CHAPTER 4

DATA ANALISIS

4.1 Introduction

This chapter will describe the findings of the study namely leadership behavior characteristic in relation to schools academic achievement. The main aim is to analyze the data that obtained from the LBDQ Form XII, based on the results of 85 respondents of the study.

This analysis is focused on the calculation of the mean of each sub-scale related to Leadership Behavior. 33 respondents (94.2 % of the sample population) from SMK Benta and 52 respondents (87.4 % of the sample population) from SMK Clifford were chosen randomly and their answers to the Questionnaires were analyzed. The frequency of each score (in terms of %) was calculated for all the samples for each sub-scale and hence the mean of each sub-scale was calculated. In this chapter, the description of the findings will be based on the following aspects:

i.   Background of respondents

ii.   Analysis of Leadership Behavior

iii.   Leadership types that predominate among these two principals

iv   Aspects of leadership Behavior that are considered the most important contributors to effectiveness of school leaders

v.   The relationship between behavior and academic achievement.

vi.   The results according to hypotheses.

4.2   Background of Respondents

Personal profiles and their background are obtained based on the findings in section B, which comprises of the race, sex, teaching experience, income, academic qualification and others

Table 4.1

School Samples According to Types of School

Types of School	Number of Questionnaire Given to school	Number of Questionnaire Returned	% of Responses	Sample Size as % of Population
Urban (SMKC)	56	52	93	87.4
Rural (SMK B)	32	33	96	94.2

Respondents are from 2 different schools. From the results, it was found that the total number of respondents involved in this study is 85. The percentage of questionnaires that returned completely were encouraging, that was, 87.4 % from SMK Clifford and SMK Benta scored 94.2 %.

4.2.1 Sex

Table 4.2

Distribution of Teacher by Sex

Sex	Frequency	Percentage
Male	30	35.3
Female	55	64.7
TOTAL	**85**	**100.0**

From the total of 84 respondent, majority of them 55 (64.7 %) are females and only 30 (35.3 %) were males. This showed that most of the respondents are female teachers.

4.2.2 Age

Table 4.3

Distribution of Teacher by Age

Age	Frequency	Percentage (%)
29 & Below	27	31.8
30 – 39	45	52.9
40 – 49	11	12.9
50 & Above	2	2.4
TOTAL	**85**	**100.0**

The respondents were grouped into four groups. It was found 45 respondents (52.9 %) of the age group 30 – 39 scored the highest frequency, it

followed by the age group of 29 and below (31.8 %). The least was from the age group 50 and above, only 2 (2.4 %) were from this group.

4.2.3 Marital Status

Table 4.4

Distribution of Teacher by Marital Status

Marital Status	Frequency	Percentage (%)
Single	22	25.9
Married	63	74.1
TOTAL	**85**	**100.0**

Most of the respondents, 63 of them (74.1%) involved in the study were married. This was consistent with the age range of between 30- 39. From the total respondents of 85, only 22 (25.9 %) of them are still single.

4.2.4 Race

Table 4.5

Distribution of Teacher of Race

Race	Frequency	Percentage (%)
Malay	71	83.5
Chinese	8	9.4
Indian	6	7.1
TOTAL	**85**	**100.0**

The results showed that, most of the respondents that participated were Malays 71 (83.5 %), followed by Chinese 8 (9.4 %) and Indians 6 (7.1 %). Result also showed that most of the teachers that served in these two selected schools were Malays.

4.2.5   Professional Qualification and Personal Income

Table 4.6

Distribution of Teacher by Professional Qualification

Qualification	Frequency	Percentage (%)
Diploma	2	2.35
Degree	83	97.65
TOTAL	**85**	**100.0**

Table 4.7

Distribution of Teachers By Income

Personal Income	Frequency	Percentage (%)
Less than RM 2000	32	37.6
RM 2000 – RM 2500	38	44.7
RM 2501 – RM 3000	12	14.1
More than RM 3000	3	3.6
TOTAL	**85**	**100.0**

Table 6 shows that, 83 of the respondents (97.65%) involved in this study had obtained at least first degree from university, when compared to 2 (2.35%)

are still remain as diploma holders, however they are undergraduates students in Distance Learning Programmes . Of the total 85 respondents, 50 respondents (50.0 %) received salary ranged from RM 2000 – RM 3000. But there were 32 respondents whose salary ranged 'less than RM 2000.00 where they were the freshman from universities. Only 3 (3.5 %) respondents fall into the salary range 'more than RM 3000.00'.

