

COMPARISON BETWEEN THE LEADERSHIP STYLE OF AMERICAN AND PALESTINIAN CONSTRUCTION MANAGERS

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Abstract:

A construction project is a dynamic entity that is carried out in an environment of ceaseless change. To be completed successfully, it must respond to the changing conditions and must be monitored through a system which generates feedback for necessary corrective action. The success of construction projects, whether it is accomplished in the country of the organization or beyond its border, is determined mainly by the quality of its management. Projects which are carried out beyond national borders may create special problems for construction managers such as operating with local laws, regulations, social customs, different leadership styles, and new environment. Numerous leadership studies have been conducted on permanent organizations; however, there have been little comprehensive studies on the more complicated issues of leadership in temporary organizations, as are frequently found in the construction industry. Leadership has been highlighted as an important factor in successful projects in a number of studies.

The aim of this study is to identify the leadership styles of Palestinian and American construction managers. This study aims also at examining the construction managers’ effectiveness and the work force productivity with relation to their managerial style. The association between the effectiveness of construction managers and work force productivity has been examined. The results indicate that the American construction managers are more accustomed to task orientation than their Palestinian counterparts. The results suggest that there is a positive association between the style of construction managers and their effectiveness, and the productivity of work forces. It was also found that there is a strong positive correlation between construction managers’ leadership style and the productivity of work forces.

Keywords: Construction, management, style, leadership, Palestinian, American

1. Introduction:

The phenomenon of leadership style has been extensively researched in the behavioral science field as it is crucial for the continuous existence and development of any organization. The search for a more comprehensive leadership effectiveness has been hampered by methodological and conceptual problems (1). Some previous methodology provided only two descriptions of leadership style (task and employee oriented managers), respondents being asked to mark the type which they considered they worked under (2). This approach is too direct because respondents had only two choices which did not provide any information regarding those whose styles embraced both types.

Other researchers tried to apply questionnaires used by some scholars in a different culture, and sometimes, different industries without any modification. In any case, the construction industry was not included. Such approaches may not reflect the real orientation of managers. Regarding conceptual problems, the leadership phenomenon was oversimplified by ignoring the actual process of leadership and expressing leadership dimensions in binary terms, e.g., task orientation and employee orientation.

In the construction industry, very few studies have explored the managerial style orientation of construction managers and the leadership style which they adopt when managing work teams on a construction project, and the relationship between such styles, the managers effectiveness, and the construction project performance. Human issues in construction have become key variables that affect the pattern of management being carried out at team-driven modern construction projects. Leadership has been highlighted as an important factor in successful projects in a number of studies. This paper reviews leadership theories and investigates the leadership styles of Palestinian and American construction managers and their relation to managerial effectiveness and work force productivity.

2. Leadership Style Studies in the Construction Industry:

Leadership in some fields, e.g. military, businessmen, personnel has been heavily researched, while others e.g. construction have been relatively overlooked. Since construction work puts heavy emphasis on cooperation among team members, leadership accordingly should have great influence on the performance of construction work. In addition, leadership has been shown to be a major factor determining successful project performance in many studies.

Lawrence and Lorsh showed the importance of integrators, equivalent to construction project managers, to successful task completion (3). Borcherding and Garner concluded by advocating that leaders should provide adequate support and assistance to the work force and establish a cooperative atmosphere among all levels and parties involved in order to enhance the morale and satisfaction of the work force and hence lead to better productivity and performance (4).

Lansely, et al. have conducted research in small and medium sized printing and building firms, and examined the relationship between organization structure, management style, and their influence on company performance. They measured the difference between companies’ management style by adapting Blake and Mouton’s model. They concluded that poor performance was related to low task orientation combined with low people orientation, and high performance was related to high task orientation, disregarding the differences in task between the printing and building industries. Moreover, Lansely et al. supported the hi-hi paradigm, as they found in the building firms that poor performance is associated with low-task/low-people orientation, and high performance is associated with high-task/high-people orientation.

