UNIT-1

Introduction to Industrial Psychology and Its Nature-

Industrial-organizational psychology is the <u>branch of psychology</u> that applies psychological theories and principles to organizations. Often referred to as I-O psychology, this field focuses on increasing workplace productivity and related issues such as the physical and mental well-being of employees.

Industrial-organizational psychologists perform a wide variety of tasks, including studying worker attitudes and behavior, evaluating companies, and conducting leadership training. The overall goal of this field is to study and understand human behavior in the workplace.

What Is Industrial-Organizational Psychology?

You can think of industrial-organizational psychology as having two major sides. First, there is the industrial side, which involves looking at how to best match individuals to specific job roles. This segment of I-O psychology is also sometimes referred to as personnel psychology.

People who work in this area might assess employee characteristics and then match these individuals to jobs in which they are likely to perform well. Other functions that fall on the industrial side of I-O psychology include training employees, developing job performance standards, and measuring job performance.

The organizational side of psychology is more focused on understanding how organizations affect individual behavior. Organizational structures, social norms, management styles, and role expectations are all factors that can influence how people behave within an organization.

By understanding such factors, I-O psychologists hope to improve individual performance and health while at the same time benefiting the organization as a whole.

While industrial-organizational psychology is an applied field, basic theoretical research is also essential. With roots in experimental psychology, I-O psychology has a number of different subareas such as human-computer interaction, personnel psychology, and human factors.

Six Key Subject Areas

According to Muchinsky's book, *Psychology Applied to Work: An Introduction to Industrial and Organizational Psychology*, most industrial-organizational psychologists work in one of six major subject areas:

- **Employee selection:** This area involves developing employee selection assessments, such as screening tests to determine if job applicants are qualified for a particular position.
- **Ergonomics**: The field of ergonomics involves designing procedures and equipment designed to maximize performance and minimize injury.

- Organizational development: I-O psychologists who work in this area help improve organizations, often through increasing profits, redesigning products, and improving the organizational structure.¹
- **Performance management:** I-O psychologists who work in this area develop assessments and techniques to determine if employees are doing their jobs well.
- **Training and development:** Professional in this area often determine what type of skills are necessary to perform specific jobs as well as develop and evaluate employee training programs.
- Work life: This area focuses on improving employee satisfaction and maximizing the productivity of the workforce. I-O psychologists in this area might work to find ways to make jobs more rewarding or design programs that improve the quality of life in the workplace.

Industrial-Organizational Psychology Topics

Here are some of the specific topics addressed by industrial-organizational psychology experts:

- **Employee motivation:** Professionals in this field may also use psychological principles to help keep workers motivated.
- **Employee testing:** Psychological principles and tests are often used by I-O psychologists to help businesses select candidates that are best-suited to specific job roles.
- <u>Leadership</u>: I-O psychologists may work to help leaders develop better strategies or train managers to utilize different leadership skills to manage team members more effectively.
- **Product design:** Some I-O psychologists are involved in the development of consumer or workplace products.
- Workplace diversity: Within the area of organizational psychology, professionals in this field may help businesses develop hiring practices that foster greater diversity as well as train employees on diversity and inclusion.
- Workplace performance: I-O psychologists often study behavior in the workplace in order to design environments and procedures that maximize employee performance.

Scope of Industrial Psychology

The six scopes of industrial psychology are as follows: 1. Economic, Social and Psychological Aspect of the Industry 2. Study of the Physical Aspect of Work Environment 3. Principles of Human Relationships 4. Study of Aptitudes and Motives 5. Study of Principles of Mental Health 6. Study of Human Relation.

1. Economic, Social and Psychological Aspect of the Industry:

• Industrial psychology deals with human behavior in the entire industrial environment. Consequently, it studies the economic, social and psychological aspects of human behaviour. In the modern age most of economic factors have some psychological influence. The various factors in communal life of workers living in industrial environment also influence the psychology of the worker. Industrial psychology studies these factors.