4.2.5   Professional Qualification and Personal Income

Table 4.8

Distribution of Teachers By Teaching experience

Item	Frequency	Percentage (%)
Teaching Experience		
Less than 1 year	9	10.6
1 – 5 years	30	35.3
6 – 10 years	21	24.7
11 – 15 years	16	18.8
Above 15 years	9	10.6
TOTAL	**85**	**100.0**
Teaching Experience In Present School		
1 – 5 years	66	77.6
6 – 10 years	16	18.8
11 – 15 years	2	2.4
Above 15 years	1	1.2
TOTAL	**85**	**100.0**

Table 4.8 shows the respondents with less than 1 year experience scored the same numbers with those of more than 15 years, that is, 9 (10.6%) for each group. 30 (35.3 %) respondents had teaching experience ranged from 1 – 5 years, it followed by 6 – 10 years , 21 (24.7 %) and 11 – 15 years, 16 (18.8 %).

Statistic shows that, most of the respondents have been working in the present school for 1 to 5 years 66 (77.6 %). That followed by 6 to 10 year, 16 (18.8 %). Only1or 1 2 % of the respondents has more than 15 years of teaching experience in the present school.

4.3 Analysis of Leadership Behavior

Leadership Behavior of Secondary School Principal that was perceived by teachers was focused on the two main leadership dimension of Consideration or Person Orientated and Initiating Structure or System Orientated Leadership.

Leadership behavior of secondary School was based on two major types of leadership, which are System Orientated Leadership Behavior and Person Orientated Leadership Behavior. The mean score and standard deviation for these two styles of

leadership behavior were based on the frequency and being demonstrated in Table 4.9 and Table 4.10.

Table 4.9

Mean and Standard Deviation of System Orientated Behavior According to Items

Item Number	Mean	Standard Deviation
No. 2	3.0941	0.9713
4	3.2706	0.8075
6	2.4118	1.0011
8	3.0824	0.9785
9	3.0941	0.7075
12	2.4471	0.4985
13	2.5365	0.5483
15	3.0235	0.4234
18	2.7529	0.4639
20	3.4941	0.3075
22	3.3365	1.0218
24	3.2471	0.3055
26	3.2294	0.4916
28	2.9529	0.6854
30	3.2529	0.2639
32	2.5765	0.5051
34	2.2706	0.4380
36	3.0450	0.6465

Table 4.10

Mean and Standard Deviation of Person Orientated
Behavior According to Items

Item N umber	Mean	Standard Deviation
No. 1	3.8941	1.0581
3	3.9882	0.8237
5	3.6000	0.7537
7	3.4824	0.6960
10	4.0118	0.8091
14	3.4176	0.6079
16	4.1765	0.7428
17	3.1176	0.9687
19	4.2235	0.8220
21	3.7765	1.0508
23	3.6059	0.7427
25	3.8529	0.8296
27	3.9647	1.0797
29	3.6176	0.4676
31	3.8588	0.7456
33	3.7412	0.5018
35	3.7059	0.7559

The Mean and Standard Deviation of two types of behavior was

further collapsed into two types of leadership behavior, namely System

Orientated Leadership Behavior and Person Orientated Leadership as shown

in Table 4.11.

Table 4.11

**Total Mean and Standard Deviation of types of
Leadership Behavior of Two Secondary Schools**

Types of Leadership Behavior	Mean	Standard Deviation
System Orientated Leadership Behavior	52.12	10.33
Person Orientated Leadership Behavior	63.38	12.86

Based on Table 4.9 and Table 4.10, the mean scores of every item were

summed up to obtain the types of leadership behavior. On the whole, both

principals scored higher in Person Oriented Leadership Behavior (63.38) as

compare to System Orientated Leadership Behavior (52.12). The difference of

mean between these two leadership types was 11.26. It shows that the principals

give more priority for maintain in the school system, and the demands and interests

of their teachers as being relatively less important. Thus, these two secondary

school principals who regards meeting the needs of the school more important.

