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A SYSTEMS APPROACH TO PERSONNEL MANAGEMENT,

An Inaugural Lecture given in the University of Fort Hare on the 10th June 1976.

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A SYSTEMS APPROACH TO PERSONNEL MANAGEMENT

Industrial Psychology has developed in a relatively short period of time into a scientific discipline which can contribute substantially to academic as well as practical aspects of industrial life.

A number of questions immediately come to mind: What is Industrial Psychology? Which fields of study does Industrial Psychology entail? The growth in South Africa? What is Personnel Management and what is its relationship with Industrial Psychology?

1. What is Industrial Psychology?

Industrial Psychology is concerned with the study of human behaviour in those aspects of life that are related to the production, distribution and use of the goods and services of our civilization.

The term 'industry' should be seen in a very broad sense to embrace all types of industry. In addition we should include human behaviour in the use of goods and services, i.e. consumer behaviour.

Let us briefly examine the behaviour of people at work. It is a fact that individuals differ in terms of behaviour and responses. In the work situation behaviour can be classified under various types, eg. work performance, subjective (job satisfaction), physiological, etc. These types of behaviour are called dependent variables (criteria).

Why do these differences in, for example, work performance, occur? Firstly, we have to look at the individual variables, such as aptitudes, personality and physical characteristics, interests and motivation, age and sex, education, experience and other personal variables. In

addition, we have to consider the situational variables which consist of:

- (a) physical and job variables—such as methods of work, design and condition of equipment, work space, arrangement and the physical environment, eg. noise and illumination; and
- (b) organisational and social variables—such as the character of the organisation, types of training and supervision received, types of incentives, unions, social environment, etc.

Independent variables consist of the individual and situational variables mentioned above (Figure I) (McCormick and Tiffin, 1974).

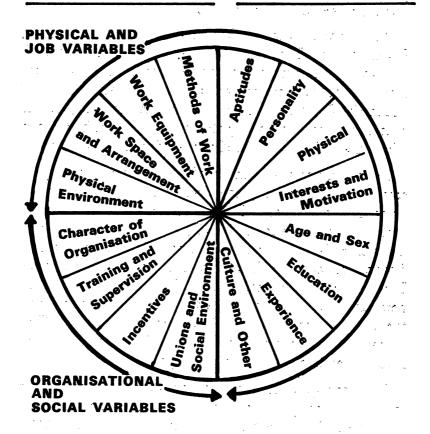
Industrial Psychology is concerned with the relationship between dependent and independent variables.

2. Fields of Study in Industrial Psychology

The contemporary viewpoint is that Industrial Psychology concentrates on four areas:

- (a) Personnel Psychology consisting of, inter alia, the following sub-areas: personnel management, group dynamics and psychometrics;
 - (b) Management Psychology consisting of organisational structure, organisational behaviour, organisational development, etc.;
- (c) Ergonomics (Human Factor Engineering) which consists of sub-areas such as man-machine systems, work study, working conditions, and safety;
- (d) Marketing Psychology which includes consumer behaviour and advertising.

Industrial Psychology has developed out of psychology but, from the fields of study just mentioned, it is clear that it also integrates aspects of many other disciplines, eg. business economics, sociology, economics, statistics and accountancy (in human resources accounting).



3. The Growth of Industrial Psychology in South Africa

In 1976 4 239 industrial psychology students (3 147 in 1972) were enrolled at South Africa's sixteen universities. This represents 3,3 percent of the total number of students at all the universities. The number of universities with separate departments of industrial psychology increased from six in 1972 to nine in 1976.

A sound trend since 1972 is the increased qualifications of industrial psychology lecturers—39 percent (vs. 30

percent) with Doctoral degrees and 44 percent (vs. 42 percent) with Masters degrees, while the percentage with lower degrees decreased from 28 to 17.

What about the professional status of Industrial Psychologists? Two psychological associations (which I believe should become one) and two professional institutes further the academic as well as professional interests of Industrial Psychologists. Following last year's legislation it is now possible to register with the South African Medical and Dental Council as an Industrial Psychologist.

