

INTRODUCTION TO BEHAVIORAL SCIENCE

BS is a study of science that analyzes processes related to and influence human behavior to understand how human behavior occurs by finding solutions to behavioral problems.

Behavioral Science uses general findings, theoretical background and contributions of such disciplines as Psychology, Social Psychology, Sociology and Anthropology. BS aims to reach general conclusions about individual and group behavior.

Behavioral Sciences



Analyses --→ individual + group activities (behavior)

Interprets

- a) Behavioral Science takes human behavior into consideration.
- b) In order to comprehend and understand the dynamics of human behavior, Behavioral Science sets principles and patterns of behavior to explain how behavior occurs.

Limits of Behavioral Science

- Interpersonal relations
- Intrapersonal relations
- Personal growth
- Motivation
- Satisfaction
- Personality
- Attitudes and values
- Leadership
- Perception
- Social structure and role
- Culture
- Individual analysis and recognition
- Change
- Group formation and behavior and so on.

Reasons That Prevented the Development of Scientific Management Approach

- Negative attitudes of church toward trading and business affairs in Middle Ages.
- Behavioral Sciences such as Psychology, Sociology and Anthropology have gained scientific characteristics through the end of 19th century.
- Until management became a scientific discipline, it had been practised as an apprenticeship type of training based on experiences on the job and intuitions.
- Management as a scientific discipline emerged from the end of 19th century.

Reasons Behind the Emergence of Management as a Scientific Approach are:

- Industrial revolution in England.
- Giant factories were founded rapidly.
- Mass production started in factories.
- Hundreds of people were recruited in every business organization.
- From boutique production to ----- Mass production
- From family oriented management to ----- Professional management
- Ownership and Professional management needed to be separated from each other with certain boundaries.

In order to explain how and why Behavioral Science emerged as an important multi-discipline in the area of management, the development of management theories as a scientific discipline will be summarized briefly in the following.

EVALUATION OF MANAGEMENT THEORIES

***The Findings of Classical Theories**

- **Scientific Management** by Frederic Taylor

Job design, standards of doing a work, procedures, principles or methods of work were examined analyzed, maximum output was the center of interest.

- **Management Process Approach** by Henry Fayol

Fayol came up with the idea that management is a 5 step process consisting of planning, organizing, directing, coordinating and controlling. He also discussed the principles of management and organizing and he defined organization principles.

- **Bureaucracy Approach** by Max Weber

Organizational structure and design, organizational hierarchy, superior and subordinate relationship in the hierarchy, standards of work, work procedures, methods, role interdependency are main concerns of Bureaucracy Approach.

Results of Classical Approach

- Organizations are seen as closed systems which mean that they provide inputs and translate them to outputs as if they do not have a contact with their environment. They see their environment as stable. In fact, environment is dynamic and changing and should be taken in serious consideration.

- “Economic Man Model” is what classical theories are for. This model approaches man as a mechanism to work and produce only for the maximum outputs and productivity of the organization by not taking men as a human being at all.

- Formal Groups are important which are also counted as work groups but the existence of informal friendship groups and their influences were ignored.

- Maximum output is intended to be provided.

- Productivity is important.

- Human factor is ignored.

***Neo-Classical Theories(McGregor, Kurt Lewin, E. Maya, Argyris, Likert, Maslow,...)**

- Hawthorne Studies, Harwood, Tavistok Institution, Yankee City, K. Lewin's Leadership Study are among the studies that draw attention to the importance of human factor in business organizations.

Results of Neo-Classical Approach

- Compared to Classical Management Approach, Neo-Classical Management Approach's center of interest is human behavior at work. Therefore, it is a humanistic approach.

- This management approach paid attention to the importance of social factors such as motivation, satisfaction, supervision, interpersonal and group relations in work organizations.
- Informal groups affect the work environment as much as formal groups. Accordingly, informal groups should be taken as serious as formal groups in organizations.
- Organizations are considered as social systems since organizational systems are made of human beings and organizations accomplish their goals based on interaction among people.
- Neo-classical theories defend “Social man model” against “economic man model” of classical theories because the productivity or maximum output can only be achieved by people who need to be recognized as social human beings with social requirements.
- Individual needs as well as organizational needs are found to be important.

***Modern Theories of Management**

-Systems Approach → (holistic approach)

- Systems and subsystems
- Close and open systems
- Contingency Approach

Levels of Analysis of Systems Approach are the individual himself, the person-person level, small groups level, more than one group relating to the others, a total organization level and finally the larger society. The whole society is a dominant and greater system and every organization is a sub-system of a bigger system which is the society in here. The groups in organizations are their sub-systems.

