Full Length Research Paper

A survey study to find out the relationship between leadership styles and demographic characteristics of elementary and secondary school teachers

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This article reports a study aiming to investigate the leadership styles of elementary and secondary school teachers' in Public Sector schools in Lahore, Pakistan. The study also explored if there was any correlation between demographic characteristics of teachers and their leadership styles. A survey was conducted using Task-oriented and People-oriented T_P leadership styles questionnaire comprising 35 items administered on 150 respondents. Pearson correlation, t-test and ANOVA methods were used to analyze the data. Teachers' gender and monthly income were significantly correlated with the task oriented, participating and selling leadership style. While Age, Designation, of the teachers' were significantly correlated with the people oriented leadership, participating and delegating leadership styles. Experience of the teachers had significant correlation with participating and delegating leadership styles. Professional qualification was also significantly correlated with delegating leadership style of teachers.

Key words: Leadership styles, elementary school teachers, secondary school teachers, demographics, public sector.

INTRODUCTION

Success of a school depends on the school leadership that is mostly confined up to the school principal. No doubt, the principal plays a vital role in the school improvement, but the presence of other leaders who may assist with the school improvement process can not be denied. Function of the school has become too complex for one individual to oversee, that is why new leadership structures that can effectively meet the diverse demands of education are needed. The concept and practice of teacher leadership has gained momentum in the past two decades. Teachers are practicing more leadership functions at both instructional and organizational levels of practice (York-Barr and Duke, 2004).

According to the designers of the whole-school development model, the traditional organization of

Teachers are one of the key-stakeholders of school leadership-principals and help to shape each student globally regarding economic potential, behavior with their society and interaction with the environment. So, teacher prepares future leaders, professionals and citizens of the world (Mckeon, 2006). The main task of educational leaders is to facilitate the teaching learning process, both.

schools is ineffective and inefficient, thus the attempt to replace the traditional organization and management of schools with a leadership team that empower a variety of stakeholders and include them in the decision-making process has been made in the Edison whole-school reform (Edison Schools, 2003). In an attempt to overcome the inadequacies of traditional models of school organization, it has been suggested that the notion of leadership as an individual enterprise should be replaced by a broader conception of leadership that focuses on groups working together to lead (Murphy and Beck, 1995).

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at school and class room level. In this context, the role of teacher as a leader is significant

Review of related literature

Leadership is a highly complex concept to define, but most definitions focus on the exercise of influence (Leithwood and Jantzi, 1999), as the notion of efficient leadership has shifted from delegation and direction to collaboration and shared responsibilities (Crowther and Olsen, 1997). A recent concept about leadership has moved away from analyses of individual leaders either those in formal leadership roles or charismatic or informal leaders to "distributed leadership" (Gronn, 1999; Spillane et al., 2004). The term "distributed leadership" implies an advocacy for democratic leadership with a sharing of authority among principals, teachers and stakeholders (Harris and Muiis, 2005), According to Leithwood and Riehl (2005), "leaders engage in three kinds of activities that promote achievement. The first is setting direction that includes, but not limited to, establishing a shared vision and fostering the acceptance of group goals. The second is changing the organization by strengthening the culture, modifying organizational processes and changing structures. Finally, leaders can develop people by offering intellectual stimulation and offering individual support". Teacher leaders may engage in any of these activities through adopting any of the leadership styles.

Robinson (1993) defines leadership style as the characteristic manner in which a person behaves in attempting to influence the actions or beliefs of others, particularly subordinates.

There are three main eras which comprise leadership theory. The trait era of leadership is considered to be the period from the late 1800s to the mid-1940s. The trait theory attempted to identify specific physical, mental and personality characteristics associated with leadership success, and it relied on research, related in various traits, to certain success criteria. The trait theory is alive and well. Researchers (Bryman, 1992; Kirkpatrick and Locke, 1991; Bass, 1990) have seen resurgence in interest in the trait approach including studies on how traits influence leadership and play a role in determineing leadership ability and effectiveness. According to Kirkpatrick and Locke (1991), it is unequivocally clear that leaders are not like other people. Bass (1990) stated that individual factors of successful leadership could be classified into six groups: capacity, achievement, responsibility, participation, status and situation.

