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INDUSTRIAL PSYCHOLOGY

VIII SEMESTER

2022 - 23

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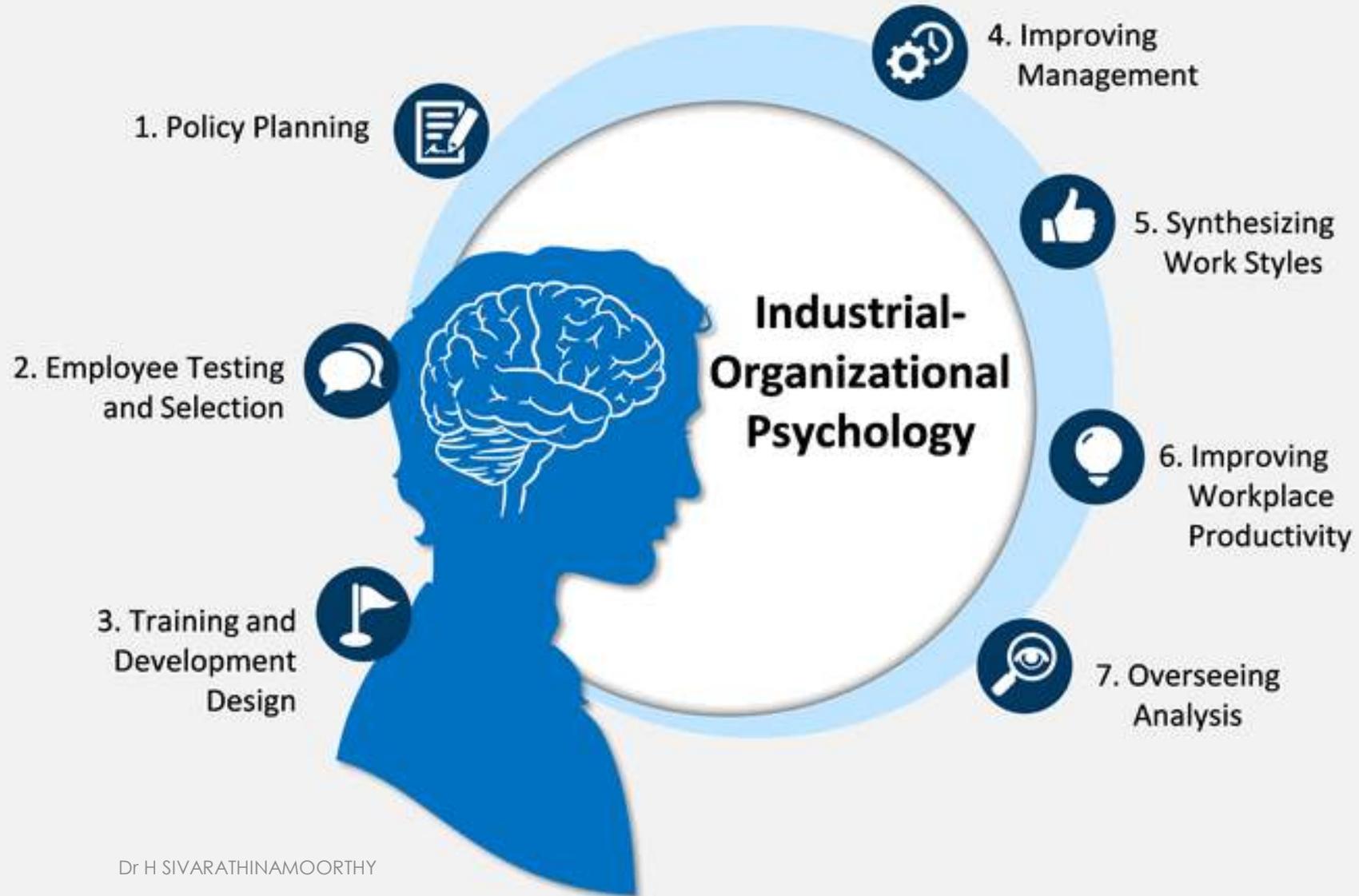
UNIT 1

Introduction to Industrial Psychology

Definitions & Scope. Major influences on industrial Psychology - Scientific management and human relations schools Hawthorne Experiments

INDUSTRIAL ORGANIZATIONAL PSYCHOLOGY

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What is Industrial Psychology?

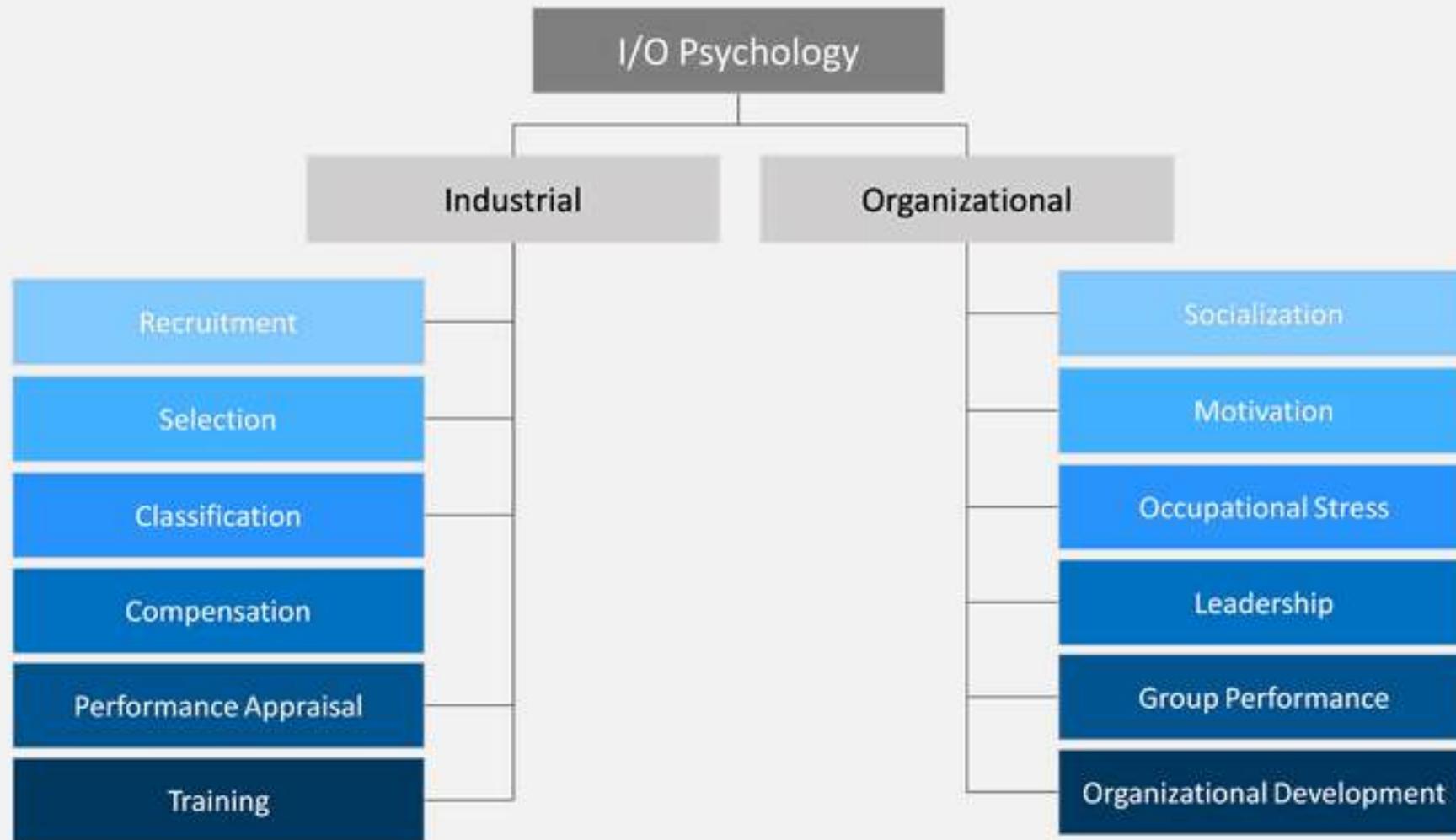
“Industrial psychology is simply the application or extension of psychological facts and principles to the problems concerning human beings operating within the context of business and industry.”

-M.L. BLUM

-J.C. NAYLOR

INDUSTRIAL ORGANIZATIONAL PSYCHOLOGY

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Major influences on Industrial Psychology

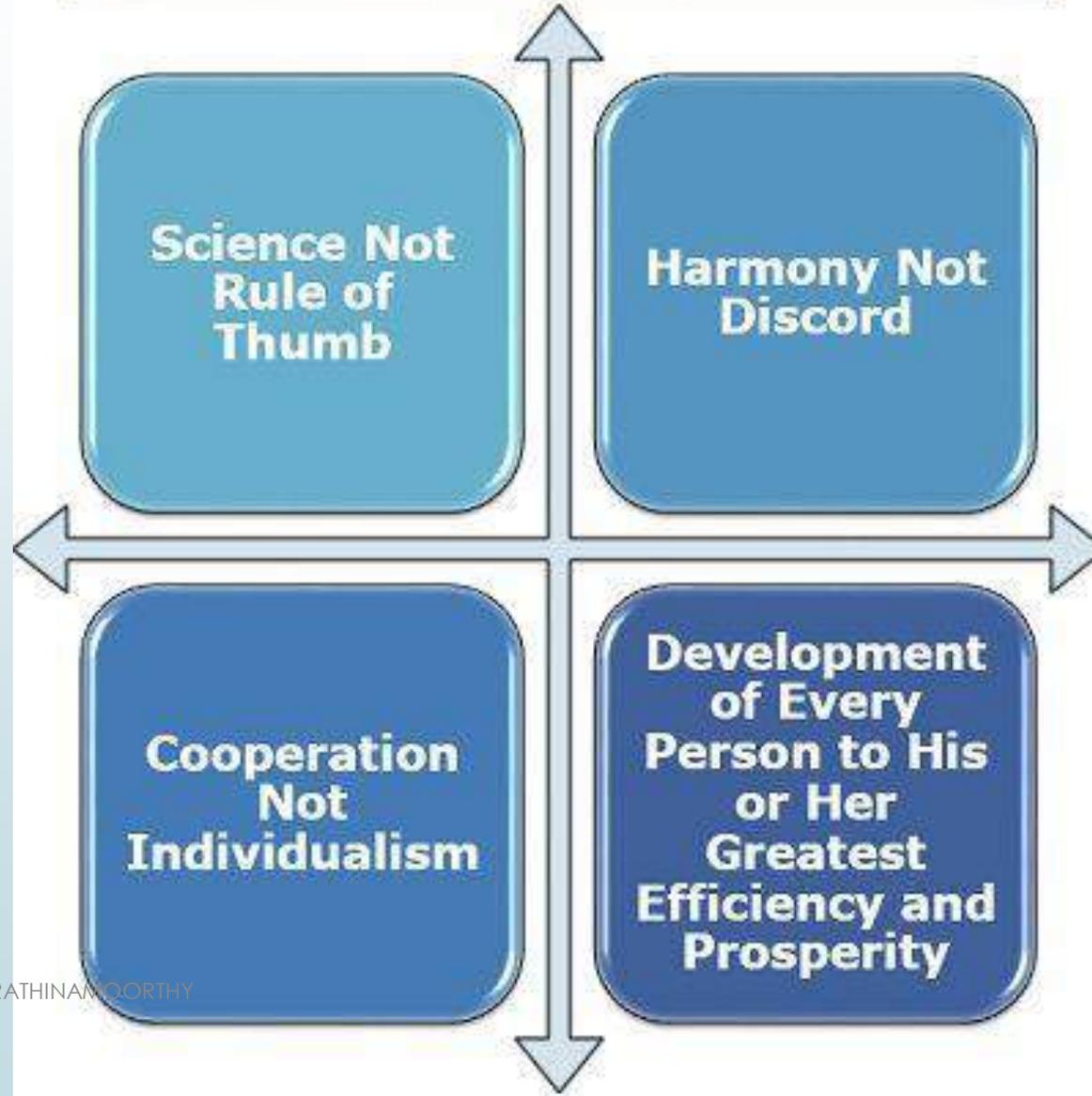
Major influences on industrial psychology are as follows:

- 1. Scientific Management Approach**
- 2. Human Relation Approaches**
- 3. Administrative Approach**
- 4. Behavioural Approach**

Scientific Management

- Started by Fredrick Taylor
- Applies scientific principles to find the “one best way” to do a job
- The principles are:
 - Develop science for the elements of work to replace rule of thumb
 - Select, train, and teach workers
 - Cooperate with workers to ensure work is done
 - Divide work suitably between workers and managers

Principles of Scientific Management





Elements of Human Relations Theory?