In Classical Management Approach, organizations were seen as close systems, in Neo-Classical Approach organizations were social systems. In Modern Management Theories, organizations are assumed as open systems which interact with interest groups in their environment such as customers, suppliers, competitors, financial organizations, labor unions, shareholders, government, law, global environment and so on. In other words, business organizations collect inputs(capital, raw material, technology, labor, equipment, energy, knowledge and so on) from their environment in order to use them in production processes to provide outputs(products and services) for the environment.

Contingency Approach of Modern Management examines managerial and organizational processes from the aspect of situational factors. According to this approach, situational factors such as all environmental factors as well as organizational structure and culture, managers' abilities, subordinates' skills and abilities, time limitations and the

characteristics of the task or problem determine which activities or decisions are the most appropriate for the time being.

THE DISCIPLINES THAT BEHAVIORAL SCIENCES CONSIST OF

Sociology

Sociology is defined as the science of society. It provides macro perspective to the analysis of human and group behavior. Sociology deals with social problems of society. The society, the institutions (such as education, family and so on), organizations, groups and norms and roles related to them are studied by sociologists.

Psychology

Psychology is defined as the science of human behavior. It provides micro perspective to the analysis of human behavior. It has many different schools and approaches (cognitive, behaviorist, gestalt, ...) to explain the complex human behavior. Social psychology as a branch of psychology is the study of individual behavior in relation to the social environment that behavior occurs. Social psychology helps Behavioral Science explain individual behavior within a group. Communication, attitudes, leadership, perception, personality, motivation, etc. are among the topics Psychology and Social Psychology contributes to Behavioral Science.

Anthropology

Anthropology is defined as the science of man. It has got two main study of area: Physical and cultural anthropology. Physical Anthropology studies man from the physical development aspect which Behavioral Science has no interest. Socio-Cultural anthropology, on the other hand, studies man kind in the context of the culture. It examines the development of culture, its content and meaning.

Other Disciplines:

Economics

Economics studies influences of economic structure and economic changes on individuals and their behavior. For example, some of the criminal behaviors are caused by economic problems and poverty. Economic issues influence the whole system in a society and therefore also influences individuals, groups or organizational level behavior in a society. Economic dynamics, problems, life standards, socio-economic influences are some of the issues Economics are related with.

Political Sciences

Political Sciences examine political inconsistencies, political decisions, political problems that a society is involved to. It studies the influences of government and other political

units on individuals and groups in terms of their behavior. This discipline collects information by public surveys.

History

History is the study of social evolution of a society or societies in chronological perspective.

Political and social changes can be explained by historical events and those events may leave an indelible impact on the development of social values of a society which will lead human behavior in them.

Law

Law studies general rules, norms and regulations in a society from a legal and legitimate perspective. For instance, it analyzes criminal cases to evaluate the boundaries of behavior patterns in societies.

Since Neo-Classical Theories and their findings are the main attraction to increase the function and role of Behavioral Science in Business Management practices, findings of some important studies in Neo-Classical Approach will be explained briefly in the following.

Studies of Neo-Classical Theories

1) Hawthorne Studies (Elton Mayo and Roethlisberger)

One of the interesting findings of Hawthorne is such physical factors as illumination, heating, physical settings of the work place and break hours do not play a consistent role in productivity. Productivity may increase or decrease from time to time independent from these factors. Instead, informal groups, ingroup relations, social factors such as motivation, satisfaction, supervision and interpersonal relations are more important on productivity.

This study is the first to draw attention to “social person model” of Neo-Classical Approach.

2) Harwood Studies

The models of pajamas were frequently changed without informing the workers in the pajama factory. As the models changed, work processes and procedures would also change. People generally feel uncertain and tensed toward changes that they have no idea at all. Problems occurred such as absenteeism, turnover, tardiness. Accordingly, three methods were used to see which one is the most effective dealing with these problems.

a) Foreman explained the workers the reasons for the change of the models.

- b) Partial participation: Comitees were formed to represent the workers in the company. In the name of the workers, these comitees participated in decision making processes.
 - c) Full participation: As a third method, every person's contrubition was welcome to see how effective this method was.
- Among the above three methods, "full participation" of workers was found to be the most efficient method to satisfy and motivate the workers.

