

# THE EFFECTS OF THE SITUATIONAL VARIABLES ON THE LEADERSHIP STYLES IN CONSTRUCTION PROJECTS

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Leadership has been highlighted as an important factor in achieving successful projects in a number of studies. This paper reviews leadership theories and compares their explanations with the empirical findings of research studies in the field of leadership particularly in the construction industry. Situational factors pertinent to the construction managers are presented incorporated with the findings of two case studies.

Keywords: Case studies, construction, leadership styles, situational variables.

## INTRODUCTION

In most human endeavour it is necessary for individuals to work as teams, on either a permanent or temporary basis, and this requires a person who will bind the team together and represent the team's interests in their interaction with the external environment.

Leadership has been described as the "influence, or the art, skill or process of influencing people to work towards the achievement of group, or larger organisational goals and objectives" (Megginson 1989). *Leadership* is not the same as *management*. Management involves exercising leadership, but it also includes the other functions of planning, organising, staffing and controlling. There can be no leaders without followers, and such followers need to be influenced, persuaded or inspired to follow the leader. However, leadership need not be mere domination, but could be effective through supportive or coordinative behaviour. An old paradigm described the leader of one particular style, e.g. directive, participative..etc. A question arises: Is there really a leadership style? A number of researches and case studies concluded that this not always the case. The findings tend to suggest that leaders' styles are flexible rather than rigid.

Since construction work puts heavy emphasis on co-operation among team members, this is expected to have a direct impact on the performance of the construction work. Theorists explained some of the factors affecting the leader's behaviour in determining the most appropriate style but fell short in dealing with construction industry. The construction process has unique factors which should be taken into account when dealing with the leadership style. The phenomena of its finite time, use of subcontractors and the collection of multi-cultural skills and backgrounds of the project team are major determinants of the leader's behaviour.

## LEADERSHIP THEORIES

A question arises in the study of leadership: how does a person become a leader? Theorists have mentioned the ideas that individual traits, leadership style, the nature of the task and the environment are determinants of a leader's effectiveness. The paper will review certain key theories on leadership before examining some case studies carried out by researchers in the construction industry to determine the variables affecting the manager's styles.

### Trait Theories

This theory is based on the assumption that leaders were *borne not made*. If the leader is endowed with superior qualities that differentiate him/her from his/her followers, it should be possible to identify these qualities. By 1950, there were over 100 studies based on the Trait Theories' assumption (Bryman, Bresnen and Beardsworth 1988). Most studies single out the following traits; intelligence, self-assurance, good health, enthusiasm, sociability, integrity, courage, imagination..etc. But when all the studies were examined only 5 percent of traits identified were common through out. The diversity and discrepancies of the results were related to the fact that traits associated with success may differ according to the situation.

### Style Theories

The assumption behind the theory is that the team members will be motivated to work harder (and therefore more effectively) for leaders who employ appropriate styles of leadership than they will for leaders who employ other styles. The styles are usually compared along the directive and participative continuum. The major differences between these styles resides in the decision making process. For an extreme directive leader, decisions are made without referring to follower's suggestions. However, in the participative style, group members actively participate in the decision making process.

Tannenbaum and W.H.Schmidt have proposed that there is a whole range of styles between the two extremes. They suggested that a leader's position on the continuum depends on his/her personality, the nature of the individuals in the work group, the nature of the traditions and values of the organisation, and the pressures of time on decision making.

### Contingency Theories

In general, these theories are based on the assumption that the effectiveness of a leader depends (or is contingent) on situational factors and leadership style as well. In other words, in order to achieve best performance, the leadership style should match the demands of the situation. The most popular contingency theories are: Path-Goal Theory and Fiedler's Contingency Theory.

### Path-Goal Theory

This theory was proposed by House and Mitchell in 1974. The theory identified four specific kinds of leadership behaviour:

- (a) *Directive Leadership*: A leader gives subordinates firm guidance and clear instructions wherever he or she can.
- (b) *Supportive Leadership*: A leader tries to be as friendly and approachable to his or her subordinates as possible.

- (c) *Participative Leadership*: A leader tries to leave options as open as possible, solicits his or her subordinates' suggestions and takes these suggestions seriously into consideration before making a decision.
- (d) *Achievement-Oriented Leadership*: A leader tries to get his or her subordinates to assume full personal responsibility for their work, sets challenging goals, expects them to perform as well as possible.

A Path-Goal situation model in table 1 shows four different situations that might face the leader, the preferred leadership behaviour to fit each situation, the impact of the leader's behaviour on the followers and the expected outcome in each situation.

