# An empirical study of Chinese leadership in vocational high schools: the relationships between principals' leadership behaviours and teachers' organisational commitment

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ABSTRACT: The purpose of this study was to investigate the relationship between principals' leadership behaviours and teachers' organisational commitment at vocational high schools in Taiwan. This study provides useful references for principals of vocational high schools to lead effectively and promote teachers' organisational commitment. In this study, the authors adopted a documentary analysis to discuss leadership theories, organisational commitment theories and empirical studies of the relationship between principals' leadership behaviours and teachers' organisational commitment. Two questionnaires, *Principals' Leadership Behaviors Questionnaire* and *Teachers' Organisational Commitment Questionnaire*, were designed and distributed to 46 vocational high schools. The sample of this questionnaire survey included 630 teachers at vocational high schools. The statistical methods of t-test, one-way ANOVA, Pearson product-moment correlation and canonical correlation were used to analyse the data obtained from the questionnaires.

# INTRODUCTION

Chinese culture has been greatly influenced by two traditional philosophies: Confucianism and Taoism. Yet the essential ideas that originally constituted these two religions have neither been developed on the basis of personnel management, nor mentioned much with regard to the principles of governmental management.

All kinds of organisations, to put them in the simplest form, are composed by a leader who organises the group and the followers who listen to the leader [1]. To make a group work well, it is definitely up to the leader to see if he/she can fully exert the art of leadership [2]. Leadership is often regarded as the most important factor to determine if one organisation will be successfully run or not [3]. Leadership is a powerful process that explains how business leaders try to help the people who accomplish organisational goals [4]. Thus, one of the most dynamic factors to combine the individual and organisation is a leader who can successfully exert effective leadership [5].

Leaders play an important role in serving as anchors for providing guidance at the right moment and for being responsible for the effectiveness of organisations. As a result, from what was mentioned above, it is not hard to see that for each organisation that seeks to perform its function to the fullest and to reach its goal to the utmost depends upon the quality of its leadership.

As for the significance of leadership, Bass stated that leaders were generally regarded as superior individuals who, because of fortunate inheritance or social circumstance, possessed qualities and abilities that differentiated themselves from individuals in general [6]. Yukl also mentioned that leadership involves a social influential process in which intentional influence is exerted by one individual over others to structure activities and relationships in a group or organisation [7]. From the two statements on the importance of leadership given by Bass and Yukl, we can further see that the leaders who exert leadership well and indicate direction clearly are the successful ones [6][7]. Leadership is the process of persuasion by which an individual induces a group to pursue objectives with the motivation held by the leader and shared by the leader and his/her followers.

Nevertheless, when it comes to the relationship, as well as the reaction pattern, between the ruling class and the ruled people, it is pretty similar to what currently exists between the leading class and the led in the education system. Therefore, books can be consulted that record the essential philosophies and can be used as a reference guide in order to know more about personnel management [8].

#### Confucianism

Confucianism emphasises moral values that can be used as an efficient system for personnel management. The managing class should always set a specific standard for the others to follow by personally behaving in accordance with the standard they set. With the proper behaviors, the managed class would be inspired and encouraged to follow the good examples set by the managing class [9].

#### Taoism

Morality is the central theme that spreads throughout the whole of the *Book of Taoism* by Lao-tzu. One of the most important principles ever mentioned by Lao-tzu is that the management class should rule in a way that is similar to flowing water, which means that the way to manage is like observing the flow of water: the water flows into the direction it is allowed without using any special force deliberately against or through the areas where there is any heavy barrier.

A manager should maintain the principle to manage like flowing water by trying not to give an order or make a regulation in such a strict and restrictive manner that could possibly result in negative emotional reactions from the managed class. On the contrary, it would be better for management just to make it clear to those being managed about what should be carried out without interfering too much or paying too much attention to the details [10].

If there is any emotional rejection, then management might need to try to avoid coming into conflict with the barrier. Instead, they can use other softer – but more humane – methods to deal with the problem encountered.

Once the management class has decided to impose any new regulations on the organisation/institution, they should always put the flowing-water principle into consideration as a priority. In doing so, the management class can prevent themselves from getting involved too much to the point where the process of the orders/regulations being carried out by the managed class can hardly stay uninfluenced by any other unnecessary external factor. As a result of the principle being practically applied, the two classes can get along with each other with a lower level of conflict, as well as improve the level of efficiency.