The behavior era began in the late 1940s when researchers started to explore the idea that how a person acts determines that person's leadership effectiveness because simply analyzing the leaders' traits cannot provide enough information about leadership effectiveness. They examined behaviors and their impact on

measures of effectiveness such as production and the satisfaction of followers.

The contingency era evolved in the 1960s when researchers began to believe that environmental variables played some role in leadership effectiveness. The focus of the contingency era was on the observed behavior of leaders and their followers in various situations, not on any inborn or developed ability or potential for leadership.

The situational leadership model was developed by Paul Hersey and Kenneth Blanchard in the late 1960s and they considered that a leader's behavior is contingent upon variations in situations and that the leader should fit the leadership style to the demands of situations (Blanchard, 1985; Blanchard et al., 1993).

A major part of the situational leadership model is concerned with the development level of subordinates. Development level refers to the degree in which subordinates have the competencies and commitment necessary to accomplish a given task or activity (Blanchard, 1985). The two factors of followers' maturity include ability, which refers to the followers' task-relevant skills and technical knowledge and willingness, which refers to the followers' commitment, self-confidence and self-respect (Hersey, 1992). By combining followers' ability and willingness, four levels of followers' maturity are produced to acquire the basic leadership styles:

Telling: The followers need specific guidance when the situation results in low ability and low willingness.

Selling: The followers need direct guidance when the situation results in low ability and high willingness.

Participating: The followers need to be more participative when the situation results in high ability and low willingness.

Delegating: The followers need to be able to accept responsibility when the situation results in high ability and high willingness (Hersey et al., 2001).

These four styles have been coined under two major aspects of the administrated instrument such as people oriented leadership style or P_Score (participating and delegating) and task oriented leadership style or T_Score (telling and selling).

The studies in this regard have been made for so many organizations, but the leadership styles of teachers are still unattended. Being an important and very purposeful future concerned area that plays a vital role in the school achievement system, it is necessary that it should be studied in the Pakistani context. Through this study, the researcher desires to explore the relationship between teachers' leadership styles and their demographic characteristics.

Table 1. Pearson's correlations between the teachers' leadership styles and demographic characterist
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Dimensions	P-score	T- score	Participating	Selling	Delegating	Telling
Gender	-0.025	0.279**	0.180 [*]	0.161 [*]	-0.025	0.014
Age	0.281**	0.113	0.166 [*]	0.045	0.162*	0.111
Designation	0.274**	0.130	0.172 [*]	-0.012	0.180 [*]	0.165 [*]
Experience	-0.021	0.059	0.232**	0.103	0.196*	0.036
Professional qualification	0.009	0.011	-0.004	-0.065	0.189*	-0.055
Monthly income	-0.003	0.197 [*]	0.158	0.120	0.098	0.099

Note; P-Score = people oriented leadership style, T-Score = task oriented leadership style. N = 150, **p< .01, *p< .05.

Objectives

The main objective of the study was to explore the impact of demographic characteristics on the leadership styles of teachers at the elementary and secondary school level. Due to cultural factors in Punjab, Pakistan, various demographic features were scrutinized for their relationship with the primary variables in this research.

METHODOLOGY

Hypothesis of the study

There is no significant relationship between teachers' leadership styles and the demographic variables (gender, designation, age, qualification, experience and monthly income).