Situation	Leader's Behaviour	Impact on Follower	Outcome
Follower lacks self-confidence	Supporting leadership	Increase confidence to achieve work outcome	More effort; Improved satisfaction and performance
Ambiguous job	Directive leadership	Clarify path to reward	More effort; Improved satisfaction and performance
Lack of job challenge	Achievement-Oriented leadership	Set high goals	More effort; Improved satisfaction and performance
Incorrect reward	Participative leadership	Clarify follower's needs and change reward	More effort; Improved satisfaction and performance

Table 1: A Path-Goal situation model.

Path-Goal situations and preferred leader's behaviour

Source : A.Yuki, *Leadership in organisations*, 1981 (Modified)

Figure 1 shows an adapted version of House's Path-Goal Model.

**Fiedler's Contingency Theory:**

After years of research, Fred Fiedler (1967) proposed that effective group performance depends upon the proper matching of a personality variable in the leader with three contingency dimensions:

- (1) *The leader member relations*: A measure of the acceptance of the leader by the subordinates (The most influential dimension).
- (2) *The task structure*: How structured or unstructured is the work to done.
- (3) *The leader's power position*: How much influence over critical power factors does the position have? Is the leader allowed to hire, fire, reward and discipline?

Fiedler believes that the effectiveness of either task-oriented or employee-oriented style depends on the answers to the three contingency dimensions.

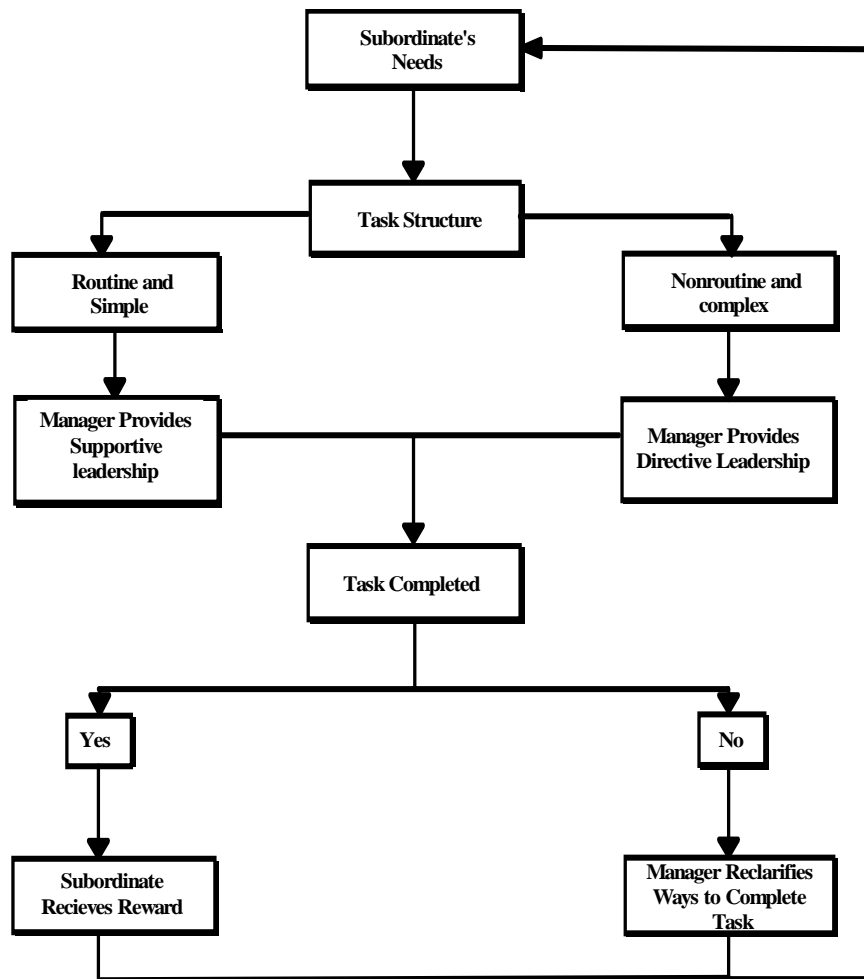


Figure 1 : An adapted version of House's Path-Goal Model

Source : Ref.7

Fiedler's conclusions were:

- (1) A leader faced a "favourable" situation (one which was easy to control) if the leader had power and authority assigned to him; the tasks the work group had to tackle were clearly laid down and structured; and the leader was well-liked and trusted by the group.
- (2) A leader faced "unfavourable" situation (one less easy to control) where formal authority was not clearly defined, where there was ambiguity in the tasks to be performed, and where there was not enough a high degree of trust or liking for the leader.
- (3) The best strategy for the leader in highly favourable or highly unfavourable conditions was to be directive, task-oriented.
- (4) The best strategy for the leader in moderately favourable/moderately unfavourable conditions was to be a more supportive or lenient leader.