2. Study of the Physical Aspect of Work Environment:

• In an industry the worker is greatly influenced by the working conditions. If the conditions are well, the worker feels satisfied and remains healthy while on the other hand if the conditions are got good the workers become dissatisfied. Industrial psychology deals with the physical working conditions.

3. Principles of Human Relationships:

- Irrespective of the automation introduced in industries, the human element can not be eliminated Even most efficient machine needs an engineer to run it, and because the engineer is a human being the most importance of the psychological element in the running of the factory cannot be ignored. The efficiency of the human being will depend very much upon the nature of his relations with the management.
- In the previous century most industrialists behaved like autocrats and considered the workers as nothing more than tools. But in that period the efficiency level was not very high.
- It has been seer that an industrialist can achieve a higher rate of production if he behaves sympathetically with his employees. An industrialist who cannot maintain good relations with his workers does not succeed for long time. Industrial psychology tries at discover principles for improving human relationships in an industrial environment.

4. Study of Aptitudes and Motives:

- As in any other circumstances, human behaviour in the industrial environment is influenced and formed by attitudes and aims. Behaviour changes with the changes in stimuli. Hence it is very important to study the rules pertaining to correct attitudes and aims.
- Industrial psychology pursues this kind of study. An important example of study of this kind is the study conducted by Hawthorne Works Western Electric Company into the effect of the attitudes of workers upon production. This study is known as the Hawthorne Study.

5. Study of Principles of Mental Health:

• Today all intelligent people realize the importance of maintaining the proper health of workers. The workers mental health is influenced by working conditions and by the attitude of other people towards him. Industrial psychology not only studies the factors influencing the mental health of industrial works but also tries to discover principles for maintaining their mental health. Industrial "psychology also gives suggestions for improving the mental health of those who are suffering from mental disease or are otherwise unbalanced.

6. Study of Human Relation:

• Industrial psychology is the study or human behaviour in an industrial context. Being a branch of psychology, industrial psychology is particularly concerned with the observation and study, of human relations, about which it reaches conclusions experimentally and through other study. On the basis of these conclusions it tries to discover general principles which can be in improving social relations between the workers and the management.

Scientific Management-

- Prior to the early 1900s, there was no management theory as we think of it today. Work
 happened as it always had—those with the skills did the work in the way they thought best
 (usually the way it had always been done). The concept that work could be studied and the
 work process improved did not formally exist before the ideas of Frederick Winslow
 Taylor.
- The **scientific management** movement produced revolutionary ideas for the time—ideas such as employee training and implementing standardized best practices to improve productivity. Taylor's theory was called scientific because to develop it, he employed techniques borrowed from botanists and chemists, such as analysis, observation, synthesis, rationality, and logic. You may decide as you read more about Taylor that by today's criteria he was not the worker's "friend." However, Taylor must be given credit for creating the concept of an organization being run "as a business" or in a "businesslike manner," meaning efficiently and productively.

Scientific management has at its heart four core principles that also apply to organizations today. They include the following:

- Look at each job or task scientifically to determine the "one best way" to perform the job. This is a change from the previous "rule of thumb" method where workers devised their own ways to do the job.
- Hire the right workers for each job, and train them to work at maximum efficiency.
- Monitor worker performance, and provide instruction and training when needed.
- Divide the work between management and labor so that management can plan and train, and workers can execute the task efficiently.

Taylor designed his approach for use in places where the work could be quantified, systemized, and standardized, such as in factories. In scientific management, there is one right way to do a task; workers were not encouraged (in fact, they were forbidden) to make decisions or evaluate actions that might produce a better result. Taylor was concerned about the output more than worker satisfaction or motivation. Taylor's work introduced for the first time the idea of systematic training and selection, and it encouraged business owners to work with employees to increase productivity and efficiency. And he introduced a "first-class worker" concept to set the standard for what a worker should be able to produce in a set period of time. Scientific management grew in popularity among big businesses because productivity rose, proving that it worked.