Bresnan et al. have investigated the issue of leader orientation of the British construction site managers. Fiedlr’s contingency model was employed to examine the relationship between site manager’s orientation (task orientation or relationship orientation) and the performance of the project (5). They concluded that site managers’ orientations have an impact on project effectiveness, and that this relationship is dependent on project length, contract values, and labor-force composition. In particular, they noticed that the implementation of a people-oriented management style on a construction site is more likely to improve the project performance than the practice of a task-oriented management style, irrespective of the degree of favorability in this situation.



On longer duration, larger-scale projects, the relationship between site managers' orientation and performance increased significantly, whereas in shorter, smaller projects, there is no recognizable relationship. Borchering raised this observation previously, stating that on larger construction sites, the leadership style is a very important issue because of the site complexity and the problems of morale and motivation (4). With respect to work force composition, it was found that there is an association between leadership orientation and increase in the performance level when the majority of work force were employed directly by the main contractor. There is no real association of the site manager on sites employing a great deal of subcontract labor.

Bresnen et al. reported that construction site managers (as leaders in temporary organizations) have stronger task orientation than their counterparts in more permanent organizations. They found also that the time span of the construction project moderates the relationship between leadership orientation and performance (5). Bryman et al. stated that, there is an evident irony that, while site managers as a whole are markedly task-oriented, the greater the emphasis on relationships (especially on longer projects) the better the performance.

Enshassi et al. indicated that there is a strong positive association between the style of managers and their effectiveness (6). They found that most effective managers tend to be high in both task and employee orientation. In other words, an effective manager is one who is equally concerned with technical aspects of management, e.g. planning, control, quality, cost, and productivity; and simultaneously is concerned with human aspects, e.g. welfare, mutual trust, respect for subordinates' ideas and the cultural differences of the work forces.

Rowlinson et al. have studied the leadership style in construction managers in Hong Kong. They found that overseas Chinese project managers are not, in general, more task oriented than their western counterpart (14) . The older project managers and those with no formal tertiary education are more task-oriented. As many of the younger managers have studied abroad and have degrees above Bachelor's level, it is not surprising that their LPC scores are a better match with their Western counterparts.

Junnonen discussed the new leadership patterns in construction in Finland (7). He found that the quality circle is the proper tool where the commitment of the entire organization is emphasized and employees take more responsibility for the development of their working methods. They also understand the quality issues more precisely and also the ways in which systems will assist them in achieving the level of quality required. The strength of quality circles arise from their people-oriented and team- building approach. They recognize that each individual can make contributions to a team effort, either by generating ideas or by improving ideas offered by other circle members. All members are involved in setting goals of higher achievement and invent ways of working more efficiently.

3. Managerial Effectiveness and Productivity:

What makes an effective leader? Leaders have some certain desirable qualities such as enthusiasm, confidence, tact, intelligence, and ability to cope with stress and deal with uncertainty. Leaders play a crucial role in helping groups, organizations or societies to achieve their goals. Therefore, a leader's abilities and skill in directing are important for a manager's effectiveness. An effective leader is a process of directing and influencing individual and group activities towards goal setting and achievement (7).



It is generally accepted that the effectiveness of construction site managers is a vital component in the success of construction projects. Anderson defined managers' effectiveness as their ability to supervise and manage subordinates (8). Laufer and Jenkins suggested that management has a direct impact on the level of productivity (9). First, a direct impact which can be utilized by planning and controlling construction activities, and secondly an indirect impact which can be achieved through a good relationship between managers and their subordinates that may raise the motivation of work forces.

It has been found that the need for corrective action with consequent delays of projects is generally attributable to ineffective managerial practice on construction projects (6). In this paper, the effectiveness of construction managers can be defined as follows: effectiveness of construction managers is their overall contribution to the achieved level of a work force's productivity in construction projects.

Productivity has been defined as the ratio of output to input. However, on the basis of previous experience, productivity is far more complex than that. Raising productivity is the fundamental source of gains in real incomes and levels of housing and that without such increases in productivity the resulting struggle over disposal of the national income is an important contribution to inflation. Several factors that might cause a decrease in productivity, these are: absenteeism, poor supervision, unrealistic wage demands, complacent management, poor working conditions, hostility in industrial relations, and a bureaucracy insufficiently attuned to the requirements of the work environment (10).