In recent years a number of new degrees have been created to help supply the ever increasing demand for personnel specialists. For example: B.A. (Personnel Management) at the University of Fort Hare, M.B.L. (Personnel Management) at Unisa's School of Business Leadership and B.P.L. at the University of the Orange Free State. The pressing need for diploma courses in personnel management is partially met by Unisa's and the Institute of Personnel Management's courses. The demand for qualified staff, especially Blacks, in this field however, still exceeds the supply.

You may quite rightly question why I emphasize the importance of qualifications. Do qualified persons perform better? In the mining industry (TREVOR-ROBERTS, 1972) the relevance of the calibre and qualifications of personnel staff was proved when the following hypotheses were accepted:

- (a) "The calibre of the personnel department head, in terms of qualifications and experience, has a direct influence on the quantity and quality of personnel functions performed."
- (b) "The personnel ratio, i.e. the number of employees per 'qualified' personnel department staff

member, is directly related to the quality of personnel functions."

The major application of industrial psychology is found in personnel management. Therefore the rest of my discussion will concentrate on this one sub-area in personnel psychology—personnel management.

4. Personnel Management defined

Personnel management is a responsibility of all those who manage people, as well as being a description of the work of all those who are employed as specialists. It is that part of management which is concerned with people at work and with the relationships within an enterprise. It applies not only to industry and commerce but to all fields of employment (Lyons, 1971).

BEACH (1970) rightly points out that: "Personnel Management is not primarily a kit of tools to be used to control and direct employees. It is, rather, a frame of reference, an understanding of why and how, and an application of theory, concepts and principles."

5. The Evolvement of Personnel Management

In order to understand the systems approach we have to briefly refer to a number of approaches towards personnel that have evolved over time as well as some newer approaches.

(a) MECHANICAL APPROACH TOWARDS PERSONNEL

The reasoning here is that if machines can be made more productive by extreme specialisation, so can men. This approach has also been called the 'factor-of-production concept'. It implies that labour must be classified with capital and raw material as a factor of production to be procured as cheaply as possible and utilised to the fullest.

The fact that human beings are involved in this is of

little significance. Since labour, white and black, is human the mechanical approach usually results in the creation of various management problems—personnel problems. Although this philosophy towards labour is changing and has changed, there are still many managers, especially in South Africa, whose attitudes are strongly influenced by this old philosophy.

(b) PATERNALISM

In this approach management must assume a fatherly and protective attitude towards employees. By merely supplying benefits, eg. housing, transport, recreation and pensions, managements are not necessarily paternalistic. It is the attitude and the manner of implementation that determine whether or not a management is paternal in its dealings with employees.

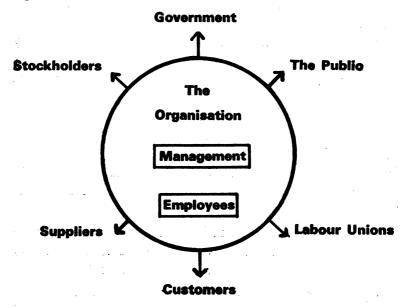
To be paternalistic two characteristics are necessary. Firstly, the profit motive should not be prominent in management's decision to provide such employee services. Secondly, the decision concerning what services to provide and how to provide them belongs solely to management. The father makes the decision that he feels is best for the child. Paternalism died largely during the depression of the 1930's, though certain managements still use this approach in their dealings with employees.

How many managements consult their black employees before deciding on these benefits and services?

(c) SOCIAL SYSTEM APPROACH

In this approach the organisation is perceived as the control agency operating in an open system. Employees are perceived as power sources whose development can be alligned with basic organisational goals. As the diagram (Figure II) indicates, the employee group is only one of many groups to which the manager must relate (FLIPPO, 1971).

Figure II



This more mature approach also explains the various roles a person has to play. From this flows role expectations, role conflicts, etc., and the influence this has on human behaviour.

(d) Newer approaches to Personnel Management

The basic mission of personnel is conceived by BICKER (1965) to be a 'huge balancing act'. Personnel is responsible for balancing the demand for and supply of people, of balancing the organisation's need for certain experience and skills with the labour market's supply of these skills and experience. Everything the personnel man does has an effect on one side of the balance or the other.