## **THE CONSTRUCTION INDUSTRY AND THE INCONSISTENCY OF THE FIEDLER'S THEORY.**

Bresnen et al (1977) carried out a research concentrating on the leadership style of U.K construction site managers, i.e contractors management. The study focused in the *"Role of site managers as leaders of their team and the range of leadership styles they adopted in managing work on site"*.

Bresnen et al research was based on Fiedler's contingency model and employed the LPC scale (Least Preferred Co-worker). The study involved 43 site managers for building and civil engineering sites based in England and Wales with a minimum contract value of two million pounds. The findings of Bresnen's research can be broadly summarized as follows:

- (1) Site managers generally exhibit a stronger task-orientation than many other occupational groupings.
- (2) Site manager's leadership orientation was associated with a number of their background characteristics (age, educational background, experience..etc.).
- (3) There is a tendency for high LPC, i.e more relationship oriented managers to perform better on larger value contracts and for longer duration.

The findings of Bresnen et al reinforced the importance effect of situational variables on the effectiveness of leadership as suggested by the situational theorists.

Surprisingly, the study also found these situational factors most commonly presumed to act as moderating variables in other settings (i.e task structure, leader's position, power and leader's member relations) did not have as strong an effect as expected upon the relationship between leader and performance in the construction industry.

Moreover, they discovered that the three additional situational variables have an influence on the impact of leadership style on performance. For example, the longer the project duration the stronger will be the relation between leadership style and performance. Similarly, for large projects and for projects employing a high proportion of direct labour. In brief, Bresnen concluded that instead of three situational variables used by Fiedler, two important features of construction activity (namely, the transience of project based organisations on site and the phenomenon of subcontracting are controlling situational factors in the construction field. Such findings gave rise to a query about the applicability of Fiedler's original theory to construction activity.

## **VARIABLES OF LEADERSHIP STYLE IN CONSTRUCTION ACTIVITIES**

In construction, evidence, from leadership researches, suggests that different styles of leadership are needed in different situations (Fryer and Fryer 1986). The manager may therefore find that he can lead successfully in some settings but not in others. There are several key variables that may have an influence in determining the suitable leadership style in construction projects. The main variables are:

### **The personal characteristics of the leader**

The leader's success depends on many factors, including the kind of person he is, his values of management, his self-confidence and competence, his trust in his team and how he copes with stress. The manager's chosen leadership style depends on such

factors. Many construction managers feel they are expected to make the decisions, others feel they must get their teams involved. Some have confidence in their team; others mistrust them.

### **The individual**

Particular style of leadership will work effectively when dealing with some people rather than others. Factors like personality and temperament constrain the leader. Leaders may adjust their behaviour and orientation to their subordinates in order to take into account perceived personality differences.

### **Subcontracting**

The construction project is characterized by the intensive use of subcontracted labour which offers greater flexibility in an industry which is both seasonal and highly vulnerable to the ups and downs of general activity within the economy. However, site managers often have less control over subcontractors than those who directly employed by their firm (Bresnen 1986). This tension may mean that construction managers need to adjust their leadership styles according to whether they were dealing with their firm's own workers or subcontractor labour because of the different commitments that the two kinds of workers have to the project and the main team.

### **Type of the project**

The kind of operation is significant whether it is well defined or unclear, important or unimportant. Repetitive construction may need tight supervision because the job has to be done in a certain way. Conversely, research work cannot be strictly controlled. Much has to be left to the worker's discretion, because the manager doesn't know what the end result will be. Some tasks demand a tight control because operations need careful co-ordination. Yet some complex tasks may necessitate the leader relying on subordinates' skills.

### **Variation in time perspective**

One aspect of construction projects which distinguish them from much activity in other industries is the fact that they are temporary systems. Each construction project is finite in that everyone associated with it knows that it will terminate once the job is finished.

Construction projects are deemed to vary in terms of haste and urgency. With some projects there is often a sense of extreme urgency; with others, there is somewhat more slack (in terms of time) and the space of work seems less hurried. The significance of this fact is that styles of leadership vary according to the amount associated with projects. When the sense of pressure is less acute managers feel more able to adopt a more consultative, participative approach in their dealings with the site team. Such style becomes "indulgent luxuries" when the time is at a premium, and so a more directive style tends to prevail (Bresnen 1986). Figure 2 shows the dynamic of leadership style in construction.