When output per person per unit time increases, productivity increases. When the unit cost of production decreases, productivity is said to have increased. When the quality of output has improved with the same volume of output, the productivity is said to have improved (11). Inefficiencies in construction operations often exist because site management is too close to the work and too busy to see them. What is required, therefore, is an approach where work can be investigated in a planned way to improve productivity. Three main categories of work can be identified: firstly, directly productive which is an expenditure of operatives time in making the building grow. Secondly, indirectly productive which is an expenditure of operatives time in preparing to make the building grow. Thirdly, non-productive work is effective only when it is directly adding to the completed product.

One of the primary goals of the organization is seen as being the search for high productivity because it is thought to ensure profitability and hence the survival of the firm. It is usual that the factors affecting productivity are classified either as technical or human. In most instances the emphasis is on the human contribution because, at least in the short term, the technology in use cannot be changed much (13).

Managerial emphasis on productivity tends increasingly to ignore the hardware and other physical manifestations of technology, in order to concentrate on trying to improve the performance of the worker. Work performance is seen as being a function of training, information, and motivation and once the worker has adequate training, the information about his job, the only factor left that can improve work performance is motivation. The study of motivation is seen as being the study of the effectiveness of different stimuli in increasing worker satisfaction and his inclination to work.

The level of a work team's productivity depends upon various factors, for instance, climate conditions, availability of materials, availability of plant and its modernity, financial liquidity, work practices, planning, and style of leadership. In this paper, the level of a group's productivity is related only to the leadership style.



4. Methodology:

Subjects:

The data for this study were obtained from 112 Palestinian and American construction managers (Construction managers are considered as individuals who are in charge of running and directing construction projects toward the achievement of a set of goals through their subordinates) representing Palestinian and American construction main contractors. The subjects for this study were drawn from Gaza Strip in Palestine (56 Construction Managers) and from South Carolina and New York in the US (56 Construction managers) in order to make a comparison between American and Palestinian leadership style (Tables 1 & 2.)

The focus was upon medium to large-scale contracts. The reason for such a choice was to reflect the general distribution of project size in the construction industry. However, there were within the sample 11 small size construction projects in Gaza Strip, which in the analysis stage were combined with medium size contracts for statistical testing reasons. Most of the construction projects in this sample were housing, schools, and infrastructure (roads, water and sewerage.)

Table 1: Location and Types of Projects in Gaza Strip – Palestine

Geographical Location	Sector	Estimated Cost (US \$)	Number in Sample	Percentage of the Sample
North Area (Jabalia, Beit Lahia, Beit Hannun)	Housing	1M-2M	4	7%
	Schools	0.6M-1.5M	2	4%
	Infrastructure	0.75M-2.5M	3	6%
Gaza Area (Gaza City, Shatti)	Housing	1M-2M	6	11%
	Schools	0.6M-1.5M	3	5%
	Infrastructure	0.75M-2.5M	9	16%
Middle Area (Nusseirat, Bureij, Maghazi, Zawiada, Dier El Balah)	Housing	1M-2M	5	9%
	Schools	0.6M-1.5M	3	5%
	Infrastructure	0.75M-2.5M	4	8%
South Area (Khan Yunis, Karara, Abassan, Bani Suhaila, Rafah)	Housing	1M-2M	7	13%
	Schools	0.6M-1.5M	4	7%
	Infrastructure	0.75M-2.5M	6	10%

Note: Sample Size 56

Procedure:

The data to be reported in this study were collected by means of interview and questionnaire distributed to construction managers currently working in Palestine and United States. Field visits were made to a number of construction projects in Gaza Strip, New York, and South Carolina to interview construction managers. The study was divided into two stages, the first stage was conducted in Gaza Strip and the second phase was undertaken in South Carolina. Tables 3 and 4 show the level of experience of respondents, training received, and membership of professional institution.



Table 2: Location and types of Projects in U.S.A.