Methods

The survey was conducted over the elementary and secondary school teachers of the Punjab public sector school education department Lahore, Pakistan. One hundred and fifty teachers participated in the survey through responding the T_P leadership styles research instrument. This instrument used to measure the leadership styles of the teachers was originally developed by Sergiovanni et al. (1969) and adopted by Ritchie and Thompson (1984). This tool consists of 35 statements at 5-point likert scale, measuring four styles of leadership namely: telling, selling, participating and delegating. These four leadership styles are further categorized under the major characteristics of leadership styles autocratic/task-oriented and democratic/people-oriented. Respondent's profile was also used along with this questionnaire to know about their demographic characteristics like gender, designation, professional qualification, experience, monthly income and age. The adaptation was made in few statements to make this tool more feasible in the Pakistani context. Reliability of the T_P LS instrument was tested through a pilot study conducted over 30 subjects. The value of the Cronbach's alpha was found as 0.68.

Analysis of the collected data

The Pearson correlation was utilized in the primary hypothesis to test whether the teachers' leadership styles (selling, telling, participating and delegating) and their demographics are significantly correlated or not. Pearson is used to analyze the relationship between two continuous and interval variables (Huang, 2000).

The t-test was used to examine the difference between teachers' demographics and different types of leadership styles used by them in schools. The one-way ANOVA was used to test the difference between different demographic variables and different leadership style. Fifteen items of the research tool have the consideration for people oriented leadership style and the other twenty five are concerned with task oriented leadership style of the teachers.

As presented in Table 1, teachers' gender was significantly correlated with the task oriented, participating and selling leadership styles ($r=0.279,\,0.180$ and $0.161,\,respectively$). Age of the teachers is significantly correlated with the people oriented leadership, participating and delegating leadership styles ($r=0.281,\,0.166$ and $0.162,\,respectively$). Designation of the teachers, either elementary (EST) or secondary school teacher (SST) has significant correlation with people oriented, participating, delegating and telling leadership styles ($r=0.274,\,0.172,\,0.180$ and $0.165,\,respectively$). Task oriented leadership style of the teachers is also significantly correlated with the monthly income (r=0.197).

Experience level of the teachers has significant correlation with participating and delegating leadership styles (r=0.232 and 0.196, respectively). Professional qualification is also significantly correlated with delegating leadership style of teachers (r=0.189), and the primary hypothesis claiming no significant correlation between the teachers' leadership styles and demographic characteristics was therefore rejected.

RESULT

There are no significant differences among teachers' leadership styles and demographic characteristics.

This hypothesis was tested using t-test and one way ANOVA statistical methods. The t-test was used to determine if significant differences exists in the teachers' leadership styles by gender and designation. The one way ANOVA was used to find if any significant difference exists in the teachers' leadership styles among age, experience and monthly income.

According to Table 2, there were no significant differences existing in the people oriented ($t=0.764,\,p>5$), task oriented ($t=-0.274,\,p>.05$), telling ($t=0.882,\,p>.05$) and delegating ($t=0.857,\,p>.05$) leadership styles of the teachers by gender. Due to the fact that the p values for P-score, T-score, telling and delegating leadership styles are greater than 0.05, these variables have no significant differences on the bases of gender. Moreover, selling ($t=-3.12,\,p<.05$) and participating ($t=-1.69,\,p<0.05$) leadership styles of teachers are

Table 2. T-test for teachers' leadership style and gender.

Dimensions	Gender	Number	Mean	SD	t	р
P_score	Male Female	97 45	3.82 3.74	0.624 0.376	0.764	0.446
T_score	Male Female	98 46	3.99 4.01	0.363 0.267	-0.274	0.785
Telling	Male Female	99 46	3.8677 3.7804	0.63885 0.29561	0.882	0.379
Delegating	Male Female	97 46	3.9253 3.8179	0.79808 0.41559	0.857	0.393
Selling	Male Female	99 46	3.8775 4.0788	0.48346 0.28790	-3.120	0.002*
Participating	Male Female	99 46	3.9596 4.1250	0.56436 0.50208	-1.699	0.019*

Note: P-score = People oriented leadership style, T-score = Task oriented leadership style, N = 150.

Table 3. T-test for teachers' leadership style and their title (designation).