- A focus of people
- The organizational environment is not an organized social context
- Human relations are important in motivating people
- Motivation depends on teamwork
- Teams must fulfill individual and organizational objectives
- Individuals and organizations desire efficiency by achieving maximum results with minimum inputs

Human Relations Theory of Management



Elton Mayo

1933

"The Human Problems of an Industrial Civilization"



Fritz Roethlisberger

1939

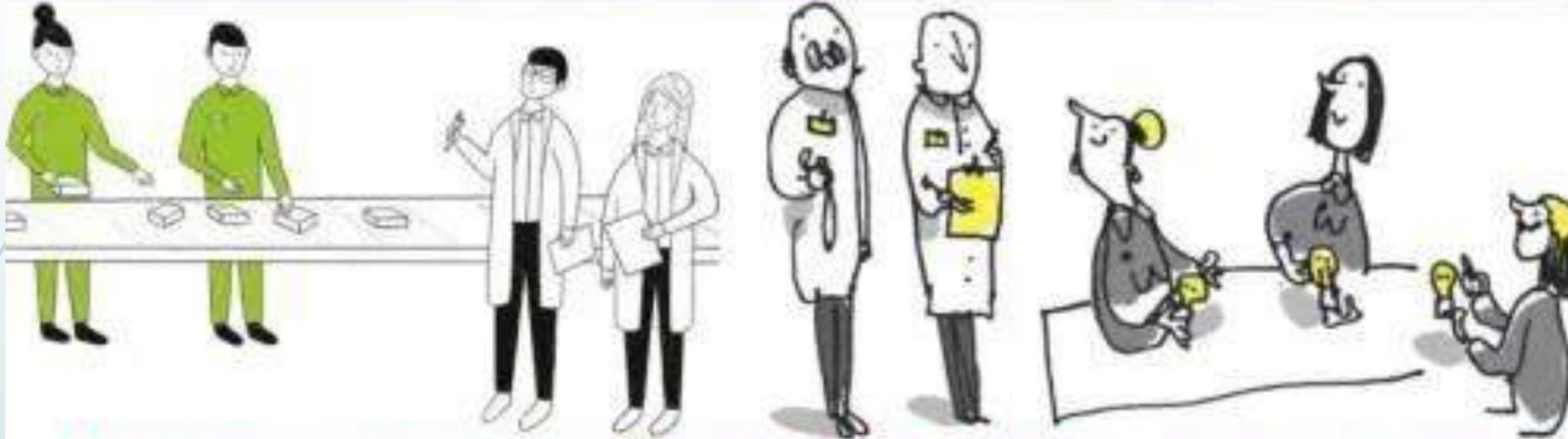
"Management and the Worker"

People are social beings, motivated by social needs.
A sense of identity is derived from inter-personal relationships.
Workers are more receptive to social forces of peer groups than monetary incentives and management controls.
Workers respond positively to attention from management, co-workers and customers.
The psychological needs of individuals significantly impact group performance.

Human Relation Approach (HAWTHORNE EXPERIMENTS)

- The Human Relations Movement began with the Hawthorne Experiments.
- The Hawthorne studies, which were conducted by Elton Mayo and Fritz Roethlisberger in the 1920s with the workers at the Hawthorne plant of the Western Electric Company, Chicago.
- This company faces the problems of workers dissatisfaction, although they provide various facilities like pension scheme, sickness benefits etc., which resultant into loss of production.

What is the Hawthorne Effect?



Better lighting, more regular breaks, etc. improve productivity. However, when workers see that people show concern for them, productivity rises more.

When workers know people are concerned about them their productivity increases



Four Parts of Hawthorne Studies / Experiments

- Part I - Illumination Experiments (1924-27)
- Part II - Relay Assembly Test Room Study (1927-1929)
- Part III - Mass Interviewing Programme (1928-1930)
- Part IV - Bank Wiring Observation Room Experiment (1932)

Illumination Studies – 1924-1927

- Funded by General Electric
- Conducted by The National Research Council (NRC) of the National Academy of Sciences with engineers from MIT
- Measured Light Intensity vs. Worker Output
- **Result – Each change (including decreases) resulted in higher output and reported greater employee satisfaction**
- **Conclusions:**
 - *Light intensity has no conclusive effect on output*
 - *Productivity has a psychological component – Researchers interaction with the workers influenced higher performance*
- **Concept of “Hawthorne Effect” was created**

Relay Assembly Test Room Experiments (1927-1932)

- At this phase, impact of length of the working day, rest hours and other physical conditions were tested.
- a small homogeneous work group of six girls was constituted.
- These girls were friendly to each other and were asked to work in a very informal atmosphere under the supervision of researcher.
- Productivity and morale increased considerably during the period of the experiment. Productivity went on increasing and stabilized at a high level when all the improvements were taken away and the pre-test conditions were re-introduced.

Implications: socio-psychological factors such as feeling of being important, recognition, attention, participation, cohasive work group and non-directive supervision held the key for higher productivity.

Mass Interview Programme (1928-1930)

- At this phase, the researchers interviewed a large number of workers with regard to their opinions on work, working conditions and supervision.
- At first a direct approach was used whereby interviews asked questions considered important by managers and researchers. But then the researchers observed that the replies of the workers were guarded and they were not open. Therefore, this approach was replaced by an indirect technique, where the interviewer simply listened to what the worker say.

Implications: The findings confirmed the ***importance of social factors at work*** in the total work environment.

if workers are asked for opinions, told they mattered, then positive attitudes increase towards organization.

Bank Wiring Test Room Experiment (1931-1932)

The experiment group consisted of 14 workers and conditions were as close as possible to normal.

After the experiment, the production records of this group was compared with their earlier production records. It was observed that ***the group evolved its own production norms*** for each individual worker, which was made lower than those set by management. Because of this, workers would produce only that much, thereby defeating the incentive system. Those ***workers who tried to produce more than the group norms were isolated, harassed or punished by the group.***

Implications: informal groups play an important role in the working of an organization . Social groups can influence production and individual worker behavior.

Contributions of Hawthorne Experiments

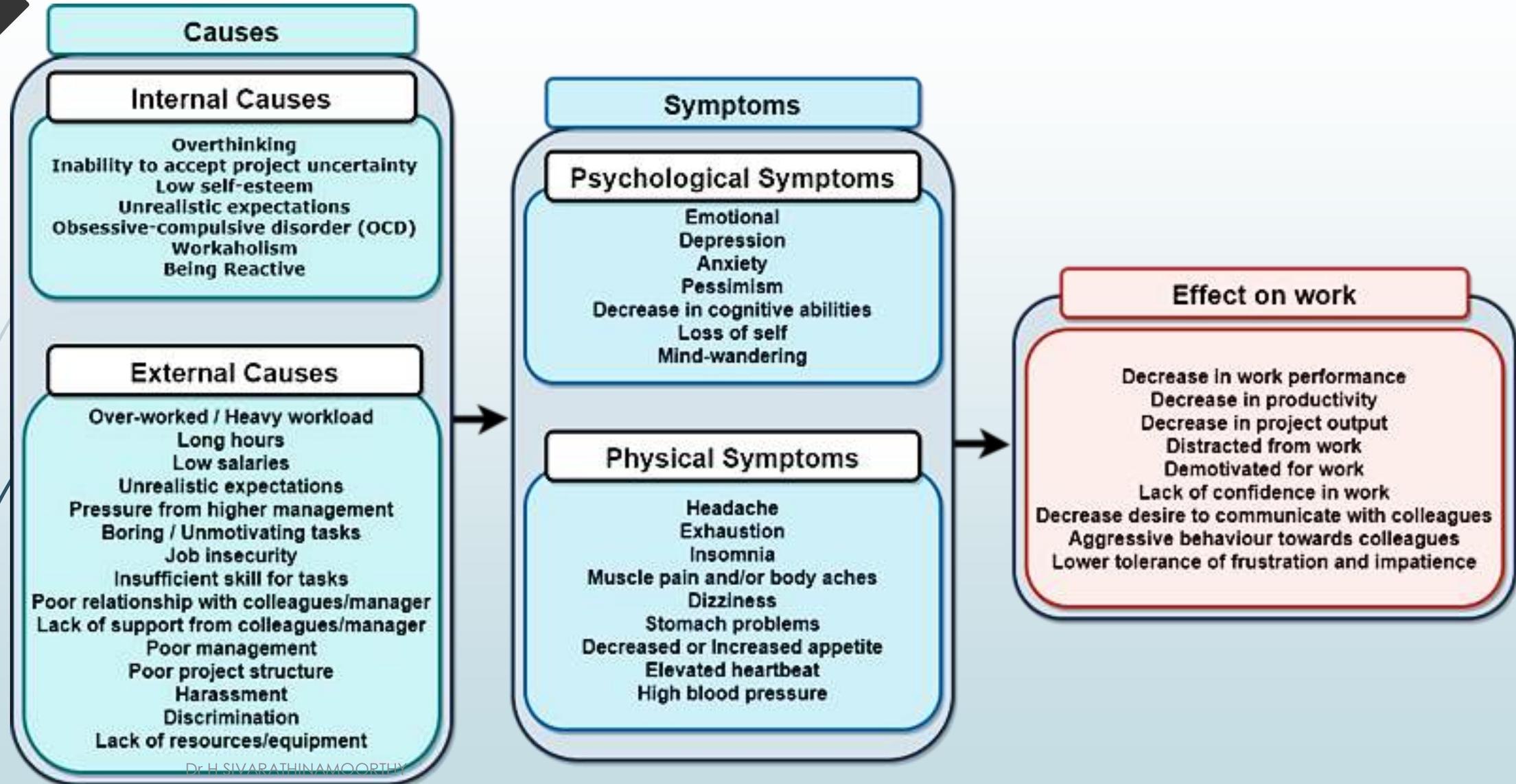
- An organization is not just a techno-economic system but also a social system.
- management must learn to develop co-operative attitudes and not rely merely on command.
- Productivity is linked with employee satisfaction in any business organization.
- Therefore management must take greater interest in employee satisfaction.
- Group psychology plays an important role in any business organization. We must therefore rely more on informal group effort.
- **Hawthorne experiments resulted in a dramatic shift towards the "human relations" school of thought.**

UNIT 2

☐ **Individual in Workplace, Motivation and Job satisfaction**

Stress management, Organizational culture, Leadership & group dynamics. Work Environment & Engineering Psychology – fatigue, Boredom, accidents and safety. Job Analysis, Recruitment and Selection.