Geographical Location	Sector	Estimated Cost (US\$)	Number in the Sample	Percentage of the Sample
Greenville, SC	Housing	Over 2.5 M	8	14%
	Schools	0.75M-2.5M	5	9%
	Infrastructure	Over 2.5 M	12	21%
Clemson, SC	Housing	Over 2.5 M	3	5%
	Schools	075M-2.5M	2	4%
	Infrastructure	Over 2.5 M	2	4%
Columbia, SC	Housing	Over 2.5 M	6	11%
	Schools	0.75M-2.5M	2	4%
	Infrastructure	Over 2.5 M	4	7%
New York, NY	Housing	Over 2.5 M	4	7%
	Schools	0.75M-2.5M	3	5%
	Infrastructure	Over 2.5 M	5	9%

Note: Sample Size=56

Of the 200 questionnaires distributed, 112 (56%) were returned completed. The returns were encouraging as 56 return rate can be considered reasonable for this type of sample, and sufficient to carry out adequate statistical tests. The selection of construction managers and contractors for the sample was basically contingent on several factors: project size, accessibility, and willingness to cooperate. Construction companies’ names and addresses were obtained from several sources, namely contractors union, Clemson University contacts, and authors personal contact.

Table 3: Palestinian Respondents Experience

Geographic Location	Number of Respondents	Member of Professional Institution		Years of Experience			Training Received	
		Yes	No	< 5	6 to 10	> 10	Yes	No
North Area	9	2	7	1	5	3	3	6
Gaza Area	18	5	13	2	4	12	4	14
Mid. Area	12	3	9	3	3	6	2	10
South Area	17	4	13	2	4	11	6	11

Note Sample Size =56

Measurement:

Construction managers’ leadership style was measured by using a questionnaire (14 statements) without labeling them under any specific classification. A group of questions were related to task oriented managers, and other to employee oriented managers. The questions or statements were rated on a 5-step Likert scale 1 (Strongly Agree) to 5 (strongly disagree) to try to avoid bias as much as possible Some of the statements were developed from Whyte and Williams and Anderson (8), and the other statements were derived for this study.



Table 4: American Respondents Experience

Geographic Location	Number of Respondents	Member of Professional Institution		Years of Experience			Training Received	
		Yes	No	< 5	6 to 10	> 10	Yes	No
Greenville, SC	25	6	19	2	7	16	21	4
Clemson, SC	7	1	6	-	1	6	5	2
Columbia, SC	12	2	10	-	3	9	9	3
New York, NY	12	5	7	-	4	8	10	2

Note Sample Size =56

In this study, the criteria of an effective construction manager was based on a broad indicator of managerial effectiveness, e.g. ability to plan, organiz, and schedule work, ability to get along well with people, enthusiasm of work, and ability to cope with stress and deal with uncertainty. The respondents were asked whether their effectiveness changed when they practicing a certain style. The answers to these questions were rated on a 5-point Likert type scale from 1 (decreases significantly) to 5 (increases significantly). These questions were followed by another asking the respondents for the reasons for their answers. It should be noted that the measure of managerial effectiveness used is a broad one. There are, however, several methods of measuring managerial effectiveness, for instance: by performance evaluation that can be either taken from the company personal files or by using a general manager’s evaluation or subordinates evaluation.

Productivity measurement was based on a subjective criterion, namely the assessment of construction managers in charge of the construction projects. Therefore, no claim can be made regarding objective measurement, which could have necessitated an extended research project in its own right. A direct measurement was made by asking the respondents whether they thought that the productivity of work forces changes when they are practicing a certain style. The answers to this question were rated on a 5-point Likert scale from 1(decreases significantly) to 5 (increases significantly).

The data were analyzed by cluster and discriminant analysis, cross-tabular analysis, and Kruskal-Wallis one-way analysis of variance tests. Cluster analysis was used to classify the observation scores that represent the construction managers’ style into groups of similar individuals. The aim of cluster analysis is to place individuals with similar attitude patterns into groups suggested only by the available data, independently of any prior definitions. Each group contains respondents who tend to be similar to each other in some feature, and dissimilar to respondents in different groups. In interpreting and labeling each cluster, the mean score of each statement in each cluster was studied and compared, then these mean scores were referred to the actual questions which were used to measure the leadership style to give more information for each cluster. Also, discriminant analysis was used to check whether the classifications of construction managers’ leadership style which were suggested by cluster analysis are accurate and meaningful.

