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# Leadership style of construction managers in Hong Kong

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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, the Territory remains under British Colonial rule (until 1 July 1997) making Hong Kong a meeting point for Western and Eastern cultures. This mixture of cultures raises interesting managerial issues and an issue particularly relevant to construction project management is leadership behaviour style. This paper studies the leadership styles of Hong Kong Chinese construction managers (by means of Fiedler's Least Preferred Co-worker (LPC) scale and House's styles grid) and compares these styles with those of their western counterparts. Hong Kong managers are found to be much more relationship-orientated than their western counterparts. The issue of the effect of situational variables on the style adopted is explored.

*Keywords:* Leadership, Hong Kong, site staff, design team leaders.

## Introduction

This paper explores issues of leadership behaviour style in construction projects in Hong Kong and reports on a recently conducted survey. Two measures of leadership behaviour style are used. The first is Fiedler's Least Preferred Co-worker (LPC) scale which has the advantage of being a well-used scale and so results can be compared with other studies. A person's LPC score is said by Fiedler to be an invariant personal characteristic, however, and so, if one wishes to explore the effect of situation on leadership style, another measure must be used. Thus a second scale, based on House's grid, is also used to investigate changes in leadership behaviour style at different stages of a project. These two scales are described in more detail later. In order to set the scene for this paper the following sections describe the Hong Kong construction industry, Hong Kong Chinese managerial ideology and organizational structures used in Hong Kong projects.

## Hong Kong's construction industry

To put Hong Kong's construction industry in context, the following section summarizes some of the key economic factors relevant to the industry.

The population of Hong Kong has increased over the past ten years by 14% to 5 859 100 in 1990 (Hong Kong Government, 1991), making Hong Kong's urban area one of the most densely populated areas on earth. To cope with Hong Kong's future development, the Hong Kong Government continues to invest heavily in a large number of projects to improve the transport, water supply, ports and other facilities of the Territory. The Governor of Hong Kong, on 11 October 1989, announced a massive port and new airport development project costing, currently, HK$840 billion.

In 1989/90, funds allocated for capital works amounted to $9877 million, representing about 14% of government's total approved expenditure for the period. The share of the construction sector in the Gross Domestic Product was about 5%; 8.4% of Hong Kong's 2.8 million workforce were engaged in construction (Hong Kong Government, 1991).

There were 1336 construction sites employing 70 654 people in the third quarter of 1990 (Hong Kong Government, Feb 1991). During the period 1980/87, an average of 68% of capital investment was in the products of the construction industry (Walker and Rowlinson, 1990). The public purse accounts for around 30% of the construction industry's workload. The industry is characterized by a very high level of subcontracting, but

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faces a double problem of labour shortage and wage inflation (typically a steel bender will be paid HK$600 per day, Hong Kong Government, Feb 1991). However, the contribution and future importance of the construction industry is not in doubt.

## Managerial ideology of the Hong Kong Chinese

Chinese culture has a major influence on the leadership style adopted by Hong Kong project managers and the preferred leadership style of their subordinates. Evans *et al.* (1981 and 1982), reviewing the writings of Hofstede (1980), Redding and Tam (1985), Wong (1986), Redding 1980) and other authors on cross-cultural aspects of management style, have summarized the following as characteristics of Chinese and Hong Kong Chinese:

1. Chinese subscribe more than their Western counterparts to the perceptions that man is inherently bad and, as a consequence, individuals must be controlled by imposing norms to ensure socially acceptable behaviour. This corresponds to McGregor's (1960) 'Theory X' and Burns and Stalker's (1966) 'mechanistic' management.
2. The majority of Hong Kong Chinese are punctual and will act according to precise schedules if there are sufficient incentives.
3. Most Asian societies follow a collectivist pattern. The management of finance is usually the undisputed job of the head of the family. The head of the family also shows his authority by making all family decisions, including those concerning his children's private matters. The rules and obligations in the family hierarchy will be monitored by all family members and close relatives, and pressure will be applied on individuals to ensure conformity. Even in Western-influenced Hong Kong, the traditional family characteristic is still dominant, although the younger generation in Hong Kong has gradually weakened the influence of parental control.
4. The Chinese Confucian doctrine which centred on loyalty, harmony, families and hard work is still evident in the Hong Kong Chinese, particularly in family and business matters.
5. The concept of 'face' and 'saving face' is still an important feature in Chinese social relationships.
6. There is less trust between individuals in the Asian enterprise.
7. Workers in Asian companies have a more long-term relationship with their employers and stress the importance of end results.
8. The Chinese culture of respect and obedience towards one's parents is also extended to include obeying one's boss and small firms in Hong Kong are often run on what is termed 'family lines' in which many of the employees are family members and the manager takes on the role of a father-figure. The workers are expected to carry out instructions exactly as specified.
9. Many Hong Kong Chinese still consider that 'luck' plays an important role in their life and that things are outside their control.
10. Hong Kong Chinese are practical and realistic.