Today, an updated version of his original theory is used by such companies as FedEx and Amazon. **Digital Taylorism** is based on maximizing efficiency by standardizing the tools and techniques for completing each task involved with a given job. Every task is broken down to the smallest motion and translated into an exact procedure that must be followed to complete that task. Because everyone is operating in the same mechanistic way, it increases predictability and consistency while reducing errors. It is relatively easy for managers to replace workers and retain the same productivity. The criticism of this type of management approach is similar to that of

Taylor's original theory: It reduces worker creativity; it requires management to monitor all aspects of employee behavior; and it is unforgiving to workers who don't meet the standard.

Scientific management was the first widespread promotion of rational processes to improve
efficiency. The goal was to develop a standard against which work performance could be
measured. Training became an important part of the management process. By the 1930s,
however, many unions and workers were suspicious of the intentions of scientific
management.

Time-and-motion study-

In the evaluation of industrial performance, analysis of the time spent in going through the different motions of a job or series of jobs. Time-and-motion studies were first instituted in offices and factories in the United States in the early 20th century. These studies came to be adopted on a wide scale as a means of improving the methods of work by subdividing the different operations of a job into measurable elements. Such analyses were, in turn, used as aids to standardization of work and in checking the efficiency of people and equipment and the mode of their combination.

The time and motion study consists of two components - time study by Frederick Taylor and motion study by Frank B. and Lillian M. Gilbreth. Taylor began time studies in the 1880s to determine the duration of particular tasks occurring under specific conditions. A few other studies came before Taylor, but his had the most impact. The time study was a component of the scientific management theory. Taylor's approach focused on reducing time wastage for maximum efficiency.

Motion study by the Gilbreths evaluated movements and how they can improve work methods. Frank and Lillian Gilbreth pursued the motion study in a bid to expound on scientific management. Taylorism, as the theory is called, had a major flaw. It lacked a human element. Critics said that Taylor's approach was solely about profits.

The Gilbreths included several variables while studying how to increase efficiency. Some of them are health, skills, habits, temperament and nutrition. In the book Gilbreth and Gilbreth, the two experts explain that motion study looks at the fatigue that workers experience then finds ways to eliminate it. They recommended solutions like rest-recovery periods, chairs and workbenches.

Implementation of the scientific management theory was one of the first instances that process improvement and process management were treated as a scientific problem.

Application of Time-Motion Study in Today's Business

Every task you do, except for thinking, requires some movement. Whether it's typing code, plugging in a pressure washer or sketching and building a plan, movement is key. It's why's the time & motion study is applicable even in the modern environment.

By analysing how employees operate, and the time they spend, a company can pinpoint where the problem is. Removing inefficiencies increases the productivity of your staff.

For example, finding a better way to manufacturer a car means that production time reduces and output increases. Excessive motion is the biggest cause of time wastage. Completing a task in ten steps, when seven could have easily accomplished the same results means that a worker is wasting a lot of resources.

Implementation The Study Improves Processes

Proper implementation time-motion study allows you to improve processes and optimisation of performance. Better working methods boost efficiency and decrease fatigue in workers. Effectiveness is not just about how hard you work, but how smart.

Time-motion theory enhances resource planning and allocation. When you know how much time and movements particular tasks require, you can apportion the necessary resources. Decreased costs is another advantage. The better you plan resources and the more work the staff accomplishes, the higher the cost savings. Remember to measure how much time workers save after implementing changes.

Human Relations Management Theory-

Human Relations management theory is a premise of organizational psychology from the early twentieth century, which suggests that employee productivity and motivation can be increased through positive social bonds in the workplace and acknowledgement of the worker as a unique individual. It holds that improved working conditions (empowerment, participation, positive treatment) lead to increased productivity.

A Brief History of Human Relations Theory

Human Relations management theory originated between 1924 and 1932 during experiments conducted at the Hawthorne plant of the Western Electric Company in Cicero, Illinois. \(^{\prec}\)

These studies were started by scholars from the Massachusetts Institute of Technology (MIT), but Elton Mayo and Fritz J. Roethlisberger of the Harvard Business School became involved in 1927 and eventually popularized the subject.