Limitations of the study:

The convenience of the sample, although it is statistically viable, may cast some doubt on whether it presents the attitudes of construction managers who did not participate in this research. Further, the managerial effectiveness and the level of work forces’ productivity measurement was based on a subjective measurement. Although this is a common means of measurement in behavioral science research, it might not be considered a very precise method. It would have been preferable to have objective measurements directly from the construction projects. Such measurement would provide additional evidence of the relationship between leadership styles and managerial effectiveness and



the level of productivity. Unfortunately, such a depth of research would have required much greater resources than were available for the study.

5. Results:

The Palestinian and American construction managers’ leadership style have been classified into four categories according to the cluster analysis which places individual with similar perceptions into groups; each of which includes managers who tend to be similar to each other in some feature, and dissimilar to respondents in other clusters. These four clusters are: high task/low employee; low task/low employee; low task / high employee; and high task/ high employee oriented. Tables 5 and 6 illustrate the classification of Palestinian and American construction managers’ style.

Table 5: Classification of Palestinian Construction Style

Cluster	Managers’ Style	Number in Sample	Percentage in Sample
1	High task/ Low Employee	14	25%
2	Low Task/Low Employee	8	14%
3	Low Task/High Employee	9	16%
4	High Task/High Employee	25	45%

Note: Sample Size=56

The results of the discriminant analysis supports strongly the results of the cluster analysis, in other words, the four groups identified by the cluster analysis are meaningful. It appears from the results shown in tables 5 and 6 that the Palestinian construction managers’ style tend to be high task/ high employee, and the American construction managers’ style found to be mainly high task/ low employee orientation.

Table 6: Classification of American Construction Manager’s Style

Cluster	Managers’ Style	Number in Sample	Percentage in Sample
1	High task/ Low Employee	27	48%
2	Low Task/Low Employee	5	9%
3	Low Task/High Employee	8	14%
4	High Task/High Employee	16	29%

Note: Sample Size=56

The results of this study indicated that the four qualities, which were considered most important in making an effective construction manager, were: enthusiasm for work, ability to plan, ability to cope with stress and deal with uncertainty, and leadership ability. However, most respondents stated that although they had identified the four most important characteristics of effective construction managers, they believed that all nine statements in the questionnaire were equally important. These include: high technical ability, willingness to listen, ability to get on well with people, and the ability to be tactful and diplomatic.



Table 7: Cross Tabulation of Palestinian Construction Managers by their Effectiveness Variations

Managers' Style	Number in Sample	Effectiveness					
		Decreases		No Change		Increases	
		Frequency	%	Frequency	%	Frequency	%
High task/ Low Employee	14	9	64	3	22	2	14
Low Task/Low Employee	8	6	74	1	13	1	13
Low Task/High Employee	9	3	33	1	11	5	56
High Task/High Employee	25	-	-	4	16	21	84

The results showed that 84% of the Palestinian construction managers perceived that their effectiveness increases when they practice the Hi-Hi style (see table 7). On the other hand, the majority of the American construction managers 78% perceived that their effectiveness increases when they practice high task/ low employee orientation (table 8).

Table 8: Cross Tabulation of American Construction Managers by their Effectiveness Variations

Managers' Style	Number in Sample	Effectiveness					
		Decreases		No Change		Increases	
		Frequency	%	Frequency	%	Frequency	%
High task/ Low Employee	27	2	7	4	15	12	78
Low Task/Low Employee	5	2	40	3	60	-	-
Low Task/High Employee	8	1	12.5	1	12.5	6	75
High Task/High Employee	16	2	12	3	19	11	69

The results of the Kruskal-Wallis one-way analysis of variance test show that the construction managers' style is highly related to their effectiveness. The level of significance (P) was found = 0.004 (Palestinian case) and P = 0.005 (American case). It can be concluded that the leadership style of construction managers and their effectiveness are unlikely to be independent. In other words, there is a strong association between construction managers' style and their effectiveness.

