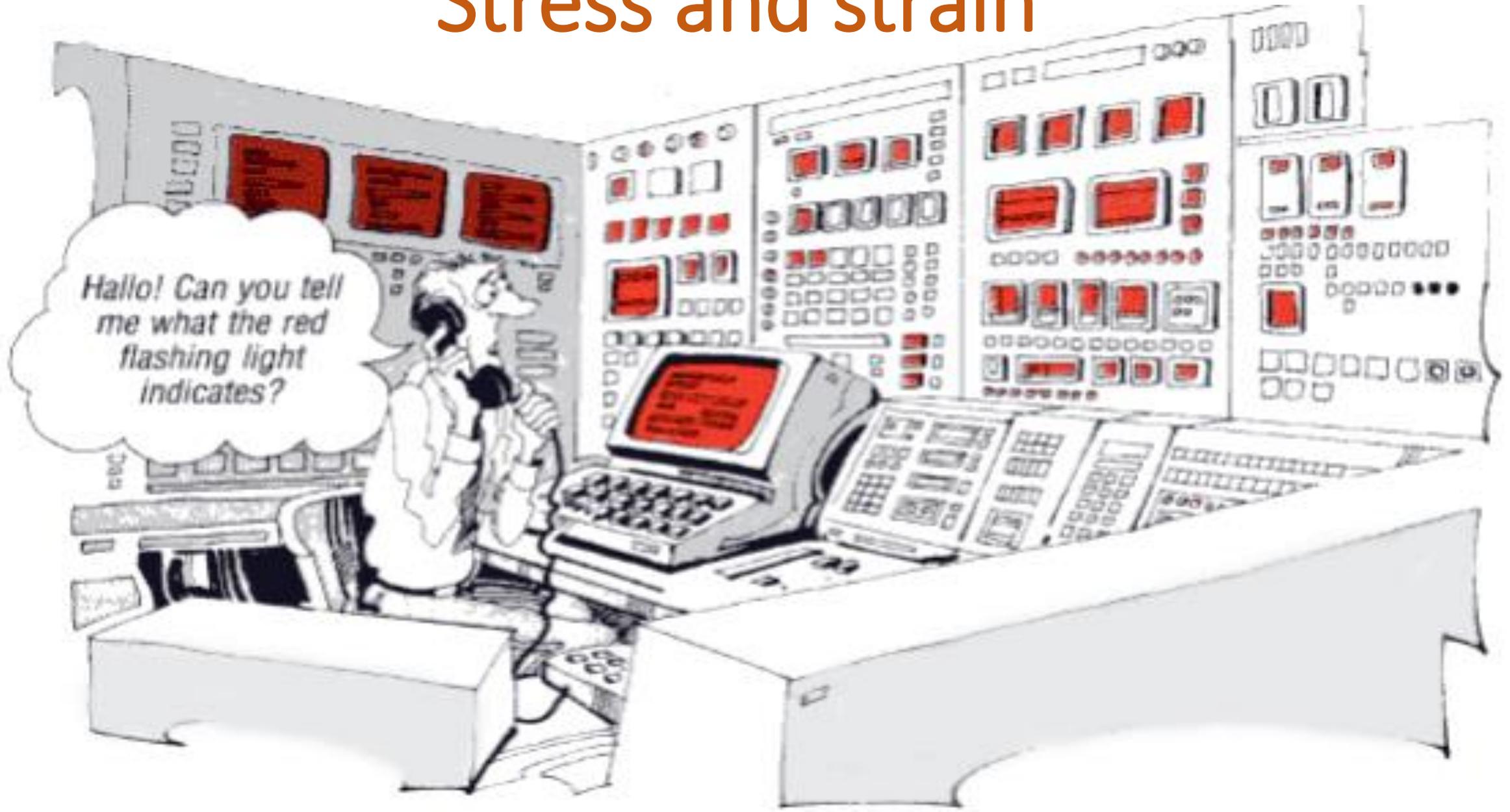
# Chemical Injuries at Workplace | Chemical Injuries in Agriculture