The Hong Kong Chinese have been described as basically loyal, hard working, pragmatic and preferring a directive leadership style. However, by the influence of Western culture and a high level of industrialization, which tends to generate more 'organic' organizations, a participative leadership style is emerging. According to Kerr *et al.* (1986), as a society develops, its management style will inevitably converge towards the democratic style adopted in the developed Western countries. The traditional cultural characteristics, as influenced by the Western culture together with the level of industrialization, have moulded a managerial ideology specific to the Hong Kong Chinese which has a great impact on the leadership style that they adopt.

## Leadership studies in the construction industry

Studies of leadership style in the construction industry are quite uncommon and, of the few studies that have been undertaken, Bresnen *et al.* (1976) state that: 'such studies have rarely focused upon a direct investigation of the role of site managers as leaders of their team and the range of managerial styles they adopted in managing work on site'. Bresnen's research concentrated on the leadership style of UK site managers i.e. contractor's management, whereas this work covers the leadership style of a wide selection of project managers and project leaders, i.e. design management, construction supervision and construction management.

Bresnen's research was based on Fiedler's contingency model and employed the LPC scale to measure leadership style. 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 managers' leadership orientation was unasso-

ciated with a number of their background characteristics (age, educational background, experience etc.).

3. There is a tendency for high LPC (more relationship-orientated) managers to perform better on larger value contracts and contracts of longer duration.

The findings of Bresnen reinforced the important effect of situational variables on the effectiveness of leadership as suggested by the situational theorists. Surprisingly, the study also found that those situational factors most commonly presumed to act as moderating variables in other settings (i.e. task structure, leader position power and leader member relations) did not have as strong an effect as expected upon the relationship between leader and performance in the construction industry. However, this study concentrated only on the construction phase of the project.

## General leadership characteristics of project managers and project leaders in Hong Kong

In the Hong Kong construction industry, the project leader position is often a low power leadership position (Ho, 1992). The leaders are often only slightly elevated over their peers in terms of legitimate authority and, as a consequence, much of their leadership style must rely on influence and persuasion, rather than on authority and commands. Although the position power may be higher when project leaders have full decision making authority, their control over contributors coming from other firms is still low. The leading of a group of mature professionals, according to Hersey and Blanchard (1972), also suggests that a delegating (achievement oriented) leadership style is important in order to 'fit' the situation.

The difference in task structures between the design stage and the construction stage also suggests that different leadership styles may be employed for each stage. In the design and contract documentation stages the structure of the task, such as developing initial evaluations, outline design strategies and selecting contractual arrangements, is often loosely defined and hence project leaders may employ a more democratic style of leadership in collecting ideas and recommendations. However, in the construction stage, where the task structure is more clearly defined, the project leaders may employ a more autocratic style of leaderhip. This is not to say that the project leader may not change to a more democratic style when problems which require recommendations from the contributors occur and may change to a more autocratic style when a conclusion is important in order to make progress. Therefore the project leader may employ different leadership styles, from autocratic to democratic, depending on the situation (needs of the task, stage of development etc.).

Additionally, organizational structure will have an impact on leadership effectiveness. The following section examines the impact of four organizational structures which are common in Hong Kong. These are:

1. **Conventional type with architect as the project leader**
   This structure is generally adopted on small scale, simple projects in Hong Kong and the position power of the project leader is generally high, with a tight organizational setting and, it is hypothesized, the project leader will adopt a structuring (or autocratic) leadership style in the design, documentation and construction phases of the project.