In the same vein MYERS (1970) speaks of the 'counter-balancing' influence where personnel management counter-balances line management's emphasis on production, with emphasis on human relations. He says further that

the personnel specialist as 'change agent' interacts with the line manager to define conditions for mutual achievement of organisational and individual goals. The primary purpose of personnel as a change agent is to maximise the achievement of organisational objectives through the best utilisation of its human resources.

Interaction is emphasized by Megginson (1967) where he says that the function of management is to blend the human and material resources and technology into a harmonious relationship which will contribute to the improvement of the company and society. He developed the following hypotheses:

- (i) "A company's productivity and resulting profitability are directly proportional to the quantity and quality of its human resources."
- (ii) "The efficiency and effectiveness of employers' productivity results from the recognition of, and enhancement of, the human dignity of each individual employee."
- (iii) "The supply and calibre of the human resource can be effectively enchanced through education, training and personal development."

6. The Application of the Systems Approach

In recent years the systems approach has been used increasingly in many fields concerning human beings, human resources, organisations and behaviour in organisations. A better understanding of the personnel management function is now possible because of the application of the systems approach.

What is the systems approach? The systems approach is essentially a way of thinking—a perspective that emphasizes relationships and inter-actions. Modern systems theory developed in response to problems

associated with the expanding horizons of knowledge. One of the core assumptions of systems theory concerns change. Because the organisation is a complex of related systems, change is introduced into either the organisation or the environment which stimulates further change as an equilibrium (or balance) is sought.

Until recently there were two major approaches to the study of organisations. The older approach pioneered by Frederick Taylor stressed the structural properties of organisations and led to the development of many principles of management. A later approach, which stemmed from the Hawthorne experiments, emphasized human elements in the organisation and lead to leadership and motivational theories. According to COLEMAN and PALMER (1973) both approaches were found to be inadequate. The structural approach was thought to overlook too many human realities. The human approach again suffered on two accounts—it failed to establish a broad framework for understanding organisations and many of its core assumptions about human behaviour in organisations were not verified by empirical research.

Because of these shortcomings the systems approach was developed which provides a basis for understanding organisations and their problems. Most systems theorists conceive of the organisation as a complex input—through put—output system. The organisation is separated from its environment by a permeable boundary. Through this boundary transactions occur which enable the organisation to secure human, financial, and material inputs. Within organisation boundaries a number of interacting sub-systems transform these inputs into a final product suitable to the environment. Output passes through the organisation's boundaries, reactivating the input—throughput—output cycle.

FREED (1975) developed a systems model of human behaviour consisting of input—processor—and output stages. To this he added three other concepts. Filtering: certain amount of selectivity is exerted on inputs allowed into the system. The second factor is a pre-control mechanism which performs an evaluative function just before the individual acts (output).

The third is a feedback mechanism which allows a system (a human) to determine not only its affect on its environment, but also if it should alter its output (behaviour). Human behaviour is complex because the numerous variables are dynamically inter-related. Yet by considering these variables from a systems perspective, the practicing manager can gain a greater understanding of both his own behaviour and that of those around him

To explain human behaviour in organisations Weyers (1969) formulated an encompassing, general, theory of the personnel function and named it "The Theory of Equilibrium". He based his theory on two variables, namely, input and outcome. Input is seen as all the contributions that the human being makes towards the attainment of the goals of the organisation. Outcome is the reward or remuneration which a person receives in lieu of his input and can vary from financial rewards to psycho-social satisfaction which is obtained from the work. In the work situation the employer receives the input and is the source of outcome while the employee is the source of input and receives the outcome. The theory of equilibrium is formulated as follows:

"All the elements of input and outcome must be in equilibrium, equilibrium is functional while disequilibrium is disfunctional, it is the task of the personnel function to attain and retain equilibrium." The systems approach has also been applied to lay the

foundation for a human resource planning model (FLOWERS and CODA, 1974). Employee needs and values are what the employees need. What the organisation needs is employee assets (knowledge, health, attitudes) and company investments. How well these two match influences job satisfaction, why employees stay, and why employees perform. The primary purpose of this model is to help with the development of a realistic human resource planning system that would include both financial and behavioural feedback measures.