The maximum possible scores for these two types of leadership is 30. From the scores in Table 4.11, it was further categorized into "high", "average" and "low", ranged from 6 – 30, that is 'high' (23-30), 'average' (15-22) and 'low' (6-14).

Refer to Table 4.12, **System Orientated Leadership Behavior** shows 47.3 % (40.8 %) was perceived as being 'high' in this type of leadership, and 52.5 % (58.9 %) was categorized as 'average' while 0.2 % (0.3 %) described as being 'low' in the urban secondary school when compared to the rural settlement secondary school.

Table 4.12

**Percentage of Secondary School Principals
Who Are 'High', 'Average' and 'Low' in
*System Oriented Leadership Behavior***

Score		Urban School	Rural School
Low	(6 - 14)	0.2%	0.3%
Average	(15 - 22)	52.5%	58.9%
High	(23 - 30)	47.3%	40.8%
Total		**100.0**	**100.0**

In **Person Orientated Leadership Behavior** as shown in Table 4.13, 42.7% (36.9 %) were perceived as being 'high', and 57.2 % (61.7 %) was categorized as

'average' while 0.1 % (1.4 %) described as being 'low' in the urban secondary school when compared to the rural settlement secondary school.

Table 4.13

**Percentage Of Secondary School Principals
Who Are 'High', 'Average' and 'Low' in
*Person Oriented Leadership Behavior***

Score	Urban School	Rural School
Low (6 - 14)	0.1 %	1.4 %
Average (15 – 22)	57.2 %	61.7 %
High (23 - 30)	42.7 %	36.9 %
Total	**100.0**	**100.0**

From the above tables, it is obvious that the urban leaders was described as more Person Orientated and System Orientated when compared to the counterpart in the rural school. Thus implying that the desirable leadership behavior would be one where the leader is 'high' in both types of leadership.

**4.4   Analysis of Leadership Types That Predominate These Two
Schools' Principals**

Generally, both the secondary school principals demonstrated more towards System Orientated Leadership Behavior. This could be evidence that, they

both score higher in sub-scales, such as "Initiating Structure", Representation", and "Production Emphasis". It followed by the better mean score in System Orientated Leadership if compared to Person Orientated Leadership. Thus, the secondary school principals tend to focus and stress on the importance of school needs, this included physical structure and academic productivity. Although means of these sub-scales indicate high scores, but wide individual differences are evident especially with sub-scales "consideration" with a standard deviation of 5.8, "Production Emphasis" with standard deviation of 5.4 and Tolerance Freedom with standard deviation of 5.2.

Table 4.14

Mean of each of the sub-scales in two different schools

Leadership Behavior Scale	Urban			Rural		
	Mean	% of Max Score	Rank Order	Mean	% of Max Score	Rank Order
Representation	19.2	79.1%	2	18.4	74.4%	2
Reconciliation	18.9	71.6%	10	17.3	67.5%	10
Tolerance Uncertainty	34.5	69.2%	11	32.4	66.1%	11
Persuasion	37.0	74.1%	4	35.2	71.2%	6
Initiating Structure	39.5	82.5%	1	36.6	76.8%	1
Tolerance of Freedom	36.4	77.3%	3	35.9	71.7%	3
Role Assumption	36.1	72.1%	8	35.1	71.1%	8
Consideration	36.5	72.4%	7	34.9	70.8%	7
Production Emphasis	37.9	73.8%	5	35.7	71.4%	5
Predictive Accuracy	17.6	68.7%	12	14.8	62.1%	12
Integration	18.2	72.7%	6	17.8	71.7%	4
Superior Orientation	35.6	71.9%	9	34.2	69.3%	9

The score obtained by individual principals was recorded on to a score sheet. As each of the principal's behavior was perceived by 85 teachers, the mean score of every item was summed up to obtain the leadership behavior. Table 4.14 lists out the means of each sub-scale for each of the school and an average mean of both the schools based on the twelve dimensions of leadership behavior as perceived by their teachers.

It had to be noted that, four of the sub-scales, "Representation", "Demand Reconciliation", "Predictive Accuracy" and "Integration" the maximum score is 25 because each of these sub-scales is made up of five items only, whereas other sub-scales are made up of 10 items, making the possible for each 50. The higher the score for any particular sub-scale, the more positive and desirable is that leadership behavior characteristic.