*A chemical can cause injury in several ways:*



*Depending on their chemical composition, pesticides can cause serious poisoning, including nerve damage and skin and eye damage. Early symptoms may include headache, nausea, dizziness and loss of strength. Use caution when handling chemical substances. **USE THE APPROPRIATE SAFETY EQUIPMENT.***

# Stress and strain



# Work Stress

<https://www.youtube.com/watch?v=tvw2VbymKYs>

- A distressingly high number of mental health issues among the working-age group have recently been observed. Wide studies focus on work stress and job satisfaction; despite the importance of these variables, the focus is now shifting to employees' emotional and mental health.
- The mental health issue is primarily caused by work stress resulting in reduced employees' productivity, tense relationships, and loss of mental calmness (Sharma & Srivastava, 2020).
- Work stress scholars defined **stressors as an environmental demand which exceeds a person's ability or skill to meet the challenge.**
- This definition is in accordance with the definition by the World Health Organisation, which described occupational or job stress as “the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities, and which challenge their ability to cope”.
- This definition clearly demonstrates that stress occurs when employees' capabilities do not meet what is ultimately expected of them.



# Work Stress

An inability of an individual to meet the demands from the job due to the imbalance in the person-environment perceptions. It is the situation where individuals' job performance, both physical and mental health, is affected poorly

Holmlund-Rytönen & Strandvik (2005)

Series of physiological, psychological, and behavioural responses due to the continuing effects of one or more stressors on individuals in an organization

Yan & Xie (2016)



# Strain in Work

- Past study recognized that psychological strain occurs when environmental demands are perceived to exceed the adaptive capacity of the person.
- This idea is in line with Panatik (2012), who suggested that **strain has resulted from the mismatch between the person and the environment**. In recent years there has been an increased interest in exploring the research area on work stress and psychological strain. **Previous research has found that greater levels of stress overall can lead to serious psychological strain**.
- Furthermore, evidence exists that whether periodic or aperiodic stressor has resulted in a longer duration of psychological strain such as depression or dissatisfaction.