2. **Conventional type with project manager as the project leader**
   Usually adopted for medium to large-scale, complex projects, in this structure the project manager may act in one of two roles:
   (a) non-executive project manager acting only as a project coordinator with the decision-making role undertaken by the architect and client. The project manager's position power is low and leadership style will tend to be participative (or democratic) throughout the project phases;
   (b) executive project manager undertaking all the integration, coordination and decision-making functions. The management function is separated from the operating system but the decision-making process requires input and expert recommendations from the design team. Thus the project manager has a higher position power than under (a) but will employ a more democratic leadership style in the design phase when expert recommendations are required, supported by a more autocratic style in the documentation and construction phases.

3. **Management contract with project manager as the project leader**
   This structure is used with large scale, complex projects with the management contractor joining the design team on an equivalent basis to all other consultants. Executive or non-executive managers may be employed and the same principles apply as to 2.

4. **Civil enginering contract with engineer as the project leader**
   Here the engineer takes on the role as the client's representative, the role being similar to that of the

architect in 1. New forms of contract, such as the NEC, may eventually change this approach to one more akin to 2 and 3, but at present a hierarchical structure exists which implies that the engineer will act in an autocratic style during design and documentation but, away from head office on the construction site, a more participative style will be appropriate.

## Measurement instruments

Fiedler's LPC scale measures the degree to which a person described favourably or unfavourably his least preferred co-worker. Leaders are asked to think of one person in their lives with whom they could work least well (the least preferred co-worker) and to describe this person along an 8-point, bi-polar scale of adjectives. Fiedler and Garcia (1987) currently interpret the LPC score as measuring a motivational hierarchy, indicating the degree to which the individual sets a higher priority or value on task accomplishment (low-LPC) or on maintaining good interpersonal relations (high-LPC).

According to Fiedler (1978): '. . . a high LPC score identifies a person whose major concern and first priority is the development and maintenance of good interpersonal relations; a low LPC score identifies a person whose major concern and priority is the accomplishment of the task or . . . to obtain tangible evidence of his or her own competence'. Those leaders with middle-LPC scores are termed 'socio-independent'. They tend to be less involved with either their superiors or their subordinates or in the way in which their personality impinges on others. They tend to be less emotional about the job, thus enabling them to gain more from training and experience (Fiedler, 1967).

The LPC score is taken here as reflecting an individual's preferred leadership style as Fiedler (1967) states: 'A person's leadership style reflects the individual's basic motivational and need structure' and Bryman (1987) states 'Fiedler [who] sees a person's score as an invariant personal characteristic'.

Fiedler's LPC scale is the subject of debate but, notwithstanding the various criticisms of the scale, the scale has been adopted in this survey for measuring the preferred leadership styles of the project leaders for the following reasons:

1. It is a well known and widely used scale;
2. The results can be compared with the results of other research;
3. It avoids direct questions to the leader on personal behaviour, thus bias from implicit leadership theories is largely eliminated.

The scale used was the 16-item version, for ease of comparison with other research (see Figure 2). According to Fiedler (1967) and Fiedler and Chemers (1984), for a 16-item scale:

| *LPC score* | *Preferred leadership type* |
|---|---|
| $<58$ | Task-motivated |
| 58–63 | Socio-independent |
| $>63$ | Relationship-motivated |

The questionnaire used is attached as Appendix 1. Note that the Chinese equivalents are based on Cantonese expressions as spoken in Hong Kong and not Potunghua as spoken in the PRC.