STRESS @ WORKPLACE



4 COMMON TYPES of STRESS ON MANAGERS



TIME STRESS

Deadlines, priorities, being late for meetings and many other things you have to finish, but you never seem to have enough time for.

ANTICIPATORY STRESS

Worrying about future events, such as an upcoming board meeting or public speech you're going to give. It's a worry that "something will go wrong."



SITUATIONAL STRESS

Worrying about a scary situation that you have no control over.

ENCOUNTER STRESS

Worrying about interacting with a certain person or group of people that you may not like, or you might think that they're unpredictable.



Friendly social network



Self-limitations



Reduce the noise



Meditation



Exercise

Stress Management Skills



Time Management

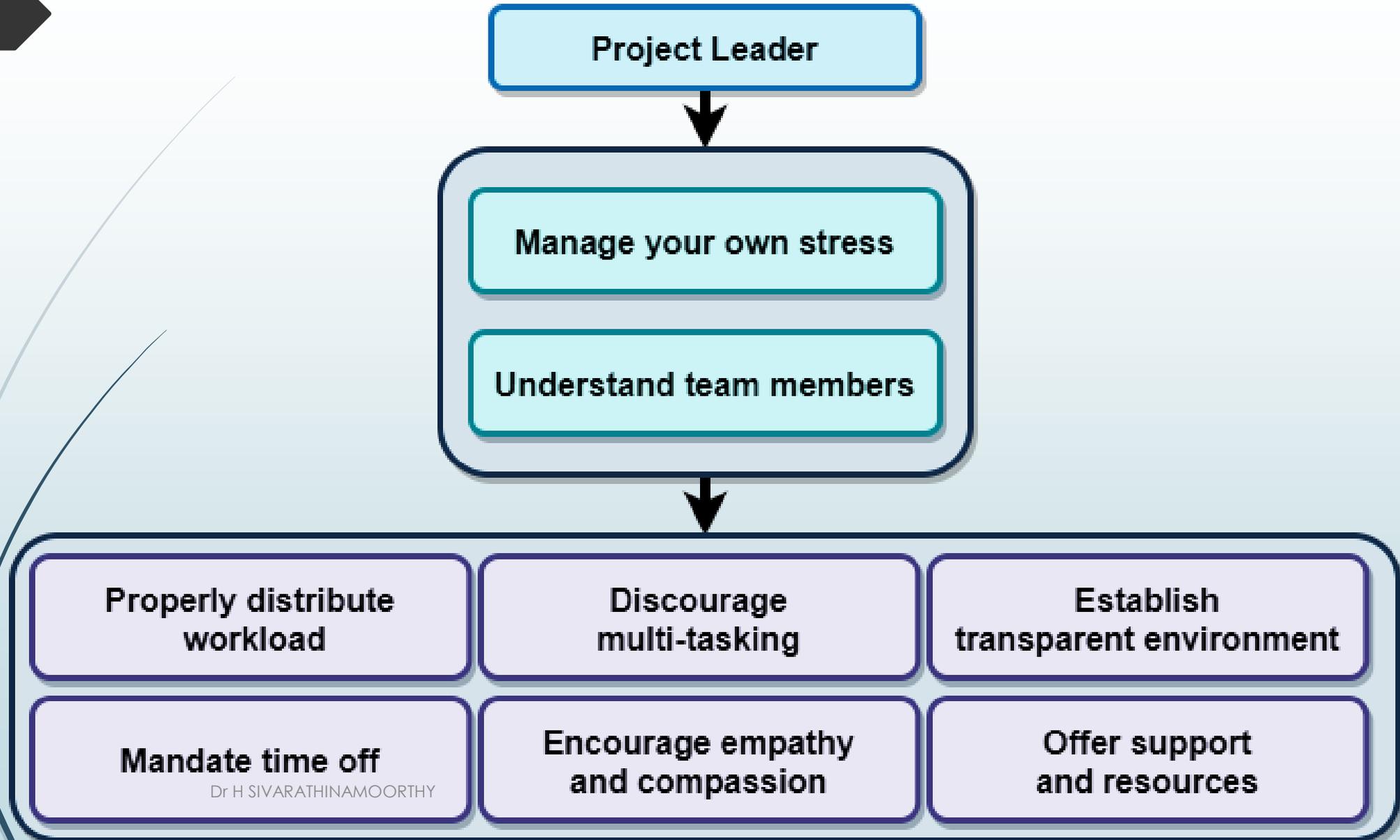


Sleep Habit



Healthy Diet

Stress Management Methods in a Project Team



10 Strategies for Managing Stress in the Workplace

1 

Control Your Distractions

Regaining control over your environment and technology can make you less frazzled.

6 

Get Enough Sleep

Good, quality rest renews you so that you can more effectively manage stress.

2 

Disconnect From Work

Take a technology break and make room for personal time to recharge.

7 

Leave "Busy" for the Bees

Shift your focus from reactive to PROactive.

3 

Make Vacation a Work-Free Zone

Use all of your vacation time and leave your work at the office.

8 

Let Go of the Past

"Face time" in the office is no longer a useful measure of productivity.

4 

Give Up Multi-Tasking

Task switching lowers the quality of your work and sabotages productivity.

9 

Support Thoughtful Work

Make sure there are quiet places in the office that support focus and flow.

5 

Use "Office Hours"

Be less available to others so you can do more thoughtful work and empower your team.

10 

Recognize When You're Overwhelmed

Your mind and body are your most important resources. Prioritize your wellbeing.

Organization Culture

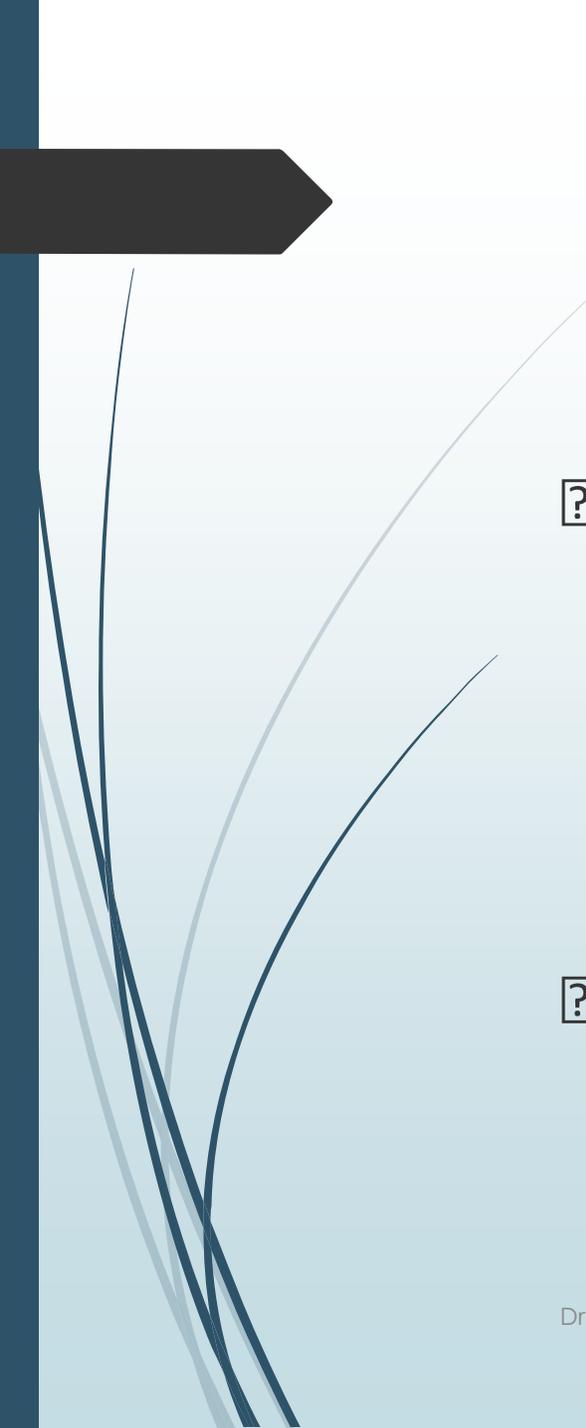
- ❑ An organization's culture defines the proper way to behave within the organization.
- ❑ This culture consists of shared beliefs and values established by leaders and then communicated and reinforced through various methods, ultimately shaping employee perceptions, behaviors and understanding.
- ❑ Organizational culture sets the context for everything an enterprise does.
- ❑ Industries and situations vary significantly, **there is not a one-size-fits-all** culture template that meets the needs of all organizations.

DIMENSIONS OF ORGANIZATIONAL CULTURE

- Diversity
- Execution excellence
- Innovation
- Integrity
- Performance driven
- Respect
- Values and behaviors
- Customer-centricity
- Speed of response
- Incentivize the new norms
- Innovation and Risk-taking
- Attention to Detail
- Outcome Orientation
- People Orientation
- Team Orientation
- Aggressiveness
- Stability
- Agility/ Nimbleness
- Collaboration/ teamwork
- Customer focus