In Table 4.11, sub-scales like Initiating Structure (ranking1), Representation (ranking 2) and Production Emphasis (ranking3) demonstrated System Orientated Leadership Behavior. It again shows the principals are particular about their school needs, this includes the academic achievement. Although means of each sub-scales indicate average scores in between two schools, but there are evident differences within the sub-scales such as "Predictive Accuracy" (6.6%), "Reconciliation" (4.1%) and "Tolerance of Uncertainty" (3.1%).

4.5 Aspects of Leadership Behavior Are Considered The Most Important Contributors to Effectiveness of School Leaders

The twelve sub-scales were collapsed into System Oriented Leadership and Person Orientated Leadership. **The Personal Orientated Type Leadership** consists of six sub-scales which are "Demand Reconciliation", "Tolerance of Uncertainty", "Tolerance of Freedom", "Consideration", "Predictive Accuracy" and "Integration". **The System Orientation Type of Leadership** consists of the other six sub-scales, which are "Representation", "Persuasiveness", "Initiating Structure", "Role Assumption", "Production Emphasis" and "Superior Orientation".

Based on Table 4.14, it's found that the three predicators, which are "Tolerance of Freedom", "Initiating Structure" and "Tolerance of Freedom"" appear to be the most important factors which underline effective (administrative) leadership. This seems to be an interesting combination. It is conceivable that an effective principal must be able to adapt successfully to such changes. In such a dynamic environment it is easy to understand that the effective principal must often adopt an active adventurous and interventionist style by taking full change of the situation. In short he must exert strong leadership and be recognized and respected by his subordinates. It is important to have the ability to cope with different personal relationship with the staff as part of the leadership option or management skill of an effective principal.

If the means of sub-scales between these were compared, the first two sub-scales which are "Tolerance of Freedom" making a, mean of 36.4 (35.9) and the second which is "Consideration" marking a mean of 36.5 (34.9) represents the

Person Orientated Leadership. The third sub-scale which is "Initiating Structure" marking a mean of 39.5 (36.6) represents the "System Orientated Leadership".

This gives us an idea that both the different Leadership Behavior of Principals which are the "Person Oriented Leadership" and the "Initiating Structure Leadership" are important contributors to the effectiveness of principals as school leaders.

4.6 Ranking of Leadership Styles According Location and Types of Schools

Table 4.15

Mean of each of the sub-scales of leadership type in two different schools

Leadership Behavior Scale	SMK Clifford (Urban)			SMK Benta (Rural)		
	Mean	% of Maximum Score	Rank	Mean	% of Maximum Score	Rank
Representation	19.2	79.1%	2	18.4	74.4%	2
Reconciliation	18.9	71.6%	10	17.3	67.5%	10
Tolerance Uncertainty	34.5	69.2%	11	32.4	66.1%	11
Persuasion	37.0	74.1%	4	35.2	71.2%	6
Initiating Structure	39.5	82.5%	1	36.6	76.8%	1
Tolerance of Freedom	36.4	77.3%	3	35.9	71.7%	3
Role Assumption	36.1	72.1%	8	35.1	71.1%	8
Consideration	36.5	72.4%	7	34.9	70.8%	7
Production Emphasis	37.9	73.8%	5	35.7	71.4%	5
Predictive Accuracy	17.6	68.7%	12	14.8	62.1%	12
Integration	18.2	72.7%	6	17.8	71.7%	4
Superior Orientation	35.6	71.9%	9	34.2	69.3%	9

* Rank Correlation Coefficient 0.86

Table 4.14 shows Sub-scales for the leadership behavior according ranking for both urban and rural settlement principals, whereas. Obviously, ranking the top was 'initiating structure' and 'Representation' for both groups. Both urban and rural settlement leaders endeavor to establish well-defined patterns of organization in their school. It also implied that, they are more concern about the school needs, such a the productivity and achievement.

