

AN ASSESSMENT OF FACTORS AFFECTING  
MOTIVATION WITH RELEVANCE TO CONSTRUCTION  
AND PROJECT MANAGEMENT

by

Adrian Fallavollita

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## ABSTRACT

### AN ASSESSMENT OF FACTORS AFFECTING MOTIVATION WITH RELEVANCE TO CONSTRUCTION AND PROJECT MANAGEMENT

Adrian Fallavollita

This report deals first with five key factors which influence motivation -- individual differences, work or job content, compensation, leader and group interactions, as well as, the performance/satisfaction issue. Secondly, some content and cognitive theories of motivation are examined and their treatment revolves around their empirically based validity. This approach is intended to provide some insights for practicing managers on the potential of such theories as motivational tools in work situations.

Finally, the motivation problem in construction is treated in the light of available research. Given the temporary organizations formed to support a project from beginning to completion, the most important motivators for craftsmen appear to be pay and job security which comes from continued availability of work on different projects. To a lesser extent, the opportunity for advancement, job responsibility and recognition are also found. For professional and managerial assignments where greater potential for career development exists, intrinsic motivators such as, work challenge, recognition, responsibility and advancement are predominant. However, considerable importance is also given by project team members to salary adjustment as a motivation incentive.

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## CHAPTER I

### INTRODUCTION

An engineer involved in construction and project management must have some understanding of how human factors can be influenced to accomplish organizational goals. As professionals and craftsmen perform the necessary design and building tasks to accomplish specific projects using materials, machines and tools, the engineer responsible for the performance of others will inevitably be confronted with the problem of motivation.

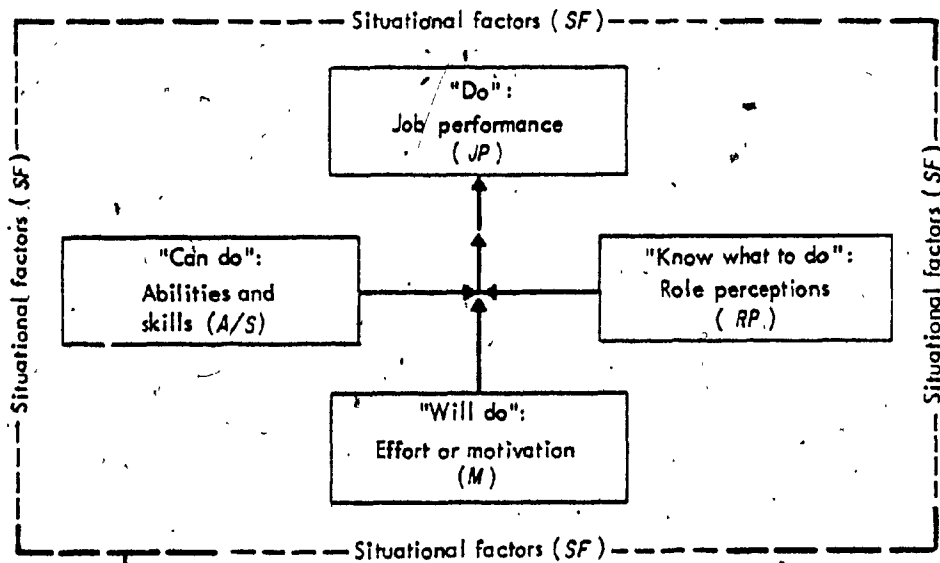
Motivation is a complex phenomenon, and it is all the more complicated and challenging in the construction-oriented setting. What makes construction distinct from manufacturing technostuctures is that activities of diverse trades are performed at the same location where the facilities, structures or processes are to be used. Construction activities, therefore, are managed in determined sequences in order to complete specific projects with whatever combination of resources are necessary. These are then discharged from the project and reassigned to subsequent projects that may be available.

This way, members of work teams are constantly changing thus making motivation of these human resources quite difficult.

Industrial psychologists claim that performance is a multiplicative function of two factors: (1) motivation, and (2) ability, i.e.  $P = (M \times A)$ . In order to better explain this process some additional variables have recently been suggested. These are (1) role perception (a person's understanding of what it is he is supposed to do); and (2) situational factors (which influence what a person can do). (2) A model of this process is illustrated in Figure 1-1.



Figure 1.1 A General Framework for Job Performance (2; p.219)



Most of the theory presented in this report comes from literature on industrial or manufacturing work organizations. The reason for this is that extensive research on human factors has been carried out in such settings, and it appears to have only been over the last decade or so that some research activity has been directed toward the construction environment.

Unfortunately, existing construction and project management literature on motivation is mostly limited to descriptions of several drive or needs theories with some emphasis on the framework, while neglecting the motivation process and the factors which determine what motivators (or incentives) will be effective in different situations. A lot, however, can be learned from the empirical studies designed to test motivation theories as this provides some understanding of their utility and limitation given situational variables, such as the nature of the work, interpersonal factors, or reward systems.

## 1.1 A Mapping Out

### 1.1.1 Objectives of Report

The objectives of this report are:

- (1) To survey some contemporary theories of motivation with emphasis on their empirically-based validity;
- (2) To explore the organization factors which influence the functions and dysfunctions of the motivation process; and
- (3) To explore which motivation strategies are relevant for project management and construction.

### 1.1.2 Scope of Report

This report will deal with basically two types of motivation theories: (1) the drives, needs, or incentives theories (often referred to as content) and (2) process or cognitive theories of motivation.

Given the nature and purpose of this report, it is clear that only a handful of organization theories can be treated with sufficient rigour. Therefore, only the most familiar and widely-tested theories to date will be covered. Psychological and Classical theories, for example, will not be included in this study; however, a concise review of over fifty theories of motivation can be found in reference

(8).

Chapter II will deal with the variables, both within the individual and the environment which have some influence on the motivation process. The chapter is important as it points out the problems affecting the individual at work which influence either positively or negatively his motivation to perform. The topics will include: (1) individual differences, (2) work and working, (3) money, (4) job satisfaction and performance, and (5) leader and group influences. It concludes with a discussion on possible motivators and their characteristics as found in organization work settings.

Some content theories that will be discussed in Chapter III include: (1) Maslow's Hierarchy of Needs, (2) Herzberg's Motivation-Hygiene theory, (3) McGregor's Management Theories X and Y, including some modifications, and (4) monetary incentive theories, from scientific management.

The chapter on cognitive theories will focus on expectancy theory, principally Vroom's concept with ramifications. A good part of the chapter will deal with Achievement Motivation, Porter and Lawler's perceptual model, as well as, Equity theory, and Goal-Setting process. What makes cognitive or process theories different from the content theories is that the cognitive approach assumes that an individual will tend to be motivated toward achieving outcomes which are perceived to result in the highest payoff or have the greatest value for the individual. The content theories, however, do not assume that any conscious choices are made, nor is there any distinction with reference to individual differences.

As part of this study, the author has conducted several interviews with construction foremen and managers. The objective for doing so was to obtain a realistic perspective of the situational variables affecting motivation and performance in construction, particularly regarding the workmen. On that basis, some link could be made between the theories of motivation and their relevance to the construction work setting. These findings will be discussed in Chapter V along with the motivation of professionals on project management teams.

### 1.2 The Motivation Process

The important thing to know is that dealing with motivation is, by nature, manipulative. In order for a manager to be effective in motivating his subordinates, he must be able to diagnose, to some extent, the work setting "in such a way as to ensure that people do what he wants them to do". (50; p.155)

This requires him to have a fairly high level of predictability that his subordinates will perform so that he gets his way and meets organizational goals, because fundamentally, that is the very reason why he is managing. Kelly in *How Managers Manage* summarizes this point well:

No matter where you start, when you try to deal with a problem in an organization, you end up dealing with people. You puzzle over, "what makes them tick", what it will take to make them do what you want. Making them do what you want is what motivation is all about. But first you must know what it is that you want. (21; p.293)

### 1.2.1 Some Definitions

Psychologists have taken numerous approaches in defining the scope of motivation. One very comprehensive definition has been provided by M.R. Jones (1955) who stated that motivation is concerned with:

... how behaviour gets started, is energized, is sustained, is directed, is stopped, and what kind of subjective reaction is present in the organism while all this is going on. (48; p.6)

Jones' definition is quite exhaustive and is considered to have included all the issues which research on the subject has covered. (24)

Victor H. Vroom offers a totally different approach to a definition of motivation. In *Work and Motivation*, Vroom defines motivation as:

a process governing choices made by persons or lower organisms among alternative forms of voluntary activity. (51; p.6)

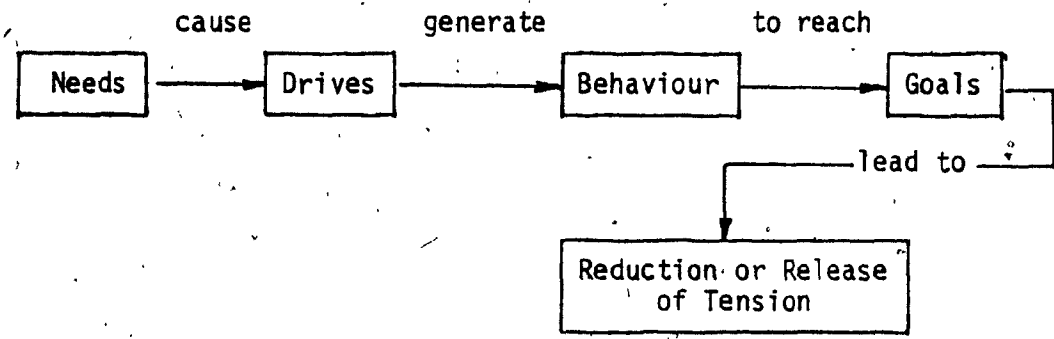
Vroom's definition covers the basis on which expectancy theory (or instrumentality theory) stands. In concept, it implies that some kind of decision process must be made for motivation to occur.

### 1.2.2 A Model of the Motivation Process

The motivation process depends on the strengths of motives present in an individual. Motives are generally defined as "needs, wants, drives or impulses within the individual". (18; p.16) Motives are, like needs, the courses of action. Most theorists believe that when a person is motivated, he is in a state of tension as there is some incongruence between the two conditions of "wanting" and "having". It has been suggested that this tension exists as a result of extreme pressures or perhaps, changes in the demands of the working environment that produce anxiety. This tension could also result from internal motives within the individual; for instance, in a case where he receives a promotion but does not welcome it for personal reasons. (50)

Figure 1.2 (22; p.279)

A Model of the Motivational Process



The motivation process, illustrated above, consists of needs which set up drives to accomplish goals. This process is merely a hypothesis or "black box" concept, and in that sense motivation refers to unobservable variables which are inferred by means of observing behaviour. (31)

There are three characteristics of the motivation process which has just been described. These include: (1) the direction of behaviour, that is, the person's preference among alternatives; (2) the strength of his motivation once the choice is made; and (3) how long he will sustain his effort. (22)

1.2.3 Implications for Managers

Since management is not a science, but a practice, the whole exercise of exploring motivation does not produce one universal formula or one set of procedures that will apply in motivating people to do what you want them to. Neither does such a formula appear likely to be found. For example, what makes people work well sometimes and not other times, what makes some more committed than others, what satisfies some while not the others when

performing similar work, and so on, are questions which concern both scholars and practitioners on the subject of motivation.

A manager who must handle a subordinate that is not performing should consider some relationships between the motivation — performance — reward link. Coping with a subordinate's lack of motivation involves looking not only into the relationship between motivation and the value and magnitude of rewards, but also: (1) the individual perceptions of how much his greater effort will result in higher performance; and (2) that the performance he attains will in fact produce his expected rewards. (9)

### 1.3 Managing for Performance

In his book, *An Introductory View of Management*, Peter F. Drucker states that the ultimate test of management is performance. According to the performance model previously stated and illustrated in Figure 1.1, performance is affected by the interaction between: (1) ability or skills to perform a task and (2) effort or motivation which is the will to perform the given task. From the research findings it can be concluded that (1) motivation affects the performance of high and low-ability people; (2) when people of both low ability and high ability are unwilling to put any effort into their performance, the differences in their performance is minimized; and (3) changes in motivation levels will make more of a difference in performance of high-ability people than those of low-ability.

Hence, for optimal performance, both ability and motivation must be at high levels. Ability can include "psychological, intellectual, and personality characteristics, aptitudes and skills, knowledge and experience". (43; p.112)

Albanese has suggested that other factors, such as (1) role perception and (2) situational factors, will influence job performance. Role perception refers to "the way in which the individual defines his job - the types of effort he believes are essential to effective job performance". (2; p.223) He points out that the accuracy of role perception is a key variable, since a person's perception of how performance will be evaluated will influence the activities he will engage in to perform his job. Role perception, therefore, takes care of the possible situation where an individual with good ability and skills and a high level of motivation may not come up with good performance, simply because he did not accurately perceive the organizational criteria under which his performance would be evaluated. (2)

The other additional variable -- situational factors -- tends to influence what a person can do in a given work setting. The situational factors which include the physical and social environment can limit or enhance both the individual's abilities and motivation. (43) Some of these factors may be quality of leadership, information processing, suitability of tools and equipment and ability levels of group members.



In order to deal with the subject of motivation intelligently, some emphasis must be put on performance. Not only because motivation affects performance, but because performance is what is expected from the organization and its members, individuals and groups if it is to survive and succeed. For this reason, performance and motivation will often be cited simultaneously.

## CHAPTER II

### FACTORS AFFECTING MOTIVATION AND PERFORMANCE

Regardless of which theory of motivation is being studied or applied, there are several factors which are important to understand for a number of reasons as they directly affect motivation. First, they provide the boundary conditions within which motivation occurs. If these conditions are restrictive in nature, then motivation will also be impaired. Second, they provide a framework for the practitioner that allows an assessment of the "individual - situational" variables that interact in the motivation — performance process. Such an assessment could help the manager know what potential efforts can be expected from his employees. Third, trying to apply motivation theories without grasping the implications of these factors is like working in a void or working without constraints. On empirical grounds this is unrealistic, as every situation is bounded by: (1) the individual's perceptions and abilities, and (2) the environmental factors which comprise job content, interpersonal relations, and reward systems.

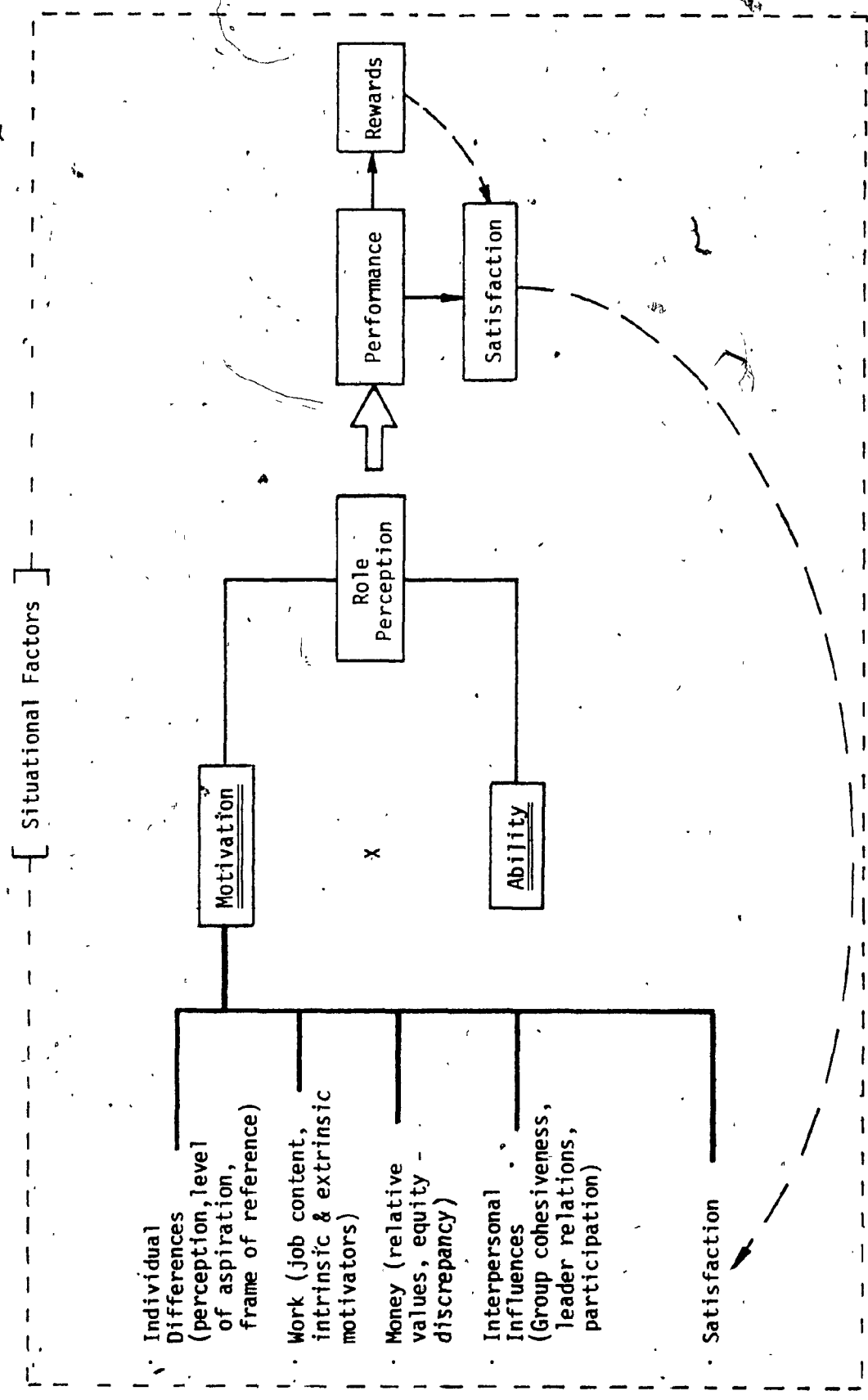
Figure 2.1 outlines five factors and their position of influence in the motivation — performance process. There is no agreement on a universal theory of motivation, yet the factors to be discussed in this chapter generally affect every motivation theory to a greater and lesser extent, and thus have an influence on motivation in work organizations.

Discussion in this chapter will therefore revolve around these major factors. Briefly, the topics will emphasize: (1) the individual differences, the individual's frame of reference and level of aspiration. The section will attempt to explain why different responses come from people in the same situation. The role of perceptions as a basic determinant of behaviour will also be reviewed; (2) work and working will cover the dimensions of working and also outline the contemporary views people hold toward work; (3) the topic on money will deal with the role of money as a motivator and demotivator depending on how it is perceived as being distributed as a reward for performance; (4) leader and group influence will discuss how group cohesiveness and leadership styles tend to influence an individual's motivation in a work situation; (5) the performance-satisfaction controversy will clarify the causal relation between performance and satisfaction based on empirical evidence; and (6) the final topic will review the basic intrinsic and extrinsic motivators available in organizational settings, as well as, point out the characteristics of such motivators.

## 2.1 Individual Differences

This factor is one of the most important to consider when trying to motivate people at work. Yet, it appears to have been neglected even by prominent organization theorists of motivation, such as, McGregor, Herzberg and Maslow. The human relations school also placed emphasis on the individual in general rather than on characteristic differences.

Figure 2.1  
The Motivation Problem



It is important to know that large differences in goals and needs exist among individuals. Using pay as an example, Lawler points out that about one quarter of the cases he investigated showed pay rated first in priority, whereas in many others it was rated sixth or lower in terms of importance. This is one reason why incentive pay systems are not always effective. Some people work for achievement and accomplishment, others work for the companionship it offers, others work for pay, and so on.