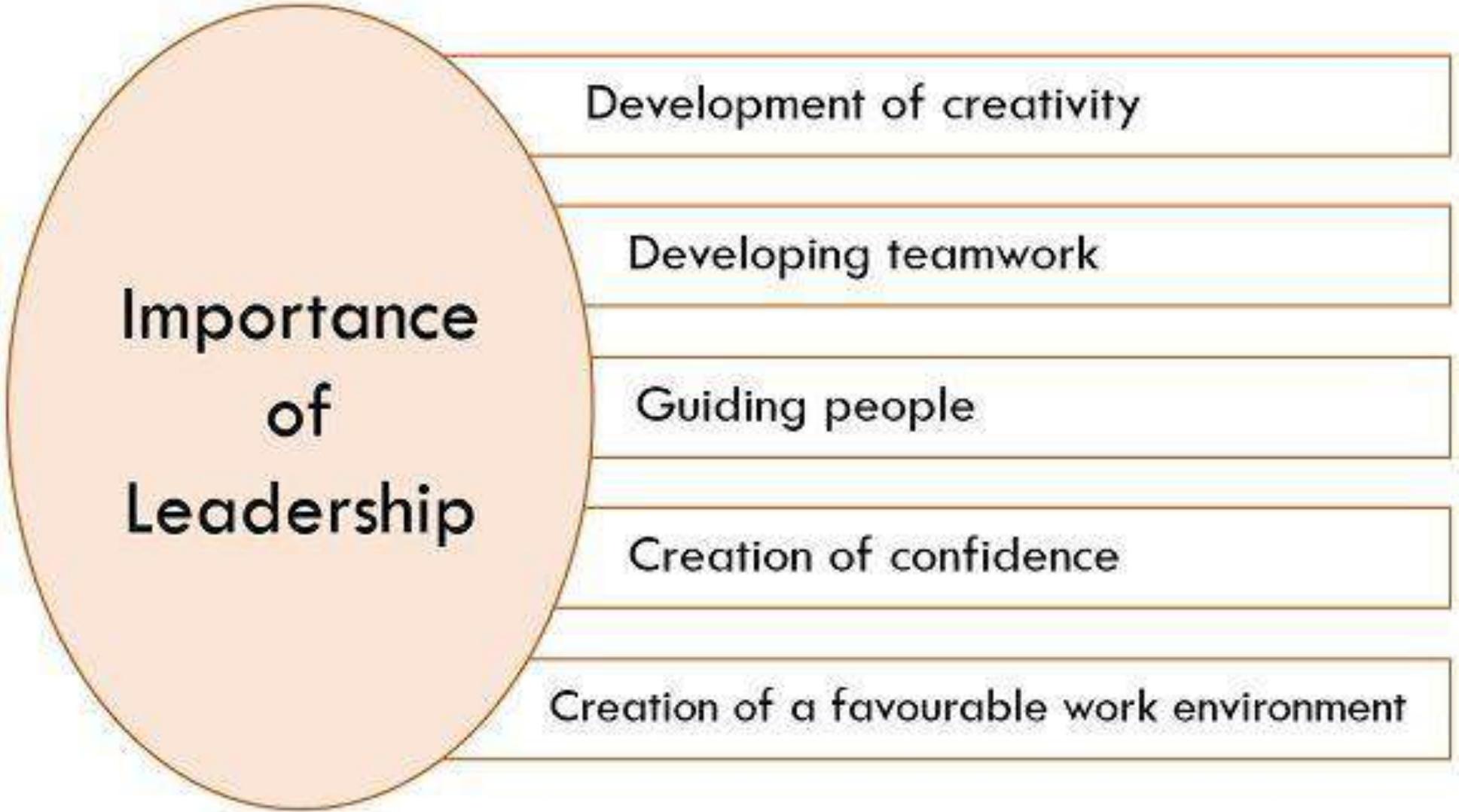


SOURCES: MANAGEMENT-TRANSITIONS.COM; ABHIJITBHADURI.COM

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Leadership and Group Dynamics

- ❑ A leader manages interpersonal conflict appropriately, and recognizes how relationships within groups change and accordingly adapts personal leadership style.**
- ❑ Group dynamics refers to the attitudes and behaviors of a group.**



Importance of Leadership

Development of creativity

Developing teamwork

Guiding people

Creation of confidence

Creation of a favourable work environment





Leadership skills

Taking responsibility and initiatives

Motivate and inspire

Understand and empathize

Lead by example

Think Strategically, flexibly and creatively

Give appropriate and constructive feedback

Group dynamics

“Two or more people who interact in organized manner to perform
A task or activity to achieve a common goal”

Nahavandi

“A group is two or more persons who interact with one another such
That each person influences and is influenced by each other person”

Griffin

“Two or more freely interacting people with shared norms & goals
& A common identity”

Kreitner.

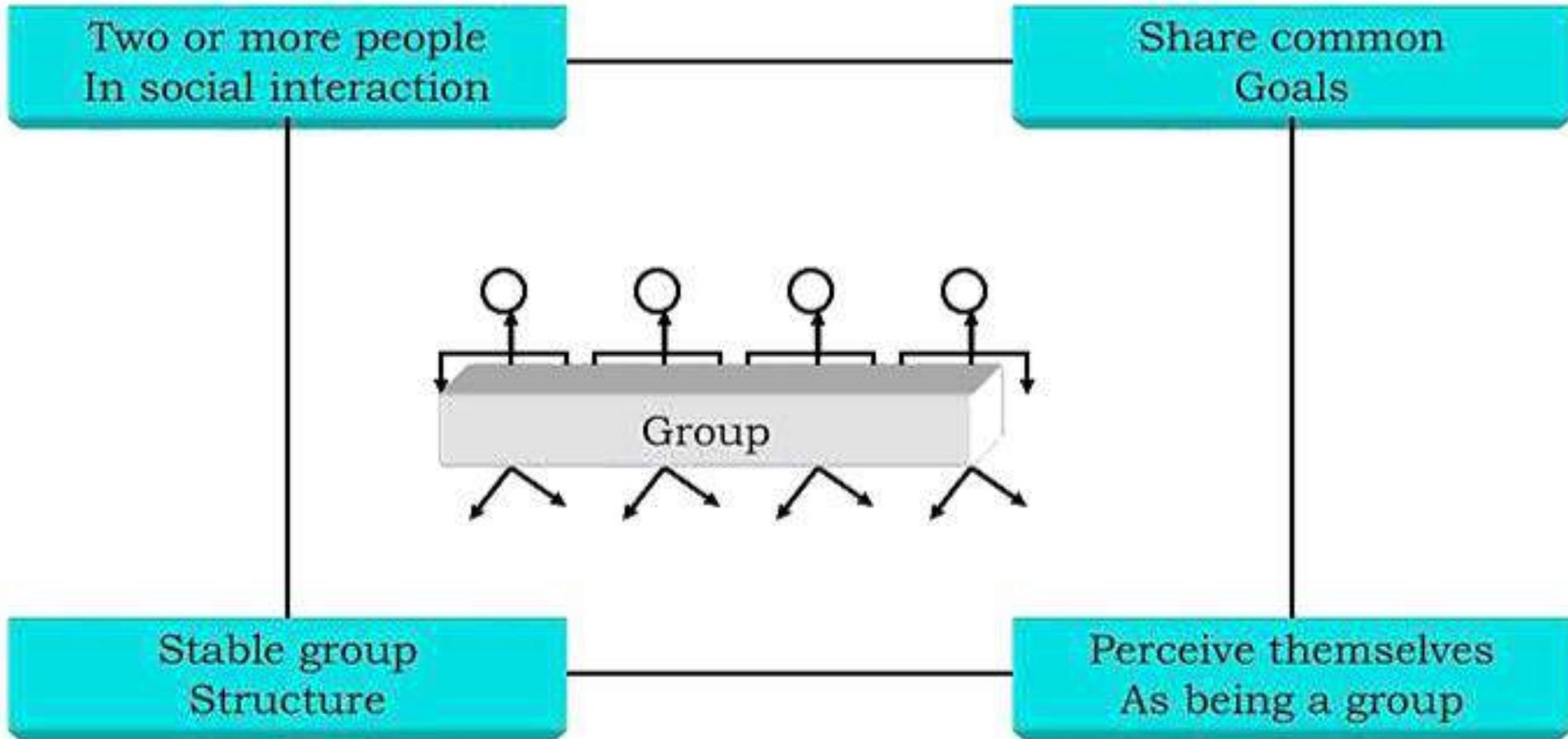
“A collection of two or more interacting individuals with a stable
Pattern of relationships between them who share common
Goals and who perceive themselves as being “group”

Greenberg

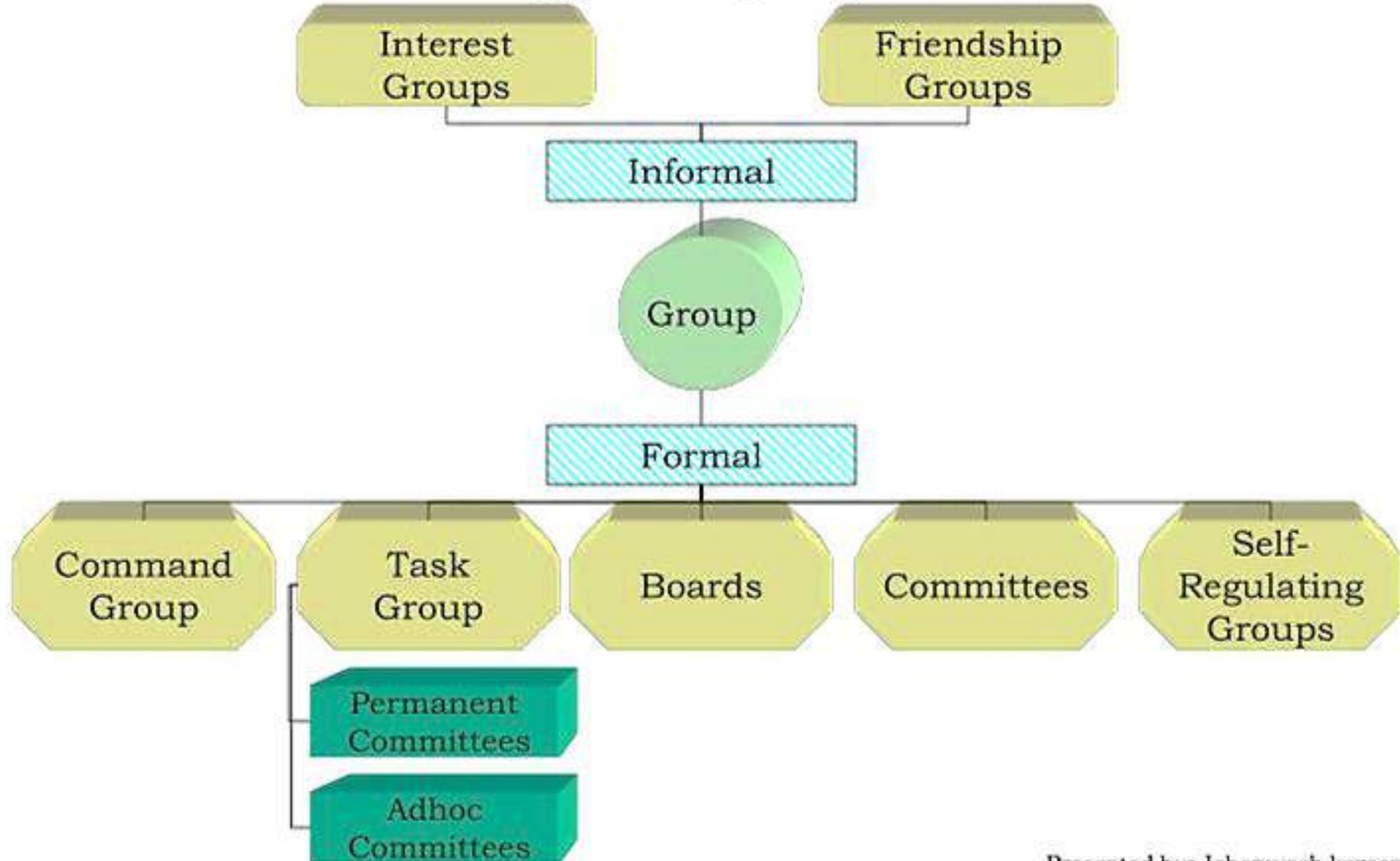
“A group is defined as two or more individuals interacting and
Interdependent who have come together to achieve particular
Objectives”

Robbins

Elements of group



Types of groups



Formal groups fulfill organizational and individual functions

Organizational functions

1. Accomplish complex, inter-Dependent tasks that are beyond The capabilities of individuals
2. Generate new or creative ideas And solutions.
3. Coordinate interdepartmental Efforts.
4. Provide a problem-solving Mechanism for complex problems Requiring varied information & Assessments.
5. Implement complex decisions.
6. Socialize and train new comers

Individual functions

1. Satisfy the individual needs For affiliation.
2. Develop, enhance, and confirm The individual's self-esteem and Sense of identity.
3. Give individuals an opportunity To test and share their Perceptions of social reality.
4. Reduce the individual's Anxieties and feelings of Insecurity & powerlessness.
5. Provide a problem solving Mechanism for personal & Interpersonal problems

Why do people join groups?