Leadership is often regarded as the most important factor that determines the successful operation of an organisation [3]. Leadership has always been a well-discussed yet fascinating topic for those students who major in administration studies. Over the past several decades, the sheer volume of writing that has been devoted to leadership attests to its prominence in the collective effort to understand and improve how organisations work and function [11]. Even though there are many factors as to whether or not an organisation can work out well, the key is still the behaviour of the organisation's leadership [12]. Therefore, studies in leadership are, as the scholars engaged in its study, very significant [13].

# TEACHERS' ORGANISATIONAL COMMITMENT

Katz and Kahn consider that the primary aim of an organisation is to attract capable people, giving these people opportunities to demonstrate reliable behaviour in order to ensure the achievement of organisational goals [14]. Organisational commitment is an index to staff performance and the level of diligence [1]. Nowadays, with the school being similar to the form of an organisation, the higher the teachers' commitment levels are, the better their teaching efficacy will be [15].

The key to ensure the efficiency of organisational goal for schools is the quality of teachers. Many researches conducted in this field for the past years proved that *like teacher, like student*. As one ancient Chinese saying goes *One country will thrive when there are good teachers available*. Not only are teachers main roles for schools, but they also act as the souls there [10][16]. Either teacher's performances or thoughts will affect students' learning attitude and achievement directly [12].

As for the meanings of the teachers' commitment studied in Taiwan, they can be divided into three levels. These are as follows:

- Willingness to work hard;
- High level of identification with the organisation;
- Willingness to stay in the same teaching positions [16-18].

# THE RELATIONSHIP BETWEEN PRINCIPALS' LEADERSHIP BEHAVIOURS AND TEACHERS' LEVEL OF ORGANISATIONAL COMMITMENT

The authors initially conducted an empirical study on principals' leadership behaviours and teachers' organisational commitment in Taiwan and the USA. The analysis undertaken partially provides the evidence for the construction of the structure of the present study.

The results from empirical studies show there to be a positive correlation between principals showing much concern to staff and an increase in teachers' organisational commitment levels [16][17][19-23].

Concerning principals' *mentor role* leadership behaviours, empirical studies indicate there to be a positive correlation between principals' advocacy in more authoritative power (in determining school affairs) and an increase in teachers' organisational commitment [21][24]. However, Hoy, Tarter and Bliss found that when principals exerted more power in their position, teachers' organisational commitment, on the contrary, decreased [23].

According to Pitner and Charter, members who show less *profession-oriented* characteristics tended to have greater organisational commitment when leaders showed more *supportive leadership* [25]. From this then, leadership – both with regard to a high-degree of advocacy in power and concern for teaching staff – can push teachers' satisfaction in their jobs, making them pay more attention to teaching [16][19][26][27]. Other studies have found that as principals insist on advocacy and yet show concern for the school to a higher degree, teachers' organisational commitment will reach its zenith [20-22].

The literature illustrates that leaders' (principals') leadership is closely associated with members' (teachers') organisational commitment. In most empirical studies, the correlation between the leader's concern for staff and staff's organisational commitment is pretty positive, which can help predict if members are more willing to generate a higher level of organisational commitment.

What the authors hope to achieve in this article is that using a practical survey to identify the correlation between principals' leadership and teachers' organisational commitment, they can further realise how the correlation works between these two groups at vocational high schools nationwide.

# HYPOTHESES

The following hypotheses have been applied to vocational high schools in Taiwan:

- Hypothesis 1 is that teachers who have different individual characteristics have no significant differences regarding principals' leadership behaviours;
- Hypothesis 2 is that teachers who have different individual characteristics have no significant differences regarding organisational commitment;
- Hypothesis 3 is that teachers who are in different school backgrounds have no significant differences on principals' leadership behaviours;
- Hypothesis 4 is that teachers who are in different school backgrounds have no significant differences regarding organisational commitment;

- Hypothesis 5 is that principals who have different individual characteristics have no significant differences on principals' leadership behaviours;
- Hypothesis 6 is that there is no significant correlation between principals' leadership behaviours and teacher's organisational commitment at vocational high schools.

#### Scale

This study made use of designing questionnaires to obtain data. The structure of the questionnaires consisted of the individual characteristics subscale, the *Principals' Leadership Behaviors Questionnaire* and *Teachers' Organisational Commitment Questionnaire*. The individual characteristics subscale in the survey covered the teacher's gender, seniority, job position, vocational school category and principal's educational background, with five items on this subscale.