A rank correlation coefficient of 0.86 was obtained, indicated that of high relationship between the rank ordering of the behavior dimension of the urban and rural leaders

4.7 Leadership Behavior and Academic Achievement

Dropout Report (1973) has taken assumption that rural schools had characteristics that were almost identical such as basic facilities, staff and low income student enrolment. The question remains: Is there a relationship between leadership behavior and school academic achievement ?

Any attempts to analyze this nature had to be handled with great care as there are so many other factors and variables that could possibly affect administrators, teacher, pupils, and thus the school productivity that included of pupils' academic achievement. For instant, teacher's commitment, financial and adequate physical facilities, could sponsor to the school productivity.

These two geographically different location of secondary schools were purposely chosen just to find out whether there is a relationship between leadership

behavior and academic achievement of pupils. For the urban secondary school, it posses excellent academic performance more than 90 % passes in the National Examination for the past five years, whereas the rural settlement secondary school's did not perform that well for the same period. This gives a very good opportunity for the researcher to determine whether the types of leadership behavior in urban and rural school will influence the academic results in the commons national examinations.

Table 4.16

Mean, Standard Deviation and T-value
Leadership Behavior Sub-scales for Principal of Two Secondary Schools

Leadership Behavior Sub-Scale	Urban School with >Than 50% Passes		Rural School with < 50 % passes		t-value
	Mean	Standard Deviation	Mean	Standard Deviation	
Representation	19.5	2.1	18.4	2.5	3.27 *
Reconciliation	18.9	2.7	15.3	2.3	3.67 *
Tolerance Uncertainty	32.7	4.7	28.5	5.2	4.24 *
Persuasion	37.1	4.6	34.3	4.2	
Initiating Structure	37.9	4.2	35.6	4.8	
Tolerance Freedom	41.5	5.2	32.7	4.9	4.87 *
Role Assumption	37.2	3.9	33.5	3.5	3.12 *
Consideration	40.6	5.8	31.1	5.4	5.43 *
Production Emphasis	35.9	5.4	35.1	6.2	
Predictive Accuracy	16.7	2.5	14.4	2.7	
Integration	18.7	2.8	15.8	2.7	4.18 *
Superior Orientation	35.1	5.1	33.6	5.3	

* Significant at 0.05 level

Table 4.16 shows the mean, standard deviation and t-value for twelve behavior sub-scales according to school performance. It is interesting to point out that, the secondary school with better performance in academic achievement scored higher on all the sub-scales. It also shows sub-scales such as "Representation", "Demand Reconciliation", "Tolerance of Uncertainty", "Tolerance of Freedom", "Role Assumption", "Consideration" and " Integration" were significant at 0.05 level.

For the Sub-scale "Representation", for example, the principal from the more productive urban school scored higher (19.5) than her counterpart (18.4) and the difference was significant at the 0.05 level. Thus, implying that the urban principal speaks and acts as the representative more frequently than the rural secondary school principal. Other examples also demonstrated the dimensions of leadership styles of the more productive urban principal significantly dominated the less productive rural secondary school principal in every sub-scales as shown in the table.

Table 4.17 shows "Tolerance of Freedom" and "Consideration" which belonged to Person Orientated Leadership Type successfully scored more than 80 %. From the rank order, it was obvious that Person Orientated Sub-scale in more productive school (Tolerance of Uncertainty, Tolerance of Freedom, Consideration, Predictive accuracy and integration) predominating other System Orientated Type of Leadership sub-scales. Thus implying that, the principal in better academic achievement gave more freedom and authority to her teachers to carry out their responsibilities.

Table 4.17

Rank Order of Leadership Behavior Scale For Principals of Secondary Schools That Related To Level of Pupils Academic Achievement

Leadership Behavior Scale	SMK Clifford			SMK Benta		
	Mean	% of Max. Score	Rank Order	Mean	% of Max. Score	Rank Order
Representation	17.4	78.1%	4	19.8	66.7%	5
Reconciliation	18.3	72.7%	9	15.4	62.1%	8
Tolerance Uncertainty	37.8	73.1%	8	28.2	56.9%	12
Persuasion	38.0	75.5%	6	35.2	70.7%	3
Initiating Structure	38.8	76.5%	5	36.8	72.7%	1
Tolerance of Freedom	41.9	81.2%	1	33.1	63.7%	7
Role Assumption	36.7	73.8%	7	33.8	65.8%	6
Consideration	41.0	80.8%	2	31.9	60.7%	10
Production Emphasis	35.9	71.8%	10	35.7	71.2%	2
Predictive Accuracy	17.2	68.7%	11	14.7	59.3%	11
Integration	18.6	78.9%	3	16.8	61.5%	9
Superior Orientation	34.8	67.9%	12	35.0	67.5%	4