Reason

Explanation

Security

Groups provide safety in numbers, protection against
A common enemy.

Mutual benefit

By joining together, group members can work to
Ensure the attainment of share goals and benefits

Need to be social

Groups satisfy the basic need to be with others

Self-esteem

Membership in certain groups provides people with
Opportunities to feel good about their
Accomplishment

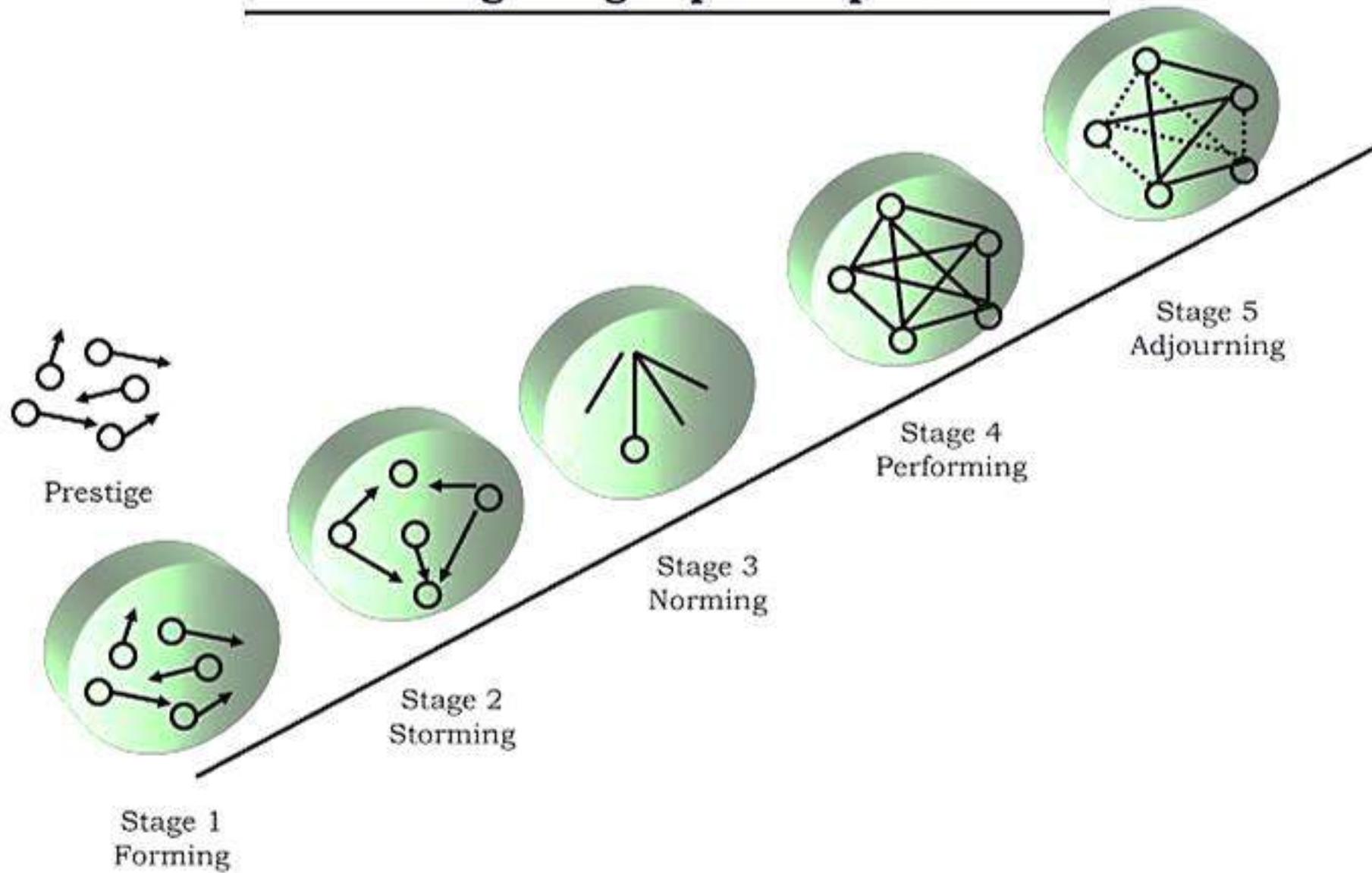
Mutual self-interest

Banding together, people can share their mutual
Interests (such as hobbies)

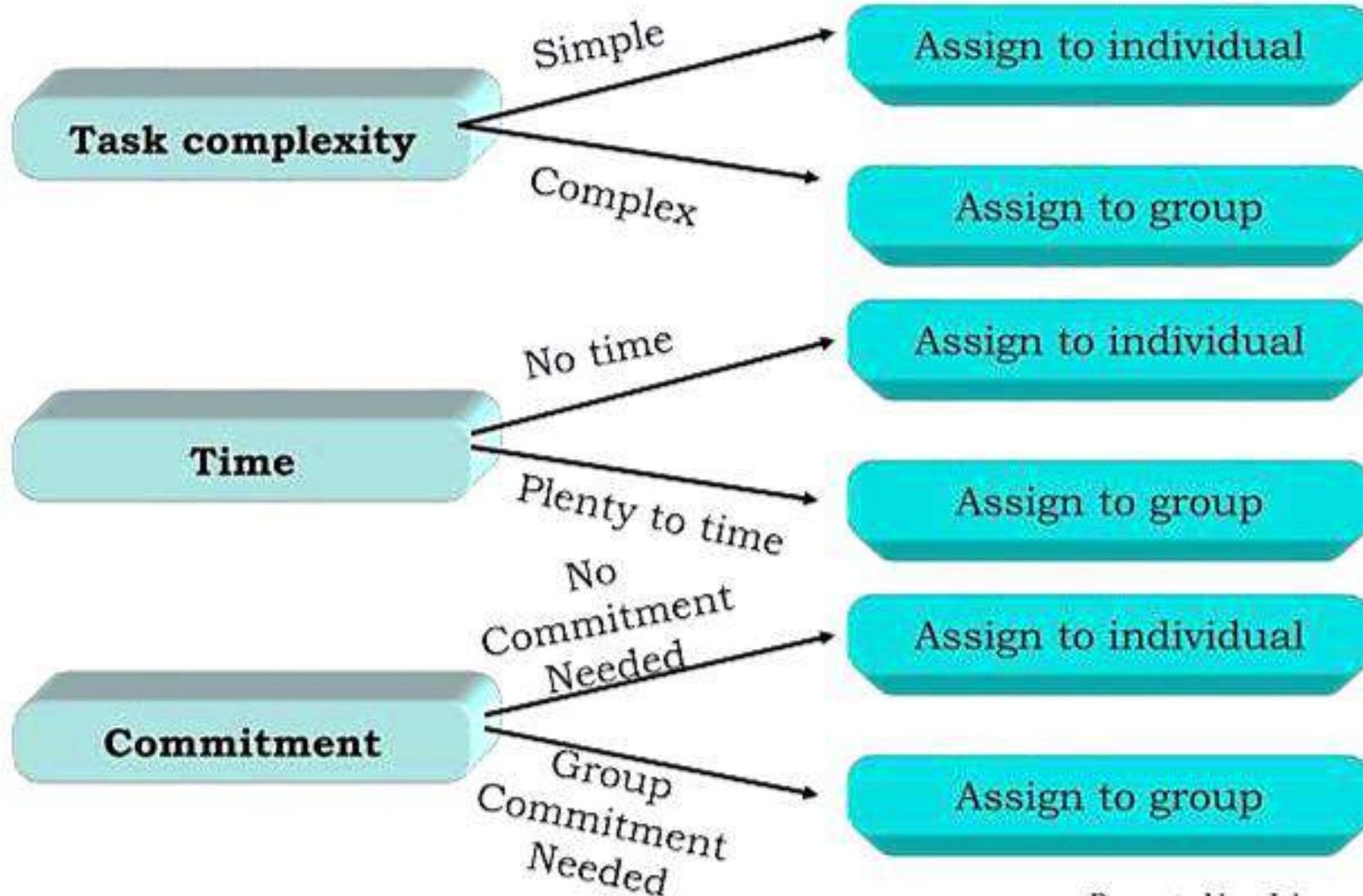
Physical proximity

People join groups because they come into contact
With each other and discover they have something in
Common

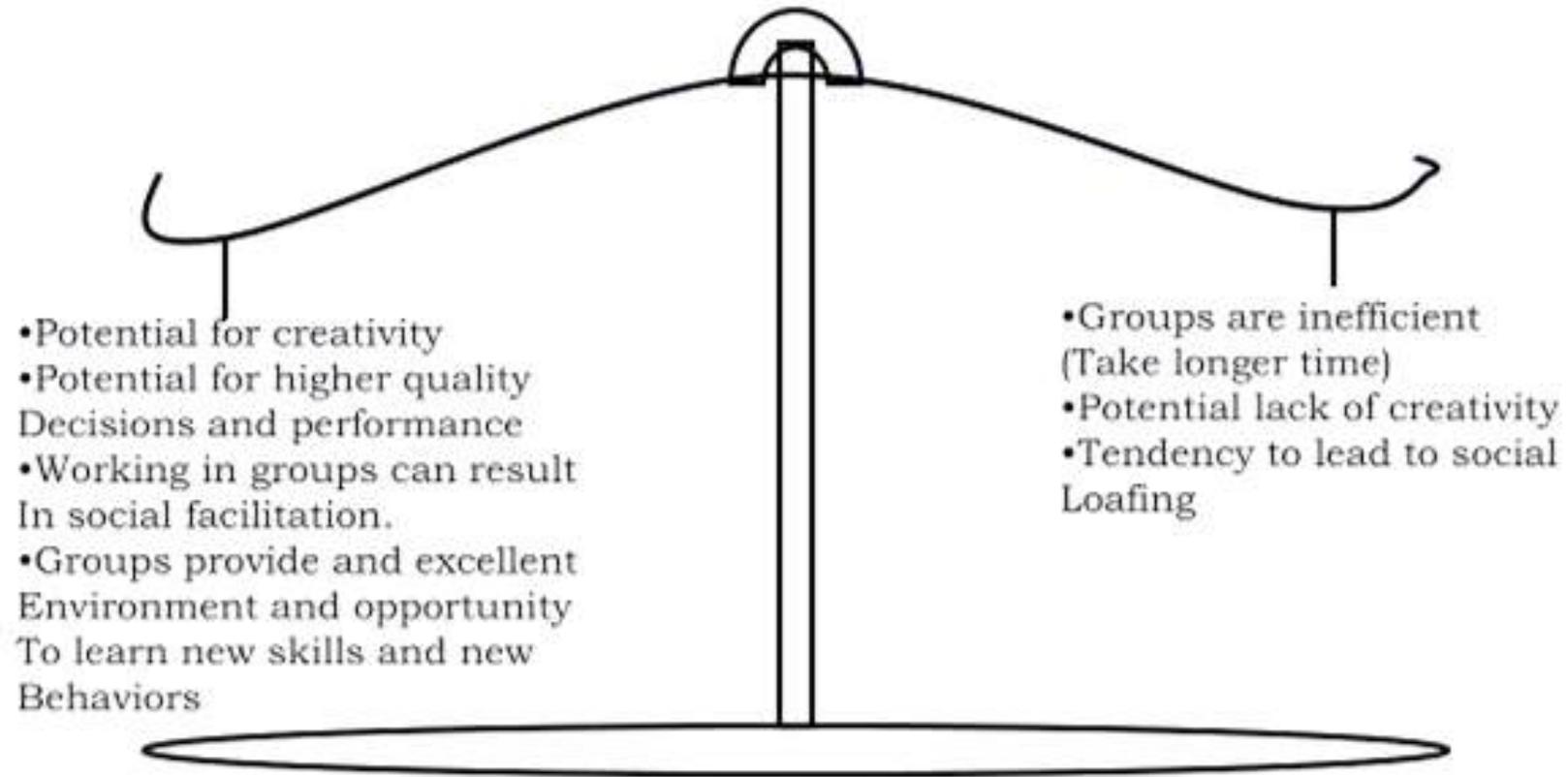
Stages of group development



Factors in use of groups



Advantages and disadvantages of groups



6 Elements of a Perfect Work Environment



POSITIVE WORK ENVIRONMENT BENEFITS

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1. Happiness has a multiplying effect
2. Happy employees are successful employees
3. Happy employees have the right attitude
4. Reducing stress increases productivity
5. A positive work environment encourages risk-taking
6. Happy employees support each other
7. Happy employees are not afraid to make mistakes
8. Leaders lead by example
9. Happiness inspires creativity
10. People like to work with happy people



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What is Mental Fatigue?