# Procedure

There were 1,200 subjects who took part in the study. The participants were drawn from 50 vocational high schools in Taiwan. The questionnaires were given to teachers who had

been informed about the purpose of the research. However, only 630 valid responses were actually returned for analysis.

The Statistical Package for the Social Sciences (*SPSS* 10.0), an independent t-test, one-way ANOVA and Pearson correlation were used to analyse the data.

# RESULTS

Teachers' Perception of Principals' Leadership Behaviours

The findings of the t-test showed that there were no significant differences on principals' leadership behaviours between males and females (see Table 1).

Those who had part-time administrative duties at the school during the survey appeared to be more conscious of the principal's leadership behaviours compared to those who did not have any administrative duties at all, as shown in Table 2.

The findings of the ANOVA showed that there were significant differences in principals' leadership behaviours in the role of parent and that of mentor (see Table 3).

Table 1: The impact of gender on leadership behaviour.

Variables	Group	No. of Teachers	Mean	SD	t
Parent role	Male	383	58.49	11.93	1.902
	Female	247	56.65	11.84	1.902
Direction role	Male	383	50.80	8.82	0.756
	Female	247	50.27	8.52	0.730
Mentor role	Male	383	72.82	14.49	1.859
	Female	247	70.60	14.89	1.639

Table 2: Different duties and the awareness of	leadership variables.
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Variables	Group	No. of Teachers	Mean	SD	t
Parent role	Without administrative duty	477	56.51	12.23	-5.297***
	With part-time administrative duty	153	61.70	9.95	-3.297
Direction role	Without administrative duty	477	49.94	8.90	-3.614***
	With part-time administrative duty	153	52.63	7.73	-3.014
Mentor role	Without administrative duty	477	70.34	15.24	-5.721***
	With part-time administrative duty	153	76.96	11.43	-5.721****

\*\*\* P<0.001

Table 3: Different seniority levels and leadership variables.

						One-way	ANOVA			
Variables	Variables Group	Group No. of Teachers Mean	Mean	Mean SD	SV	Sum or Square	df	MS	F	Scheffé
Parent	(1)<4 years	119	60.29	9.93	Between	1441.318	3	480.439	3.421*	(1)>(3)
role	(2)5-10 years	142	56.74	10.68	group Within	87910.309	626	140.432		
	(3)11-20 years	233	56.49	12.59	group	87910.309	020	140.432		
	(4)21+ years	136	58.84	13.16	Total	89351.627	629			
Direction	(1)<4 years	119	51.88	7.51	Between	676.514	3	225.505	3.009	無
role	(2)5-10 years	142	50.39	8.18	group Within	46915.460	626	74.945		
	(3)11-20 years	233	49.43	9.11	group	40915.400	020	74.743		
	(4)21+years	136	51.67	9.26	Total	47591.975	629			
Mentor	(1)<4 years	119	74.88	11.58	Between	2436.151	3	812.050	3.822*	(1)>(3)
role	(2)5-10 years	142	70.57	12.98	group Within	132996.014	626	212.454		
	(3)11-20 years	233	70.22	15.85	group	152790.014	020	212.434		
	(4)21+ years	136	73.76	16.13	Total	135432.165	629			

\*P<0.05 \*\*P<0.01

Private schools showed significant differences in the role of a mentor and the role of direction with the surveyed teachers' perceptions of principals' leadership behaviours (see Table 4). It was found that those principals who graduated from a non-teachers' college/university were more aware of the existence of the three roles than those from a teachers' college/university (see Table 5).

#### Teachers' Perceptions of Organisational Commitment

There were significant differences observed from the following four perspectives of the teachers: the willingness to work hard; the willingness to stay in the same teaching position; high identification with the organisation; and organisational commitment as a whole (see Table 6). Full-time teachers with part-time administrative duties at the school differed significantly from those without part-time duties in terms of their organisational commitment (see Table 7). The ANOVA test showed that there were significant differences in the teachers' perception of the variables of the willingness to work hard, willingness to stay in the same teaching position, high identification with the organisation and organisational commitment as a whole (see Table 8).