VLOK (1972) views the personnel function as a subsystem comprised of input, mediator (processes) and output variables. He states that the personnel functions contribute in an interrelated manner towards those objectives they share with other sub-systems and system variables. With the focus on interaction and growth personnel practices and research are dealing with stable entities and should find systems concepts and methods most helpful.

Our objective with the systems approach is to understand the role of the personnel management function as a system within the total organisational context.

The personnel system is related to and influenced by many other systems. Before we can fully understand personnel management as a system we will have at least to relate it to the employee system and the management system.

(a) EMPLOYEE SYSTEM

Employees' inputs to the organisation consist of their abilities (eg. skills, experience, knowledge), motivation and time. How these inputs are used in relation to the job demands, form the processes that lead to certain outputs. Employees invest their inputs via these processes in order to obtain outputs relevant to their individual and

group needs. Feedback is continuous depending on the degree of satisfaction obtained and the inputs and processes will be adjusted accordingly.

(b) Management System

The management inputs are capital, material, machinery, and managements' philosophy of business and interpersonal relations. The management processes of planning, organising, leading and controlling are well-known to you. It is through the application of these processes that management hope to convert their inputs and the inputs of the employees to achieve the outputs of their system—the achievement of company goals. Management feedback is usually systematically planned and consists of reports, financial statements, etc. These two systems are dynamically linked. For example, the manager, as an employee, in fact, belongs to both systems.

(c) Personnel System

The linking pin between the management and employee systems is the personnel system. Without decreasing line management's responsibility for their own employees, the personnel system attempts to integrate the employee and management systems.

The inputs of the personnel system are the recruitment and selection of the right quality and quantity of manpower. The processes of the personnel system are aimed at the development, compensation, integration and maintenance of manpower resources. The objectives of these processes are twofold and reflect the integrating function of the personnel department. On the one hand they should help management to achieve the company goals (management outputs) while at the same time contribute to the employees outputs—satisfaction of individual and group needs. The outputs of the personnel system are the evaluation of employee and management

performance and the satisfaction of the needs of the individual, group and the company.

Due to its dual outputs, feedback on the personnel system is also twofold. On the one hand, management feedback is reflected in productivity reports, manpower costs, etc., while on the other hand employee feedback is shown in labour turnover, absenteeism, morale surveys, etc.

The systems approach underlines the dual roles and integrative function of personnel management. It also clearly shows that the total personnel system must include the employees, personnel and management systems. The inputs and processes of the personnel system help and facilitate both management and employees, therefore the personnel staff perform a facilitating role. Empirical proof for this last statement was found in my own research in the gold-mining industry (Trevor-Roberts, 1972):

"... the higher the input by the company in the personnel department, the higher the outcome in terms of the contribution the personnel department can make towards the management of the company's human resources."

7. Conclusion

One major criticism levelled at personnel management as it is actually practised in organisations, is that it is technique bound. Personnel management has long suffered from a continuing succession of fads and cure-alls, eg. T-groups, M.B.O., assessment centres, etc. This emphasis on techniques rather than problems tends to produce a situation in which techniques are applied indiscriminately. This is not to say personnel management does not need the techniques, in fact it needs as many useful ones

as it can get. But it is important that these techniques become the servants of comprehensive decision making and wide-ranging strategy formulation, rather than ends in themselves.

The systems approach underlines the inter-relationships between various sub-systems and between the various personnel functions. For example by emphasizing the compensation function both the employee and management systems are affected, Within the personnel system, recruitment will by influenced as well as individual performance, which in turn can influence the satisfaction of individual, group and company needs.

Personnel people must separate themselves from preparing forms, making records and reports, and performing only a welfare function, and become manpower managers with a systems approach to personnel management. They should become active members of the management team and should assist in the formulation of policy. I believe that the correct application of the systems approach could lead to a revaluation of the managerial role of personnel management.

With the acceptance of the chair in Industrial Psychology at the University of Fort Hare, it is my firm intention to develop Industrial Psychology to the best of my abilities. However, I do this in all humility and with the full realization of my own inabilities and shortcomings.

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