There appears to be some evidence, according to Lawler, relating individual differences with organizational factors, like managerial level, as well as, to personal characteristics, such as age, sex, and level of education. This implies that management can identify those individuals in the organization for whom particular motivators are likely to be effective. Unfortunately, organizations are limited in influencing how important various outcomes are to their members. Lawler states that organizations have partial control over the situation in which their employees work and can create the conditions that will arouse certain needs. However, these needs have to be present in the individual in order to be aroused, but "whether the needs are present is a function of many things beyond the control of the organization". (24; p.38)

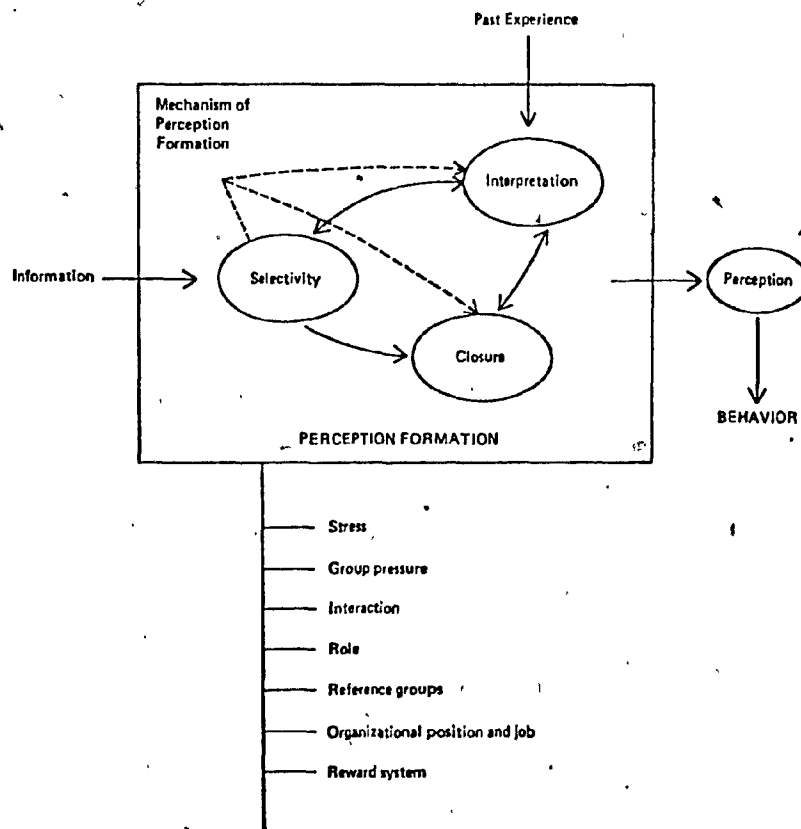
### 2.1.1 Perception

An individual's perception is a key factor in understanding individual differences, let alone behaviour. Cognitive theories of motivation in fact are based on people's perception of what they think they can attain as a result of their efforts. Several individual characteristics have been studied to establish their influence on perception. According

to Reitz, the characteristics studied most frequently are sex, personality, and culture. The process of perception formation consists of three mechanisms as illustrated in Figure 2.2. According to Litterer, the first mechanism is selectivity, in which certain pieces of information are separated for further consideration by thresholds. The second mechanism is closure, whereby bits of information are compiled into a meaningful whole. Third is the mechanism of interpretation where previous experiences aid in judging the information perceived. What makes this an active process is the constant feedback which the mechanisms provide.

The major determinants affecting perception are classified as (1) hereditary elements, (2) reference groups, and (3) broad cultural environment. (8)

Figure 2.2 Perception Formation and Its Impact on Behaviour (29; p.107)

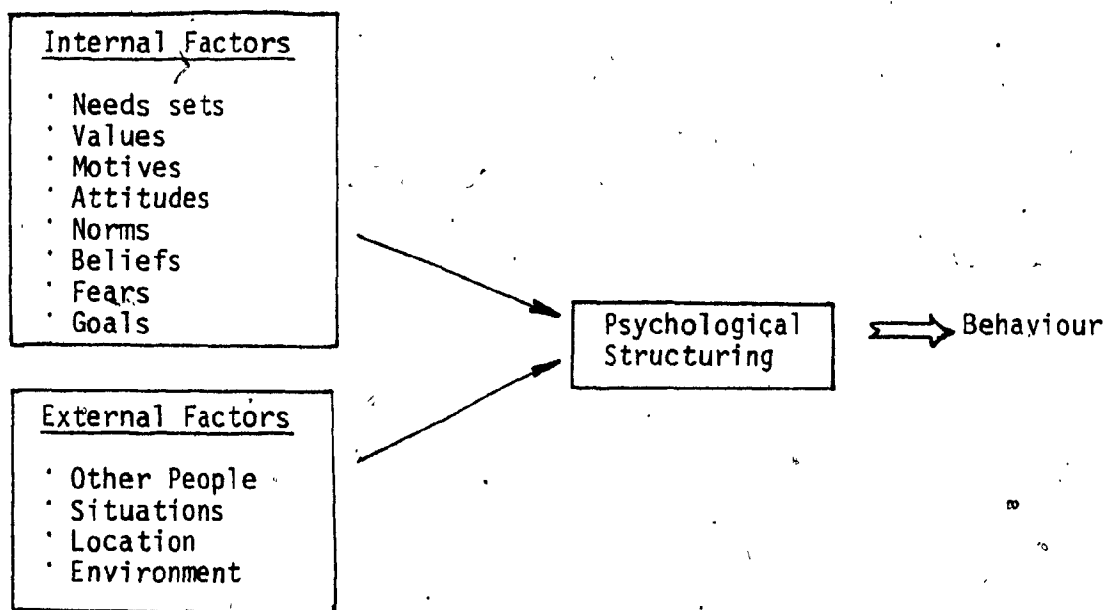


### 2.1.2 The Individual's Frame of Reference

Sherif defines the frame of reference of an individual as a, unique "system of functional relations among factors operative at a given time which determine psychological structuring and hence behaviour". (11; p.47)

The individual's frame of reference for a person includes both internal and external factors to the person's personality which influence the psychological structuring of the person. Stated differently, the frame of reference is the central part of the individual's phenomenal field around which the world is organized. (8) Figure 2.3 illustrates this framework.

Figure 2.3 The Individual's Frame of Reference  
(Modified After 11; p.477)



In order to get an insight into another person's frame of reference, it is necessary to observe the person's behaviour in order to infer what constitutes his internal factors, particularly his motives, goals and values. As the frame of reference is something of a "black box" it can never be fully understood. This is why we must be extremely careful when attempting to relate stimulus to behaviour in another person, as our perceptions of the stimulus may be totally out of phase with that of another.

Moreover, the factors which another individual may consider most important to him change with time, thereby increasing further our range of error in perception of another's frame of reference. Elbing suggests breaking up the frame of reference into several operational categories. These include the individual's (1) accumulated knowledge base, (2) decision-making processes, (3) assumption about cause and effect, (4) human needs, (5) past experience, (6) expectations, and (7) culture and values. (11)

Possible sources of values include: family, religion, associations, community, work place, friends, books and newspapers. (32) And, since society is changing, a great many values change along with it, for some more than for others. In general, it is reasonable to assume that values are in a state of transition and are influenced by the stages of an individual's life cycle.

The motivation that drives a person can be understood in terms of the concept he has of himself. And the individual's perception of his abilities gradually becomes a kind of self-fulfilling prophecy. This way he seldom achieves anything beyond his expectations as he will not try to achieve more than what he thinks he can. (8) This leads to a consideration of the level of aspiration of an individual.



### 2.1.3 Level of Aspiration

The level of aspiration is a target for which an individual strives. It refers to his goal striving behaviour in trying to meet objectives which can be measured in terms of excellence. (8) Expectancy theories of motivation assume that an individual makes choices among alternatives that reflect the best possible rewards that result from taking a certain action. In this sense, the level of aspiration is important insofar as it influences the subjective probabilities which an individual places on taking up difficult tasks. Atkinson has reported that there is some tendency to raise the level of aspiration following success while lowering it following failure, suggesting that the level of aspiration is influenced by past experiences of success and failure.

### 2.2 Work and Working

While work belongs to the realm of objects, working belongs to the realm of human beings. So there is a distinct difference, according to Drucker, between work and working. Work is, by nature, a task, it is a "something". It is outside and independent of the worker. Hence, it requires (1) analysis, (2) synthesis, and (3) control. Working, on the contrary, is the activity of the worker, a dynamic process, the human being at work. (10)

Work can be analyzed for better understanding, but it must be put back together into a process and then given a built-in control -- a feedback mechanism to constantly keep it heading in the right direction if it is to obtain results. Drucker adds that there is no difference among different kinds of work, regardless of whether the end product is a thing, information or knowledge.

### 2.2.1 Dimensions of Working

Drucker has identified five dimensions of working. They are:

- (1) physiological -- The human being works best if he can coordinate a series of tasks using his muscles, senses, and mind.
- (2) psychological -- Work is an extension of personality, a way of measuring worth and defining oneself.
- (3) social -- It offers an opportunity to play a role in a group, community, and so on.
- (4) economic -- Work is the foundation of economic existence ... provides economic activity and creates tomorrow's jobs.
- (5) power -- Authority levels are needed to reach objectives and results in an organization.

Although they are separate, these dimensions always exist together. However, they are not all pulling in the same direction. The challenge for managers is to manage both work and working. They have to make work productive and the worker achieving. They have to integrate work and working. (10) By doing so, the worker can relate to the work he must perform as something that produces rewards or satisfaction in the way of accomplishment.

### 2.2.2 Contemporary Views of Working

An important clarification of the various work ethics maintained by people working in organizations has been offered by M. Scott Meyers and Susan S. Meyers in their article "Toward Understanding the Changing Work Ethic". Some of the viewpoints held by the individual are:

- (1) Prefers work of his own choosing that offers continuing challenge, requires imagination and initiative, even though pay may be low.
- (2) Feels responsible for his own success and is always on the lookout for new opportunities which will lead to a more responsible position and greater financial reward.
- (3) Doesn't like any kind of work that ties him down but will do it if he has to in order to make some money. Then he'll quit and does what he wants until he has to get another job.
- (4) Has worked hard for what he has, and thinks he deserves some good breaks. He thinks others should realize it is their duty to be loyal to the organization if they want to get ahead.
- (5) The kind of work he usually does is okay, as long as he has a steady job and he has a good boss.
- (6) Believes that doing what he likes to do, such as working with people toward a common goal is more important than getting caught up in a materialistic rat race. (21)

While each of these views is a reflection of a different set of values, the implication for managers is that different motivators are going to be required for each group. In fact, the needs and motives of the above are different, making the motivation theories required for each

group invariably different. A brief analysis on the different viewpoints is in order. The first viewpoint requires "intrinsic" motivators to satisfy the psychological dimension or the so-called self-actualization needs (in Maslow's hierarchy). The need for achievement is strong. The motivators are: challenge, recognition, interesting work, promotion, and feedback. The second viewpoint reflects the first, however, the individual seeks monetary rewards in addition to autonomy. The third is basically a reflection of the low level need of survival. It lacks overtones of any social, self-esteem or self-actualization need. In this case, once the monetary need is satisfied it no longer acts as a motivator, until it becomes a need once again. The fourth viewpoint reflects a need for affiliation and "playing by the rules". The fifth viewpoint again stresses the low level needs and combines it with social needs of acceptance. The last viewpoint reflects a basic need for affiliation and some need for achievement.

### 2.2.3 Productivity

Productivity has been defined as the measure of how well resources are brought together and utilized for accomplishing results. Drucker expands on this definition by stating that it is the balance between all factors of production that will give the greatest output for the smallest effort. He adds that increased productivity in a modern economy is never achieved by muscle effort. In fact, it is doing away with muscle effort and substituting it with capital equipment (mechanical energy), and knowledge which involves theoretical and analytical skills. (10)

The whole question of productivity revolves around what must be accomplished. Resources must be brought together and utilized for accomplishing results. In short, productivity is a ratio of all inputs required to achieve the output. In equation form:

$$\text{Productivity} = \frac{\text{Outputs}}{\text{All inputs}} \quad \left( \begin{array}{l} \text{in units of} \\ \text{measurement} \end{array} \right)$$

Productivity is also a combination of effectiveness and efficiency. Elaborating on the terminology, effectiveness refers to the extent to which the final result is realized; whereas, efficiency refers to the extent to which the desired result was produced at least cost. (9) This ratio yields the index of productivity:

$$\text{Productivity Index} = \frac{\text{Effectiveness}}{\text{Efficiency}}$$

There are two factors, according to Drucker, which have a substantial impact on productivity and never become visible cost figures. These are (1) knowledge, the most productive resource if properly applied and the least productive is misapplied; and (2) time, the most perishable resource. "There is nothing less productive than idle time of expensive capital equipment or wasted time of highly paid and able people." (10; p.60)

Motivation can have a dual effect on productivity. It can directly affect performance which is really the output or actual results obtained, and moreover, can also affect the input or efficiency with which work is performed. It is important to note that the two may not be compatible under certain conditions if criteria are conflicting; such as quantity versus quality.

### 2.3 The Money-Motivation Relationship

Perhaps the most controversial incentive found in motivation theory is pay. The role of money (or pay) as a motivator has been ambiguous, yet except in voluntary work, pay is always found as a reward or remuneration for work done. The reasons for the ambiguous role of money are not absolutely clear, however, some insights into its relevance can be found in the various research studies carried out mostly by Deci, Adams, Lawler, Gellerman, and Herzberg. Each of these researchers has contributed some perspective on the role of money as a motivator. Herzberg has even put forth the premise that money does not serve as a motivator, but is merely a maintenance (or hygiene) factor that prevents dissatisfaction when available in sufficient amounts.

The role of money as a motivator is very complex because it can take on many values, particularly the psychological in contrast to the economical. Psychologically, money can be viewed as a measure of success, achievement, or social status. (8) According to Vroom, money really takes on an instrumental role for obtaining other desired outcomes, or satisfying other needs. And from an economic standpoint, money represents purchasing power, which is really a way for one to "keep score" on how successful he has been. (32)

There is evidence to suggest that workers select their jobs in order to achieve one goal having top priority -- pay. The findings of research studies illustrate the following trends:

- (1) Organizations which pay higher than average wages are more likely to attract and retain high-quality labour.

- (2) Turnover is high in organizations where wages are lower compared to other companies in the area.
- (3) The tendency to leave a company is greatest when all the other employees seem to be making more money.
- (4) Turnover is low in times of recession. (41)

### 2.3.2 Conditions Favoring Pay as a Motivator

Lawler has pointed out that pay can be an effective motivator for good performance under certain conditions. These instances occur when people:

- (1) Value pay highly;
- (2) Believe that good performance results in high pay;
- (3) Believe that by exerting effort they can improve their performance;
- (4) Reckon that the advantage of working hard, performing well, and obtaining high pay exceeds the disadvantages and psychic opportunity costs; and
- (5) See good performance as the most attractive of all possible behaviours in the situation. (17; p.542)

Georgopoulos et al also found that when greater personal effort can affect higher earnings, the end result will be higher performance. (40) Moreover, Lawler found in a study involving 600 managers that the most highly motivated managers indicated from the results that they attached greater importance to pay and felt that good performance would lead to higher pay. (40)

Salary will likely continue to remain an issue given the management policies of today's organizations. Who would be ready to practice a policy of openness on a subject such as this? Salary openness would demand trust, open discussion of performance, justification of salaries, none of which are likely to function well in a hierarchically autocratic organization. (24) It would demand pursuing a democratic approach to management which, in theory, organizations subscribe to, but in practice don't apply. And there appear to be good reasons for this. Making salaries public information might disclose hierarchical "pecking orders", as well as disrupt group cohesiveness by sudden awareness of substantial intra-work group differences. Most concerns are with disclosing actual pay inequities related to inadequate job performance appraisal systems and current weaknesses in administering salary so that it reflects valid relationships with job performance. (40)

In any event, the secrecy regarding the amount of pay an individual receives, how the level of salary and pay are determined, as well as the individual's long term or career pay history all have potential effects on how he responds to any specific amount of money. (40) In general, there is evidence to suggest that secret pay policies actually contribute to dissatisfaction with pay and possibly lower job performance.

### 2.3.3 Dysfunctions of Pay Differences

Drucker has pointed out that the relative amounts of income among individuals rather than the values of income themselves are the real determinants of either satisfaction or dissatisfaction given the status or relative scales of distribution across the organization. Clearly,



the distribution of economic rewards reflects the worth of a person or group in an organization. And the more total income goes up, the more powerful the dissatisfaction over pay differences among individuals becomes. Nothing detracts from motivation more than dissatisfaction over one's own pay compared to that of one's peers. (10) Basically, workers want to be treated fairly. And they will feel uncomfortable by receiving either too much or too little compared to others performing essentially the same tasks.

#### 2.3.4 How Money Affects Intrinsic Motivation

Results obtained by Deci (1972, 1973) demonstrate to some extent that money actually diminishes intrinsic motivation. For example, in one set of experiments performance was observed to improve when pay was offered as a reward and decreased when it was later withdrawn. Deci reports as follows:

Once subjects began to receive contingent monetary payments for doing an interesting activity their intrinsic motivation to perform the activity decreased ... The paid subjects had, to some extent, become dependent on the external rewards (money), and their intrinsic motivation had decreased. (9; p.310)

However, it is also noted that money does not decrease intrinsic motivation if it is paid now - contingently. However, to use money as an effective motivator it must be made contingent on performance -- and doing so, decreases intrinsic motivation. For this reason, Deci concludes that it may be preferable to structure jobs to arouse intrinsic motivation rather than trying to set up monetary incentive schemes as the former approach seems to lead to greater productivity and more satisfied workers. (9)

Vroom commented on Deci's research as follows:

The introduction of pay for the performance of a task changes the meaning of a task for a person. Cognitively, it becomes something which he does for money, not because of its intrinsic enjoyment. This explanation is consistent with, if not derivable from, recent theories of cognitive dissonance. (17; p.541)

What is important to note here is that once a person's perceived reward-outcome is removed it not only generates inequity but also reduces the motivational force as a result of the elimination of the "expectancy x valence" attributed to the "money" component of the reward system which comprises all intrinsic and extrinsic rewards a person may attach to the performance of a given task.

In any event, other studies have concluded that extrinsic rewards do not necessarily reduce intrinsic ones as long as pay is not delayed. Some evidence indicates that extrinsic rewards (like pay) add to intrinsic ones. (17)

### 2.3.5 Dysfunctions of Using Pay as a Reward System

Mali has suggested a list of indicators which can limit the power of pay as a motivator. In fact, given the existence of such conditions in an organization can result in a condition of overpaying employees relative to their performance. The following conditions are by no means a definite measure of situations where overpayment can arise, but they provide nevertheless a good idea of the potential policies which can be dysfunctional when using pay as a motivator:

- (1) No link existing between compensation and productivity;
- (2) General wage increases being given across the board;
- (3) Benefits are allocated in the same amount to all employees;

- (4) Using time as a basis for salary increases;
- (5) Compensation is determined from power moves, threats, or legal acts;
- (6) Practice of paternalism;
- (7) Pay "automatically" allocated from inflation or cost of living "escalators";
- (8) Appraisal systems which appear highly subjective. (32)

Pay as a reward system can be very costly, and yet, ineffective.

First, large amounts of money are needed today to motivate people. Second, people's perceptions of what they should receive compared to what others are getting is an irreconcilable issue with no end in sight. Drucker summarizes it this way:

... As people get more, they do not become satisfied with a little more, let alone with less. They expect much more. This is, of course, one of the major causes of the relentless inflationary pressures that besiege every major economy today.

... Economic incentives are becoming rights rather than rewards ... If only very large -- and steadily larger -- raises serve as incentives, then using material incentives becomes self-defeating. The expected result in terms of motivation may be obtained but the cost will be so high that it exceeds the benefits. (10; pp.233-34)

### 2.3.6 Dysfunctions of Incentive Pay Systems

Opsahl and Dunnette conclude that there is considerable evidence to show that incentive pay systems usually yield greater output per manhour, lower unit costs, and higher wages in comparison with results related to straight payment systems. However, they do not always result in increased production. For example, Hickson has pointed out five general causes which are dysfunctional to increased productivity. These are: (1) uncertainty about the continuance of the existing "effort-bargain" between

the workers and the organization, (2) uncertainty about the continuance of employment and, (3) uncertainty about the continuance of existing social relationships, (4) the desire to continue social satisfactions derived from the practice of restrictions, and (5) a desire for at least a minimal area of external control over one's own behaviour. These factors would suggest that careful attention must be attributed to the interaction between job and personal variables that accompany any monetary incentive situation. (40)

#### 2.3.7 Equity Theory Viewpoint

Scholars of Equity theory (discrepancy theory) such as Adams and Locke have pointed out that an individual's performance level will affect the amount of rewards he feels he should receive. On that basis, when rewards are not performance based, that is, when poor performers get equal rewards (or worse, greater rewards) compared with good performers, the latter will tend to be less satisfied, thereby producing a negative satisfaction-performance relationship. The corollary is also true -- when better performers are given more rewards, a positive satisfaction-performance relationship will result among the good performers. Based on these findings, people's satisfaction with their pay is a function of (1) how much they receive, and (2) how much they feel they should (or want to) receive. (24)

Studies by Porter and Lawler determining whether pay satisfaction was strongly related to the amount of pay received, have produced data suggesting that (1) people's perception of what their pay actually is rises with an increase in pay; while (2) their perception of what it should be does not necessarily rise. Higher pay does bring higher satisfaction.