### Actual leadership style

Since the LPC score is presumed to measure the preferred leadership style of project leaders, the actual leadership style employed by design team leaders at different project phases was measured by means of another scale in order to investigate the influences of the situation on this preferred leadership style. The measure consists of four sets of statements, each expressing a way in which one may have acted in managing the work of one's subordinates. Each of these statements corresponds to a leadership type as identified and developed by the Ohio State and University of Michigan Studies (in the 1950s) and by the contingency theorists (such as Blake and Mouton (1964), Hershey and Blanchard (1969) and House and Mitchell (1974)). Rather than plotting leader behaviour style on one axis (a continuum) two separate axes are used, representing concern for task and concern for relationships on a grid. Thus four leadership styles can be identified, namely:

1. directive (instrumental) – a systematic approach to clarifying expectations, roles, accomplishments, etc. by the leader;
2. supportive – showing concern for the subordinate's well-being while, in general, directing;
3. participative – a consultative approach in which subordinates are involved in decision making;
4. achievement-orientated – akin to management by objectives where the leader sets goals for the subordinate to attain (also known as delegating style).

The questionnaire used is attached as Appendix 2. From an analysis of the responses to this questionnaire a primary and a secondary style of leadership behaviour can be identified.

## The study

Given the foregoing discussion of the Hong Kong construction industry, managerial ideology and leadership in the construction industry, the following propositions have formed the basis of this study:

1. Construction managers in Hong Kong will be task orientated in the same way as their Western counterparts. This task orientation can be measured by Fiedler's LPC scale and will indicate a preferred style of leader behaviour.
2. Leader behaviour will be moderated by the situation; in particular different leader behaviour styles will be used at different stages of the project process as indicated earlier. Bresnen (1986) and Bryman (1987) investigated the link between leadership style and project duration (transience) but with inconclusive results. Such an approach ignores a very important aspect of construction projects – their method of management over the whole project process, not just the construction phase. This study attempts to explore this situational variable by considering three project phases: design; documentation; and construction, and including design team leaders as well as site staff in the survey.

## Sample

Two separate surveys were conducted, one on design team leaders and the other on construction site staff. The majority of respondents were civil engineers. Both samples were selected from a list of government contracts currently being constructed on site. Each respondent was initially approached personally to find out whether the respondent had been with the project for most of its duration and thus was able to give meaningful responses to the questions. The design team leaders' sample was targeted for responses relating to change in leadership behaviour style. The selection of respondents was random, but obviously dependent on respondents' willingness to cooperate in completing a lengthy questionnaire.

The design team leaders survey targeted medium to large size construction projects ranging in value from HK$55 to 1400 million. A total of 28 projects were included in the sample indicating a 40% response rate to mailed questionnaires and telephone follow-ups.

The construction site staff survey targeted government civil engineering contracts with values ranging from HK$12 to 1400 million. A total of 29 complete sets of questionnaires were returned which represented a 46% response rate.

## Results

### Preferred leadership style

The preferred leadership of an individual is considered as the habitual and preferred style of leadership one would choose to adopt if the influences of situational variables were discounted.

### Construction site staff

The LPC scores of the sample of civil engineers in the Hong Kong construction industry scatter over the entire spectrum, with significant frequencies at higher scores (Max. = 112, Min. = 16, Mean = 63.59 and s.d. = 23.31; the distribution is shown in Figure 1). Average LPC scores for a range of occupational and student samples are given in Figure 2.

The mean LPC score of the sample is at the lower end of the high LPC (relationship-motivated) range and is comparable to the scores for US second level managers. When compared with the other LPC scores it can be seen to be high and is much higher than the scores recorded by Bresnen *et al.* (1986, Mean = 55.03), Bryman *et al.* (1987, Mean = 55.46) and Quinless (1986, Mean = 56.80).

However, the distribution in Figure 1 shows that an almost equal number of scores lie in the relationship-motivated and task-motivated range, with six scores in the socio-independent part of the range. The high mean score is attributable to seven scores over 75. Thus, the sample of construction site managers in Hong Kong displays the full range of leadership behaviour style and cannot be categorized as displaying one single style.