The analysis indicates that private schools delivered significant differences in the variables of the willingness to work hard,

	Table	+: Public/private school ar	id leadership varia	ules.	
Variables	Group	No. of Teachers	Mean	SD	t
Parent role	Public	497	57.45	12.43	-1.484
	Private	133	58.95	9.74	
Direction role	Public	497	49.81	8.85	-4.906***
	Private	133	53.52	7.42	
Mentor role	Public	497	71.05	15.34	-3.549***
	Private	133	75.30	11.31	

Table 4: Public/private school and leadership variables

\*\*\* P<0.001

#### Table 5: Principals' background and role perceptions.

Variables	Group	No. of Teachers	Mean	SD	t
Parent role	Teachers' college	401	56.15	12.50	-4.832***
	Non-teachers' college	229	60.60	10.25	-4.032
Direction role	Teachers' college	401	49.76	8.90	-3.302*
	Non-teachers' college	229	52.06	8.15	-3.302
Mentor role	Teachers' college	401	70.13	15.48	-4.414***
	Non-teachers' college	229	75.13	12.54	-4.414

\*P<0.05 \*\*\* P<0.001

Table 6: Gender influence and organisational commitment.

Variables	Group	No. of Teachers	Mean	SD	t
Willingness to work hard	Male	383	53.97	7.35	2.021*
	Female	247	52.73	7.82	2.021**
How practical teacher is & how	Male	383	17.35	3.76	2.715**
much pay/bonus	Female	247	16.53	3.68	2.715***
Willingness to stay in the same	Male	383	23.47	4.29	1.784
teaching position	Female	247	22.81	4.76	1.784
High identification with the	Male	383	41.02	7.35	2.406*
organisation	Female	247	39.55	7.75	2.400**
Organisational commitment as a	Male	383	135.82	20.29	2.487*
whole	Female	247	131.61	21.42	2.407

\* P<0.05 \*\* P<0.01

# Table 7: Duty and organisational commitment.

Variables	Group	No. of Teachers	Mean	SD	t
Willingness to work hard	Without administrative duty	477	53.05	7.56	-2.557*
	With part-time administrative duty	153	54.84	7.38	-2.337
How practical teacher is &	Without administrative duty	477	16.75	3.77	-3.289***
how much pay/bonus	With part-time administrative duty	153	17.89	3.55	-3.269
Willingness to stay in the	Without administrative duty	477	22.88	4.56	-3.313***
same teaching position	With part-time administrative duty	153	24.25	4.07	-5.515***
High identification with the	Without administrative duty	477	39.82	7.54	-3.713***
organisation	With part-time administrative duty	153	42.39	7.22	-5./15****
Organisational commitment	Without administrative duty	477	132.50	20.87	-3.582***
as a whole	With part-time administrative duty	153	139.37	19.87	-5.582****

\* P<0.05 \*\*\* P<0.001

Variables	Crown	No. of	Maan	CD.		One-way A	NOVA		Б	Cabaffá?
Variables	Group	Teachers	Mean	SD	SV	SS	df	MS	F	Scheffé'
Willingness to	(1)<4 years	119	51.56	7.05	Between	2051.624	3	683.875	12.655***	(4)>(1)
work hard	(2)5-10 years	142	51.58	8.76	group Within	33829.717	626	54.041		(4)>(2) (4)>(3)
	(3)11-20 years	233	54.01	6.80	group	55629.717	020	54.041		(4)>(3) (3)>(1)
	(4)21+ years	136	56.24	6.90	Total	35881.341	629			(3)>(2)
How practical	(1)<4 years	119	17.09	3.58	Between	87.626	3	29.209	2.091	無
teacher is & how much	(2)5-10 years	142	16.37	3.63	group Within	8745.859	626	13.971		
pay/bonus	(3)11-20 years	233	17.36	3.53	group	8745.859	020			
	(4)21+ years	136	17.09	4.29	Total	8833.486	629			
Willingness to	(1)<4 years	119	21.28	4.46	Between	1313.926	3	437.975	24.171***	(4)>(1)
stay in the	(2)5-10 years	142	21.76	4.96	group Within	11342.996	626	18.120		(4)>(2)
same teaching position	(3)11-20 years	233	24.10	3.68	group	11342.990	020	16.120		(3)>(1) (3)>(2)
1	(4)21+ years	136	24.90	4.20	Total	12656.922	629			
High	(1)<4 years	119	39.59	7.40	Between	1299.271	3	433.090	7.872***	(4)>(2)
identification with the	(2)5-10 years	142	38.42	8.16	group Within	34442.172	626	55.019		(4)>(1)
organisation	(3)11-20 years	233	40.90	6.57	group	34442.172	020	55.019		(3)>(2)
5	(4)21+ years	136	42.51	7.97	Total	35741.443	629			
Organisational	(1)<4 years	119	129.52	19.84	Between	14740.112	3	4913.4	11.916***	(4)>(2)
commitment as a whole	(2)5-10 years	142	128.14	23.55	group Within	258129.388	626	412.347		(4)>(1)
as a whole	(3)11-20 years	233	136.37	18.06	group	230129.300	020	412.347		(3)>(2) (3)>(1)
	(4)21+ years	136	140.74	20.68	Total	272869.500	629			