As a case in point, a comparison between highly paid, lower-level managers and lowly paid, higher-level managers, shows that lower level managers were more satisfied with their pay even though they received less than higher-level managers.

## 2.4 Leader and Group Influence

The main interpersonal influences on motivation come from group interaction and supervisor/subordinate relationships. No doubt, group members can either motivate or demotivate an individual to perform well thereby affecting the likelihood that he will receive expected rewards. There is evidence that organizations are reluctant to promote employees who are not respected by their peers. (24)

### 2.4.1 Group Cohesiveness

Peer group relations appear to have a strong influence on social-need satisfaction. This is particularly important to individuals with a high need for affiliation (24), although acceptance and support by group members is highly valued by most members in an organization. Also important, according to Lawler, is the influence peer groups have on the individual's perception of what he ought to receive from the work situation, particularly in terms of extrinsic rewards.

Some research findings have concluded that highly cohesive work groups are likely to be more productive than other less cohesive ones. This is not always the case, although they do tend to have more influence on motivation, particularly when the outcomes (that the group has some

control over) are valued by the members. This obviously can be dysfunctional in cases where influence is directed toward anti-management and anti-production attitudes. This tends to explain why cohesive groups show more variance in production rates, since group norms on productivity have a greater effect on its members; whereas, in less cohesive groups, chances are that high producers offset the low producers and productivity thus remains fairly stable.

Research by Seashore attempted to identify the factors influencing productivity in cohesive groups. The main finding showed a difference existed in group norms. The high producing groups, for example, were more supportive of high productivity than low producing cohesive groups. The study, however, failed to confirm why such different norms developed.

(24)

Lawler summarizes the power of influence cohesive groups have on their members this way:

Cohesive groups have more influence on motivation and productivity than non-cohesive groups because cohesive groups are more effective at giving and withholding rewards for two major reasons. First, cohesive groups can act with more unanimity (rejection by one means rejection by all); second, they influence the reception of highly valued outcomes ... However, groups cannot influence the performance of people who do not value the outcomes controlled by the groups. (24; p.194)

Alvin F. Zander, writing on "Team Spirit versus the Individual Achiever", points out that groups possessing stronger team spirit perform better than those having less. And he adds that what increases team spirit and drive for success is having the increased responsibility for the group's outcome. The most salient point he makes, however, is that "organizational structures that emphasize and reward individual

achievement tend to splinter rather than 'unify groups" (16; p.223)

#### 2.4.2 Participation

Vroom observed that the effects of participation are influenced by the workers' needs for independence. The consensus seems to be that workers having scarcely any need for independence are not motivated by participation, nor when the group is essentially not in favour of it. Hence, using it would fail to affect group norms. (24)

On the other hand, Vroom explains why participation can affect motivation:

It is possible that people become "ego involved" in decisions in which they have had influence. If they have helped to make a decision, it is "their decision", and the success or failure of the decision is their success or failure. Intuitively, it would appear that the amount of personal involvement of people in decisions is dependent on the amount of influence they have had in the decision and the extent to which they pride themselves on their ability to make that kind of decision. (51; p.228)

It is a matter of self-esteem or self-concept that is at stake, provided that it is perceived as such. In short, when participation changes the performance → outcome beliefs of a person it follows that it affects his motivation. (24)

#### 2.4.3 Effects of Leadership Styles

The role of the leader in motivation is important to consider because he represents an integral part of the work setting, and moreover, he is most likely the one really concerned about how to motivate -- since he is accountable for results of others.

A few of the things that leaders do are distribute or withhold rewards, such as higher pay or a promotion; pad or tear apart a performance evaluation; make a job interesting or boring; provide or withhold feedback when most needed; encourage initiative or stifle growth; and so on.

While a certain leadership style may lead to the highest motivation, it may not necessarily lead to better performance. For example, a participative leadership approach in one case may lead to low performance but high motivation, because of the participative guidance and support it provides a subordinate, at the expense of valuable time that can be expended otherwise. (24)

There has not been conclusive evidence from the research on the relationship between productivity and relationship-oriented leader behaviour. That is, consideration alone will not affect motivation as it will not change a subordinate's performance  $\rightarrow$  outcome beliefs ( $P \rightarrow O$ ) about working hard and performing effectively. Although, if used along with other behaviours, consideration may have this effect. Nevertheless, Lawler suggests that:

... the person who expects to be praised and supported, regardless of his performance, will be no more motivated than the person who will not be praised or supported, regardless of his behaviour. On the other hand, the person who wants to receive praise and support and receives them only when he performs well will have different  $P \rightarrow O$  beliefs and should be more motivated than the person who always or never receives praise and support. (24; p.180-181)



## 2.5 Job Satisfaction and Performance Controversy.

The human relations school appears to have erred when it argued that satisfaction leads to good performance by increasing motivation. Hertzberg's findings, in particular, postulated that job satisfiers were motivators while dissatisfiers were hygiene factors. And, moreover, they were not on the same continuum.

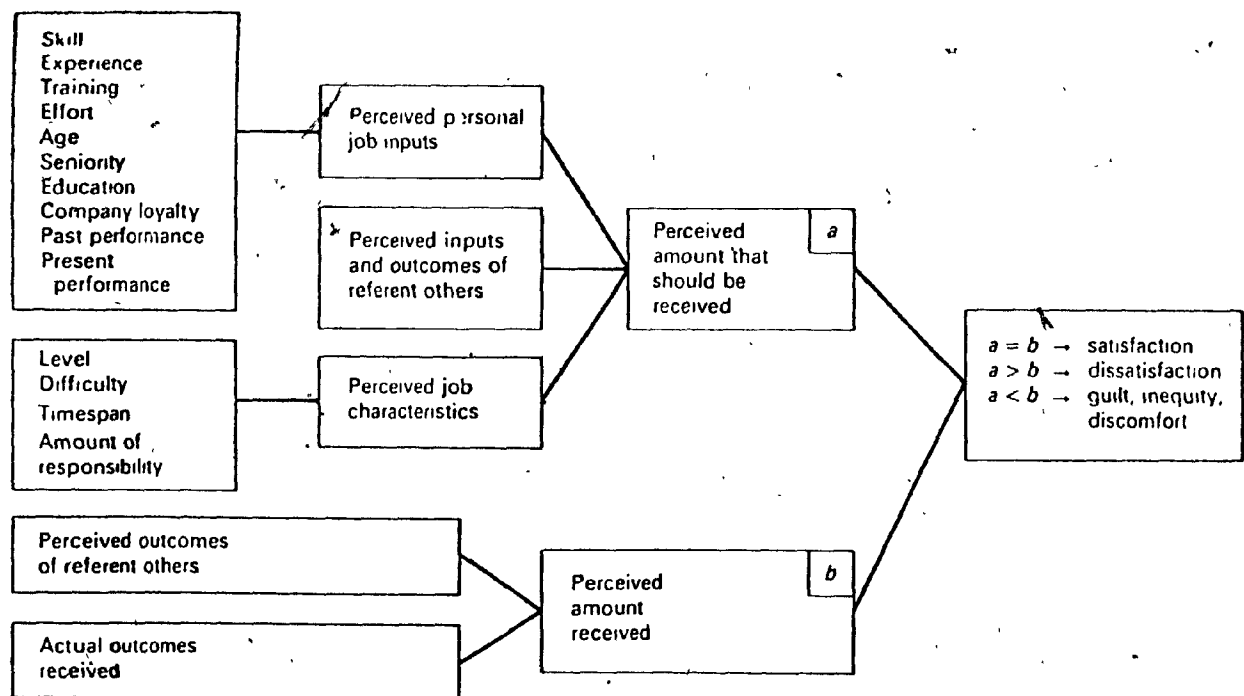
However, more rigorous research has cast doubt on any causal relationship between satisfaction and performance. That is, job satisfaction does not necessarily lead to better performance. In a review of the findings between job satisfaction and performance, Vroom found that in most cases there was only a very slight relationship between the two. A major portion of later research, according to Lawler, indicates that the fact that better performers are slightly more satisfied than poor performers, is probably due to better performance causing satisfaction rather than the reverse. (24)

Job satisfaction is merely an attitude -- an attitude a person may have toward his job in general or a set of attitudes toward certain aspects of his job, such as pay, working climate, chances of advancement, and so on. (2) Albanese claims that almost any job-related factor can influence a person's level of job satisfaction or dissatisfaction. In fact, studies have been conducted to determine the attitudes which influence job satisfaction in general. These are listed as: (1) attitude toward work group; (2) general working conditions; (3) attitude toward company; (4) monetary benefits; and (5) attitudes toward supervision. (2)

Schwab and Cummings, in their article "Theories of Performance and Satisfaction: A Review", observe that satisfaction and performance are dependent upon variables such as: (1) occupational; (2) organizational; (3) individual; and (4) community. These writers point out that organizational characteristics tend to be related to satisfaction in a non-additive way. They claim that organizational factors have a tremendous influence on performance as they have a direct impact on motivation. Some of these factors are pay, job scope, career development, and interpersonal factors.

A model of the determinants of satisfaction is illustrated in Figure 2.4.

Figure 2.4 A Model of the Determinants of Satisfaction (24; p.75)



### 2.5.1 "Satisfaction causes performance" Proposition (S $\rightarrow$ P)

Charles N. Greene has remarked that the S  $\rightarrow$  P linkage reflects the popular belief that "a happy worker is a productive worker". The acceptance of this proposition, he claims, makes good sense (particularly for the practicing manager) because it represents the path of least resistance. However, there is scarcely any empirical evidence supporting this causal relationship. (15) However, while satisfaction does not influence performance, it does affect absenteeism significantly, and, to some extent, turnover.

### 2.5.2 "Performance causes satisfaction" Proposition (P $\rightarrow$ S)

This hypothesis considers satisfaction not as a cause of, but as an effect of performance. The thesis is that "differential performance determines rewards which, in turn, produce variance in satisfaction". (14; p.285) This proposition has been advanced by Lawler and Porter, and tested also by others such as Bowen and Siegel, and Greene who report finding strong evidence in favour of the P  $\rightarrow$  S condition. Greene's study demonstrated significant correlations between performance and rewards granted subsequently, and between rewards and subsequent satisfaction. (15)

Hence, performance is a function of a person's effort to get the payoffs he desires, and satisfaction is determined by the outcome he actually obtains.

### 2.5.3 "Rewards" as a Causal Factor

The most recent theoretical proposition considers both performance and satisfaction to be functions of rewards. This view upholds that

rewards cause satisfaction and moreover, rewards that are based on current performance affect subsequent performance. (15) This proposition has been formulated by Cherrington, Reitz, and Scott from the contributions of reinforcement theorists. Greene reports on their experimental investigations as follows:

The rewarded subjects reported significantly greater satisfaction than did the unrewarded subjects. Furthermore, when rewards (monetary bonuses, in this case) were granted on the basis of performance, the subject's performance was significantly higher than that of subjects whose rewards were unrelated to their performance. For example, they found that when a low performer was not rewarded, he expressed dissatisfaction but that his later performance improved. On the other hand, when a low performer was in fact rewarded for his low performance, he expressed high satisfaction but continued to perform at a low level.

The same pattern of findings was revealed in the case of the high performing subjects with one exception; the high performer who was not rewarded expressed dissatisfaction, as expected, and his performance on the next trial declined significantly. The correlation between satisfaction and subsequent performance, excluding the effects of rewards, was 0.00, that is, satisfaction does not cause improved performance. (15; pp.286-287)

#### 2.5.4 Implications for Motivation

Not all empirical findings have been conclusive on the satisfaction → performance → rewards relationships. However, the general trend of the results discredits the satisfaction causes performance proposition while it substantiates the latter two propositions described above. Thus, for a manager who is interested in motivating his employees to increase their performance it is necessary to reward good performance with fairness, even though this may mean putting up with dissatisfied employees.

Greene suggests taking this approach, saying that, in addition to its positive effects on performance, the strategy provides equity because the most satisfied employees will be the rewarded good performers, while it also allows the organization to retain its most productive employees.

(15)

Albanese adds that good performers would attach a higher value to expectancy, and that higher value should have a positive impact on motivation and performance. He also argues that satisfaction does not necessarily reduce valence through the tendency of satisfaction to decrease the importance of most rewards. The reason for this is that need-satisfaction does not always operate consistently for different needs, let alone for different people. As is the case for the self-fulfilment need, there is evidence that it increases in importance as a motivator as it is satisfied. (2)

#### 2.5.5 Job Interest

It is possible to have individuals stay in a job which can be described as a "personally unsatisfactory organizational situation" for either of two reasons: (1) no better alternative is available, or (2) he has been locked in. (41) When such a case occurs, there seems to be no reason to expect that the individual implied will be motivated to perform a good job. It appears that the only personal stake he has is to simply remain a member of the organization.

It is important to point out that interfering with a person's attainment of goals will lead sooner or later to frustration. This phenomenon can be caused by either an imaginary barrier or a real barrier but more importantly, it causes dysfunctional behaviour. Such dysfunctions can be

manifested in the form of aggression, regression, and fixation. (8)

It is difficult to conclude from the research evidence whether being in an occupation which is consistent with a person's interests, will result in fact, in a greater degree of job satisfaction than being in a job which is inconsistent with interests. (55) However, there is evidence to indicate that recruiting efforts which tend to highlight all the opportunities and prospects the new employee has open to him can turn out to be dysfunctional. The reason for this appears to be due to the unrealistic expectations concerning which rewards will or will not eventually be received on the job.

Studies are reported which indicate that when compared with job applicants who go through an unrealistically positive job interview, those who receive a realistic one show higher satisfaction scores and lower turnover rates after they are on the job. Company recruiters would do well to "tell it like it is" and point out some negative aspects of a particular job -- it will ultimately be better for both the individual, as well as the organization.

One other point is worth noting on this topic. That is, the recruiting procedures and devices are not very effective for predicting motivation of new applicants. While some measure of ability is feasible, the applicant's motivation on the job is a function of both the individual himself, as well as, the organization factors he perceives once he has been on the job. These include, most importantly, the achievement of rewards or outcomes. Zytowski points out that the payoffs and rewards the person expects are complex, and requires that a whole range of motivational concepts which exist in vocational psychology be considered.

This includes (1) interests, (2) attitudes, (3) values, and (4) personality characteristics. (55)

## 2.6 Motivators and Their Characteristics

A wide range of motivators have been developed in the study of motivation in organizations. Those that fall in the intrinsic category include: (1) challenge, (2) autonomy, (3) recognition, (4) responsibility, (5) promotion, (6) feedback, (7) praise, (8) new job assignments, (9) participation in work and job analysis, (10) achievement, (11) training opportunities.

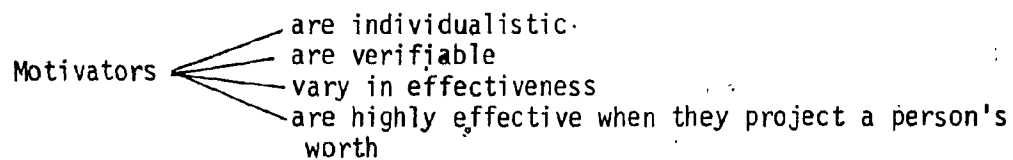
Among extrinsic motivators are found: (1) salary increases, (2) piece-rate pay plans, (3) wages, (4) bonuses and profit sharing, (5) fringe benefits like pension plans, insurance programs, investment plans, etc., (6) seniority privileges and various status symbols.

For motivators to be effective, there must exist conditions to allow both the organization and the individual to achieve their respective goals. If job conditions are created to allow employees to perform well, derive job satisfaction and rewards, a motivational intensity should emerge to drive both parties toward meeting objectives.

(32)

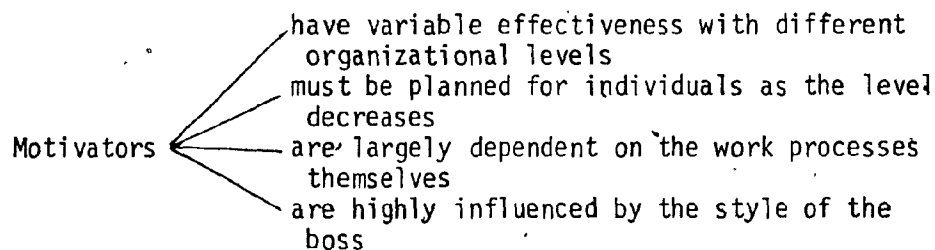
Now that the common motivators usually surrounding the organizational work settings have been presented, it might be useful to know the general characteristics which they portray. A list of characteristics is suggested by Mali (32) in *Improving Total Productivity*. These have been re-arranged and are discussed in the following sections.

### 2.6.1 Characteristics at the "Individual" Level



While some motivators may work well for some individuals, they may be totally ineffective for others, since individual differences are an integral part of personality. For this reason, motivators should be tested by observation or questioning, rather than simply assumed to be valid under a given condition. Depending on the set of needs individuals may have, the effectiveness of motivators will vary. There is evidence, however, that workers tend to look for personal worth and fulfillment needs on the job.

### 2.6.2 Characteristics at the "Job" Level

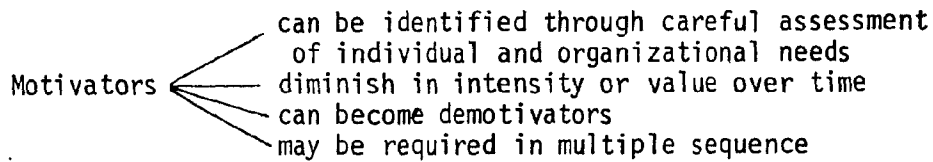


Motivators that apply to certain job levels in the organization may be totally ineffective at other levels. Intrinsic motivators that may motivate a middle manager may be something indifferent to a supervisor or worker. Moreover, while it may be simple for a top manager to motivate himself, lower levels of management are least able to do this. Likewise, the motivators that exist in certain jobs may not be possible in others given the boundary conditions imposed by the job scope and content.



The style of the leader can be influential in generating motivators on the job. He can alter the job content (within limits) to provide variety, challenge, allow participation, provide training and development.

### 2.6.3 Characteristics for "Satisfaction of Needs"



As is often the case, a combination of motivators may be required to satisfy a range of needs. The needs of individuals at a given time are the clues for generating motivators. Motivation is most effective when organizational goals are aligned with individuals' needs satisfaction. As conditions change, motivators also change. As individuals go through their life cycles, motivators will change dramatically. For example, what motivates a new employee on the job will very likely not motivate him five or ten years after.

### CHAPTER III

#### CONTENT THEORIES OF MOTIVATION

Many motivation theories exist that are based on needs, drives, and incentives. While most of them cannot be easily categorized as they contain elements of more than one category, they are, quite often referred to as simply "content" theories. These are contrasted to "process" theories, which are cognitive or perceptual theories of motivation.

One recurring theme in management is for the manager to identify the needs of his subordinates and select the incentives that will best influence the individuals' efforts toward goal-directed behaviour that is in line with organizational objectives. It is generally accepted that individuals in an organization contribute to its success only to the extent that allows them to accomplish their own objectives, and this premise seems compatible as a basis for reinforcing contributions on both sides. (8)

For the purpose of this report, only a few theories will be dealt with in this chapter. These are: (1) Maslow's hierarchy-of-needs, (2) Herzberg's Motivation Hygiene theory, (3) McGregor's Theory X and Theory Y, and (4) the monetary incentives approach to motivation. The reason for selecting these four is that they appear to have the most relevance for the study of motivation in organizations, and moreover, they have received adequate empirical testing to permit an assessment of them.

Before proceeding, it may be helpful to clarify such terms as needs, drives, motives, and incentives. Drives are referred to as psychological determinants of behaviour while needs are a condition of physiological disequilibrium. Needs are internal stimuli which instigate the motives for action. Motives refer to a particular class of reasons for action. "The relationship between needs and motives is such that needs are the preconditions for instigating motives, and the latter has the forces that lead the former." (8; p.24) These terms, however, are frequently interchangeable.