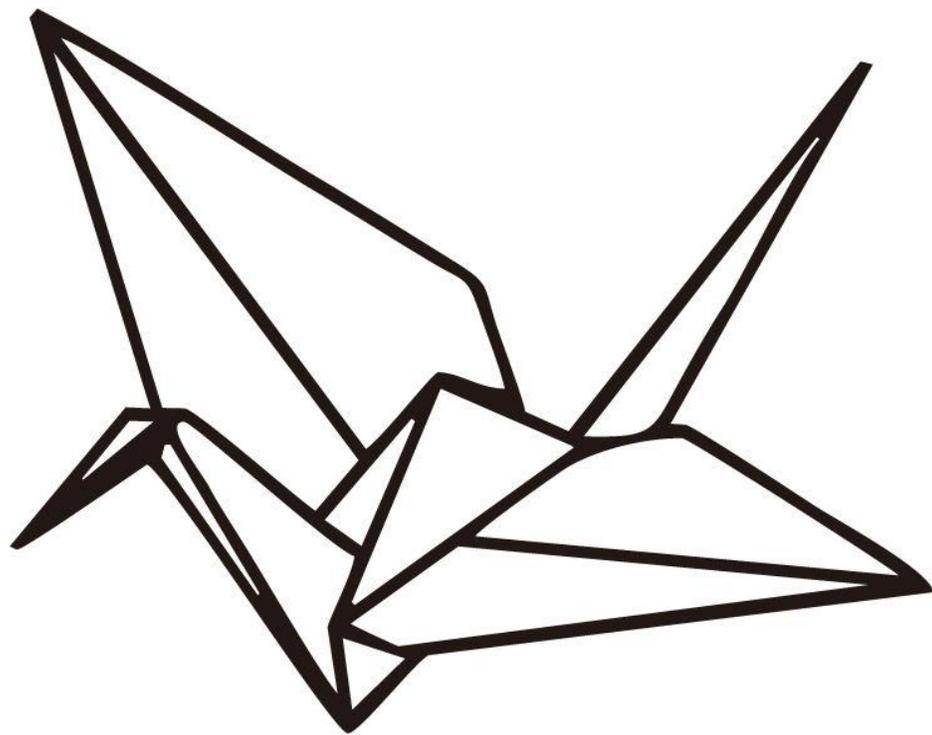


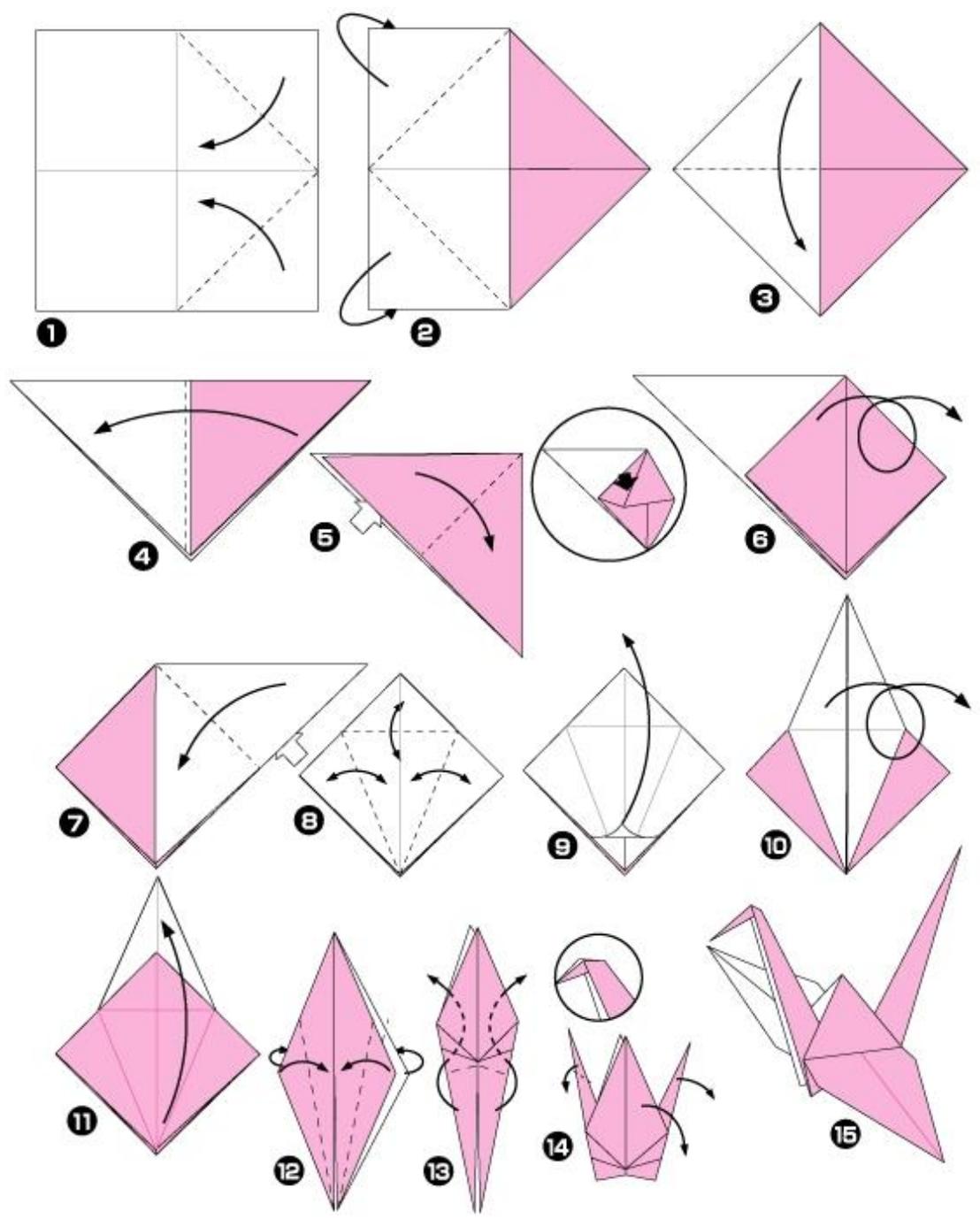
# Strain in Work

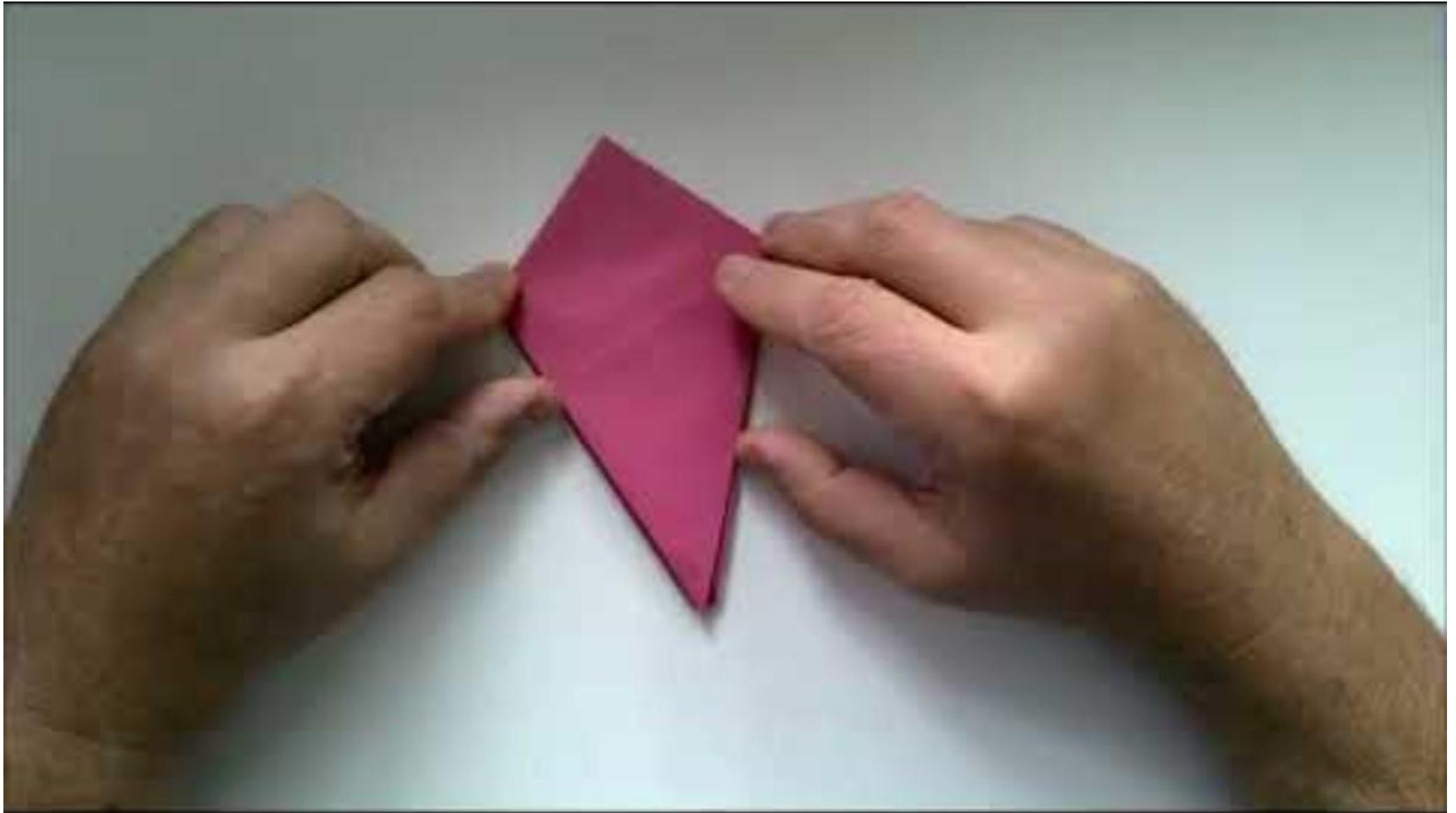
Work Stress	Definition	Source
Strain	Individuals' psychological outcomes to stressors	Lazarus & Folkman (1987)
Strain	States that are harmful and usually have an adverse effect on the individuals experiencing them	Beehr (1995)
Strain	Affective, feeling states of the individual characterized by depleted emotional resources and lack of energy	Lee & Ashforth (1996)
Psychological strain	Individuals' subjective feelings for stressors they face in their surrounding environment	Van Dyne et al. (2002)
Psychological Strain	The outcome of organizational stress experienced at the individual level	Bhagat et al. (2010)