Table 8: Different levels of seniority and teachers' organisational commitment variables.

\*\*\* P<0.001

willingness to stay in the same teaching position, high identification with the organisation and organisational commitment as a whole with regard to the teachers' perception of teacher's organisational commitment (see Table 9). Table 10 shows the correlation between principals' management styles and the teachers' level of organisational commitment.

# CONCLUSIONS

The important findings, after statistical analysis, include the discovery of significant differences in the teachers' perceptions

of principals' leadership behaviours covering the roles of direction, parent and mentor in terms of the teachers' seniority, duty and vocational school category. However, there was no significant difference detected in terms of the teachers' gender, marital status or school scale. On the basis of the teachers' gender, seniority, duty, and vocational school category, there were significant differences in the teachers' organisational commitment. Furthermore, there were significant differences in the teachers' perception of principals' leadership behaviour in terms of the principals' educational background.

Table 9: Influence of public/private school background and organisational commitment.

Variables	Group	No. of Teachers	Mean	SD	t	
Willingness to work hard	Public	497	54.03	7.16	3.202*	
	Private	133	51.44	8.59	5.202*	
How practical teacher is & how	Public	497	17.03	3.80	0.047	
much pay/bonus	Private	133	17.02	3.58	0.047	
Willingness to stay in the same	Public	497	23.76	4.13	6.065***	
teaching position	Private	133	21.17	5.16	0.003****	
High identification with the	Public	497	40.75	7.36	1.972*	
organisation	Private	133	39.30	8.09	1.972*	
Organisational commitment as a	Public	497	135.57	19.87	2.005*	
whole	Private	133	128.92	23.43	2.995*	

\* P<0.05 \*\*\* P<0.001

Table 10: Correlation between principals' leadership behaviours and teachers' organisational commitment.

Variables	Willingness to work hard	How practical teacher is and how much pay/bonus	Willingness to stay in the same teaching position	High identification with the organisation	Organisational commitment as a whole
Parent role	0.379**	0.435**	0.369**	0.543**	0.491**
Direction role	0.367**	0.426**	0.324**	0.523**	0.468**
Mentor role	0.371**	0.452**	0.350**	0.545**	0.488**

\*\* P<0.01

Significant positive correlations also exist between principals' leadership behaviours and teachers' organisational commitment: the Pearson r equalled 0.491 between principals' role of parent leadership behaviour and teachers' organisational commitment; the Pearson r equalled 0.468 between principals' the role of direction leadership behaviours and teachers' organisational commitment; and the Pearson r equalled 0.488 between principals' role of mentor leadership behaviour and teachers' organisational commitment.

#### SUGGESTIONS

Based upon these findings, several suggestions can be brought forward.

Suggestions for vocational high schools and principals cover:

- Principals should judge different situations and identify teachers' needs to demonstrate leadership behaviour;
- Principals should praise teachers at the right moment to arouse a higher level of work motivation in teachers;
- Principals should emphasise gender equality, as well as encourage and show concern towards female teachers;
- Principals should pay much attention to teachers' career development in every school;
- Principals should appropriately allocate administrative duties to most of the teachers and transfer teachers' duties regularly to raise their organisational commitment.

Suggestions for the educational administration include:

- Excite senior principals' sense of mission for education at the right time;
- Supply a consultative body where young teachers can solve the problems of teaching and promote their organisational commitment;
- Hold regular seminars on principals' leadership effectiveness.

Suggestions for teachers incorporate the following:

- Teachers should avoid emotionally overreacting when filling in questionnaires and avoid giving untrue responses for some scruples;
- The promotion of teachers' organisational commitment is the responsibility of educators who work at the school.

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