* Rank Correlation Coefficient 0.18

According to the Dropout Study (1973), rural schools in this country are the poorest and the most disadvantaged. This is mainly because the allocation of educational funds to schools is close related to the student population. Limited financial resource could have reaching consequences on administrative and leadership behavior.

Table 4.18

Total Mean and Standard Deviation of types of
Leadership Behavior of Urban and Rural School
That Related To Level of Pupils Academic Achievement

Types of Leadership Behavior	Urban School (n=52)		Rural School (n=33)	
	Mean	SD	Mean	SD
System Orientated Leadership Behavior	23.8	2.85	21.4	2.37
Person Orientated Leadership Behavior	22.6	2.17	20.3	3.48

In Table 4.18, the leader from the more productive school is more considerate and regards the comfort, well being, status and contributions of the followers are important. Thus, the morale of teachers would be higher if the leader "looks out for the personal Welfare of group members" and is willing to put suggestions made by group into action.

Being high in "integration" indicates an attempt by the leader to "maintain a closely knit organization" by settling conflicts when they occur in the group and he sees to it that work of the group is coordinated. This possibly indicates that behavior related to the personnel of the school should be given high priority if the principals expect productivity. Principals must frequently exhibit behaviors that indicate to the teachers that they care and are looking after their welfare and a certain amount of freedom of action must be given to the teachers if they are productive.

4.8   Results According to Hypotheses

Hypothesis 1: The leadership style of the two secondary school principals will differs significantly along leadership dimension of Person Orientated and System Oriented Leadership

From the research result, the total mean sub-scales that related to Person Orientation Leadership was 63.38 % compared to 52.12 % of the System Orientation, and the difference is 11.26. This shows that there is a significant difference between the leadership style of the two secondary schools. Generally, the priority of principals seems to be maintaining the demand and interests of teachers. In other words. Person Orientation Leadership Behavior seems to predominate among these two schools. The results is also similar to the findings of Rahimah (1981), in her study on leadership behavior among 32 primary school headmasters in the Federal Territory.

However the difference in the total mean of both the different type of leadership, which shows that both these two leadership behavior which are Person Orientation Leadership and Initiating Structure Leadership are also important in both of these schools.

Hypothesis 2: The leadership style between and among principals of the two secondary schools differs significantly from one another.

Table 4.12 shows the percentage of secondary school principals who are 'High', 'Average' and 'Low' in the **System Orientated Leadership Behavior**. It is obvious that, for the urban secondary school principal, 47.3 % was perceived high if compared to her rural counterpart only 40.8 % was perceived as being 'high' in this type of leadership. The difference for the 'high' score among them is 6.5. It is significant to show that there is a significant difference in System Orientated Leadership Behavior between the two secondary schools.

Person Orientated Leadership Behavior as shown in Table 4.13, once again, one of the secondary school principal was perceived 42.7% as being 'high' compared 36.9 % to her counterpart. The difference for the 'high' score category between these two principals has been 5.8. With comparison, one the secondary school principal was considered as more concern about their subordinates in the school, this included teachers' welfare, more consideration and freedom for them to handle and to solve problems.

The chi-square analysis was used to identify the differences and similarities along the System and Person Orientated Leadership Behavior. The result revealed that the Person Orientated Leadership Behavior had significance value of 0.0134 and System Orientated Leadership Behavior scored 0.0372. Both the values are less than

alpha value of 0.05, indicated that the leadership styles between and among principals of secondary schools differs significantly from one another. This result is also similar to the findings of Shammugan (1997) and Alageswary (1980) in their study related Leadership Behavior of Primary and Secondary School in the State of Selangor and the Federal Territory of Kuala Lumpur.

From the finding, it is obvious that the urban leaders was described as more Person Orientated and System Orientated when compared to the counterpart in the rural school. Thus implying that the desirable leadership behavior would be one where the leader is 'high' in both types of leadership.