3) Tavistok Institution Studies

In this study which took place in England's coal mines, the equipment and methods of mine digging were changed. Before the change, people used to work in smaller groups and had a good communication and friendship among each other. With the change, larger groups were formed which prevented face to face communication and minimized individual and friendly interaction among people. As a consequence of this study, the importance of small groups and cooperation had been realized. Since the cooperation and support had been eliminated (decreased), satisfaction levels of workers diminished.

4) Kurt Lewin's Leadership Studies

Kurt Lewin argued three types of leadership and he came up with the following judgements derived from his experiments.

- Democratic leaders -> Quality of work is high, satisfaction is high.
- Authoritarian leaders -> Quantity of work is high, low satisfaction.
- Laissez-faire leaders(let your employees do) -> Low quantity and quality, no cooperation, group success is low.

5) Maslow's Need Hierarchy

Maslow discussed human needs such as physiological, security, effecton and belonginess, self-esteem and self- actualization on a pyramid. At the bottom of the pyramid, lower level needs such as physiological, security and belonginess would take place in an order. On a higher level, psychological and social needs such as self-esteem and self-actualization would appaeer. Before the lower level needs are satisfied, the upper level needs wouldn't appear so needs would follow a hierarchy.

6) Likert System 4 Managerial Grid

Likert explained four types of leadership behavior with their characteristics.

- Authoritarian leaders – The use of power and control are important and these leaders do not feel any obligation to make explanation to their followers.
- Cooperative authoritarian –These leaders explain and share information with their followers but make the final decision by themselves.
- Participative leaders – Everyone participates with his ideas and the decision is made together.

-Democratic leaders – Subordinates make the decision and the leader delegate the authority to his subordinates. He only interferes when he is needed.

7) Mac Gregor's X-Y Theory

According to this theory, X type of managers or leaders believe that employees need to be controlled as they can not be trusted and they should be directed by their boss.

Otherwise, they have a tendency to escape from what they are doing, they need to be disciplined and punished. In contrast, Y type of managers or leaders trust their employees and believe that work is as important and natural as rest for them as they have a tendency for growth and development. Employees should be rewarded for their achievement.

INDIVIDUAL CHARACTERISTICS AS A SOURCE OF BEHAVIOR

ABILITY

Ability: An individual's capacity to perform the various tasks in a job.

- a) Intellectual Ability – The capacity to do mental activities. It is related to IQ=Intelligence Quotient.
- b) Physical Ability – The capacity to do tasks demanding stamina, dexterity, strength and similar characteristics. It's about the use of physical capacity such as eye-hand coordination and physical resistance to powerful stimulus to perform tasks.
- c) Multiple Intelligences – This the most popular and demanding classification of abilities. It contains four parts of intelligences such as cognitive, social, emotional and cultural.

-Cognitive – The type of intelligence that has been measured by intelligence tests.

-Emotional – The ability to identify, understand and manage emotions.

-Social – The ability to cope effectively with others. In other words, it's the ability of making yourself clear and communicating people effectively.

-Cultural – The awareness of cross-cultural differences and the ability to function successfully in cross-cultural situations. It's the successful adaptation to different cultures and changing environments.

EX: Some people are called smart people, particularly those with high cognitive intelligence but they may not adapt well to everyday life or work well with others

or succeed when placed in leadership roles.

BIOGRAPHICAL CHARACTERISTICS

1.Age

-Older age – means experience, strong work ethic, commitment to quality, lack of flexibility or resistance to new technology.

The following correlations were found:

-Older age < - > Quitting job tendency is less.

-Older age < - > Concious absenteeism is less but absenteeism is rather caused by poor health conditions.

-Older age < - > Productivity does not decrease in terms of physical ability plus experience becomes more important.

-Older age < - > Job satisfaction increases until the retirement stage.

2. Gender

- Gender < - > Problem-solving ability

- Gender < - >Analytical skills

- Gender < - >Motivation No consistent male-female differences were found.

- Gender < - >Competitive drive

- Gender < - >Sociability

- Gender < - >Learning ability

-gender < - > productivity No significant difference

-gender < - > job satisfaction

-Working mothers with children prefer part-time work and flexible work schedules.

-Gender < - > absenteeism → women have higher rates of absenteeism caused by family responsibilities.

3. Marital Status

Marriage makes a steady job more valuable and important. No further investigation were achieved.

4. Tenure

- Seniority < - > productivity (a positive relationship)
- Seniority < - > absenteeism (negatively related)
- Seniority < - > turnover (the longer a person is on a job, the less likely he or she is to quit.)

It is strangely related to tenure.

- Seniority < - > Satisfaction (positively related).