Dimensions	Designation	N	Mean	SD	t	р
D coore	EST/TUGT	62	3.60	0.328		_
P_score	SST/TGT	50	3.89	0.767	-2.427	0.018*
	EST/TUGT	63	3.96	0.373		
T score					4 540	0.404
_	SST/TGT	50	4.06	0.319	-1.510	0.134
-	EST/TUGT	63	3.7508	0.42913		
Telling	SST/TGT	51	3.9059	0.71733	-1.430	0.156
Delegating	EST/TUGT	63	3.7143	0.44076		
Delegating	SST/TGT	50	4.0150	1.00180	-2.138	0.035*
Selling	EST/TUGT	63	3.9722	0.42977		
Geiling	SST/TGT	51	3.8946	0.50706	0.884	0.378
	ECT/TUCT	60	2.0049	0.51000		
Participating	EST/TUGT	63	3.9048	0.51866		
	SST/TGT	51	4.1176	0.57955	-2.067	0.041*

Note: P-score = People oriented leadership style, T_score = Task oriented leadership style, N = 150.

significantly different by gender because p values are less than 0.05. The hypothesis claiming no significant difference between teachers' leadership styles and demographics is therefore partly rejected on the bases of gender.

According to Table 3, people oriented (t = -2.42, p < 0.05), delegating (t = -2.13, p < 0.05) and participating (t = -2.06, p < 0.05) leadership styles have significant differences among leadership styles of teachers and

demographics on the basis of designation because p values are less than 0.05. T-score (t = 3.19, p > 0.05), telling (t = -1.43, p > 0.05) and selling (t = 0.884, p > 0.05) leadership styles have no significant difference with demographics on the bases of designation because p values are greater than 0.05. The hypothesis, claiming no significant difference between teachers' leadership styles and demographics, is therefore partly rejected on the basis of designation.

Table 4. ANOVA for teachers' leadership style and their age group.

Dimensions		SS	df	MS	F	р
D	Between groups	1.442	4	0.360	1.192	0.317
P_score	Within groups	42.944	142	0.302		
Toooro	Between groups	0.294	4	0.074	0.654	0.625
T_score	Within groups	16.198	144	0.112		
Dorticinating	Between groups	1.346	4	0.337	1.138	0.341
Participating	Within groups	42.873	145	0.296		
O all'	Between groups	0.661	4	0.165	0.830	0.508
Selling	Within groups	28.854	145	0.199		
Delegating	Between groups	2.161	4	0.540	1.133	0.343
	Within groups	68.163	143	0.477		
T : 111'	Between groups	1.333	4	0.333	1.103	0.357
Telling	Within groups	43.800	145	0.302		

Note: P-score = People oriented leadership style, T_score = Task oriented leadership style, N = 150.

Table 5. ANOVA for teachers' leadership style and their experience.

Dimensions		SS	df	MS	F	р
P_score	Between groups	1.216	4	0.304	1.000	0.410
	Within groups	43.170	142	0.304		
T score	Between groups	0.825	4	0.206	1.896	0.114
1_50016	Within groups	15.667	144	0.109		
Participating	Between groups	1.409	4	0.352	1.193	0.316
ranicipaling	Within groups	42.809	145	0.295		
Selling	Between groups	1.042	4	0.261	1.327	0.263
	Within groups	28.473	145	0.196		
Dologoting	Between groups	0.963	4	0.241	0.496	0.738
Delegating	Within groups	69.361	143	0.485		
T - 11:	Between groups	1.590	4	0.398	1.324	0.264
Telling	Within groups	43.543	145	0.300		

Note: P-score = People oriented leadership style, $T_score = Task$ oriented leadership style, N = 150.

EST = Elementary school teacher, TUGT = Trained under-graduate teacher, SST = Secondary school teacher and TGT = Trained graduate teacher.

Table 4, shows that there were no significant differences existing in the p-score (F = 1.19, p > 0.05), t-score (F = 0.65, p > 0.05), telling (F = 1.13, p > 0.05), selling (F = 0.83, p > 0.05), participating (F = 1.13, p > 0.05) and delegating (F = 1.10, p > 0.05) leadership styles of the teachers on the bases of age because the

values of p are greater than 0.05. The hypothesis claiming no significant difference between teachers' leadership styles and demographics is therefore accepted on the basis of age group.