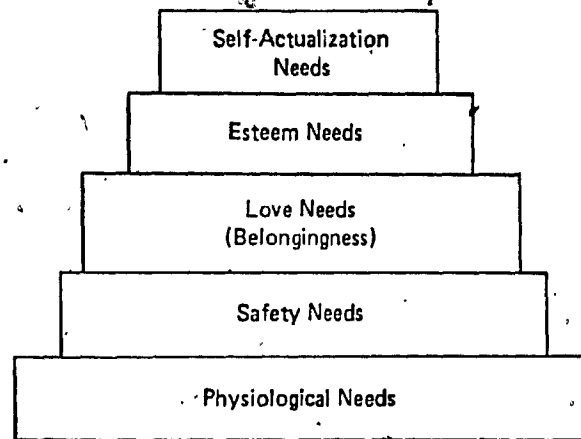
Likewise, incentives, rewards and outcomes are used interchangeably. However, some distinction exists and should be pointed out. While incentives are inducements for future performance, rewards are paid for past performance. Incentives are external stimuli that influence human behaviour -- they become motivators depending on how they satisfy needs.

### 3.1 Maslow's Need Hierarchy

Perhaps one of the most familiar theories of motivation is Maslow's theory of the hierarchy-of-needs. Essentially, Maslow's model assumes five levels of needs arranged in order of importance so that the lowest level need must be satisfied before a subsequent higher order need can become a motivator, and so on up the hierarchy.

Figure 3.1 illustrates this conceptual framework.

Figure 3.1 Maslow's Hierarchy of Needs



✓  
 Maslow has distinguished between motivation of lower level needs and that of higher order needs. Unlike motivation associated with primary drives, motivation experienced on higher order needs (growth needs) does not decrease as the needs become satisfied. In fact, Maslow argues that as people experience growth and self-actualization, the need is reinforced. That is, obtaining growth increases the need for more growth. This phenomenon has been identified by Maslow, in later revisions of his original model. (24)

### 3.1.1 Empirical Test of Maslow's Theory

Relatively little research supports the hierarchy of needs theory. However, there is evidence from studies on starvation and thirst, which are in favour of the hierarchy of needs. Therefore, there is some evidence claiming that when basic biological existence needs are not satisfied, higher order needs are irrelevant. (26) There is also some

supporting evidence provided by Cofer and Appley, and later by Aldefer, to illustrate that unless security needs are satisfied, people will not be concerned with the higher order needs. (41)

Studies by Aldefer, Hall and Nougaim indicate that the satisfaction - importance relationships that are valid for one level of the needs hierarchy are not necessarily valid for the other levels. (26) Lawler and Suttle add that people experience widely differing socialization experiences and may find themselves at different points in their careers which gives rise to the large differences in the relative prepotence and the overall sequence of the higher order needs. Moreover, many people do not even possess a number of higher order needs nor can they possess them. Hence self-actualization may be a powerful need for one person but not for another.

In summary, it has been the general consensus among researchers that:

- (1) The least satisfied needs appear to be the most important;
- (2) Need satisfaction leads to reduced need strength. Therefore, most needs are in fact capable of being satisfied and become at least temporarily, less important;
- (3) There is one exception on need satisfaction which has to do with self-realization and growth. This need appears to work in reverse compared to the rest, in the sense that, the more it is satisfied the more it leads to increased need satisfaction; and
- (4) The need for self-actualization and competence seems to be capable of being satisfied only by outcomes which are intrinsic (internal to the person) and which are essentially given by the person to himself.

Little, if any, evidence is available to support the view that a hierarchy exists at all above the security level. In fact, Maslow proposed modifications over the original model by putting forth a two-level hierarchy encompassing deficiency motivation and growth motivation.

The lower level of this revised model includes the physiological, safety, belongingness, love, respect, and self-esteem needs. (48)

### 3.1.2 Problems with the Hierarchy-of-Needs Model

Drucker (10) points out that wants are not absolute, and change in the process of being satisfied. As the economic want, for example, is satisfied (that is, people do not have to worry about where the next meal comes from) it becomes less and less satisfying to obtain more economic rewards. However, economic rewards do not become any less important. On the contrary, while the impact of an economic reward as a positive incentive decreases, its capacity to create dissatisfaction quickly increases. Hence economic rewards stop being "incentives" and become "entitlements", thereby even becoming deterrents. Also, contrary to what Maslow's theory implies, the various dimensions of human beings at work change their character as they approach being satisfied.

It is clear that unless the lower level needs are satisfied, the other needs will not bear any influence worth noting. However, which higher order needs come into play after the lower ones are satisfied, and moreover, the order in which they do develop cannot be stated. (41)

### 3.2 Hertzberg's Motivation - Hygiene (Two-Factor) Theory

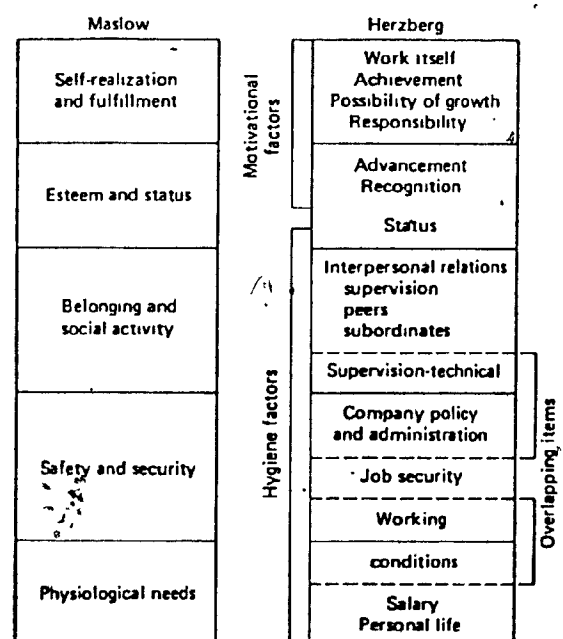
A rather simple way of approaching Hertzberg's theory is to view it in terms of satisfaction and dissatisfaction with the job situation.

Further, satisfaction and dissatisfaction are not end points on one continuum. That is, if some factors causing dissatisfaction are removed, it will not automatically result in satisfaction.

What Herzberg's research was meant to determine was which events experienced at work resulted in an increase or a decrease in job satisfaction; that is, how feelings of satisfaction or dissatisfaction affected worker performance, personal relationships, and so on. On that basis, the factors which led to satisfaction were called "motivators" since they satisfied the need for self-fulfillment or self-actualization. The other factors leading to dissatisfaction were called "hygiene" factors since they were basically related to environmental variables. This, essentially, provides the framework of the Motivation-Hygiene theory.

Figure 3.2 illustrates Herzberg's model in parallel with Maslow's hierarchy-of-needs. A number of similarities are apparent, however, a key difference lies in Herzberg's assertion that only the higher order needs act as motivators, while lower level needs are merely hygiene factors decreasing dissatisfaction but not leading to motivation.

Figure 3.2  
Maslow's Need Hierarchy Model  
compared with Herzberg's (M-H)  
Model (20; p.255)



### 3.2.1 Lack of Empirical Support

The semi-structured interview technique used by Herzberg and his associates has undergone criticism by researchers who have demonstrated that subjects tend to respond to Herzberg's questions by: (1) taking the credit when things are going well, and (2) blaming the work setting when things go badly. (21)

Numerous research studies conducted on this theory have shown that the same factors can cause both satisfaction and dissatisfaction, and moreover, that a given factor can cause satisfaction in one group of people and dissatisfaction in another group indicating that hygiene factors and motivators can be interchangeable. What the theory has done is neglect the influence that individual differences have on the motivation process.

Porter et al report that a number of researchers have been unable to come up with evidence supporting the major tenets of Herzberg's theory. Some examples are Dunnette, Campbell and Hakel, 1967; Huiton, 1968; and King, 1970. (41)

Moreover, results have been obtained suggesting that the original grouping of job and situation-related factors may have been largely a function of methodological artifact. Further, contrary to the explanations of the theory, data has demonstrated that both satisfaction and dissatisfaction can derive from both intrinsic and extrinsic factors.

### 3.2.2 Critical Review

What has made Herzberg's theory so important is that it has strongly influenced managerial thinking about motivating the worker. More specifically, it has moved managers and organizations to deal with improving



the work situation and creating those job characteristics which could be construed as motivators. In fact, the Motivation-Hygiene Theory is more concerned about explaining the determinants of job satisfaction, rather than explaining the process of motivation. (24)

Nevertheless, Hertzberg's theory gained swift acceptance when he and his associates introduced it over twenty years ago. According to Porter et al, the reasons are clear:

... the theory is simple, providing only two categories (motivators and hygiene factors) in which all aspects of the job and the work situation can be placed, and the theory makes good intuitive sense to many managers who have had personal experience with jobs in which motivators are mostly absent. (41; p.299)

Schwab and Cummings (45) criticize the two-factor theory as lacking evidence to support the premise that satisfaction leads to performance. The studies have been non-experimental in design and do not show causality nor any theoretical explanation for the causal relationship which was postulated.

Lawler (24) also points out that Hertzberg did not develop any theoretical base to explain why job factors should affect performance. The theory contains very meager explanations of why outcomes are attractive and it fails to consider the importance of associative connections in determining which of a number of behaviours a person will choose to perform in order to obtain a desired outcome.

The real basis, therefore, of the (M-H) theory rests upon a study of need satisfaction conducted through a series of interviews with some 200 engineers and accountants. Vroom has argued that the methods in which the interviewee recounts extremely satisfying and dissatisfying job events, accounts for the results found by Hertzberg and that this method alone is

inadequate to test the theory. (19)

In summary, Herzberg's theory is not scientifically correct and has not been supported on empirical grounds. However, taking a more optimistic view, Steers and Porter (48) suggest that Herzberg probably deserves some credit for acting as a stimulus for other researchers who have postulated new theories on motivation. The answer perhaps is not to accept the theory or reject it in its entirety. Rather, it would be more advantageous to approach the (M-H) theory with the intent of enriching jobs in organizations, or even to view it in terms of an attempt to model human behaviour in the work setting.

### 3.3 McGregor's Theory X and Theory Y

The basic assumptions on which McGregor has based his theories X and Y find their roots in widespread views of man's nature. Theory X assumes man is essentially immature and must be driven in order to get anything out of him. Theory Y assumes that man has some psychological drive to work and search for responsibility and achievement, or self-actualization in his work.

Unfortunately for these theories (and for most theories for that matter) empirical tests have not substantiated the concepts put forward, and some rather harsh criticism has also been directed to Theory Y. In fact, McGregor himself later noted that Theory Y is not participative. On the contrary, putting responsibility on the worker and by aiming for growth and achievement makes unrealistically high demands on both workers and supervisors. Moreover, what has become clear from the research on motivation is that Theory X and Theory Y are not really theories about human nature.

#### 3.3.1 Assumptions of Theory X and Theory Y

Theory X and Theory Y can be extended to suggest guidelines for leadership styles, as well as, for motivation in organizations. According to McGregor, people cannot be motivated directly, because motivation must come from within the individuals themselves. Accordingly, motivation is expressed in outcome behaviour when conditions permit.

Essentially, Theory X is founded on a set of implicit assumptions which Kelly (22) lists as follows:

- (1) The average employee is by nature indolent and lazy -- he prefers to get by, doing as little as possible. The average worker is an "8 to 5" man who never "takes off his jacket" unless he has to.
- (2) He is seen as having scant ambition, little need for responsibility, and much need to be led. He works only to get three square meals a day, a roof over his head, and his "fags and beer". To make this policy effective, he plays the average, keeps his nose clean, and minds his own business.
- (3) He is presumed to be inately self-centered, and somewhat unconcerned about the needs of the organization.
- (4) He is fundamentally resistant to change. The presumption is that change is anathema to him: "I'm in a rut and I'm going to stay there".
- (5) He is assumed to be gullible and easily led by the demagogue... Implicit in this approach is a sharp division between leaders and followers. (p.104)

The Theory Y assumptions are, of course, contrary to those of Theory X. McGregor states these as follows:

- (1) Management is responsible for organizing the elements of productive enterprise -- money, materials, equipment, people -- in the interests of economic ends.
- (2) People are not by nature passive or resistant to organizational needs. They have become so as a result of experience in organizations.
- (3) The motivation, the potential for development, the capacity for assuming responsibility, the readiness to direct behaviour toward organizational goals are all present in people. Management does not put them there. It is a responsibility of management to make it possible for people to recognize and develop these human characteristics for themselves.
- (4) The essential task of management is to arrange organization conditions and methods of operation so that people can achieve their own goals "best" by directing "their own" efforts towards organizational objectives. (31; p.24)

Enlightened as the assumptions of Theory Y may seem, there has been great difficulty with this approach. However, it has some value in looking at motivation from the managerial point of view. According

to McGregor, managers can motivate their employees by taking a new view and set of attitudes about people and their environment for best advancing the goals of people and the organization. (32)

### 3.3.2 Evaluation of McGregor's Theory X and Theory Y

There is at least some impressive evidence in support for Theory Y. In most jobs even the most alienated workers manage to find something that gives them satisfaction. (10) Essentially, McGregor's theory becomes a determinant for leadership styles and motivation of workers in organizational settings.

Commenting on the validity of Theory Y, Drucker writes:

... ordinary, everyday experiences teach us that the same people react quite differently to different circumstances. They may be lazy and resist work to the point of sabotaging it in one situation. They may be motivated to achieve in another one. It is clearly not just human nature or personality structure that is at issue. Or at the very least, there are different human natures which behave differently under different conditions. (p.230)

What this passage is really saying is that people appear to react to given situational factors. Depending on the effect that these external stimuli have on their drives and motivation, they will accordingly adopt a specific form of behaviour. There is doubt, therefore, about the consistency of Theory X and Theory Y as tools for motivation. In fact, Morse and Lorsch (36) reveal startling results from their studies on task and organization. These writers redefine a set of assumptions that would determine how individuals tend to behave and what type of management they will require.

Most management writers of industrial psychology subscribe to Theory Y in lieu of Theory X. Using terms like "self-fulfillment", "creativity", and "the whole person", they are, according to Drucker, advocating control through psychological manipulation. Psychological control by the superior (the manager) translates into psychological control by the supervisor as "unselfish" and in the workers' own interest. As such, the manager in the guise of the helper and supporter really retains control as the "boss".

Stretching the argument further, Drucker adds, that this may appear enlightened compared to the old "carrot-and-stick", but it is, nonetheless, despotism. Therefore, under this new psychological approach (1) persuasion replaces command; (2) psychological manipulation replaces the carrot of final rewards; and (3) playing on individual fears, anxieties, and personality needs replaces the old fear of being punished or of losing one's job.

As a final comment:

Psychological despotism, whether enlightened or not, is gross misuse of psychology. Using psychology to control, dominate, and manipulate others is self-destructive abuse of knowledge.  
(10; p.237)

### 3.3.3 A Contingency Approach

Extensive research by Lorsch, Morse, and Lawrence demonstrates that the most effective organizations structure themselves around the characteristics of their tasks and the requirements of their environment. The "contingency" theory was postulated for the purpose of finding the best fit between task, people and organizational goals. The premise is that any single set of assumptions about human behaviour is inadequate as there is no single design that is best for all situations. This approach

emphasizes a research of the management characteristics and practices that would best fit the situation, and the application of the most appropriate theory or combination of theories (wholly or partially) to handle the multitude of problems arising in managing. (32)

In their article "Beyond Theory Y", Lorsch and Morse point out that in the effective organizations, employees expressed more feelings of competence than those in less effective ones. The findings suggest that different approaches to motivating the human resource are effective depending on the nature of the competitive environment at the time, and the kinds of workers that form the organization. (36) It is important to understand, therefore, the differences existing among people and situations -- the needs, goals and objectives of both individuals and their organizations.

A new set of basic assumptions as a way out of the conflicting results obtained with the old Theory X and Theory Y has been put forth by Morse and Lorsch. The list is as follows:

- (1) Human beings bring varying patterns of needs and motives into the work organization, but one central need is to achieve a sense of competence.
- (2) The sense of competence motive, while it exists in all human beings, may be fulfilled in different ways by different people depending on how this need interacts with the strengths of the individual's other needs -- such as those for power, independence, structure, achievement, and affiliation.
- (3) Competence motivation is most likely to be fulfilled when there is a fit between task and organization.
- (4) Sense of competence continues to motivate even when a competence goal is achieved; once one goal is reached, a new higher one is set. (36; p.410)

### 3.4 Economic Incentive Approach to Motivation

The basic concern of the economic incentive approach was to get people to meet work quotas of productivity. Put another way, it had to do with helping people get what they wanted by showing them how to get what the organization wanted.

The underlying assumption on which this approach is based is simply that people are concerned primarily with maximizing their earnings. The "carrot and stick" assumption about worker motivation was introduced with this approach.

Various viewpoints have been put forward by industrial theorists on the incentive approach. The more familiar historical ones are: (1) Adam Smith's, (2) Fred Taylor's, and (3) Hugo Munsterberg's.

The strategy which Adam Smith proposed was to make incentives available so that the individual could increase his productivity. Smith's premise was to align monetary rewards with the levels of contribution a worker made to the organization.

Taylor's piece rate standards viewpoint maintained that the worker can be driven only to a point and then the situation would have to change. Hence if the work were made simpler and easier, people would do more work. This would increase productivity. The idea consisted of categorizing tasks into specialties, assign standards of performance, and a monetary value to each task. What Taylor was the first to do was analyze the job to be done by breaking it down to elemental parts and utilize different workers to carry out the entire work process. Simple as it might seem, this approach dehumanized the psychological dimension of working. (10)



Research evidence on monetary incentive strategies has not always confirmed that motivation to produce is increased, however, in most cases it is more effective than no monetary incentive at all. (40). The question to be answered is for how long is it effective before beginning to lose its effect.

Munsterberg's approach was significantly more elaborate than that of either Taylor or Smith. He maintained that workers should be given job structures which are assigned money rates and are provided with merit evaluation when the jobs were well achieved. Munsterberg worked on the assumptions that: (1) workers regard job satisfaction and wage level to be an important factor in choosing a job; (2) workers regard the monetary rate levels in the organizational hierarchy as an opportunity for advancement and success; and (3) workers would make a greater contribution to productivity if merit recognition would allow stepping up to higher rate structures. (32) Clearly, this approach led to the human relations studies which began a departure from the old scientific management school of thought.

CHAPTER IV  
COGNITIVE THEORIES OF MOTIVATION

A number of formulations of expectancy theory have been advanced since Tolman (1932) and Lewin (1935) introduced the concepts of expectancy and valence, respectively. Generally referred to as expectancy theories of motivation, they utilize the multiplicative relationship of (EXV) to determine motivational force. (24)

Basic to process or cognitive theories is the premise that individuals have cognitive expectancies which affect what choice of action they take among various alternatives. Cognitive theories focus on the mental capacity of the individual. His attitudes, values, satisfaction, expectancies, valences, beliefs and subjective probabilities of future events are examined for their interrelationships with behaviour and with one another. (43)

When dealing with cognitive theories, the important thing to know is that individuals form their own perceptions of rewards and it is this perception (which is essentially subjective) -- not the reality -- that has a greater influence on motivation. Perception is not only important for giving value to outcomes or rewards, but it is also necessary for perceiving one's own abilities and skills, as these characteristics determine to a significant extent one's direction and intensity of job behaviour. (8)

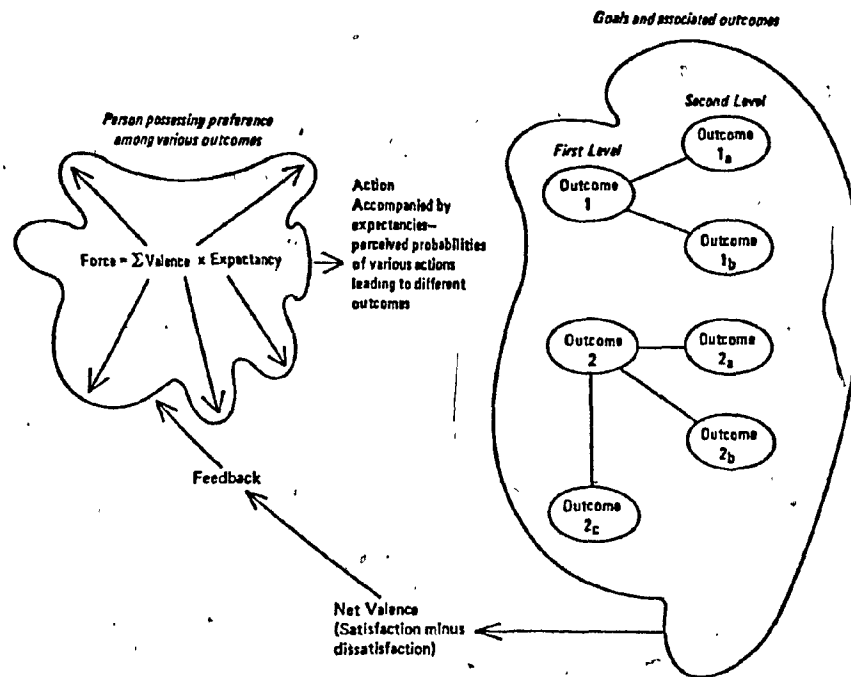
Unlike content theories, most cognitive theories: (1) consider individual differences, (2) are forward-looking, (3) do not attempt to predict what is likely to motivate or demotivate, and (4) aim at predicting behaviour or explaining the motivational process.