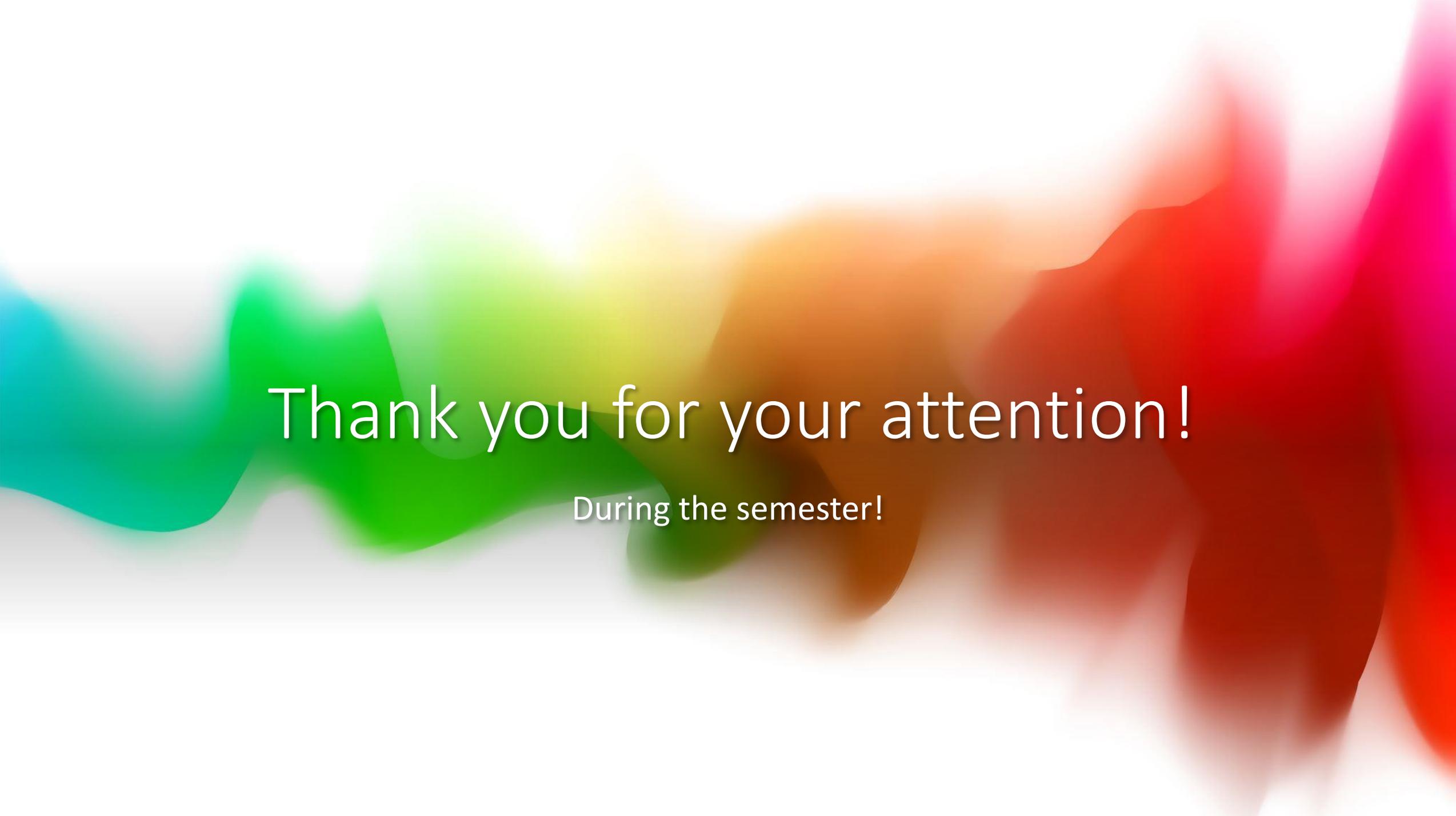


# Origami experiment









Thank you for your attention!

During the semester!