Table 5, demonstrates that there were no significant differences existing in the p-score (F = 1.00, p > 0.05), t-score (F = 1.89, p > 0.05), telling (F = 1.32, p > 0.05), selling (F = 1.32, p > 0.05) participating (F = 1.19, p > 0.05) and delegating (F = 0.49, p > 0.05) leadership

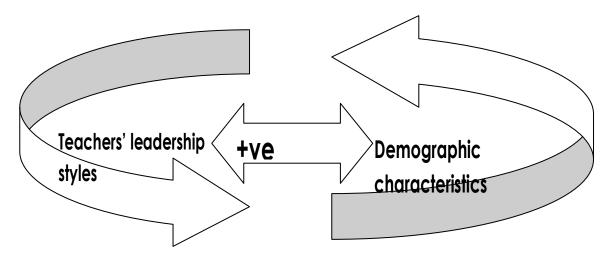


Figure 1. Correlation between the variables

Table 6. ANOVA for teachers' leadership style and their professional qualification.

Dimensions		SS	df	MS	F	р
D	Between Groups	1.407	3	.469	1.561	.202
P_score	Within Groups	42.978	143	.301		
Tacara	Between Groups	.321	3	.107	.959	.414
T_score	Within Groups	16.171	145	.112		
Participating	Between Groups	.957	3	.319	1.077	.361
	Within Groups	43.261	146	.296		
Selling	Between Groups	1.339	3	.446	2.313	.078
	Within Groups	28.176	146	.193		
Delegating	Between Groups	2.222	3	.741	1.566	.200
	Within Groups	68.102	144	.473		
Telling	Between Groups	.576	3	.192	.629	.597
	Within Groups	44.557	146	.305		

Note: P-score = People oriented leadership style, T_score = Task oriented leadership style, N = 150.

styles of the teachers on the bases of experience because the values of p are greater than 0.05. The hypothesis, claiming no significant difference between teachers' leadership styles and demographics, is therefore accepted on the basis of experience.

For the fact that all p values were greater than 0.05, this test shows that these data provide substantial evidence that there were no significant differences among teachers' leadership styles and demographic characteristics. The hypothesis, claiming no significant difference between teachers' leadership styles and demographics, is therefore accepted on the basis of qualification (Table 6).

DISCUSSION AND CONCLUSION

The significant findings of this study were that the elementary and secondary school teachers in Punjab pu-

blic sector education department used the participating and delegating leadership styles most frequently, followed by the people oriented leadership style, task oriented leadership style, selling leadership style and finally, the telling style.

In this research, teachers' leadership styles had positive correlation with their designation, experience, age, gender, professional qualification and monthly income (Figure 1).

The top educational leader-principal can expect the staff members of his team to act as a cohesive unit. Over time, a self-selection process becomes evident by which only those who embrace certain norms and perspective are willing or allowed to stay in an organization (Pfeffer, 1983). The longer a teacher is at a school team, the more pronounced his or her leadership style becomes. Katz (1982) pointed out that those leaders are likely to depend increasingly on their past experiences and routine

information sources rather than on new information with growing organizational experience.

Moreover, the research suggests that homogeneity on the length of time, leading in the organization (experience), can lead to similar interpretation of events (Lawrence and Lorsch, 1967) and can enhance general expressions and communication among staff members (Zenger and Lawrence, 1989). Additionally, Hambrick and Mason (1984) said that a leader's personal experiences and values can be concluded from demographic demographic categories such as experience. These factors can influence teachers' leadership styles. However, significant differences were found in teachers' leadership styles and the demographics such as gender and designation. Secondary school teachers were more likely to prefer using people-oriented, selling and participating leadership style than elementary school teachers. Teachers who are older were more likely to prefer using a selling leadership style than others who have more experience in leading.

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