In addition to expectancy theory, other cognitive theories which will be discussed in this chapter include: (1) Porter and Lawler's perceptual model, (2) equity theory, which was briefly introduced in Chapter II, and (3) the goal setting process. The perceptual model is presented since it represents an elaborate framework for looking at motivation from the managerial optic of performance and results. Equity theory and goal setting will be treated since they have gained some prominence on empirical grounds as contemporary cognitive theories of motivation.

#### 4.1 Vroom's Instrumentality Theory

Vroom borrowed the concept of *expectancy* from Tolman and *valence* from Lewin and proceeded to develop the Instrumentality theory of motivation. In his book, *Work and Motivation*, Vroom formulated two propositions to link expectancy, valence, and instrumentality. The objective of the theory was to establish a correlation between the valence of outcomes and their expected consequences, as well as, to predict a motivational force or a choice which a person will make based on his perceived values of outcomes. A model of Vroom's theory is illustrated in Figure 4.1.

Figure 4.1 Vroom's Expectancy (Instrumentality) Model (20; p.258)



Central to a clear understanding of expectancy (instrumentality) theory are certain key terms described below.

- (1) Outcomes -- are simply anything an individual may want to obtain.
- (2) Valence -- represents the strength of an individual's preference or feelings about a particular outcome; i.e. whether he is indifferent toward it, is attracted to it, or is repelled by it. Hence, valence can be zero, positive, or negative. Valence is distinguished from the value of the outcomes or the actual satisfaction coming from attainment of the outcome. (46) Further, valences can be either "intrinsic" or "extrinsic".

Intrinsic valence can come from job satisfaction, self-esteem, self-fulfillment, a sense of achievement, and satisfying interpersonal and social relationships. Extrinsic valence is externally imposed or controlled by the organization. Examples include pay, fringe benefits, promotions, office furnishings, etc. (2)

- (3) Expectancy -- is defined by Vroom as a momentary belief about the likelihood that a particular act will be followed by a particular outcome. The degree of belief or the subjective probability can vary from zero to one. It is an action — outcome association, while instrumentality is an outcome — outcome association.
- (4) Instrumentality -- refers to the individual's perception of the relationship between first-level outcomes and second-level outcomes; i.e., the likelihood that a first-level outcome is seen as leading to the attainment of a second-level outcome. Instrumentality can vary between -1 (indicating a belief that attainment of a second-level outcome is certain without the first outcome, and impossible with it), to 1 (indicating that the first outcome is believed to be a necessary and sufficient condition for the attainment of the second outcome). (51) While expectancies are perceived possibilities, instrumentalities can be viewed as perceived correlations. (46)

#### 4.1.1 Structure of Vroom's Theory

Whenever an individual chooses between alternatives which involve uncertain outcomes, it seems clear that his behaviour is affected not only by his preferences among the outcomes but also by the degree to which he believes these outcomes are probable. (51) Vroom formulated the first proposition to predict the valence of outcomes. His statement is as follows:

The valence of an outcome to a person is a monotonically increasing function of the algebraic sum of the products of the valence of all outcomes and his conceptions of its instrumentality for the attainment of these other outcomes. (51; p.17)

Symbolically it looks as follows:

$$V_j = f_j \left[ \sum_{k=1}^n (V_{jk} I_{jk}) \right]$$

$$j = 1 \dots m$$

$$f_j' = 0$$

$$I_{jj} = 0$$

where  $V_j$  = valence of first outcome  $j$

$I_{jk}$  = cognized instrumentality

( $-1 \leq I_{jk} \leq 1$ ) of outcome  $j$  for the attainment of second outcome  $k$

$V_k$  = valence of second outcome  $k$

$n$  = number of outcomes

$f_j$  = function symbol

The "other outcomes" Vroom refers to are second-level outcomes. Vroom points out that at any time, there could be substantial discrepancy between the anticipated satisfaction from an outcome and the actual satisfaction that it provides. In other words, an individual may desire an outcome or reward but derive little satisfaction from its attainment. Moreover, outcomes attained are dependent not only on the choices that he makes but also on the events that are beyond his control. A person's behaviour therefore, is affected not only by his preferences among outcomes but also by the degree to which he perceives these outcomes as being probable.

According to Vroom's first proposition, outcomes are perceived to have some valence value because of the instrumentality associated with the belief that other outcomes (second-level) will be attainable. There are two levels of outcomes that have to be understood. In the work environment the first level of outcomes might encompass: (1) achievement, (2) salary, (3) recognition, (4) promotion, (5) job security, (6) interpersonal relations, among others. However, as Vroom states, money or promotion may have no real value by themselves but take on some meaning when securing second-level outcomes such as: (1) food, (2) clothing, (3) entertainment, (4) status, and so on, which are not directly linked to a particular action. (7) Actions may have various origins. They may be influenced by the individual himself or by the work situation whether it be the organization, work group, or supervisor.

A clarification between actions and outcomes should be made at this point. Vroom stated that the distinction between these two terms is not absolute. Actions are frequently described in terms of particular outcomes which they affect. Vroom employed the term "action" to refer to behaviour that is one of a possible set of alternatives for the individual like trying to perform well or searching for a job. Therefore, the belief that an act (trying to perform well) will lead to an outcome (performing well) and another outcome (a reward such as pay) is an instrumentality that affects the valence of the original outcome. (24) Of course, if valence of an outcome is zero there will be no effect on the strength of expectancy for attaining the outcome and will therefore have no positive effect on motivational force.

This leads to the second proposition, which Vroom stated as follows:

The force on a person to perform an act is a monotonically increasing function of the algebraic sum of the products of the valences of all outcomes and the strength of his expectancies that the act will be followed by the attainment of these outcomes. (51; p.18)

Symbolically,

$$F_i = f_i \left[ \sum_{j=1}^n (E_{ij} V_{jk}) \right]$$

$i = 1, \dots, m$ ;  $f_i > 0$ ;  $i \cap j = \Phi$  where  $\Phi$  is the null set

where,

$F_i$  = the force on an individual to perform act  $i$

$E_{ij}$  = the strength of the expectancy ( $0 \leq E_{ij} \leq 1$ ) that act  $i$  will be followed by outcome  $j$

$V_{jk}$  = the valence of outcome  $j$

$n$  = number of outcomes.

The multiplicative aspect of the theory is important, for unless both valence and expectancy are present to some degree there will be no force. (24) Lawler gives an example of tying pay and good performance to illustrate that a valent reward such as pay may not be enough to motivate the desired behaviour. If negative consequences, like feeling tired or being rejected by a work group are also perceived to be related to good performance, then the individual may not be motivated in that direction. On the contrary, if performing poorly results in the highest (EXV) in that particular case, then the individual will tend to perform poorly. The individual can therefore, have positive or negative preferences for an outcome depending mainly on the degree to which they are perceived to be associated to the individual's needs. As the individual is presumed to have some choice of action, he will select that



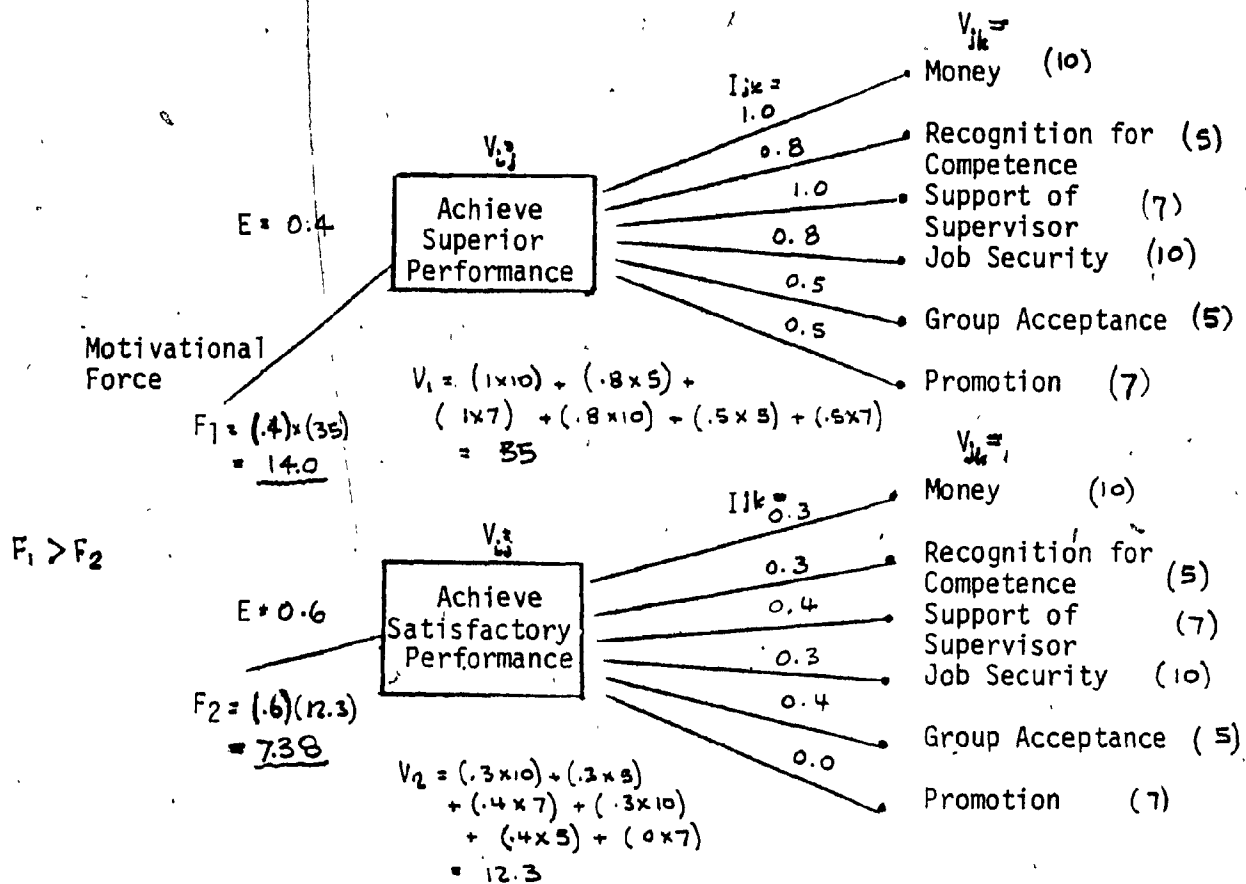
alternative which has the highest (EXV) force out of the outcomes potentially associated with his choice of action.

As an example to illustrate the motivational force of an individual given the likelihood of certain outcomes, consider the following situation.

Suppose an engineer is working on project management in a matrix organization for a large consulting firm. Given his own personality characteristics and the situational variables which affect his work role, he can, for instance, strive to achieve either superior performance or accept marginal or satisfactory performance. This is a simple motivational problem, and in order to deal with it in terms of expectancy theory, certain basic outcomes, or rewards, must be identified. This is a critical point in the theory since it is difficult to establish what these outcomes are for different individuals. In any event, for the purpose of this illustration, assume that the engineer perceives the following key rewards: (1) salary adjustment dependent on performance; (2) recognition for competence; (3) his project manager's support; (4) job security; (5) group project team acceptance; (6) promotional opportunity to become project manager in the near future. Figure 4.2 illustrates the decision model this engineer faces according to expectancy theory. The assigned values refer to the valences, instrumentalities and expectancies according to his perception.

From the calculations obtained in Figure 4.2 it can be readily assumed that the engineer will be motivated to achieve high levels of performance in his work according to the attractiveness of the possible outcomes.

Figure 4.2 An Example of Vroom's Theory of Motivation



#### 4.1.2 An Assessment of Vroom's Theory

Although there appears to be no doubt about the validity of the expectancy process, there does, however arise some difficulty associated with exact formulations of expectancy theory. (41) This finding is not surprising given the variables involved. Perhaps the most controversial designation has to do with outcomes; that is, first-level outcomes and second-level outcomes. Some researchers have mixed the first and second-level outcomes depending on their interpretations of the possible outcomes and payoffs associated with their approach in analyzing work situations. In general, the questions that arise are related to the structure of expectancy theory rather than the process. Process here refers to

behaviour or voluntary control of the individual's perception of rewards attached to specific courses of actions he may take.

The individual therefore, is in the position of a decision maker faced with a set of first-level outcomes whose preference is determined by their expected relationships to possible second-level outcomes. On the surface, it seems a simple matter to motivate workers by providing extrinsic first-level outcomes which would have a high valence resulting from their connection with the individual's needs or second-level outcomes and tying this to a high expectancy that such outcomes are achievable. However, a major problem must be resolved which was stated by Hunt and Hill:

We do not know all of the goals that have positive valence in a work situation. We do not know how much of a difference in force is necessary before one kind of outcome is chosen over another. Nor do we know what combination of measures yields the best prediction in a given situation. (20; p.263)

Clearly the theory involves many variables which cannot be observed and measured, among them are valences and instrumentalities. (43) For these reasons, it is difficult to test the theory and moreover, it is very difficult to apply by the practicing manager. Among some of the problems involved are the extent that instrumentalities and valences change over time, making information on these variables quickly obsolete and not practical in the long run. Yet, the theory remains the most accurate description of the motivational process that has been developed (46)

It has been suggested that in order to deal with expectancy theory, managers must be prepared to: (1) identify the type and amount of behaviour that is considered good performance; (2) classify the performance criteria that will be evaluated; (3) assure that subordinates have good

job skills; (4) make desired consequences contingent on good performance; and (5) communicate those contingencies to their subordinates. (2)

#### 4.1.3 Empirical Evidence Supporting Vroom's Theory

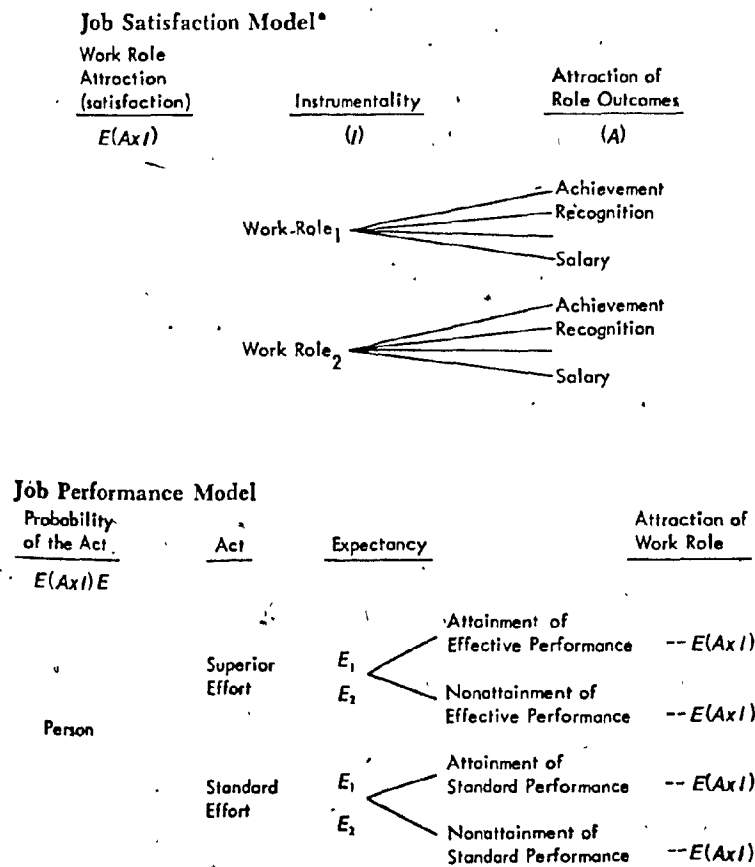
Since Vroom's theory was specifically formulated to deal with motivation in the work setting, it has received extensive testing by researchers and scholars of motivation to validate the concept on empirical grounds. Empirical results obtained by testing expectancy theory have reinforced Porter and Lawler's contention that specific attitudes about expectancies and outcomes are more effective in predicting performance than are general attitudes toward task or the work setting. In general, the theory has been as successful as any alternative theory in predicting variations in employee performance. (2)

Some studies have concluded that people prefer occupations with huge valences to those with lower valences. Other studies have found that people's satisfaction with their jobs is a function of their perceptions that those jobs are instrumental in obtaining outcomes which they value highly. Still other studies show that workers' attitudes toward performance are a positive function of the perceived instrumentalities and valences of good performance: (43) In general, there is evidence to support that instrumentalities, valences and role perceptions are significantly related to measures of subsequent performance.

Graen (1969) tested Vroom's theory on job performance and job satisfaction and examined factors that affect perceived instrumentality. His results introduced important limits for instrumentality theory, as well as, proposed some useful modifications and extensions. (35) Graen took an entirely new approach in his research by focusing on two work roles:

(1) effective performer, and (2) job incumbent. Figure 4.3 illustrates Graen's interpretation of Vroom's theory.

Figure 4.3  
Suggested Job Satisfaction and Job Performance Model  
based on Vroom's Propositions (43; p.125)



Eight role outcomes (second-level) were included in Graen's study: (1) accomplishment, (2) achievement feedback, (3) salary, (4) human relations, (5) recognition, (6) policies and practices, (7) responsibility, and (8) working conditions. These role outcomes were chosen on an apriori basis.

A first-level outcome, on the other hand, was termed a work role, which is defined as a set of behaviours expected by the organization and considered appropriate for the worker. For example, "effective job performer", "team member", and "group leader" are work roles.

The results obtained by Graen supported in part the job satisfaction model (Vroom's first proposition) and suggested some limitations for it. Graen concluded that the job satisfaction model is limited to situations where the relation between work roles and role outcomes are stated in a concrete manner. The results also suggested that the models will only be successful for the specific role outcomes that are linked to the work role. This conclusion is based on the fact that the job satisfaction model successfully predicted job satisfaction only for the intrinsic outcomes, and these outcomes were the only ones specifically linked to the job. Moreover, in the case of the relationship between the job performance model (Vroom's second proposition) and performance, the correlations were higher for the intrinsic outcomes than they were for the extrinsic outcomes. (35)

In any event, numerous studies taken together cast doubt on the validity of the assumptions, the relationships, and the hypotheses of expectancy theory. (2) Studies attempting to predict the effort an individual exerts in a job, using expectancy models have produced mixed results. However, most of the research studies have found that workers who perceive high instrumentalities and valences in their jobs put in more effort than those who perceived lower instrumentalities and valences in their jobs. Yet, about one third of the studies reviewed did not find instrumentalities and valences significantly related to measures of job effort. (43)

## 4.2 Variations of Expectancy Theory

All formulations of expectancy theory are characterized by the notion that outcomes have a valence because of their likelihood of attaining other outcomes which satisfy an individual's needs. What some of these outcomes are can be found by diagnosis, but what still remains unresolved is the task of predicting what complete list of possible outcomes have an influence on motivation at any one time, what people really need and value, and what their ability or capacity is for performing in a certain way. (41)

Through empirical research intended to validate Vroom's theory, other researchers have gone ahead and modified the model in an effort to absorb the results and to get a better correlation between empirical evidence and the theory. Some very perceptive formulations have been devised, which elaborate on the motivational process in a work situation. The more noteworthy variations based on Vroom's model come from Campbell et al with the "Hybrid Model", and Lawler's "Extended Expectancy Model". One variation of expectancy theory which deals specifically with situations in which achievement is the principle motive was formulated by Atkinson, at about the same time that Vroom introduced his instrumentality theory.