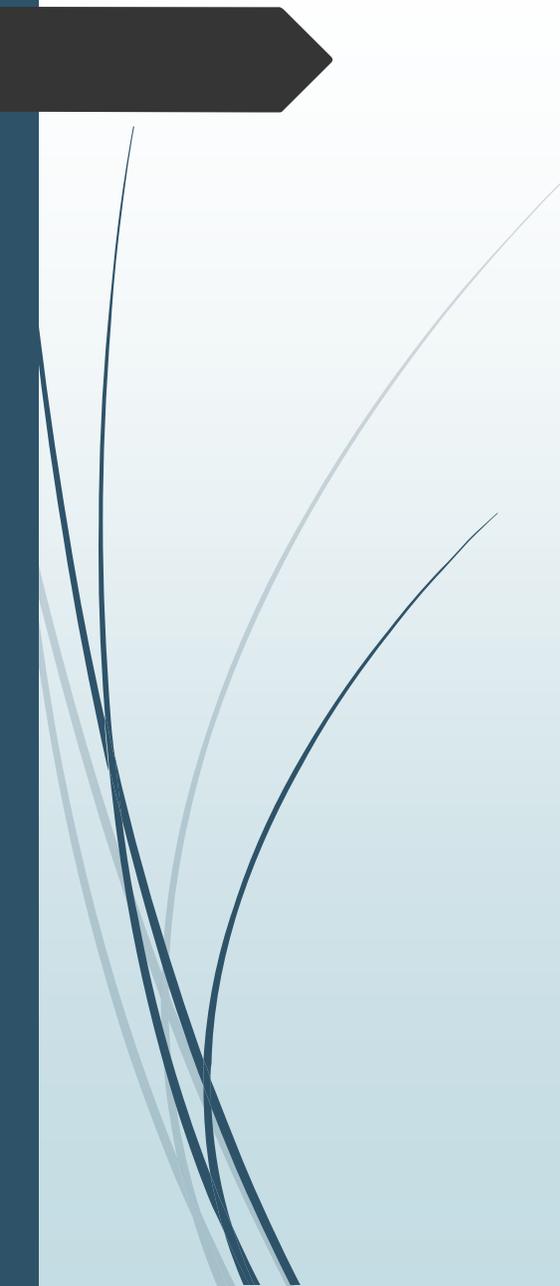
Just like the body can become physically fatigued after intense exercise, rigorous mental exhaustion and stress can cause mental fatigue. This occurs when you're persistently overwhelmed without time for adequate rest and restoration, which leads to cognitive fatigue. You may find it difficult to problem-solve, focus on specific tasks, or make executive decisions. Likewise, you might struggle with the pervasive feeling that your brain is exhausted or overworked.

Brain Fog and Fatigue

The term “brain fog” refers to a general state of confusion and forgetfulness. Like mental fatigue, it often results from high levels of stress, working too much, and a lack of sleep.

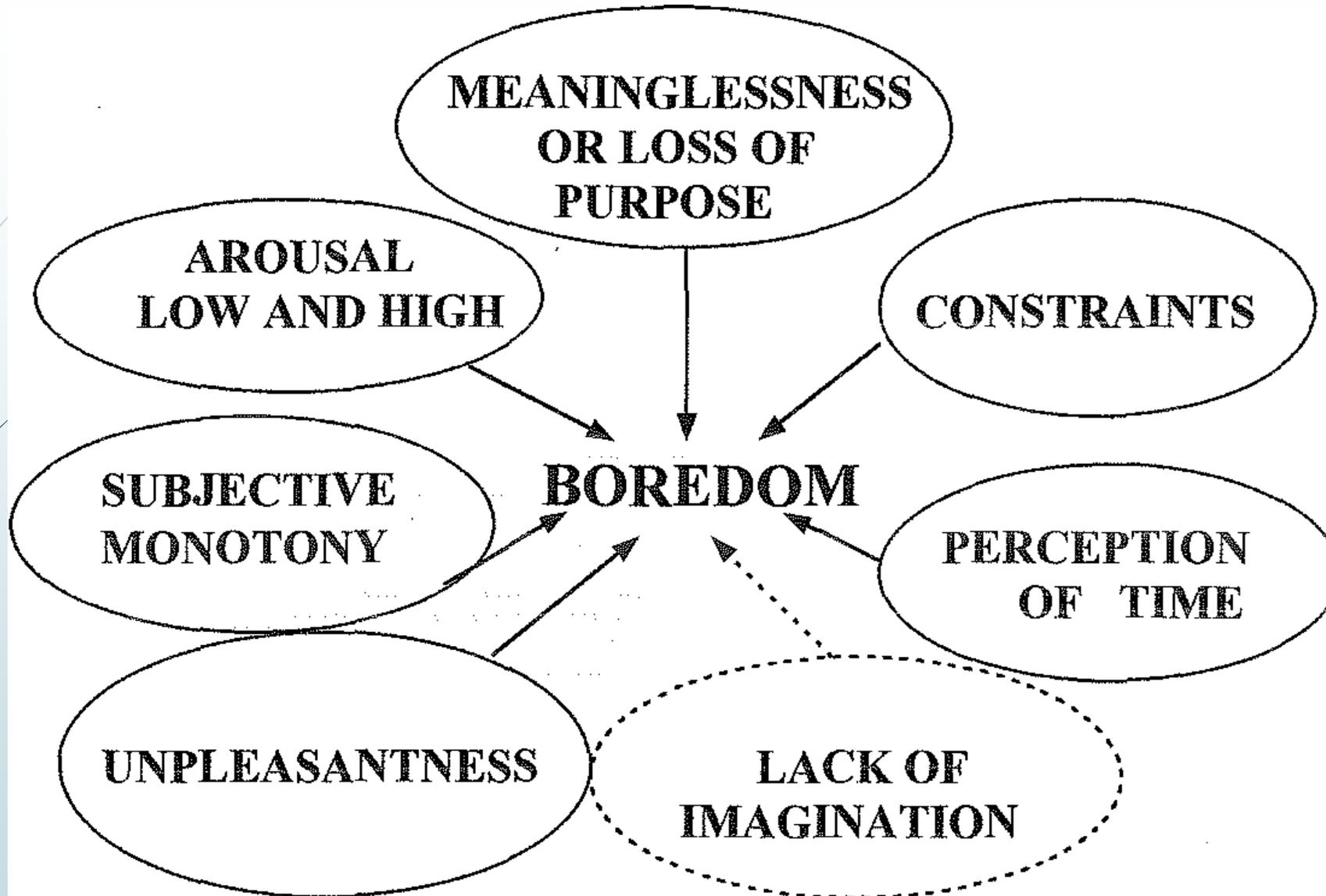
It may be more helpful to recognize that brain fog or a tired brain often coincides with mental fatigue. However, mental fatigue is a cluster of psychological and physical symptoms associated with feeling mentally exhausted.





Mental Fatigue Symptoms

- Persistently feeling tired or emotionally “drained”
- A lack of motivation to complete daily tasks
- Feeling like you can’t think straight or clearly
- Difficulties with concentration
- Challenges with decision-making
- Feeling like you’re in a funk



Accidents and Safety

- ❓ Accident is an unplanned and uncontrolled event in which the action of an **object, person results in personal injury**. Industrial accidents conceive them as arising directly out of the work situation from **faulty equipments or inadequate performance** of an individual.
- ❓ Accident proneness is the continuing tendency of a person to have accidents as a result of stable and persistence characteristics.

Accidents and Safety

CAUSES OF ACCIDENTS

PERSONAL FACTOR

- Age
- Health
- Personality
- Emotional state
- Psychological characteristics (14% accidents due to faulty attitude)

SITUATIONAL FACTOR

All environmental factors

MACHINERY FACTOR

- Improper guarded equipments
- Defective equipments

Accidents and Safety

PREVENTIVE MEASURES FOR REDUCING ACCIDENTS

- ❑ Direct preventive measures (from engineering point of view)
- ❑ Indirect preventive devices (control the situational factors)
- ❑ Psychological preventive devices:
 - Safety community
 - Safety program

Accidents and Safety

INDUSTRIAL SAFETY PROGRAM

1. Work methods in relation to safety,
It is related in three ways
 - Concentration on act or skill
 - Incorrect working methods
 - Check the tool before use
2. Development of safety habits
3. Safety records and provision of rewards
4. Management support
5. Slogans

Job Analysis, Recruitment and Selection

Job Analysis

- **Job analysis** is the systematic study of a job's tasks, duties, and responsibilities, and the knowledge, skills, and abilities needed to perform the job.
- Job analysis is the starting point for many important personnel functions.
- A job analysis yields several products.