### Design team leaders

The LPC scores of the study range from 18 to 144 with a mean of 65.74 and a standard deviation of 27.7 and cluster above the middle portion of the range, as shown in Figure 3. The mean LPC score of the study sample indicates that project managers and project leaders in

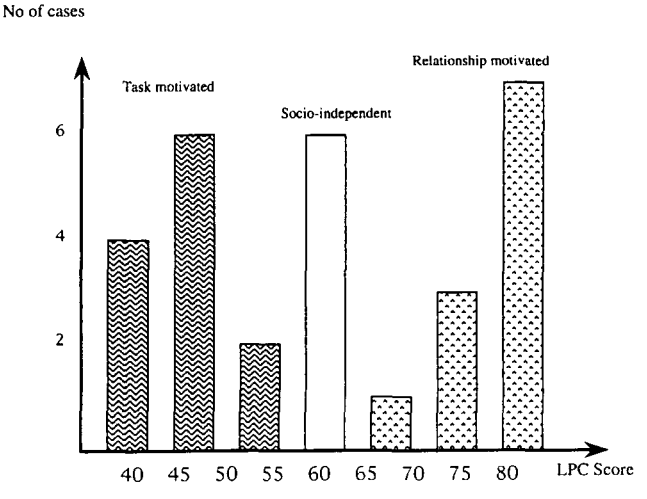


**Figure 1** Bar chart of LPC scores of site managers.

Hong Kong are generally relationship-motivated and socio-independent and few are task-motivated.

When compared with the average LPC scores for other occupational samples (as shown in Figure 2) this score is equivalent to those between head nurses and second level managers in America and is much higher than those obtained by Quinless (1986) (Average = 58.50) for design team leaders in the United Kingdom. The differences can be attributed, in part at least, to the cultural differences between Chinese society and Western society.

| Occupational Samples | Average |
|---|---|
| | |
| Second level manager, Iran (1) | 84.03 |
| Head Nurses, U.S. & Canadian (1) | 71.82 |
| Second level managers, U.S. (1) | 63.47 |
| Civil service engineers, U.S. (2) | 60.44 |
| Design Team Leaders (3) | 58.50 |
| National Guard senior officers, U.S. (1) | 56.97 |
| Construction Managers (3) | 56.80 |
| Construction site managers, U.K. (2) | 55.46 |
| Construction site managers, U.K. (4) | 55.03 |
| Company Commanders, U.S. Army (1) | 53.62 |
| Administrators, City Treasury Office, U.S. (1) | 46.22 |

**Figure 2** Average LPC scores for a range of occupational samples (16-item scale).
Notes: (1) From Fiedler and Chemers (1984, p. 26, Table 2-1). All LPC score based on 18-item scale, but have been adjusted to a 16-item mean. (2) Bryman *et al.* (1987) study of construction managers, using a 16-item scale. (3) Quinless (1986). (4) Bresnen *et al.* (1986) study of construction managers, using a 16-item scale.
*Source:* Bryman (1987) and others as noted.

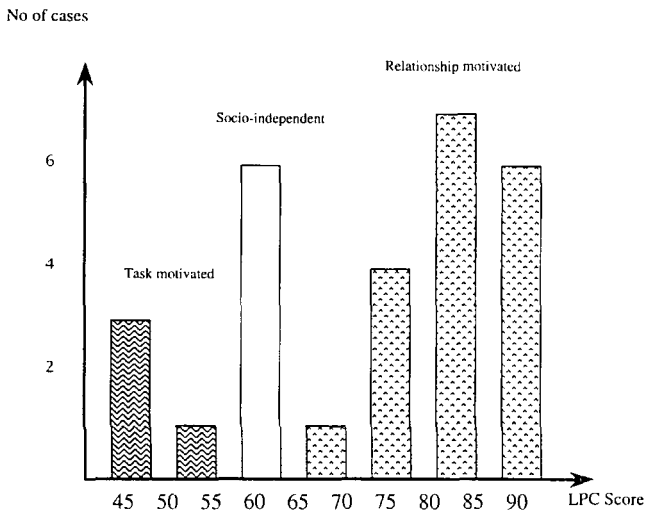


**Figure 3** Bar chart of LPC scores of design managers.

The high score signifies that design team leaders in the Hong Kong construction industry may have a tendency to develop and maintain close relationships with others in the work group. They may be concerned with achieving a harmonious working atmosphere and may be less emotionally involved with task accomplishment. This emphasis on social harmony is a very commonly observed phenomenon in Chinese societies.

## Actual leadership style

In order to study how the situational variables modify the habitual leadership style of the leader, the actual leadership style being adopted by the leader was determined. The actual leadership style was categorized into directive, supportive, participative and achievement-orientated in the survey.