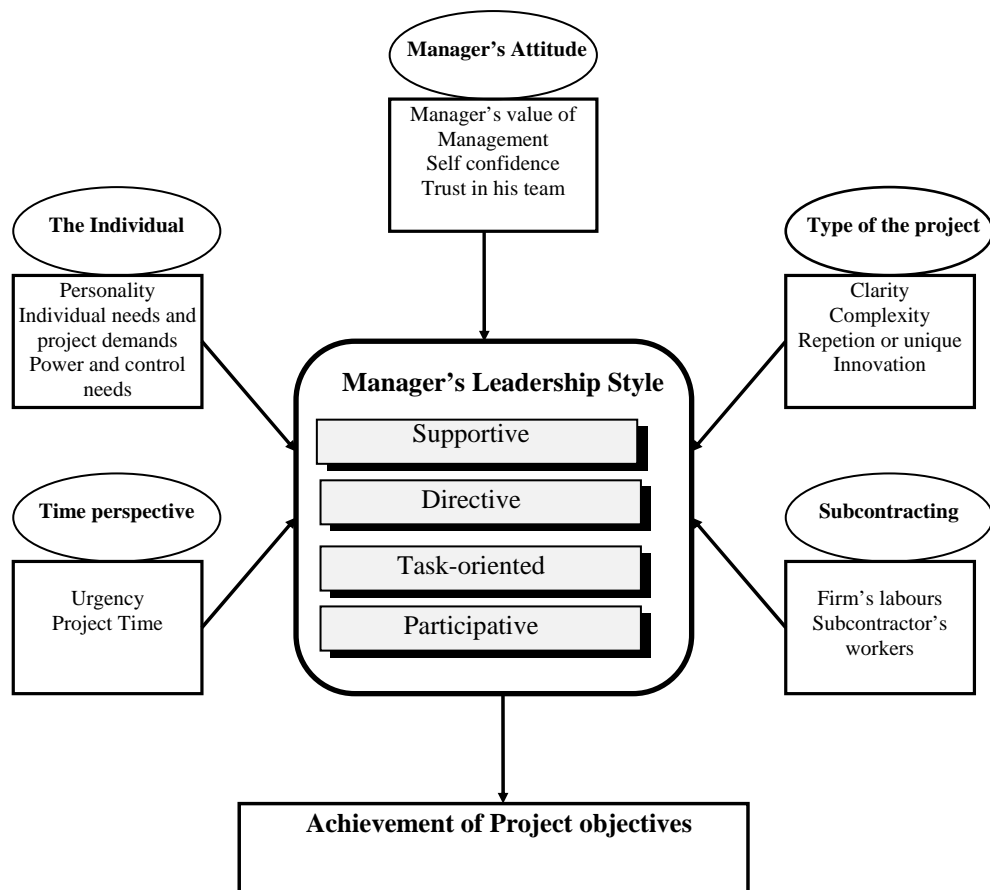


Figure 2: The Dynamic of Leadership Style in Construction

## CASE STUDIES

To illustrate the point that leadership styles change with the situation two case studies were chosen from the construction industry. The first case study shows the effect of the cultural background on the leadership behaviour in Hong Kong, while the second case study demonstrates how the leaders should behave in a heterogenous construction environment in the Middle East.

### Hong Kong: The Effect of the Cultural Background

Hong Kong's construction industry is one of the most dynamic in the world and the Territory has a remarkable record of completing projects to budget in seemingly impossible times. Despite the fact that 97% of the population is Chinese, Hong Kong is considered to be a meeting point for Western and Eastern cultures. A survey was conducted by Rowlinson, S. and Ho. T (1992) to explore the leadership style in construction projects in Hong Kong, using two measures; the first is fiedler's Least Preferred Co-Worker (LPC) scale and House's grid to investigate changes in leadership behaviour style at different stages of a project. Two separate surveys were conducted, one on design team leaders (28 projects), and the other on construction site staff (29 projects). The majority of respondents were Civil Engineers. The summary of findings were as follows:

- (1) There is no predominant leadership style in the local civil engineering construction industry, although the participative and directive styles were more dominant.