PROCESS OF JOB ANALYSIS



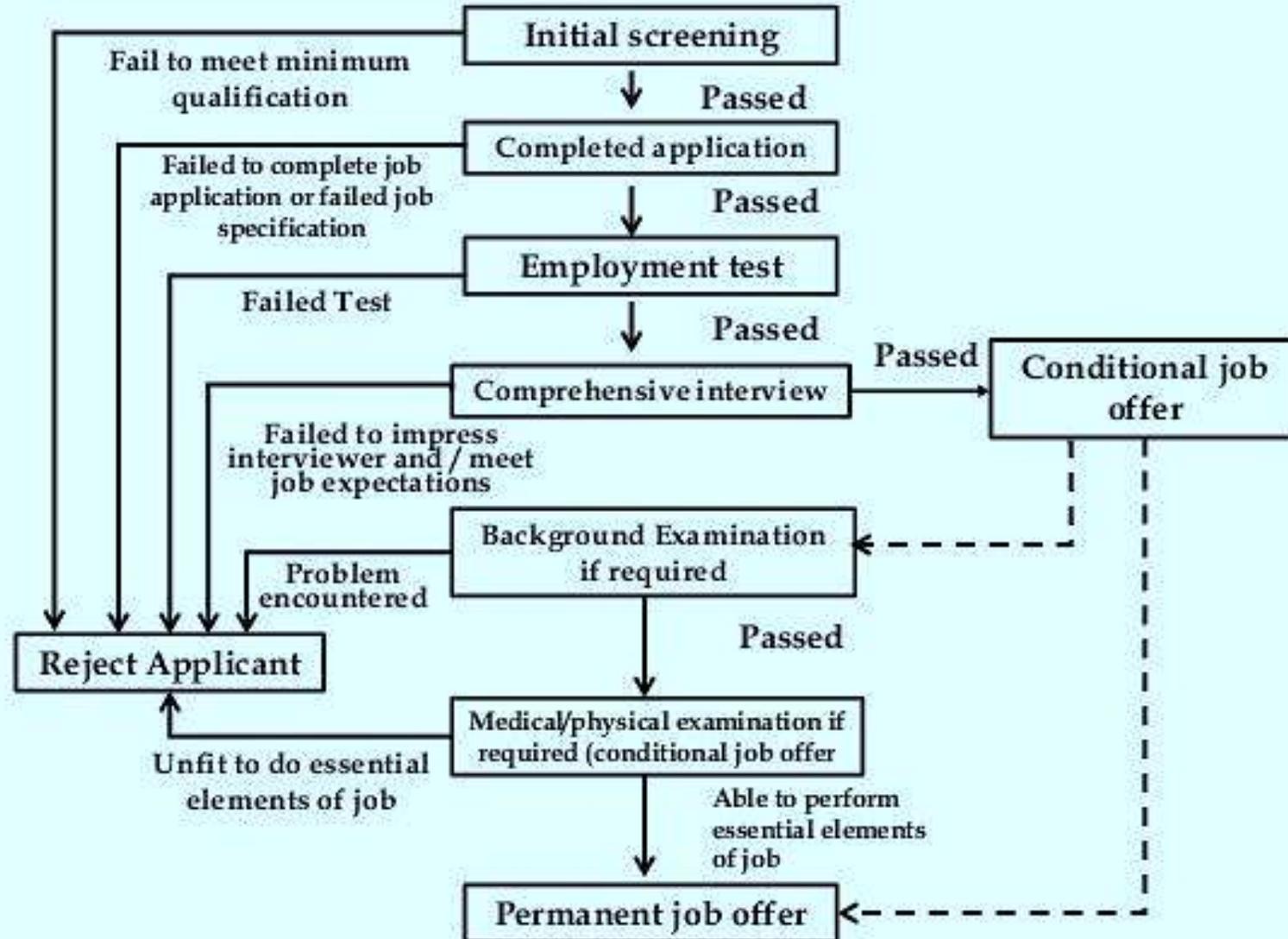
Major Job Analysis Concepts

- KSAO
 - Knowledge: Know to do a task
 - Skill: Can do a task
 - Ability: Capability to learn to do a task
 - Other personal characteristics: Other attributes needed
- Subject Matter Expert (SME)
 - Job incumbents
 - Supervisors

Recruitment and Selection



SELECTION PROCESS





UNIT 3

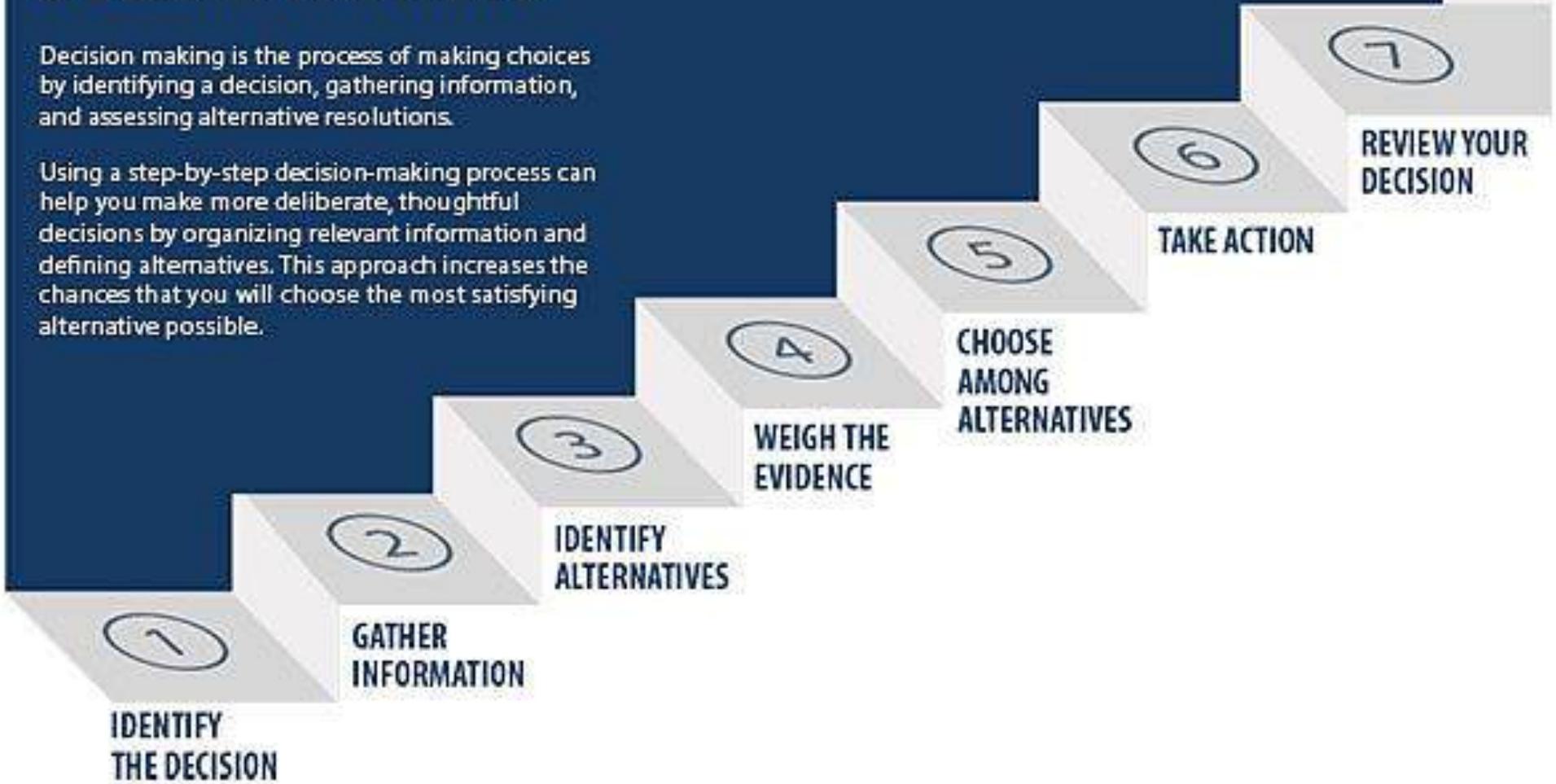
Decision Making by Individuals & Groups

Decision making process, individual influences, group decision process

7 STEPS TO EFFECTIVE DECISION MAKING

Decision making is the process of making choices by identifying a decision, gathering information, and assessing alternative resolutions.

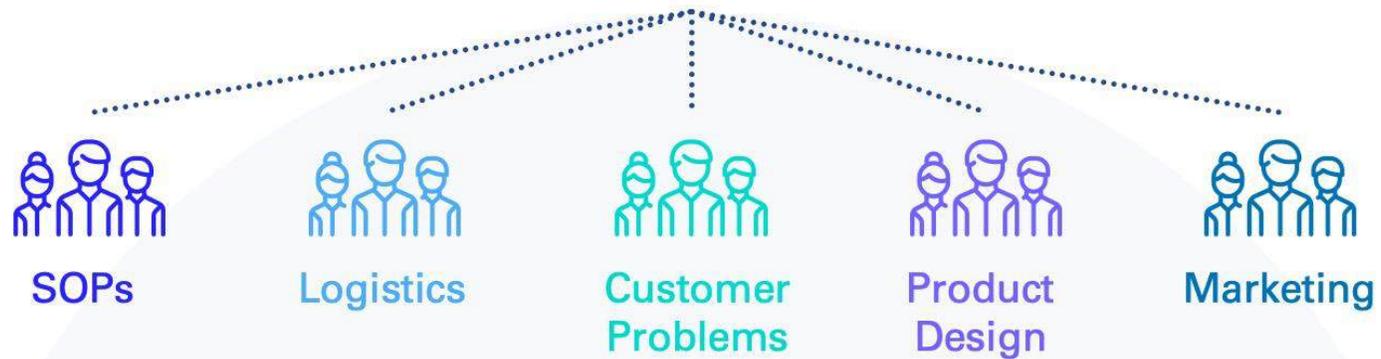
Using a step-by-step decision-making process can help you make more deliberate, thoughtful decisions by organizing relevant information and defining alternatives. This approach increases the chances that you will choose the most satisfying alternative possible.



Decision Making Methodology



Examples-Distributed Work



DECISION-MAKING STYLES



Conceptual



Directive



Behavioral



Analytical



Decision-Making Styles

Conceptual decision-making

- If you're a conceptual decision-maker, you focus on the future.
- That means you don't just evaluate the immediate impact of your decisions — you also look at the impact they could make months and years down the road.
- People with this decision-making style are often described as the “idea person” on the team.
- They're creative and inspiring.
- You might also hear this decision-making style called holistic decision-making, visionary decision-making, or theoretical decision-making.

Decision-Making Styles

Conceptual decision-making

How to recognize conceptual decision-making:

- You thrive with ambiguity and love open-ended questions and problems
- You're often told you're creative and that you have big ideas
- You think about the big picture when making decisions, rather than only examining the choice in front of you

Conceptual decision-making is great for:

- Situations where there's a lot of uncertainty and not one defined outcome
- Situations when you don't need an immediate answer or instantaneous results, and you have some wiggle room to experiment

Conceptual decision-making can be challenging when:

- There isn't a lot of room for trial and error, so you need to pursue the "safest" option
- Your culture doesn't provide a lot of psychological safety and team members fear risks and potential failures
- Time is limited, so you can't pursue a big-picture project and need to focus on a short-term solution first

Decision-Making Styles

Directive decision-making

How to recognize directive decision-making:

- You prefer to take action. You can become frustrated when people dwell on decisions
- You feel way more efficient when you make decisions alone
- You use rules, procedures, and past results to inform future decisions
- You're often referred to as rational and level-headed

This decision-making style is great for:

- Situations when a swift decision is required and there isn't time for collaboration and consensus
- Situations when there's only one answer or way forward, as evidenced by rules, processes, and previous events

Directive decision-making can be challenging when:

- Teams or groups want to contribute their opinions to the decision-making process, rather than having directions handed down from on high
- Navigating a situation you haven't been in before, as there aren't existing processes or past experiences to lean on

Decision-Making Styles

Behavioral decision-making

How to recognize behavioral decision-making:

- You care about harmony on your team. That's why you prefer to make decisions that don't rock the boat
- Before deciding, you ask others "What do you think?" or "How do you feel?"
- Relationships are your most valuable asset in the workplace

Behavioral decision-making style is great for:

- Situations that have a low possibility for conflict and disagreement
- Situations where there isn't one right decision and you can easily opt for the most popular and agreeable solution

Behavioral decision-making can be challenging when:

- A popular decision is impossible, so conflict and disapproval are inevitable
- You're so focused on harmony that it overshadows any opportunity for creativity or out-of-the-box thinking

Decision-Making Styles

Analytical decision-making

How to recognize analytical decision-making:

- You believe that the best decisions take time, and you'll take as long as you need to feel comfortable.
- You think that the strongest decisions come from information. The more information you can gather, the better the decision will be.
- You don't need a black-and-white answer. Creative problem-solving is actually fun.