## Construction site staff

It was found that there is no predominant leadership style in the local civil engineering construction industry, although the participative and the directive styles were more prevalent (see Figure 4). A more detailed examination of the responses from the 29 leaders revealed that only five of them employed a single leadership style, and 13 of them were exercising more than two out of the four leadership styles. Thus, civil engineers in the local construction industry appear able to adopt a range of styles suited to individual project or personnel needs.

## Design team leaders

Most design team leaders used at least two different management styles in each phase of the project (a primary and a secondary style). 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 (see Figure 5). Surprisingly, the use of an achievement-oriented style was rarely recorded, even in the feasibility stage. This absence may well reflect a need still to retain some control over a subordinate's work and the determinants of this need may well stem from the high intensity methods of working in Hong Kong, where projects are

| Style orientation / Style used | Achievement | Participative | Supportive | Directive |
|---|---|---|---|---|
| Primary Style | 5 | 11 | 5 | 8 |
| Secondary Style | 9 | 5 | 7 | 8 |
| Total recorded | 14 | 16 | 12 | 16 |

Numbers in cells indicate number of responses in the category, sample size = 29

**Figure 4** Actual leadership style for construction managers.

| Style orientation / Phase of project | Achievement | Participative | Supportive | Directive |
|---|---|---|---|---|
| Feasibility phase | 2 | 6 | 13 | 7 |
| Pre-contract phase | 1 | 7 | 14 | 6 |
| Post-contract phase | 3 | 4 | 6 | 15 |

Numbers in cells indicate number of responses in the category, sample size = 28

**Figure 5** Actual leadership style for design team leaders (by phase).

often undertaken at very high speed within significant cost constraints.

The study sample in this research consists of 18% architects, 25% 'non-executive type' project managers and 57% 'executive type' project managers. All of them are leading project teams with team members coming from separate, independent professional firms. The amalgam of different independent firms in a construction project organization makes direct control and supervision of team members' work difficult and, as a consequence, the leadership style employed by project leaders will be much more reliant on persuasion and influence instead of direct instruction and control. This organization structure of the project design team explains why construction project leaders tend to adopt a participative or supportive style in the feasibility stage and pre-contract stage of works. In the post-contract stage, the tasks are more clearly defined and, in order to monitor progress, the leadership styles of construction project leaders may tend to be more supportive or even directive.

## Discussion of results

### Construction site managers

Civil engineers in the local construction industry appear to be more relationship-motivated than their counterparts in the United Kingdom. This distinction may be attributed to cultural differences. Social harmony and the concept of 'face' – the subtle sensitivity to one's pride – are regarded as useful doctrines in the attainment of economic and social objectives in Chinese societies. The local civil engineers are therefore trained in their upbringing to be very sensitive to others' feelings, especially those with whom they work. This concern with attaining and maintaining good personal relationships is expressed in their preferred and habitual leadership style. However, the sample LPC scores show that a whole range of styles are used.

### Design team leaders

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. These cultural characteristics greatly influence the preferred leadership style which make Chinese leaders more relationship-orientated than their Western counterparts and more concerned with maintaining good personal relationships and a harmonious working atmosphere.

In addition, 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.

## Conclusions

### Preferred leadership style

Project managers and project leaders in the Hong Kong Construction Industry are generally relationship-orientated and socio-independent and their management styles is less concerned with task accomplishment. The LPC scores of the project leaders in Hong Kong are comparatively higher than those of their Western counterparts which indicates that project leaders in Hong Kong have more concern with maintaining good relationships and a harmonious working atmosphere. Thus the first proposition of this paper has been contradicted. Bryman (1987, p. 17) states: '. . . there is a stronger task emphasis among site managers than among other leaders. Whether this is a general tendency among leaders in temporary organizations can only be ascertained with any degree of certainty by further studies.' These results only partially support Bryman's contention on task emphasis among site managers (LPC scores being equally divided between relationship and task motivated, but this is not true for design team leaders, who exhibit strong relationship motivation) but this lack of support may come from either the influence of Hong Kong Chinese cultural values or the LPC scale itself.