Table 9: Cross Tabulation of Palestinian Construction Managers by Work Force Productivity

Managers' Style	Number in Sample	Productivity					
		Decreases		No Change		Increases	
		Frequency	%	Frequency	%	Frequency	%
High task/ Low Employee	14	7	50	3	22	4	28
Low Task/Low Employee	8	6	74	2	26	-	-
Low Task/High Employee	9	1	11	2	22	6	67
High Task/High Employee	25	1	4	5	20	19	76



The results indicate that 76% of Palestinian construction managers believed that the productivity of work force increases when they practice the Hi-Hi (Table 9) style. On the other hand, the majority of American construction managers (67%) believed that managers believed that the productivity of work force increases when they practice high task/low employee orientation (Table 10).

Table 10: Cross Tabulation of American Construction Managers by Work Force Productivity

Managers' Style	Number in Sample	Productivity					
		Decreases		No Change		Increases	
		Frequency	%	Frequency	%	Frequency	%
High task/ Low Employee	27	3	11	6	22	18	67
Low Task/Low Employee	5	2	40	3	60	-	-
Low Task/High Employee	8	1	12.5	2	25	5	62.5
High Task/High Employee	16	3	19	4	25	9	56

The results of the Kruskal-Wallis one-way analysis of variance test show that the construction managers’ style is highly related to work forces’ productivity as perceived by respondents. The level of significance (P) was found = 0.003 (Palestinian case) and P=0.004 (American case). One can conclude, therefore, that it is unlikely that both variables (construction managers’ style and productivity) are independent. There is evidence of the existence of a relationship between the style of construction managers and work force productivity.

Spearman’e rank correlation has been used in examining possible correlation between the effectiveness of construction manager and the productivity of work forces. It was found that there is a strong positive correlation between both variables. In the Palestinian case the correlation coefficient (rho) was 0.582 and the probability (P) was 0.0001, and in the American case the correlation coefficient (rho) was0.652 and probability (P) was 0.0002. In other words, these results suggest that when the effectiveness of construction managers increases, the productivity of work force also increase.

6. Discussion:

In looking at the results reported above, it can be noticed that the Palestinian construction managers’ leadership style is different from the American construction managers’ leadership style. The majority of the Palestinian managers tend to be high in both task and in employee orientation; on the other hand the majority of the American construction managers in this sample tend to be high in task and low in employee orientation. The Palestinian managers can not ignore the attention towards their employee form the cultural point of view. The American managers have to practice more task orientation than employee because of the lack of training of work forces. It is recommended that more emphasis on training programs should be made to both construction managers and work forces.

The results also indicate that there is a strong positive association between both the style of managers and their effectiveness. In particular, the results indicate (in Palestinian case) that most effective managers is one who is equally concerned with technical aspects of management, e.g. planning, control, quality, cost and productivity; and simultaneously is concerned with human



aspects, e.g. welfare, mutual trust, respect for subordinates’ ideas and considering their feelings. In the American case, the most effective managers are one who mainly is concerned with technical aspects of management.

The present findings lend weight to Blake and Moutan’s postulation, that is, the category of high task/high relations is the most effective style as managers build a cohesive and responsive work team. The results also lend support to Lansley et al’s finding that the most successful companies are the ones with a high task/ high people orientation. The results also lend support to Bresnen et al’s finding, as they concluded that site managers’ orientation have an impact on project effectiveness and that this relationship is dependent of project length, contract values, and labor-force composition. However, it is worth recording that our findings are not congruent with several scholars, among them Larson and Nystrom. Fleishman also reported that what is effective leadership in one situation may be ineffective in another.

The results indicate that there is a very strong correlation between the style of construction managers and the level of work force’s productivity. It can be inferred from this association that the style of construction managers can create conditions conducive to the enhancement of work forces’ productivity. However, this conclusion has to be treated with caution, as it is hazardous to attribute cause and effect relationship to such type of data. It would be incongruence to ignore the fact that causal direction could be the opposite.

The information derived from our empirical data indicates that there is a significant positive relation between the effectiveness of construction managers and the level of work forces’ productivity. This confirms the fact that if the effectiveness of construction manager’s increases, the productivity of work force also increases regardless of their degree of specialty and skills. Having said that, such inference must be treated with caution, as it is hazardous to impute causes and effect associations to such kind of data.

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