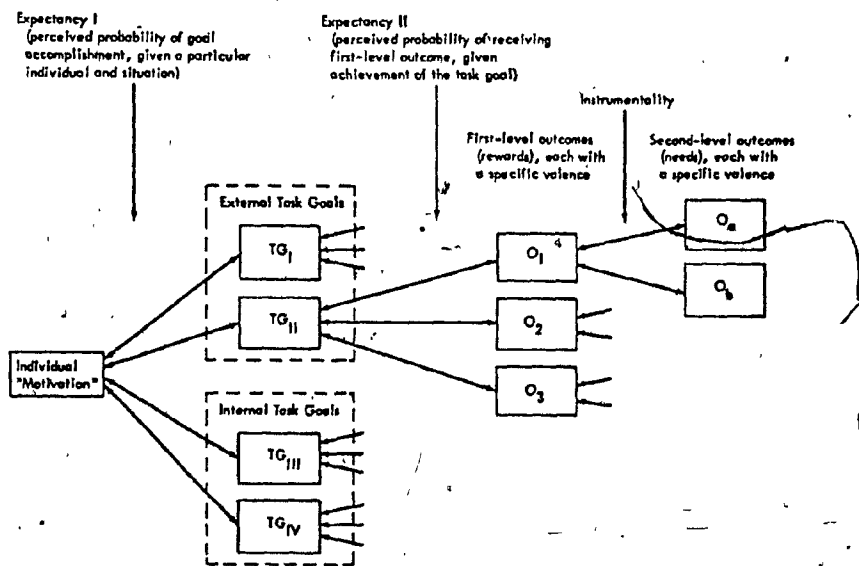
### 4.2.1 The Hybrid Model

The Hybrid expectancy model presented in Figure 4.4 was formulated by Campbell, Dunnette, Lawler and Wieck. (7) This model was never intended to represent a formal theory, and the researchers admitted that determining explicit multiplicative combinations or other configural or

higher order functions is far beyond present measurement capability. However, they did point out that external and internal goals and rewards can lead to possible conflict situations for an individual. Conflicting valences of potential outcomes will have adverse effects on the individual's motivation to perform, as well as, his estimates of probability of being able to actually do the job.

The major contribution made by these researchers was to clarify the distinction between task goals, first-level outcomes and second-level outcomes. Task goals could be such things as quotas, time limits, standards or the expression of loyalty or positive attitudes toward the firm. First-level outcomes refer to the incentives such as: (1) salary, (2) promotion, and (3) responsibility; while second-level outcomes refer to more basic needs such as: (1) food, (2) housing, or (3) freedom from anxiety. (46)

Figure 4.4 The Hybrid Model (46; p.126)



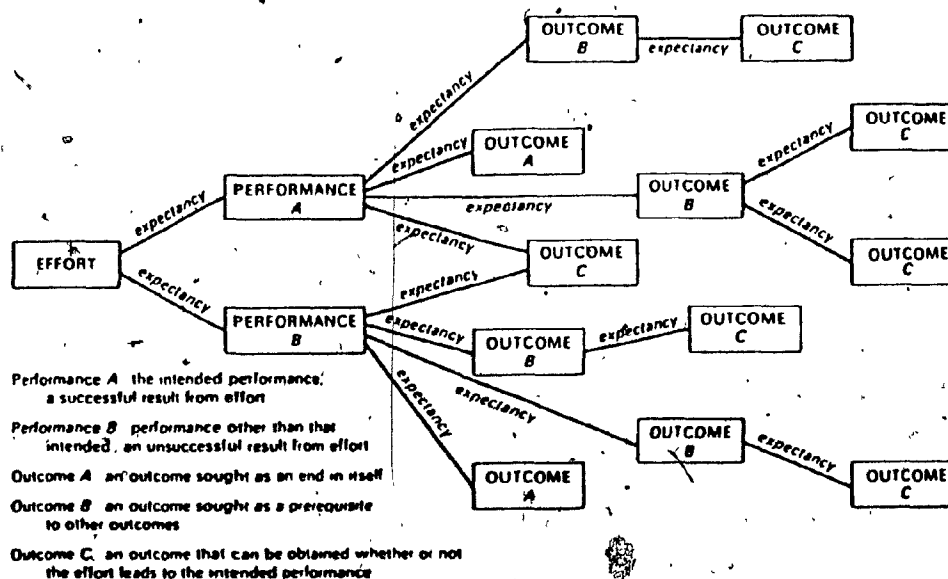


#### 4.2.2 Extended Expectancy Model

Research on expectancy theory has been useful in dealing with ways to diagnose a performance situation in motivational terms, and for changing the situational variables in order to achieve higher motivation from workers. Once a diagnosis of the situation has been made, changes can be instituted to enhance motivational effort. (16) Lawler, in particular, has attempted to clarify the significance of performance given an individual's effort when faced with possible anticipated rewards or outcomes.

Lawler (1973) introduced two terms to expectancy theory in order to facilitate understanding how performance could result from the motivational process. Working with Vroom's Instrumentality theory as a basis, he introduced: (1) the concept of a perceived effort  $\rightarrow$  probability ( $E \rightarrow P$ ) which is the equivalent of *expectancy* in Vroom's model; and (2) perceived performance  $\rightarrow$  outcome (reward) probability ( $P \rightarrow O$ ) which is equivalent to *instrumentality*. These two phases have a multiplicative relationship, along with a "valence" factor. Lawler's Extended Expectancy model is shown in Figure 4.5.

Figure 4.5 Lawler's Extended Expectancy Model (24; p.126)



The reward value of an outcome or valence stems, of course, from the perceived ability to satisfy one or more needs. Of specific relevance here is the list of needs suggested by Maslow which include security, social, esteem, and self-actualization needs. (24)

Combining the two phases of the extended model, the motivation to perform can be expressed symbolically as:

$$M = (E \rightarrow P) \times (P \rightarrow O) V$$

In order to make this equation work, it has been suggested that: (1) new outcomes be introduced which are perceived as valuable by the performer and seen as resulting from good work; (2) the expectancy of existing outcomes be changed such that the relationship between hard work and positively valued outcomes is strengthened, and that between hard work and negatively valued outcomes is weakened; or (3) the valence of existing outcomes be changed. The first two alternatives are viable through external changes and are easier to handle than the third one, since it is more difficult to change the subjective evaluation which an individual makes of various outcomes. But the situation can be altered so that a worker can perceive it differently and more positively. (16)

Research on the relationship between job performance and beliefs about how valued rewards can be obtained in organizations reveals that (1) the importance of rewards, and (2) how rewards are obtained are directly related to performance. Any changes in job design are more likely to affect the instrumentality of good performance rather than affect the expectancy that effort will lead to performance, as Vroom pointed out. (24)

#### 4.2.3 Atkinson's Expectancy Model

One motive which has been studied more extensively than any other in the research on motivation has been the achievement motive. McClelland has studied this motive as characterized in people with a high need for achievement (abbreviated n Ach) while Atkinson has postulated an expectancy theory based on the achievement motive in risk taking situations.

The achievement motive, as defined by McClelland, is a desire to perform in terms of a standard of excellence or as a desire to be successful in competitive situations. This need for achievement is believed to be present in most people but the amount that will be present depends on a number of things, including one's childhood experiences and hereditary factors.

The importance of achievement motivation in work organizations appears obvious as it can directly influence good performance. Moreover, McClelland points out that the achievement motive can be learned or acquired by a process of trying to actively cope with one's environment. When achievement motivation is present in an individual, motivation to perform well is high. McClelland has observed, however, that n Ach motivation does not function in situations where the person is performing relatively routine or boring tasks and where no competition is involved. Also a person with a high n Ach will be expected to perform at his best under "task-motivated" situations and poorest under relaxed situations. High achievers tend to enjoy performing a task simply for the sake of accomplishment. Thus, they tend to be viewed as "task-motivated" individuals.

Atkinson's theory of motivation is principally directed to the achievement need and applies mostly in situations characterized by a certain degree of uncertainty. The theory assumes that the tendency to achieve success and avoid failure is simultaneously aroused in achievement related motivation. (8)

Atkinson hypothesized that human motivation which is the target of goal-directed behaviour is a joint multiplicative function of expectancy, motive, and incentive. In this model, the tendency to achieve success ( $T_s$ ) is considered a multiplicative function of the motive or need to achieve success ( $M_s$ ), the strength of expectancy or subjective probability of the goal attainment ( $E_s$ ), and the incentive value of the success ( $I_s$ ). Hence,

$$T_s = (E_s \times M_s \times I_s)$$

The variables  $E_s$  and  $I_s$  depend on the level of aspiration which is influenced by the individual's past experiences. The second variable,  $M_s$  is considered a relatively stable disposition of personality. (8)

Atkinson's formulation evolved through a series of experimental studies of achievement-oriented behaviour in risk-taking situations. One cannot overlook the fact that motivation of the n Ach individual depends upon the situation variables, that is, the work itself, the work group, the leader and the organization. For these reasons, the need for achievement does not work by itself but can have considerable utility if managed properly. As McClelland explains:

... the man with high need achievement seldom can act alone, even though he might like to. He is caught up in an organizational context in which he is managed, controlled, or directed by others. And thus, to understand better what

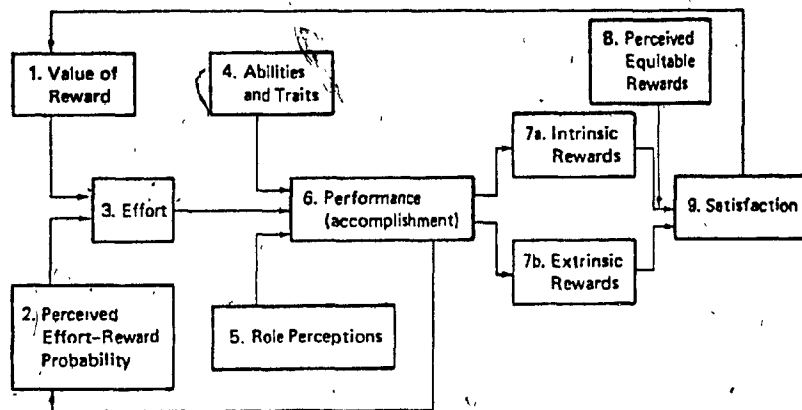
happens to him, we must shift our attention to those who are managing him. (17; p.31)

### 4.3 Some Contemporary Process Theories

#### 4.3.1 Porter and Lawler's Perceptual Model

Porter and Lawler have advanced a cognitive model of motivation called the Perceptual model. This model differs from expectancy theory in several ways. First, it is expressed in diagrammatic, rather than in mathematical form. Second, it attempts to model some of the dynamics of the motivation and performance processes. Third, it includes more variables, such as: (1) role perception, (2) satisfaction, (3) perceived equitable rewards, and (4) abilities. Fourth, it emphasizes the importance of perception in motivation. (43) This model which is presented in Figure 4.6 is similar to Lawler's extended expectancy model in that it utilizes the variable "effort". And as in expectancy theory, the effort a person puts into a task is clearly a function of the value he places on the possible outcomes which are present, as well as, his perception of the likelihood that his effort will lead to these outcomes or rewards. The value of reward (variable 1) is similar to the expectancy concept of valence which the individual holds of the possible results of an outcome. The value of a reward, therefore, is dependent not only on the reward itself but also on the valence it holds for the individual.

Figure 4.6 A Perceptual Model of Motivation (43; p.83)



Performance (6) leads to two types of rewards: (1) intrinsic rewards (7a) are those that are perceived directly from work and do not come from external organizational factors. A sense of accomplishment or pride and satisfaction with the task one is performing are examples of intrinsic rewards; (2) extrinsic rewards (7b) come from outside the work itself and include such items as pay, praise, recognition, time off, and fringe benefits.

The parts involving variables (2), (3), (6), (7a) and (7b) are similar to extended expectancy theory in that the individual's perception that his effort is likely to lead to rewards is a combination of two beliefs: (1) that his effort will improve his performance, and (2) that his improved performance will be rewarded.

Variable 8, perceived equitable rewards, suggests that the satisfaction one derives from a reward is influenced by the discrepancy be-

tween what the person wants or expects and what he gets. According to the model, one source of dissatisfaction with rewards is the degree to which actual outcomes fall short of rewards to which one believes he is entitled. Equity theory to be discussed in the following section will deal with this condition.

The perceptual model suggests how the results of one's efforts will influence subsequent efforts. In Figure 4.6, the arrow going from performance (6) back to perceived effort-reward probability (2) indicates that if performance of an act is actually followed by rewards, it will in turn increase the individual's perception that subsequent effort exerted in the performance will likely be rewarded. This finding has been supported empirically and has been discussed in Chapter II under the satisfaction → performance controversy.

A second dynamic characteristic of the model is the link between satisfaction (9) and value of reward (1). This connection indicates that the satisfaction one derives from rewards perceived for performance will in turn affect the subsequent effort one is willing to put into performing the task.

In summary, the perceptual model is a cognitive theory, whereby the individual does what he consciously decides to do in order to maximize his satisfaction from the outcomes that result from his performance. According to the perceptual model, if an individual's perceived effort-reward probabilities and the values he places on the rewards are known, then the level of effort can be predicted regardless of how those probabilities and values came to be perceived.

#### 4.3.2 Equity Theory

A relatively new process theory -- equity theory -- has been developed in recent years by several theorists working somewhat independently within the same general framework of Festinger's concept of cognitive dissonance. The basic theme is that an individual will be motivated in his work to the extent that his performance serves to reduce the discrepancy that is perceived to exist between what he expects to receive and what he actually gets. (8) Various terms are used to refer to this theory. These are: "cognitive dissonance" theory, "exchange" theory, "inequity" theory, "social comparison" theory, or "distributive justice". (46) (48)

The most detailed work on this theory is that of Adams (1965). His theory is derived mostly from hypotheses on cognitive dissonance and other works. The message is that any degree of inequity which is perceived to exist for a person creates tension in the amount relative to the degree of perceived inequity. (40)

According to Adams employees develop certain ideas about how much they put into a job (inputs) and what they get out of it (outcomes). The standard against which this ratio of inputs/outcomes is compared is developed through observations of others or by knowledge of similar jobs or from past work experience. No doubt, the perceived outcomes are influenced by a person's job inputs. These can include all the skills, abilities, and training he brings to the job, as well as the behaviour he exhibits on the job.

Lawler argues that the greater a person perceives his inputs to be, the higher will be his perceptions of what his outcomes should be. "A person's perceptions of what his outcomes should be is influenced by his perceptions of the job demands. The greater the demands made by the job,



the more he will perceive he should receive. Job demands include such things as (1) job difficulty, (2) responsibilities, (3) organization level." (24; p.76)

Obviously, when inputs are seen as too great in comparison with outcomes and the person's standard, then a state of underreward or inequity exists. When such a case occurs, the employee can: (1) reduce inputs, (2) increase outcomes, or (3) change the internal standard. Similar situations can occur in conditions of overreward and one can reduce this tension by: (1) increasing inputs (working harder), (2) decreasing outcomes (accept less pay), or (3) change the referent standard. (46)

Goodman and Friedman (14) report on the results obtained in testing four hypotheses of Adams' Equity theory. These deal with (1) overpaid - hourly, (2) overpaid - piece rate, (3) underpaid - hourly, and (4) underpaid - piece rate. Generally, the results are in favour of Adams' hypotheses. The data from the overpaid - piece rate studies supported Adams' hypothesis more consistently than that of the overpaid hourly studies. In the case of the underpaid - hourly studies there were not enough studies to adequately test the hypothesis, however, there was preliminary support for the theory. The same is true for the underpaid - piece rate studies.

The limitations of equity theory as it stands is that it ignores individual differences. No doubt, there are variations in the way people will respond to feelings of inequity which reflect their individuality. Moreover, Weick has pointed out that the theory overlooks methods of resolutions such as (1) denial, (2) differentiation, (3) toleration of the discrepancy, (4) alteration of the object of judgment,

(5) bolstering, and (6) task enhancement. (40)

#### 4.3.3 Goal Setting

One of the most recent approaches in the cognitive theories of motivation is that of goal setting. (46) Goals refer to objectives or levels of performance whose attainment is associated with success and non-attainment with failure. (43) In practice, goals and objectives are often used interchangeably. In fact, managerial objectives are generally derived from organizational goals, and objectives tend to cascade down the organizational hierarchy in the form of a "means - ends" chain. In this manner, top level goals or objectives reflect the "ends" of managerial performance and sub-objectives which consist of action plans to achieve the higher level objective are the "means" for their attainment. (42)

Establishing sub-objectives involves determining the "what, who, when, where, and how much" that it takes to achieve a given objective. On the organizational level, goal setting consists of several steps: (1) to formulate long-range goals and strategic plans, (2) to develop specific overall organizational objectives, (3) to establish departmental objectives, and (4) to set individual job objectives. Once these objectives are established at all levels, a plan of action must be determined to achieve the set objectives. Contemporary theorists hold that the goal setting process serves as a motivating force to improve performance. (8)

Motivation is expected to be strengthened through: (1) identifying and enhancing employee training and self-development, (2) distribution of compensation relative to performance, and (3) identifying career and manpower planning. (42)

To date, goal setting has been gaining widespread support from different large organizations at all management levels. A lot of interest has been developing as a result of the empirical evidence in support of improved performance achieved by individuals when working toward specific goals rather than when they are not. (43)

The major theoretical hypothesis on which goal setting is based is that conscious goals or objectives can influence task performance. The proper way to proceed with the goal setting process is for a manager to establish goals and objectives and then consult with his subordinates in establishing the results expected of them so that individual objectives can be integrated with those of the organization. The heart of the process rests in establishing attainable, measurable, relevant and challenging objectives.

Participation of superiors and subordinates in this process is essential so that performance and results are well understood and perhaps even their formulation produced by both. The subordinate must have some stake in setting certain goals so as to increase their commitment and make their attainment more relevant to individuals' levels of aspiration. It is important that goals have an impact on individual behaviour. The process is meant to become a means by which actual work behaviour compares against desired behaviour.

Recent reviews of empirical studies are fairly supportive of goal setting. Relationships between previous experience and goal setting has been studied with relevance to level of aspiration. The evidence suggests that individuals are continuously resetting their goals. If one goal is reached there is a tendency for it to be raised the next time. There appears to be a gradual shifting and raising of a person's ambitions the

more he achieves. (29)

Goal setting contributes to managerial effectiveness providing direction and motivation by setting a standard. Evidence supports the premise that specific clear goals generally improve both individual and group performance more than by merely defining responsibilities or encouraging people to improve.

One major problem with the theory is that a number of theoretical components are relatively unrefined. Variables such as goal acceptance, commitment, goal difficulty all influence the goals → effort cognitive process. Also, strong managerial support is necessary. Finally, as is often the case, an individual's job behaviour is dependent on the behaviour of others. In these interdependent situations, individual goal setting becomes less applicable. (46)

CHAPTER V  
MOTIVATION OF PROFESSIONALS AND  
CRAFTSMEN IN PROJECT MANAGEMENT AND  
CONSTRUCTION

The foregoing chapters have dealt with factors affecting motivation and some organizational theories of motivation that have utility in getting individuals to perform and thus meet organizational goals. This chapter will focus on motivation in project management and construction. In order to deal with motivation in such a setting, it is necessary to look at productivity and performance which can be readily perceived and assessed, and then inquire into motivation in order to get performance to what it should be.

It is important to grasp that the professional is motivated by somewhat different incentives from those which motivate the workman in general on a construction project. The nature of the jobs they perform is entirely different, but more importantly, so is their training which ultimately influences their values and expectations.

This chapter begins with a discussion on the nature of the construction environment and points out the characteristics which make it a difficult and challenging work setting. Motivation of foremen and craftsmen is then discussed from the viewpoints of the literature survey.