Hypothesis 3: The leadership behavior of urban and rural settlement secondary school differs significantly from one another.

Sub-scales for the leadership behavior were ranked for both urban and rural settlement principal. Obviously, ranking the top was 'initiating structure' for both group. Both urban and rural settlement leaders endeavor to establish well-defined patterns of organization in their school. A rank correlation coefficient of 0.86 was obtained, indicated that of high relationship between the rank ordering of the behavior dimension of the urban and rural leaders.

The mean scores of the 12 sub-scales were collapsed into two sections to measure two types of leadership behavior for both the urban (more productive) and

rural (less productive) schools. For this purpose, Table 14.8 shows evidence that the principal in the urban school obtained higher score in both System Orientated and Person Orientated Behavior.

With comparison, the principal of urban school displayed more significant role as System Orientated than the rural leader, where a mean of 23.8 for the urban school and 21.4 for the rural school. That is, the leader in the urban school emphasized more of the need and aspiration of the school.

Although the score obtained for both urban and rural principal on Person Orientated Leadership is 22.6 and 20.3 respectively, but the different was not significant at the 0.05 level. The urban school principal was more concerned about the need of the staffs, as she scored slightly higher in Person Orientated Leadership Behavior, if compare with the counterpart in the rural settlement.

Another local researcher, Ee (1986) in his study on "The Relationship Between the Educational Attitude of teachers and Their Perception of the Leadership Behavior of their Principal" also found that the urban leader tends to be more competitive and motivated to bring better pupils' academic performance than those from the rural areas.

Hypothesis 4: There is a relationship between leadership behavior and the academic achievement of pupils.

The productivity index was obtained from the results of pupils for the Penilaian Menengah Rendah (PMR) and Sijil Pelajarn Malaysia (SPM) National Assessment Examination from the year 2003. For the purpose of study, these two school were categorized according to the overall performance of students in this examination, that is, school with more than 50 % overall passes, and that had 49 % or lesser formed another.

Results in this research show the mean, standard deviation and t-value for the twelve behavior sub-scales according to the level of academic achievement. The most distinguish characteristic from the leadership behavioral pattern shows that, principal from the better academic achievement school (> 50 passes) scored higher on each of the sub-scale. Her behavior dimensions: "Tolerance of Freedom", "Consideration" and "Integration' had score more than 80 % of the maximum score.

It also shows that, the leader of the better productive school managed scored higher in other behavior sub-scales, such as "Integration", "Demand Reconciliation", "Tolerance of Freedom", "Tolerance of Uncertainty", "Predictive Accuracy", "Consideration", "Role Assumption" and "Representative". The first six of these behavior dimension describe Person Orientated Leadership Behavior, whereas the last two describe System Orientated Leadership Behavior.

Results also displayed the rank order for the twelve sub-scales for better productive principal that compared with her counterpart from a lower achievement secondary school in the district. The rank correlation coefficient of 0.18 is significantly low, this demonstrated a very low relationship between these two sets ranking. School with lower productivity ranking in almost sub-scales demonstrated System Orientated leadership higher and lesser prominence given to Person Orientated Behavior sub-scales. This possibly indicates that behavior related to the school principals should be given priority if they preferred better school productivity, especially in the academic achievement.

From the above analysis, there was a significant relationship between school examination results and leadership behavior. The result on relationship between leadership styles and academic achievement is similar to Lim (1983) in his study regarding the relationship between school leadership and school effectiveness. Urban leader who was 'high' in both Person Orientated Leadership Behavior and System Orientated Leadership Behavior, could achieve better academic results in her school. Leadership behavior seems to be related to academic achievement, however, this type of relationship needs some reservations since there may be other factor that could affect academic achievement other than leadership behavior.

4.9   Summary

Based on the result presented above tentative answers to the research questions formed in this chapter one may be given. In order to have an effective principal, he or she must possess, both the leadership qualities which are the System

Oriented Leadership and the Person Oriented Leadership. He or she must be able juggle both this aspects of leadership at the rights time and situation. Different schools would have their own weakness and therefore a good principal should be able to detect this weak point in the first situation and from there onwards be able to use both these Leadership aspects to reach up to an effective school status.