If the scale measures 'an invariant personal characteristic' then it may not be an appropriate tool to analyse the styles employed by construction personnel at work, and the alternative grid measure may be more useful. Fiedler's LPC Scale has been surrounded by controversy for many years as to its exact meaning. It seems from this study that it may well not be a good tool to use when attempting to apply a contingency view to the construction project and that alternative measures, which can take into account situational dependence and admit that an individual may use a range of styles, may be more appropriate.

In relation to the much higher LPC score recorded in Hong Kong compared to the UK, the difference may be

attributed to the cultural differences between Chinese society and Western society, particularly the influences of the Chinese Confucian doctrine of harmony, the collectivism characteristic and the concept of 'saving face'. These make leaders more sensitive to the feelings of others and suppress their directive behaviour. Project leaders in Hong Kong thus rely more on personal relationships with the group to complete the task.

However, a major problem encountered in comparing the results with previous research is the lack of information on the spread of scores. Although the average score for Hong Kong site managers is high, there are almost equal numbers in the task- and relationship-motivated ranges. Thus, the Hong Kong site managers sample exhibits a whole range of styles and they cannot be categorized by one single style. This is not true for the design team leader sample which can be said to be strongly relationship-motivated.

### Actual leadership style

The results of the survey indicate that different leadership styles are employed by the same project leaders and these may be attributed to the different situations in which they find themselves. In general, projects leaders in the Hong Kong Construction Industry tend to use a supportive style in the feasibility study and pre-contract stages of works and a directive style in the post-contract stage of works. These results are in general agreement with the previously proposed leadership styles.

As far as site staff are concerned, the participative and directive styles are common leadership styles in Hong Kong construction projects, while the supportive and the achievement-orientated styles are used as secondary styles. The diversity of the leadership styles being used may well indicate that Hong Kong civil engineers are able to adapt to different task needs.

The research has thrown up some interesting and somewhat surprising results, particularly the finding that Hong Kong construction managers are more relationship-orientated than their western counterparts. This finding merits further investigation.

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## Appendix 1

Think of the person with whom you can work least well. He or she may be someone you work with now or may be someone you knew in the past. He or she does not have to be the person you like least well, but should be the person with whom you had the most difficulty in getting a job done. Describe this person as he or she appears to you.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Pleasant | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Unpleasant |
| Friendly | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Unfriendly |
| Rejecting | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Accepting |
| Helpful | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Frustrating |
| Unenthusiastic | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Enthusiastic |
| Tense | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Relaxed |
| Distant | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Close |
| Cold | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Warm |
| Cooperative | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Uncooperative |
| Supporting | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Hostile |
| Boring | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Interesting |
| Quarrelsome | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Harmonious |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Self-assured | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Hesitant |
| Efficient | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Inefficient |
| Gloomy | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Cheerful |
| Open | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | Guarded |

## Appendix 2

Below are four sets of four statements, each expressing a way in which you may generally have gone about managing your subordinates' work on this site. For each set, will you say which you think is the closest description of what you have done.

1.

(a) I try to get my subordinates to assume full personal responsibility for their work.

(b) I try to give my subordinates firm guidance and clear instructions wherever I can.

(c) I try to leave options as often as possible and try to get serious and useful suggestions from my subordinates.

(d) I try to be as friendly and approachable to my subordinates as possible.

2.

(a) I try to let my subordinates know exactly what is expected of them, to reduce any margin of error.

(b) I try to ask subordinates their opinions before putting plans into action.

(c) I try to make my subordinates as satisfied as possible with their work.

(d) I try to get my subordinates to be as committed to their work as I am.

3.

(a) I try to make my subordinates' work as clearly defined and specified as possible.

(b) I try to be as fair and equal as I can in my dealings with subordinates.

(c) I try to motivate my subordinates to perform as well as possible.

(d) I try to get my subordinates to offer suggestions for improvement in work methods.

4.

(a) I expect my subordinates to achieve as high a level of performance as possible.

(b) I want subordinates to feel that they can come to me with their personal problems.

(c) I try to get my subordinates work as well organized as possible.

(d) I try to take into account serious and useful suggestions for improvement or change in methods.