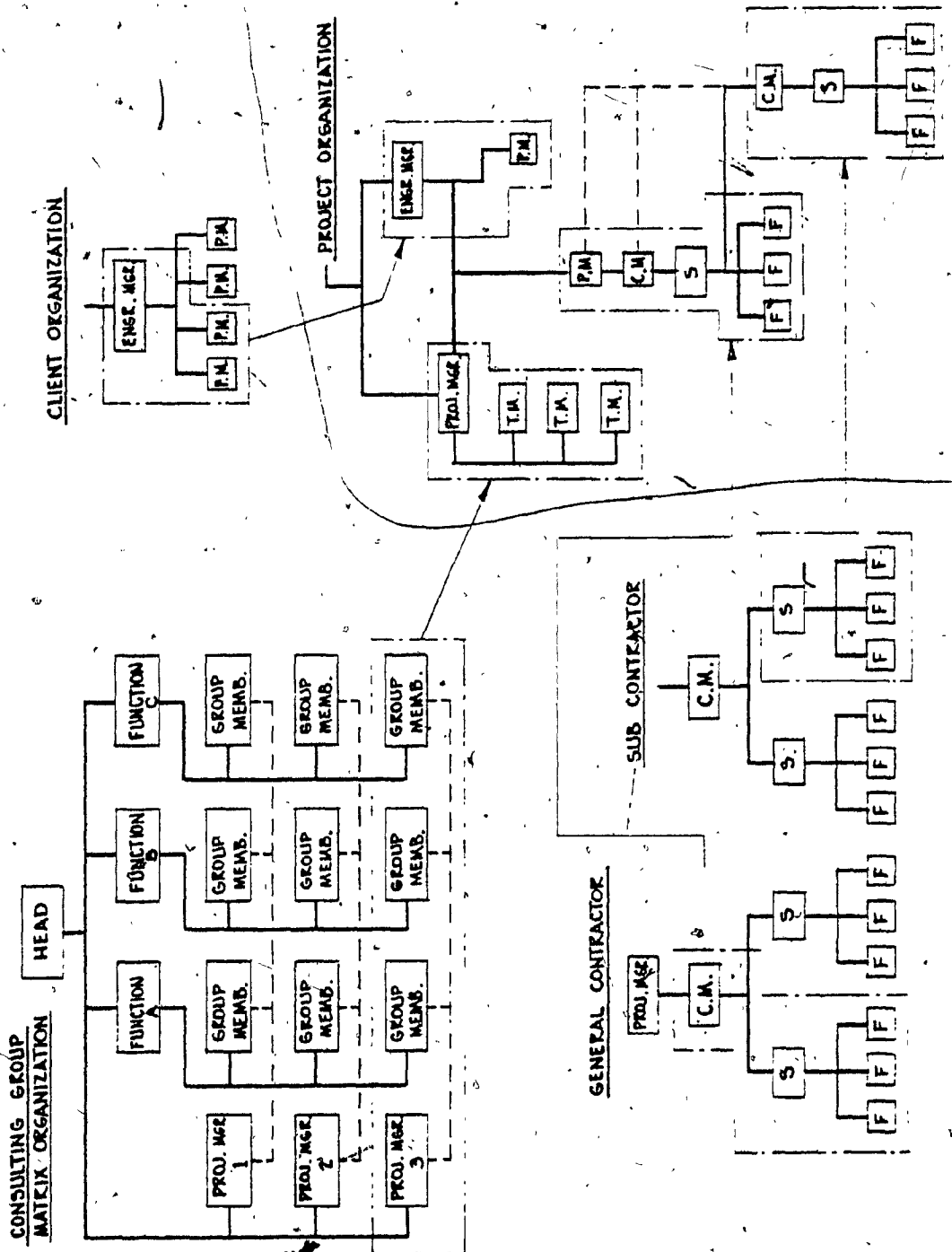
Subsequently some results from interviews conducted by the author with construction personnel are presented. The objective of the section is to point out how the problems of motivation are perceived and handled on the construction site.

The topics related to the professional attempt to highlight the role motivation plays in getting performance. Both individual and situational factors will be dealt with and some emphasis will be placed on the dysfunctions that arise in complex organizational settings. The professionals or knowledge workers in project environments are often engineers by education. No doubt, there are many project and construction managers who have earned their positions because of their broad experience in the field; and for the purpose of this report it is assumed that the professional is distinct from the foreman or tradesman, or union-labour in general.

The professionals referred to come from different organizations and form a temporary organization for a particular project. Therefore, the professional may come from a general contractor, sub-contractors, consulting groups, and the owner/client like large industrial organizations. How such organizations combine to form temporary project organizations is shown in Figure 6.1.

The temporary life of the project also influences union labour which is obtained from hiring halls upon request and may be released upon completion of the work. Matrix organizations formed in consulting groups and giant manufacturing clients are temporary structures. The project manager in matrix organizations is in a position similar to a general contractor's construction manager, since both have no real line authority to direct participants other than by persuasion or coercion, or by reporting to an individual's superior in question. It reduces to a monitoring

Figure 5.1 Project Organization Structures



kind of management with the use of expert or referent power. (37)

### 5.1 Characteristics of the Construction Environment

The construction industry is marked by some rather unique characteristics that make it both a challenging and frustrating working environment. Both workmen and supervisors alike talk with mixed sentiments concerning the way they have to toil through a typical construction project. Some individuals favour the uncertainty involved in shifting work assignments, variable work methods and variations in the weather and climate that affects the mood and pace of working in the field. (3)

The volume of construction activity is a function of both public and private investment. In fact, construction can be regarded as a service function responding to fluctuations in activity of the economy as a whole. To a lesser extent, it is also affected by seasonality. (34)

Collective bargaining in construction is done between union locals and the construction association in the area, not with individual contractors. Workers are hired through the union hall pending the level of manpower required for the work which a contractor may have at any one time. This creates a situation where workmen can work for several employers during a relatively short period, which does not help in forming any psychological bond between workmen and the contractor or between workmen themselves. In fact, from various interviews, the author has found that workmen who change employers too often are considered to be the least productive.



Clearly, contractors cannot always follow up with opportunities to keep workmen employed after completing a project. For this reason, there seems to be little incentive for being productive. Given this kind of "temporary" relationship, workmen are not to any significant extent "company-minded" employees, but feel they owe more allegiance to their unions who negotiate their wages and their benefits, among other employment conditions. (12)

An out-of-town contractor would rely heavily on workmen provided from the hiring hall which are often comprised of individuals with less ability and drive, and are possibly the most militant. On projects having a greater number of workers on the site, contractors will get fewer workmen who are ready to put in a good day's work. Group pressures are usually directed to slowing down the more productive workers. The out-of-town contractor faces greater motivation problems with his forces compared to a local contractor who is better able to keep effective field supervisors and a majority of capable workmen who will keep up with the pace. (4)

Unions like the FTQ and CSN both found in construction are composed of "locals" which exert jurisdiction over specific localities and districts. These locals have considerable freedom to conduct their operations and negotiations with the local contractors' associations. (5) Because the collective agreement establishes uniform conditions that apply to all union-labor trades in a specific region, it serves to eliminate competition with respect to wages and working conditions. Hence, controlling labour costs on a project by increasing output becomes a key problem for management on a project. For this reason, most contractors (if not all) will try to maintain a minimum volume of work at all times

in order to keep their key foremen and workmen on the payroll. There are times when this can give them an overwhelming edge over their competitors and allow them to bring in the job within cost and even make a reasonable profit.

Construction organizations are, in general, less structured than their counterparts in the industrial/manufacturing industries. Contractors, by and large, have developed successful firms which started off in infancy with only a handful of individuals (if not less) who assumed responsibility for the entire business plan themselves. Hence, the hierarchy in construction firms is often very shallow. And their styles of operation generally reflect the attitudes of the owners who control the business.

Communication is usually informal, and decision making is usually looked after by one or two individuals involved in dealing with a particular problem. Group decisions or meetings required to handle decisions are rare, as in the majority of cases, decisions require action on short notice. And any delay in taking a course of action usually has an adverse effect on profit. And profit is the fundamental reason for staying in business. What profit each makes depends on the ability to perform on time and in coordination with other contractors of different trades.

Often, organizations (groupings of individuals and firms) are formed specifically for a particular project. This is in striking contrast to the industrial workers whose employment may be quite stabilized over many years. In construction, managers and superintendents are usually re-assigned to other projects. However, labour agreements impose a restriction on hiring workmen who reside within specified territorial limits.

bounded by a 50 mile radius, before other firms from outside the designated boundaries can be employed on a project in the area in question.

Apart from the above-mentioned problems there is the fact that many contractors are not sufficiently staffed to provide thorough planning of the work well in advance, which results in sub-optimal use of labour and equipment. When this occurs, it is not unusual to find workmen spending their final hour or so filling in time in order to get a full day's pay, particularly under cost-plus contracts. (1)

Following are one superintendent's comments on the effect which short term employment on a project has on the workmen in general. His experience focuses on process-oriented heavy industrial projects.

"Productivity is all right from the guys you take along with you over a series of projects. Otherwise, the guy that comes on for 5 or 6 weeks or a couple of months, doesn't really give a damn about you ... The best way is to go on a project with a good number of workers you already have and hire new ones and mix them up so that you don't have to "push" them, but "pull" them instead.

... The kind of team you have has a lot to do with the productivity you get. For example, a team that's done a good day's work and is finished on a job late in the day and it's pointless to start on another job somewhere else on the site -- you're better off giving them that last half-hour or even three-quarters of an hour because you'll get good productivity back for awhile ... Now that's not always the case...there are guys who feel you owe it to them. But once you've seen what people's reactions are you'll know better the next time around ..."

## 5.2 Motivation of Foremen

From interview results reported by Borcharding (4), there is some relationship between foremen's motivation and the presence of certain factors in their jobs which enhance their interest and performance. For

example, situations offering opportunities like (1) steady employment, (2) advancement, (3) the chance of running a job, (4) taking on greater responsibility, (5) understanding the overall project, (6) improving their positions in life, and (7) receiving greater recognition for their efforts, all seem to act as motivators for foremen on process industrial and building projects.

These motivating factors are found on the several-million-dollar projects where organization structures are not steep and the work setting is not constrained by having to deal with less productive work forces and possible unemployment at the end of the project. (4)

Foremen motivation can be enhanced for example by delegating them the necessary authority and responsibility so that they can exercise initiative and recommend constructive changes and procedures to use in order to minimize lost time. That is, reorganizing work activities so that foremen can influence the methods to follow to get the job done with the least physical effort in the least time duration.

Another motivation tool is to recognize the innovators so that they develop a sense of personal achievement and to challenge them with problems of a different nature than what they are accustomed to.

On out-of-town projects, it is preferable for an out-of-town contractor to subcontract work on the site to local contractors either by dividing the work packages by trades or by areas of the project. This way, many field supervisors and tradesmen would be transferred by the local contractors to the project from other jobs in the area thereby reducing the number of strangers that form the work teams. Thus, the work groups could be more effective with foremen who are already familiar with them.

For any project it is important to remember to recognize the foreman's ability to make job decisions which directly affect schedule and work flow, and not to reduce his position to simply that of "pusher". (4)

### 5.3 Motivation of Craftsmen

On construction projects, it is usual to find poor performers working alongside good performers. It really depends on the foreman's discretion to place different kinds of workmen as effectively as possible in order to get satisfactory output from them. Often an individual who does not perform is paired with a better performer so as to provide a certain momentum to get him moving. On occasions where workmen are troublemakers, they are usually assigned to jobs which would not effect the productivity of others.

Since group cohesion and group dynamics are important factors in influencing motivation to work, it is important for the foreman to evaluate crew members early in the project if he is to maintain effective control over productivity. Group cohesiveness can have either beneficial or adverse effect on group norms, standards, and values, and a foreman or manager has but one recourse which is to splinter the group if its values are detrimental to productivity. (1)

#### 5.3.1 Some Motivators in Construction Jobs

The task of creating jobs to motivate workmen may, no doubt, be a challenging one. However, it becomes very difficult given the constraints of the work setting which were described earlier in this chapter.

Borcherding (3) points out that the construction worker is immersed in a dynamic environment of shifting work assignments, responsibility and possibly different positions of authority. Hence, the key problem in motivating workmen does not appear to be one that can be solved with "job enrichment", which is intended for eliminating repetitive and monotonous tasks. In fact, job enrichment in construction may be a step in the wrong direction, because well-organized tasks permit workmen to be productive and lead directly to job satisfaction.

Surveys involving construction personnel indicate that a sense of accomplishment has the greatest effect on job satisfaction. Part of the solution appears to be found in planning the project and keeping up with progress on schedule. This is regarded to be more effective than any attempt at job enrichment.

A lot of responsibility falls on first level supervision and workmen in construction. Since the plans and specifications map out the tasks to be performed, it generally can be said that the manner or method followed to perform an activity depends to a great extent on the physical conditions, and on the ability and experience of the foremen and workmen involved. It is not surprising in construction to find that decisions on methods are made right on the spot where the work is performed, especially in subcontractor work groups.

Overtime in construction is regarded as a good motivator if properly distributed and provided it does not get out of hand. Otherwise it can have adverse effects on productivity. Overtime attracts workmen to a project but reduces labour productivity and creates excessive inflation of construction labour costs. (4) The tendency for most workmen is to take advantage of overtime. When it is bound to come up because of

start-up deadlines or other reasons, there is a tendency for workmen to slow down in order to fall into overtime. Borcharding has stated that on an extended basis of overtime, the reduced productivity of workmen for a week's work is equal to or greater than the number of overtime hours worked. For example, if a job is scheduled for 60 hours per week, there is a reduction in productivity for the total 60 hours, not for just 20 hours of overtime. Beyond eight weeks, therefore, the productive return is less than that of a 40 hour week.

In order to deal with the overtime issue, certain strategies can be followed: (1) avoid overtime as much as possible; (2) when overtime becomes necessary to attract workmen or meet a client's deadlines or other requirements, schedule it on alternating weeks to assure that productivity will not fall below that level reached at the end of the one week of overtime; (3) seven days of eight hours is significantly less productive than six days at nine hours even though the total hours are about equal; (4) the critical path method provides the best information to determine those tasks where overtime will have the greatest effect on schedule. (4)

Apart from uncontrolled overtime, other factors reducing productivity are: (1) slowdowns caused by unwilling or poorly qualified craftsmen, (2) increased absenteeism, (3) reduced effectiveness due to fatigue, and (4) a greater number of injuries. (4)

### 5.3.2 Influence of Foremen on Craftsmen Motivation

In order to get the best effort out of every man under his control, a foreman must be a kind of psychologist, as well as, being a good organizer and a knowledgeable builder. (50) A foreman can lose good workers if he adopts the wrong attitude, or worse still, cause poor performance

from the work group.

The manner in which a foreman directs a workman is also critical. If a workman knows the job well, then no lengthy explanations are required; however, careful explanatory instructions are required for a lesser experienced workman on a similar job. Hence, the foreman acts as a kind of catalyst in getting productivity from the work crews. (53)

The first thing a foreman must get across is the task goals on a project, then he must follow through with the right kind of leadership required to motivate workmen. If he succeeds, he is effective as a leader; if he does not, he is in trouble and so is the project. "Laissez-faire" leadership has no place in the construction field. And neither has the autocratic, domineering boss. Workmen would barely tolerate him nowadays, and neither would union temperament allow such a supervisor to remain on the site. This makes it all the more important for the foreman or "pusher" to display some flexibility in leadership style.

While the task-motivated construction foreman would appear to be more effective in directing workmen to greater productivity, the relationship-motivated leader has his place under conditions where participative behaviour from subordinates is appropriate. In general, a task-motivated supervisor who is constantly on the go, is concerned about solving problems that come up, listens to his workers' suggestions, is in effect, encouraging crew members to do the same. Some workmen respond well to good supervision, and although it may make no difference for some, removing a good foreman can have a devastating effect on workmen who are generally poor performers.



In order to remain in charge and keep things under control, a foreman must continually stay in contact with his workmen. Often praise and simple acknowledgement of good work will be enough to keep certain workmen content and interested in the job. (53)

When the author asked how important good working relationships were between a foreman and the work crew, one construction manager expressed his opinion as follows:

"As a rule, if they get along well you can expect good productivity. But the foreman's got to play ball with each man on the team, since they're all different and won't respond the same way. You can praise some people for a job well done, and they couldn't care less; but for others it could be important.

If there's personality conflicts, like a foreman who's not well-liked, it could cause production problems or instructions to be misinterpreted. If the case is serious, you'll either have to switch the foreman or switch the men, as you see fit ..."

On assessing the influence that teams can have on individuals and productivity, one foreman put it this way:

"Team effort is a big factor in getting productivity up. It has an influence also on motivation of the individuals in the team in getting the work done. You know that a guy in a group has to keep up with the rest and this is where the team effort comes in. Once the team is split up and the marginal worker is back on his own again, you can bet he'll take it easy again.

... Sometimes you can pit one team against another for competition. Depending on the people you get, it could help boost production quite a bit."

#### 5.4 Summary of Findings from Interviews

On the motivation of workmen, the general viewpoints expressed by the interviewees could be summarized as follows.

"Most workers are motivated by the fear of being laid off. They know they are expensive, and you can't afford to keep them employed when you don't need them ... You keep the most productive ones working and the lousier ones you let go."

\* \* \*

"It's hard to motivate people who are regularly changing jobs. Generally, workers are not self-motivated so you start out by staying behind them and push for production. Those who aren't very productive I try putting them beside those who are good producers and they tend to get a little more done that way."

\* \* \*

"Many workers are interested in advancing to foremen because then they won't need to work. They think it's an easier job, so they try and put in a good effort just to get that promotion."

\* \* \*

"Some derive satisfaction from doing a good job and knowing they helped put up a building ... Every job is different so the work remains interesting and challenging."

When asked what the basic motivator was for the workmen, one foreman replied:

"It boils down to money. The men are here for the money more than anything else. That's what gets them other things like a house, car, taking vacations ...

There's other things you look for besides money, like satisfaction, responsibility, a chance to get ahead, but they're all next to money. I don't think anybody here would show up on the job if he knew he wasn't going to get paid tomorrow."

One superintendent responded as follows:

"People are mainly coming to work for the pay. It's the money they're after not job satisfaction and the rest. There's maybe 10% who come to work for job satisfaction ... The majority come on the job and put their minds on the coffee break, then the lunch break, then the afternoon break, and then on going home."

Some general remarks on motivating strategies which have been suggested in some interviews are given below:

One steel erector's superintendent states that:

"For small crews that you can control better, say 7 or 8 men, for example, in welding you can pay for a 40 hour week to the welders who might finish the work ahead of time provided you know how many feet you've got to produce to stay within standards (and quality) ... The job goes faster this way, there's less overhead, room and board, rental charges on equipment, and you can move on to different jobs ...

But in general though, it's hard to work on incentive schemes, because you're changing workmen constantly on even a weekly or monthly basis and they don't all like to work the same way."

A general contractor's project manager puts it this way:

"You start out knowing how many hours or dollars you can afford to spend on a job and then plan accordingly by staying on schedule. That takes good supervision... Supervision has to be good because it can make you or break you. Today you know you can't use the whip, so you've got to be good to make your crew productive using any other means you can.

It pays to have other work in sight for them after the project is completed ... it keeps them interested in maintaining the work pace. Otherwise the tendency is to drag the job when it gets near the end that can cost you."

Regarding the general feeling people out on the field have toward their jobs, their attitudes and concerns for performance, a sub-contractor's superintendent states:

"Over the last four or five years, the attitude has improved a bit. Before the seventies, the attitude was a lot better in general. In the early 70's, it got out of hand with the union warfare raging all over the province. But luckily the new laws now allow you to select men so you have more chance of making a profit than you did before:

... Still, people work in construction for a living. That's the attitude of about 75% of the workers. That means 75% of them wouldn't work in construction if they didn't have to ... now out of that you might have 25% who kind of like to show they're doing a good job."

In answer to whether or not workers changed their performance depending on changed conditions, the general viewpoint is summarized below:

"You can always try to change a worker's attitude by showing him how to tackle a problem by giving him a chance ... If he's late frequently, you can explain to him that it's for his own good to correct the problem. You can give a fellow more responsibility, or you can even pay him something over his dues if he's sick or you get rained out ... but the chances of success in most cases have been minimal. A lot has to do with the guy's personal situation, like if he's got a family to support, has payments to make on a home, or if he's interested in advancing to foreman. They guy can have family problems, drinks a lot or stays out late, and doesn't produce much the next day. A lot of these things go into making a guy feel responsible or whether he won't give a damn and just wait for his pay check."

With respect to differences between rural workers and urban workers, that is, whether social background tends to influence worker performance, the following reply was given by one superintendent:

"I'd say there's a difference ... For example, a typical worker from Lac St. Jean coming from a relatively poor background, probably worked on a farm as a kid, and had a harder time than the city fellows, has a tendency to make a better worker ... You can expect him to be better and more responsible in the field. I think that hard times sort of create a better foundation in making a good worker ...

"A poor guy who comes in and puts in a good day's work and is paid well for it feels more satisfied with what he's contributing. Since his background offers no security, he tends to fight more for his job by being more dependable and responsible ... He'll tend to push more for advancement ...