Human Relations management theory was started by scholars at MIT, but popularized by Elton Mayo and other "founding fathers of HR" from Harvard Business School.

Around that time, Western Electric had begun to look for ways to "inspire company loyalty, discourage high employee turnover and unionization, and present a good face to the public."

They attempted to accomplish these goals by increasing total compensation and improving employee well-being in the workplace. The latter of the two methods, increasing employee well-being in the workplace, is what prompted the Hawthorne Experiments and marked a shift in management theory from strictly scientific to multidisciplinary.

The Hawthorne plant of the Western Electric Company in Cicero, Illinois was the birthplace of Human Relations management theory in the 1920s.

In fact, the Hawthorne studies were the first to focus on the work life of employees. From then on, companies would have an interest in the applications of behavioral, social, and medical sciences to management and productivity, and scholars (like George Lombard, Paul Lawrence, and others) began to develop the field of Organizational Behavior.

What Are the Key Principles of Human Relations?

During the Hawthorne Experiments, researchers discovered that employee motivation is influenced by many factors.

These factors are categorized in a number of ways, but the simplest for understanding Human Relations is to do it by actor.

Using this method, you can see that four primary categories of actors influence employee motivation:

Four "Actors" in Human Relations theory

- 1. The employee
- 2. Groups of employees
- 3. Supervisors and managers
- 4. The organization

By understanding each actor category's role in the process, an organization can put in place working conditions that optimize employee motivation and, in turn, productivity.

In each of the following sections, I'll go over what was discovered about the category and the Human Relations principles that came as a result.

1. Treat employees well as individuals

As we all know intuitively, a large portion of employee motivation comes from each person as an individual. Each individual's motivation is influenced by their unique personality, experiences, capabilities, circumstance, thoughts, behaviors, and other factors.

As such, a key principle of Human Relations is for organizations to consider individual factors and how they can be influenced to increase motivation. This can include initiatives that look to change/improve an employee's personal circumstance in and outside the workplace as well as their personal desires, perceptions, and attitudes.

2. Promote positive group values and relationships

Since individuals have social needs and interact together in the workplace, group factors must also play a role in employee motivation.

As discovered during the Hawthorne Experiments, cliques form and establish informal rules within the workplace, in turn exercising power and influence on the attitudes and behaviors of all the individuals involved.

Therefore, a key principle of Human Relations is that an organization must promote positive group values and relationships so that social pressure will produce teamwork and positive employee attitudes and behaviors.

If this can be done, results from the study indicate that group productivity will improve as desired.

3. Ensure effective management and supervision

In addition to individual and group influences, managers and supervisors also impact employee motivation.

In fact, the Hawthorne studies showed that "many worker behaviors, attitudes, and emotions have their genesis in their supervisor's actions" and that "stress and fatigue can be the result of interactions with supervisors and coworkers."

In particular, it became clear that an authoritarian leadership style was substantially less effective than a more democratic/participative approach.

As a result, another key principle of Human Relations is that an organization must ensure that managers and supervisors:

- 1. Understand psychology (including motivation and behavior);
- 2. Are sensitive to employees' individual and group needs;
- 3. Communicate effectively;
- 4. Are supportive and motivating (including giving positive feedback to employees); and
- 5. Empower employees and allow for some degree of autonomy/control.

To the other extreme, if managers disagreed with company policies and/or become too closely allied with workers, they were found to limit production and sabotage performance.

Therefore, an organization must also ensure that managers and supervisors fulfill their roles and responsibilities as leaders and work in the best interests of their company as well.

4. Establish effective organizational conditions

As you may have noticed in the previous three categories, the organization is clearly at the center of Human Relations. This is because the organization houses and controls the underlying conditions for all of the aforementioned parties and interactions.