Analytical decision-making style is great for:

- Situations where there could be a lot of different right answers, so there's room for creativity to find the best solution.
- Situations that require perspective and information from a variety of sources.

Analytical decision-making can be challenging when:

- A quick decision is required, so there isn't enough time to gather large amounts of information
- There isn't a ton of information available, so leaders need to rely on their gut instincts over-analysis.

Decision-Making Techniques

Brainstorming

*Electronic
meeting*

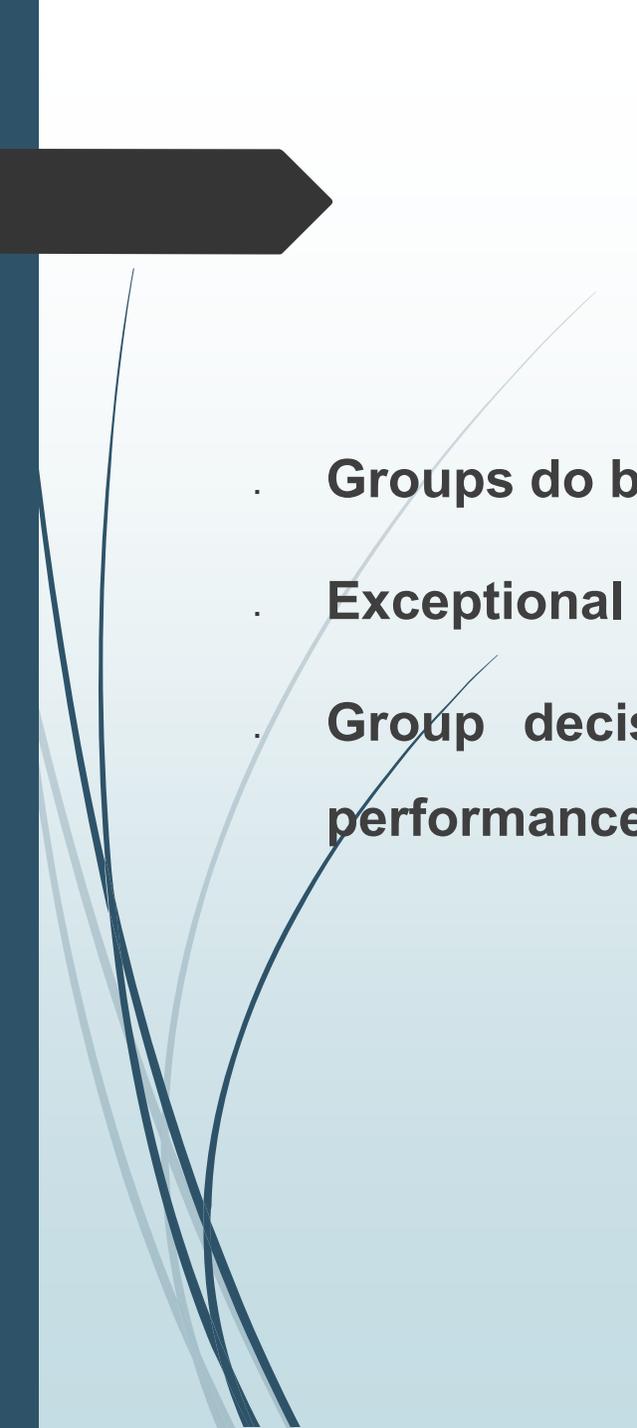
*Delphi
method*

*Multi-
voting*

*Nominal group
technique*

Group Decision-Making

ADVANTAGES	DISADVANTAGES
<p>1. Greater pool of knowledge. A group can bring much more information and experience to bear on a decision or problem than can an individual acting alone.</p>	<p>1. Social pressure. Unwillingness to “rock the boat” and pressure to conform may combine to stifle the creativity of individual contributors.</p>
<p>2. Different perspectives. Individuals with varied experience and interests help the group see decision situations and problems from different angles.</p>	<p>2. Domination by a vocal few. Sometimes the quality of group action is reduced when the group gives in to those who talk the loudest and longest.</p>
<p>3. Greater comprehension. Those who personally experience the give-and-take of group discussion about alternative courses of action tend to understand the rationale behind the final decision.</p>	<p>3. Logrolling. Political wheeling and dealing can displace sound thinking when an individual’s pet project or vested interest is at stake.</p>
<p>4. Increased acceptance. Those who play an active role in group decision making and problem solving tend to view the outcome as “ours” rather than “theirs.”</p>	<p>4. Goal displacement. Sometimes secondary considerations such as winning an argument, making a point, or getting back at a rival displace the primary task of making a sound decision or solving a problem.</p>
<p>5. Training ground. Less experienced participants in group action learn how to cope with group dynamics by actually being involved.</p>	<p>5. “Groupthink.” Sometimes cohesive “in groups” let the desire for unanimity override sound judgment when generating and evaluating alternative courses of action. (Groupthink is discussed in Chapter 13.)</p>



Individuals Versus Group Decision-Making

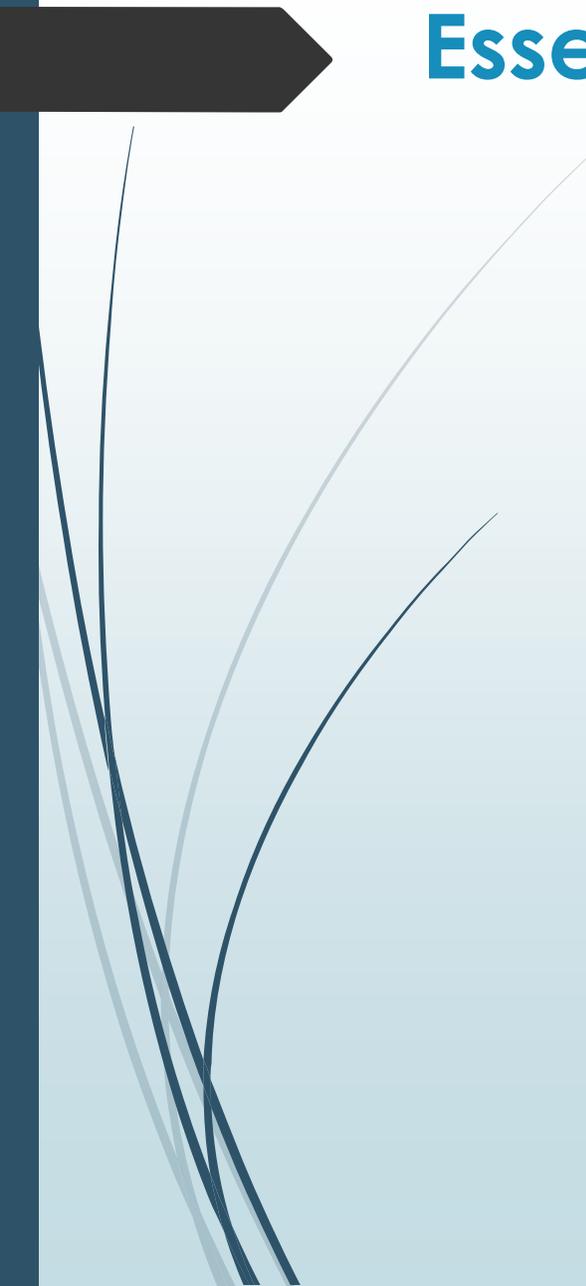
- **Groups do better quantitatively and qualitatively than the average individual.**
- **Exceptional individuals tend to outperform the group.**
- **Group decision-making performance does not always exceed individual performance, making a contingency approach to decision-making advisable.**

Individuals Versus Group Decision-Making

<i>Individual Decision Making</i>		<i>Group Decision Making</i>	
<i>Pros</i>	<i>Cons</i>	<i>Pros</i>	<i>Cons</i>
Typically faster than group decision making	Fewer ideas	Diversity of ideas and can piggyback on others' ideas	Takes longer
Best individual in a group usually outperforms the group	Identifying the best individual can be challenging	Greater commitment to ideas	Group dynamics such as groupthink can occur
Accountability is easier to determine	Possible to put off making decisions if left alone to do it	Interaction can be fun and serves as a team building task	Social loafing-harder to identify responsibility for decisions

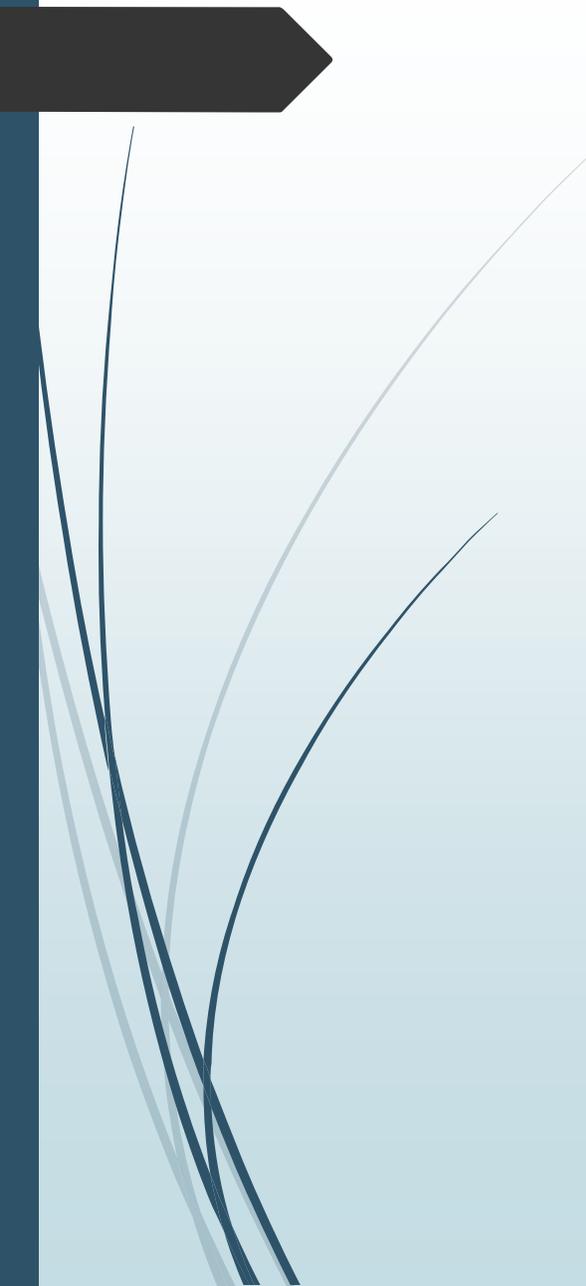
Ethics into Decision-Making

- Ways to infuse ethics into decision making.
 - ▶ Develop a code of ethics and follow it.
 - ▶ Establish procedures for reporting violations.
 - ▶ Involve employees in identifying ethical issues.
 - ▶ Monitor ethical performance.
 - ▶ Reward ethical behavior.
 - ▶ Publicize ethical efforts.

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Essentials for Effective Decision-Making

1. Accuracy
2. Environment for decision
3. Timely decision
4. Communication of decision
5. Participative decision-making
6. Implementation of decision

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Difficulties in Decision-Making

1. Incomplete Information
2. Un-supporting environment
3. Non-acceptance by subordinates
4. Ineffective Communication
5. Incorrect timing