From my experience in the field, the rural workers I'd say are more prepared to work harder than workers from the city."

Following are some responses which were given to questions directed at getting an idea of the kinds of worker stereotypes, foremen's supervisory styles, and handling of authority in the field.

Q. *What kinds of workers have you come across in your experience in construction?*

R. "I'd say there are two categories of workers -- those whom you got to keep after, and those whom you can leave alone and they'll work anyway. I don't know of any other kind."

Q. *What do you find difficult about motivating people on the job?*

R. "They are not always the same people you got from one job to another. The more stable ones you get to know and they're usually okay. The ones who aren't regular are tougher to control. If they haven't got the right attitude then you got to stay behind them."

Q. *Do you use praise as a motivator?*

R. "Can't praise them too often or it won't work after awhile. You use it sparingly ... most people will recognize it and appreciate it.

You also have to let the guys know when they're not doing too well. You don't have to lean on them too much, but you've got to let them know."

Q. *How do you handle unsatisfactory workers?*

R. "Usually I can tell within two days whether a worker will do or not. If I see he's not suitable, I'll let him go; all I have to say is I don't need him ... the union can't do anything about it.

You can choose from three classes of workmen. There's the A, B, and C classes, corresponding to how many hours they've been employed in their trades over the years. I usually

prefer a class "A" workman since he knows more and fits in more easily on the job. But usually, if the worker is moving around too often, he's not that good."

Q. *How do you exercise authority on the job?*

R. "It takes some authority on the job to get any work done. But when you got good workers with good experience you have to give them some freedom of choice on how to handle certain parts of the job ... I tend to leave the good performers alone and concentrate on the others.

Sometimes you can mix some good and bad workers together and get a more steady output. The bad guys know they have to keep up the pace with the good ones in the group, or there's going to be complaints, and they can get thrown out if they don't produce."

Q. *How do you split your authority style between Theory X and Theory Y (let me explain these ...)?*

R. "... 95% of the workers can do the job. But I know that if I used Theory Y for half of them, I wouldn't get any work out of them. Theory Y is okay when the workmen have been around for a long time and you know them, and there's a mutual trust that's been built up, otherwise Theory X is what I'd have to use ... It's not that they can't do the work, but they just need somebody to remind them what they have to do ... and that's a big part of my job as foreman -- reminding people to do what they know they have to do.

... Especially when you're getting close to the end of a project. They just begin to slow down. It's normal, it's not always that you've got another project lined up to put them on to ... some of them know they're going to be back looking for work."

Q. *Do you see any difference in motivation with respect to different types of contracts a job is done on?*

R. "On cost-plus contracts, we tend to push the men less ... It usually will cost the client more. But we can't take too much advantage either, but we do tend to progress more slowly.

On fixed-price jobs, we've got to push more and get organized in advance. Competition is tough in the industry and we've got to push harder than our competitors to get the jobs and make a profit."

Q. *Can you comment on the relationship between satisfaction and performance ... which causes which in your opinion?*

- R. "I think you've got to have some interest in the job to start off with. The more interested you become, the better job you'll want to do. But I think you have to have performance up there in order to get satisfaction from the work ... the two really go together, but you need to have performance if job satisfaction is gonna last."

### 5.5 - Motivation in Project Management

In order to get commitment to a project, the project manager must, first of all, commit himself to the success of the project. There are many different management systems available to help carry through the mechanics of the job, but it still takes people to exercise judgment, make whatever decisions are required and make the systems work.

Three variables are constantly in conflict during the life of a project -- these are time, cost and content. Getting the job done involves handling these factors effectively which in turn involves getting all the human resources pulling together to reach the same goals. The problem is that human beings will contribute tremendously under appropriate conditions, while in other situations they will not nearly be as effective. (38)

Some situational factors which influence individual effectiveness have been dealt with in this report, however, there are also personality factors which come into play. These are the frame of reference the individual holds of himself, his expectations from his job and a need for fulfilling his potential. It is very easy for the wrong conditions to develop, whether due to the organization, the work group, or the individual himself which leads to under-utilizing resources.

### 5.5.1 Leadership Styles in Project Management

An assessment of the effectiveness of different leadership styles which have resulted from surveys on project managers, have been reported by Thamhain and Wilemon. (49) These are categorized as follows:

- (1) The effectiveness of the project manager depends on his leadership style and his work environment ... (A) leader-oriented management approach appears most effective in a poor organizational environment where communications, work continuity, and career growth are inferior. However, in a good organizational climate, ... team-oriented style seems to be most effective.
- (2) Task complexity and position power of the project manager does not appear to be an important determinant of the leadership style. While the effectiveness of a particular style may be influenced by the degree of position power and task complexity, the choice between Style I and Style II seems to depend only on the organizational climate. (49; p.27)

The leadership Styles I and II referred to by these authors are more specifically the following:

- (1) Style I - is leader-centered and typical of managers who prefer organizationally derived influence sources like authority, reward, and punishment.
- (2) Style II - is team-centered and typical of project managers who focus on team members' needs in deriving the influences for their project support.

These leadership styles, while being specifically defined for a project management work setting are really variations of leadership patterns derived in the research by Fiedler. Detailed discussion of these leadership styles can be found in (16) and (22).

### 5.5.2 Combinations of Project Managers' Motives and Needs

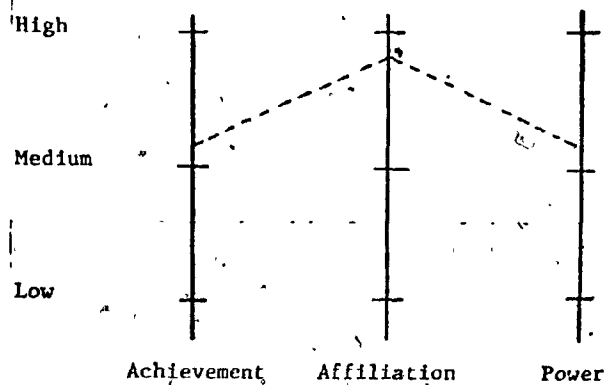
Smith (47) makes the following points in regard to the human motive needs such as achievement, power, and affiliation as displayed by the project manager. He reports that, based on research evidence, the best



motive profile for the project manager is one illustrated in Figure 5.2. It is clear that the most successful project managers tended to be higher on affiliation rather than achievement or power.

Figure 5.2

A Motive Profile of the Project Manager (47; p.259)



This calls for putting on bi-focals if a project manager is to be successful with his project. That is, if the project manager is excessively achievement-oriented he may not be sensitive enough to the needs of the project sponsor nor the needs of the team members. Team members, on the other hand, should display more need for achievement rather than affiliation or power. And if a project manager has too high a need for

power he may end up demotivating his team members or cause competitive conflicts with the project sponsor, as well as, making him overly independent and not delegate enough to his team members. Smith adds that a high need for affiliation is required for holding the team together. Lacking formal functional authority over the team members outside of the project, he has to respond more than a line manager to the members' needs for affiliation.

A project manager's qualities have to include, at the very least, confidence and integrity. He must have integrity toward the organization, toward the client, and toward his team members. That includes having each member's interests at heart, otherwise any motivational techniques are bound to fail if they lack sincerity. (5)

Project management is quite distinct from general management in that it involves a continuing process of change. It therefore requires individuals who can work and think about other's behaviours in such a change-oriented setting. A project manager has a more difficult job of motivating people if he stresses methods and techniques rather than concentrate on getting results from his group members, since the backgrounds and disciplines of the members are numerous and diverse. The group can be kept motivated to strive for goal attainment when such goals are most valuable to the group members. However, if frustration sets in, the effectiveness and productivity of the group in general will be impaired. Frustration can arise from countless ways, but the result is basically the same -- reduced commitment, less group cohesiveness, increased pressures, overly-aggressive behaviour, and so on.

### 5.6 Motivation of Professionals

What is important in this process of motivation is that to get highly motivated employees, there has to be some connection between the attractiveness of rewards as seen by the employees, and what they have to do to obtain them. Regarding knowledge work, doing well "has much more to do with high quality of performance than with producing large quantities of work". (41; p.304)

The intrinsic rewards people derive from doing their jobs are related to feelings of satisfaction obtained directly from their performance. Individuals will have different priorities for whichever needs to satisfy and these are essentially achievement, competence and self-actualization obtained from solving problems generated in the job.

Designers, for example, are motivated by the sense of accomplishment and achievement which their efforts accomplish. Their reputations can influence their future work within their organizations, as well as, influence the client and therefore, is an important factor in affecting performance. (39)

However, people must value intrinsic rewards in order to be motivated with these kinds of motivators. Why job enrichment schemes alone do not always work is that people require both extrinsic, as well as, intrinsic rewards from their jobs, and only the individual can define for himself what is or is not rewarding to him. (17) If an organization tries to motivate using extrinsic rewards, it still faces the problem of determining which rewards to use. According to research data, promotion and pay appear to be the most significant extrinsic rewards that organizations have to offer. However, which individuals will value pay more highly

than promotion and vice versa, is important for organizations to know. This means knowing something about individual differences. Otherwise, it would be attempting to motivate the wrong individuals with the extrinsic rewards that are available.

#### 5.6.1 Project Manager and Group Influences on Motivation of Team Members

Both the Project Manager and the project team potentially can provide extrinsic rewards to group members. They can offer praise and social acceptance which have great value for most individuals, and hence influence their motivation. The group also plays an important role in influencing how members will be motivated to carry out decisions. And there is evidence that group decisions can influence the kind of intrinsic rewards that are tied to performance.

Moreover, rewards tend to be associated with good performance, when decisions about performance are made by the group rather than by the individual himself. Research by Evans found that there is some relationship between leadership initiation and consideration, and the employee's performance → outcome beliefs. Hence, "in combination, high consideration and high initiation can increase motivation by tying supervisory approval to effective performance". (24; p.181) They seem to be effective in creating strong extrinsic motivation based on social needs. However, their influence would be effective only on those people who value social rewards from their superiors.

House and Mitchell (19) point out that the interaction between leader and subordinates leads to motivation to the extent that the leader's behaviour can influence expectancies such as, goal paths and valences, or goal attractiveness. Managers should be careful also to

provide supportive leadership under conditions where tasks are dissatisfying, frustrating or stressful to subordinates. Also, in cases where subordinates are performing rather ambiguous, non-repetitive tasks, the more the project manager is task-oriented, the more the subordinates are confident that their efforts would pay off in effective performance.

(19)

A number of important factors have been indicated that must be considered in motivating individuals in a project environment. These are: (1) what the team member is capable of doing, (2) what he is interested in doing, (3) how committed he is in his work and the goals he wishes to obtain. (37)

Also, power equalization appears to have the potential of increasing motivation in individuals who (1) display strong needs for independence, competence, and self-esteem; (2) are members of a work group favouring participation; and (3) value the social rewards that groups have to offer.

(24) The effect of power equalization is greatest on intrinsic motivation and hence will influence certain people such as described above.

Power equalization will have some effects on satisfaction as well. It tends to satisfy autonomy needs and leads to lower absenteeism and turnover. Lawler (24) notes, however, that these effects will result only when individuals involved have strong needs for independence and are low on authoritarian relations.

It is therefore imperative for the project manager to provide job design and conditions that will have people direct their own efforts towards organizational objectives. (38) This is accomplished by making the best use of each project team member, besides getting them to work more effectively as a unit where the team objectives are predominantly

the driving force for each member. Since each individual has his own particular expectations, it is an arduous task for a project manager to direct each individual's energy toward meeting project goals. Exerting influence and power very often only leads to conflict, apathy, and resistance. (37)

Some guidelines have been reported by Gemmill and Thamhain in their article, "The Effectiveness of Different Power Styles of Project Managers in Gaining Project Support" which point out the influence bases most important in project manager and project group interaction. Subordinates tend to consider factors such as: (1) work challenge, (2) formal authority, (3) salary adjustment, and (4) expertise, as the most important reasons for providing support on a particular project.

In their assessment of these factors, project managers ranked expertise as the second most important variable instead of formal authority (as viewed by subordinates).

The most salient points which the study makes are that there are no significant differences between managers as opposed to project managers (in matrix organizations). The only variation in priority appeared in work challenge and authority. Therefore, work challenge becomes the most effective influence base in providing support to the project manager. Obviously, work challenge represents an intrinsic motivation factor flowing from the content of project work. (13)

The above study suggests that project managers would obtain greater support from project personnel by generating subordinates' interests in the project itself, as well as, finding out the kind of work that is most challenging to individuals and providing them whenever possible with such work.

These basic motivators must be dealt with for each subordinate apart from the individual sets of values and behaviour characteristics that reinforce or detract from their efforts to perform on the team. Successful project management depends on the relationships of all individuals' motives and expectations from their work. Any dysfunctions can make project management more vulnerable than general management since the task is specific and bounded in a time constraint. The objective is not survival -- it is performance, and self-destruction of the task force upon completion. Therefore, individuals' organizational stability and security are unfounded, and any problems which arise can more easily result in poor performance, finger pointing, and real bitterness and dissension among project personnel. (37)

If the payoffs or rewards, whatever they may be, are not perceived by each individual, then attempting to motivate team members is doubtful to result in any considerable accomplishment. Murdick and Shuster (38) suggest that what we should be striving for is psychological contract, not just a job contract.

#### 5.6.2 Dysfunctions in Motivation of Professionals

The important thing to remember is that "carrots and sticks" are out of place where the knowledge worker is involved. If a project manager assumes that he is superior to all others, he is doomed. (10) The manager in contrast who makes the effort to detect the needs and values of his workers, and realizes that a worker's values, interests and expectations vary with time stands the best chance of successfully leading a project team.

The task is not a pure and simple one, however. When individuals come together -- whether they be knowledge workers or manual workers -- into an organized group, there will be competition for rewards; and these, in the end, will not likely be the same for everyone. There are going to arise situations of give and take -- some get their way, some compromise, while others get left out. (32) Anyway we look at it, outcomes of this nature are going to produce frustration and this will impair performance. These conditions must be avoided wherever possible for the performance of the organization as a whole depends on it.

Recently, theorists have studied certain hypotheses regarding what one puts into a job versus his outcomes and rewards. These studies are based on equity theory which has been treated in Chapters II and IV of this report. Most approaches to this theory maintain that satisfaction is determined by the differences between actual outcomes a person receives and some other outcome levels. When there is a difference between the received outcome and the other outcome level, then dissatisfaction will result. The magnitude of the difference between the two outcomes will tend to influence the intensity of dissatisfaction also.

Locke, one of the exponents of equity theory, emphasized that what is important is perceived discrepancy rather than actual discrepancy. (24) He argues that satisfaction is affected by what an individual wants and what he perceives he receives. If an individual does not agree that a certain standard of performance is equitable, he is not prone to pay any attention to any comparison or judgment between his performance and that expected. The most effective way to get commitment is to get a person to participate in the process of establishing the standard. (37) If members are not motivated, not much appraisal and feedback is likely to be



effective. If they feel that their efforts are not properly recognized in the organization or that their values and strengths are not adequately utilized, there is not much point in trying out motivation strategies by using goal setting or management by objectives. The process will only become "management by whose objectives?" Harry Levinson (28) points out that the MBO process cannot overlook certain key questions if it is ever going to work. More specifically it must tackle questions about: (1) the manager's personal objectives; (2) his needs and wants out of his work; (3) changes in his needs with time; (4) relevance of occupational objectives to his needs and wants. And as a further word of caution:

"... no objectives will have significant incentive power if they are forced choices unrelated to a man's underlying dreams, wishes, and personal aspirations." (28; p.59)

Most individuals will commit themselves to a project only to the extent they think they have to, unless doing more will bring them significant advantages and rewards. Such rewards can be monetary, or they can consist of role changes that the individuals can make by doing well. It is not surprising to see that quite often people are motivated to act in unproductive ways. This results from seeing no apparent advantages to improving performance and as a result of disappointment and frustration.

Most knowledge workers respond positively to higher order needs and job fulfillment, but they all do in varying degrees. What is challenging for one individual may not be so challenging for another; some may seek autonomy, while others prefer dependence and guidance; some are motivated by recognition and advancement in reward for good performance, while others may only want more money instead.

### 5.6.3 Conflicts in Professionals' Careers

An individual employed in a large organization, by virtue of the work setting, necessarily sacrifices a good deal of independence. What seems worse is the loss of control that is particularly noticeable when it comes to considering decisions about his own career. In smaller organizations, the problem is less acute since the professional has greater flexibility in broadening his authority and power base according to his personal motives. However, the larger the organization the more it influences what decisions he can make and what freedom of action he can assume.

Shoonmaker describes this conflict as follows:

"Instead of acting independently to control his own life and career, an employee gives up this control and becomes dependent upon his superiors and his organization. This loss of control is especially noticeable for decisions related to his own career. Instead of acting for his own interests, an employee is expected to work for the good of his organization and leave the decisions about his career to other people ... they cannot really escape the knowledge that the organization controls them. (11; pp.451-452)

The expectations of the professional are greater than the workman's primarily because of his wider knowledge and skills spectrum. (32) This new level of awareness forces the individual's needs to rise, causing him to want more rewards from his job, his superiors and the organization.

Lawler reports that there is evidence indicating that higher educated people are more concerned with self-actualization. (24) And Drucker states that "only self-motivation, and self-direction make them productive. They have to be achieving in order to produce at all." (10; p.174)

The point to make is that work does not have to be enjoyable, but it does have to be achieving in order to get any process of motivation to work.

## CHAPTER VI

### SUMMARY AND CONCLUSION

In order to get the process of motivation to work, there must exist needs which set up drives or motives that accomplish goals and provide rewards or outcomes which satisfy the needs. The process is deceptively straightforward. The fact is that in order to motivate individuals in organizations, it is important to know what rewards and outcomes the individuals value, and moreover, the rewards must be distributed equitably. For if the process lacks integrity, motivation to perform will be impaired.

What is difficult about motivation is that it cannot be observed, yet the process is well-understood. Motivation can be inferred by observation of behaviour and performance. This requires that situations be analyzed from the optic of what influences motivation in the organization, and then attempt to provide motivators in the work situations that enhance the motivation of individuals. The process is complex since individuals are different and their values and needs can change as different variables are introduced in the work environment.

This study has focused on three main topics: (1) the factors that influence motivation in work organizations; (2) the theories that have relevance in understanding motivation in organizations; and (3) the motivational problems arising in construction and project management work settings.

Examination of the construction setting reveals that the basic motivators for workmen, in general, are money and job security. To a lesser extent, intrinsic motivators like accomplishment, self-esteem, recognition and advancement are also found. What makes money the basic motivator is its instrumentality (in Vroom's terms) which gives it buying power in general. Money is also equated with success and status. Security needs of course, are considered important as they are related to income. In fact, evidence has shown that there is a tendency to slow down productivity near the end of a project when no subsequent work is in sight.

Motivating workmen in construction is made complicated not only by the nature of the environment, but also by the lack of effective motivators other than monetary rewards. The higher-level needs kind of worker appears to be the exception rather than the rule. In this context, the motivation theories which have relevance are Maslow's needs theory on two levels -- the security at the lower level with other physiological and social needs, then the self-esteem and self-actualization needs at the upper level. Also, Theory X and Theory Y approaches to management reveal that, given the nature of the personalities and the environment involved in construction, the Theory X approach is more effective than Theory Y.

The findings from the interviews support the theme expressed throughout this report -- that is, individual differences, the nature of work, money, group and leader influences, job satisfaction and performance, as well as, equity or discrepancy -- that certain key factors all have some impact on the individual's motivation level.

From the literature survey on project management, it can be concluded that motivators mostly sought are those related to self-esteem and self-actualization -- challenge, recognition, feedback, praise, promotion, and salary. Trying to apply cognitive theories in these situations such as goal-setting and equity theory would appear successful in motivating professionals. Measurable goals can be set for each individual's level from the objectives which cascade down from the organizational hierarchy. The individual and his immediate supervisor both have some input into "what, how, when and why" of the goals that need to be achieved. The message is clear: "the individual is accountable for performance" -- which he has accepted responsibility for.

The task-oriented worker (professional or craftsman) generally responds favourably to goal setting. However, the individual's goals, motives, and needs must be taken into account in the process. The higher the job level, the higher the expectations of the individual performing the job. The level of aspiration may be far-reaching and there is a danger that achievement can begin to lag far behind the individual's level of aspiration. It is important in these cases to keep the goal-setting process on equitable terms, or the individual will, before long, revert to dysfunctional behaviour which affects motivation and ultimately, performance.

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