Thus, a key principle of Human Relations is that the organization must create working conditions that allow for/promote increased individual and group attitudes toward work. This includes the organization ensuring that:

- 1. Physical working conditions are safe and conducive to employee performance;
- 2. Social and other related working conditions promote employee productivity;
- 3. Employee compensation and benefits are appropriate and effective;
- 4. Managers and supervisors have and use appropriate leadership skills;
- 5. Input from managers, supervisors, and employees is incorporated into the organization's policies and procedures; and

6. All parties' interests are aligned.

As was discovered during the Hawthorne Experiments, if an organization can apply these key principles, then it can achieve the original goals of *inspiring company loyalty*, *discouraging high employee turnover and unionization*, and *presenting a good face to the public*.

Schools of Thought Related to Human Relations Theory

The simplest way to determine which schools of thought have a relationship with Human Relations Theory is to examine the theory's contemporaries.

In the next few sections, we'll dig deep on the historical context of management theories that took root around Human Relations Theory:

Management Theory Prior to Human Relations

Just prior to Human Relations Theory, in the late 1800s to early 1900s, the management theories of Frederick Winslow Taylor, Max Weber, Henri Fayol, and others were most prominent. They all shared a similarity with Human Relations in that they were a departure from managerial norms in favor of improvement. That said, they did have their differences.

Henry Fayol's theories were the primary contemporary to schools of thought associated with Elton Mayo like Human Relations.

Taylor, who is known as the father of Scientific Management used science to determine "the most effective and efficient way to accomplish a given task." Instead of focusing on the performer of the task (i.e. the employee) as in Human Relations, this approach focused primarily on the task itself.

Weber, who is known as the father of Sociology, developed the Principles of the Ideal Bureaucracy, which provide justification of and rules for management decisions. This theory shared a focus on the individual with Human Relations, but approached things from a management and leadership perspective rather than a worker's perspective.

Fayol, who is known for Fayolism or Administrative Theory, developed the 14 Principles of Management, which detail the responsibilities of managers. This theory considered human needs and relationships between parties in the workplace like Human Relations, but it focused primarily on administrative rather than psychological aspects.

Management Theories Developed Alongside Human Relations
As Human Relations Theory was gaining popularity, the management theories of Chester Barnard and Mary Parker Follett were gaining ground as well.

Barnard is best known for his work called "the zone of indifference." This work examined what could make a worker disobey orders, thus focusing on the individual like Human Relations. Conversely, unlike Human Relations, his theory promoted logical rather than social or emotional influences on behavior.

Follett is best known for her work on conflict resolution. In particular, she showed that social concerns were important to employee relations and that integrative solutions were paramount. While her work differed by having a more Taylor-like foundation, her work also focused on social and emotional influences like Human Relations.

In What Ways Is Human Relations Theory Relevant Today? Despite originating in the late 1920s, <u>Human Relations principles are still very relevant</u>.

Human Relations was widely popularized by psychologist Elton Mayo, and is still a common way of approaching HR by large companies like Google and Facebook.

First, since organizations are still made up of people, understanding how individual factors influence motivation is important. In addition to utilizing the psychology of motivation, caring for employees through internal and external benefits — like parental leave, onsite wellness and healthcare services, fitness centers, personal and professional development, and more <u>at Google</u> — is still effective at improving employee productivity (as many studies have shown).

Second, while the use of remote technology and groups continues to grow internationally⁴, producing in groups is still the norm in business. Thus, it is still true that organizations must foster positive group dynamics in order to produce teamwork and positive employee <u>attitudes and behaviors</u>.

Third, over time, it has become more and more apparent⁵ that effective leadership is critical to an organization's success. This must be true given that managers across industries spend <u>about 75%</u> of their time in verbal interaction, <u>most often with subordinates</u>. Therefore, it is still important that an organization ensures managers and supervisors are equipped to support and motivate employees.

Finally, it is clear that organizations still must create working conditions that allow for/promote increased individual and group attitudes toward work. A great example of establishing positive individual and group working conditions is the work flexibility offered by Cisco. There, you can time swap 20% or 100% of your job on a temporary or permanent basis and work across various business groups within the company.

Through these and other types of initiatives, businesses are certain to have a more fulfilled workforce who will perform better and remain loyal to their company.

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