- (2) Majority of leaders employ more than two out of four leadership styles. Thus, Civil Engineers in local construction industry appear able to adopt a range of styles suited to individual project or personnel needs.
- (3) Design team leaders used at least two different leadership styles in each phase of the project. During the feasibility and pre-contract phases a supportive style was most regularly used. However, in the post-contract phase a directive style was most popular.
- (4) Site engineers and design team leaders appear to be more relationship-motivated than their counterparts in the United Kingdom.

In Chinese Society, the Confucian doctrine of harmony, the characteristic of collectivism and the concept of "saving face" makes leaders more sensitive to the feelings of others and allows them to suppress their directive behaviour. This shows that cultural characteristics greatly influence the preferred leadership style which make Chinese leaders more relationship-oriented than their Western counterparts and more concerned with maintaining good personal relationships in a harmonious working atmosphere. Findings showed, as well, the task of the design team leader may well call for a much more open style of leadership due to the nature of the task, certainly in the design process and, to a lesser extent, in the documentation and construction phases.

#### **Middle East: The Heterogeneous Construction Groups**

In the Middle Eastern countries, such as Saudi Arabia and Kuwait, it is common today to observe construction projects performed by teams coming from more than one culture. The cocktail of human resources and manpower in the Middle East creates several problems for site managers due to the differences in the way of thinking and behaving. These differences can usually be traced to dissimilar education, language and cultural background of various national groups.

A survey was carried out by Enshassi and Burgess (1990), to examine the impact of site managers' styles on the multi-cultural work forces productivity and the most appropriate leadership style to the Middle East. The sample was 79 construction site managers defined as individuals in charge of construction projects chosen from 62 international and local construction firms, which were drawn from 6 countries in the Middle East. The main findings were:

- (1) The level of the multi-cultural work forces' productivity decreases in this sample in construction projects in the Middle East because of the cultural differences which exacerbate communication problems between work forces' groups on the one hand, and between site managers and the work forces on the other.
- (2) Cultural diversity of group members may raise the degree of ambiguity, miscommunication and misinterpretation during the construction process.
- (3) The style of site managers can create conditions conducive to the enhancement of mixed-cultural work groups' productivity.
- (4) A high level of productivity can be achieved when site managers adopt a highly task and employee-oriented leadership style.



In the Middle East where employees may be drawn from different countries, from numerous cultures, speaking several languages, managers need to be highly employee oriented in order to understand the cultural diversity of the individuals and groups, so that any destructive and unnecessary conflict can be avoided or at least minimised. Moreover, managers in such an environment need to be highly task oriented, through the planning, organisation and supervision of their subordinates, giving particular attention to these features which would help to avoid misunderstandings and reworking, so that a high level of productivity of such a complex team can be maintained.

## CONCLUSION AND FURTHER RESEARCH

Leadership is one of the artistic skills in management needed to influence the people or group towards the achievement of the common goals and objectives. The successful outcome of any project depends largely on the leadership effectiveness to deal with all situations and contingencies. Theories such as Trait Theories, Style Theories and Contingency Theories explained some reasons behind the success and effectiveness of the leader's behaviour but fell short when dealing with leadership styles during the construction process.

Evidence, cited previously, suggests that project managers and others vary their styles of leadership considerably in response to their assessment of the characteristics of individuals, whether dealing with subcontracted or the firm's own labour, and the degree of urgency associated with a project. The significance of this evidence is in twofold:

*First*, theorists and researchers investigating leadership styles have tended to view their object of study in primarily static terms. According to the (old) paradigm, a leader *is* directive, participative, or whatever. Even when dealing with a combination of styles a leader is still characterized in a static leadership style. Surveys and case studies in construction sites suggest that leaders vary their styles to a very considerable degree, largely in response to their assessments of the implications of various situational contingencies. While some contingency approaches acknowledge variability in leadership styles, others such as the Path-Goal (House & Mitchell 1974) and Fiedler's (1976) models do not. Describing leaders in terms of one particular dimensions of leadership, e.g., employee-oriented or task-oriented differs from the way the leaders actually behave.

*Second*, theorists mentioned the situational contingencies which affect the leadership style such as task structure, leader's position, the leader's member relation..etc. The situational factors taken into account in construction sites were somewhat different. Factors such as subcontract vs. directly employed labour, time pressure, cultural background (case study 1) and multi-cultural work force (case study 2) are unique factors to the construction process which should be added to the leadership styles' variables.

Further research should be carried out in this aspect to examine and explore the possibility and operation of leadership in a variety of roles and situations, not simply among those persons in whom formal leadership has been vested. This could result in finding a method to create and place good leaders among construction managers in an industry which severely lacks an effective leadership.

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