EXCELLENT PUBLISHERS

Leadership Practices for School Improvement: Gender Disparities

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KEYWORDS	A B S T R A C T
Effective leadership, Leadership practices, School improvement, Secondary schools, Gender differences, Pakistan	The main purpose of this study is to determine the relationship between leadership practices of head teachers and school effectiveness and to compare the leadership practices of male and female head teachers for school improvement at secondary level in Pakistan. It was conducted on a stratified random sample of 108 head teachers and 216 elementary and secondary school teachers working in the government boys and girls secondary schools of the Punjab province. Data was collected through three sources: 1) Statistics on education from Education Management Information System (EMIS) Punjab; 2) annual results of grade 10 students of Boards of Intermediate and Secondary Education (BISE); and 3) a questionnaire containing biographical information and 66 items at five-point rating scale. The validity and reliability of the questionnaire was ensured through experts' opinions and pilot testing in the field; the overall reliability was established at 0.901 Alpha level. Findings of the study revealed a significant positive correlation between leadership practices of head teachers and school effectiveness. Democratic leadership practices have more positive strong correlation with school effectiveness than authoritative leadership practices. Female head teachers

Introduction

Education is the fundamental right of human beings. It is considered an important determinant of economic and social development of a country. It is generally believed that education is of vital importance in individuals' development and well-being of a society. The main aim of education is to develop the capacities latent in human nature and to coordinate their expression for the enrichment and progress

of society, by equipping children with spiritual, moral and material knowledge.

The process of education begins at home because one does not only acquire knowledge from a teacher; he/she can learn and receive knowledge from parents, family members and peer group. However, the notion of education has remained strongly associated with formal education that takes

place in structured and formal education institutions. These institutions have an organized structure to run the process of education. In this organized structure there are some personnel who have their roles and responsibilities. They all need to play an important role in the success of these institutions. But the heads of these institutions are considered the most important individuals who can take part effectively in the success of these institutions due to their leadership role. The plethora of effective school research has shown that the effective and successful schools are the result of the activities of effective leaders (Hopkins, 2001; West et al., 2000). Researchers have identified the purposeful leadership by the head teacher as one of the 12 key factors that contribute towards school effectiveness and school improvement (Mortimore et al., 1988). National Commission on Education (1996) and Office for Standards in Education (1995) also emphasized on the necessity for clear and sensitive leadership by the head teacher for school improvement.

Research has shown that head teacher is the single most important individual that plays a vital role in the success of a school (Miller, 1995). Leithwood and Jantzi (2000) argued that effective leaders employ an indirect but powerful influence on the effectiveness of school and on the achievement of students. Bell et al. (2003) stated that effective leadership is an important factor in a school's success. Hargreaves and Fink (2004) noted how highly successful and dynamic schools can quickly decline with the leaving of an effective leader. In conclusion, arguably it can be stated that school leadership has a significant effect on school effectiveness and school improvement (Wallace, 2002).

Despite the importance of leadership for school effectiveness and school improvement, a core issue in regard to leadership and school effectiveness is that what type of leadership more effectively contributes towards school improvement (Leithwood and Reil, 2003). Different researchers have different claims regarding the leadership practices that contribute effectively towards school improvement. Leithwood and Jantzi (1990) found that relation-oriented leadership more effectively contributes towards school improvement because this approach builds trust, respect and a desire on the part of followers to work collectively toward the same desired future goals. There was also found that democratic/ participative leadership has significant relationship with school effectiveness and improvement (Kunwar, 2001). It was also found that task-oriented/ authoritative leadership has significant effect on school effectiveness than the democratic/relation-oriented leadership (Iqbal, 2005). Mehmood (1995) stated that both initiating structure (task-oriented) and consideration (relation or people-oriented) are important behaviour for effective educational leaders. Marks and Printy (2003) found that transformational and shared leadership positively influence school performance. These findings of different research studies reveal that there are some inconsistencies among the claims of researchers regarding the leadership practices that contribute effectively towards school effectiveness and improvement. This inconsistency may be due to some cultural differences of different countries. One type of leadership that is effective in one situation may not contribute effectively in another situation. Another reason of this contradiction may be that different studies have been conducted in different situations on different samples. So it can not be claimed that a specific leadership style can contribute effectively in all contexts.

Regardless of these claims of different researchers in regard to leadership practices and school effectiveness, a debate has come up with this question whether women have the same leadership practices and are effective as men. Cantor and Bernay (1992) stated that it was even common two decades ago for corporate women to dress more like men in their efforts to follow the masculine model of leadership. Loden (1985) affirmed that men follow a leadership approach that characterized by qualities such as competitiveness, hierarchical authority, high control for the leader, and unemotional and analytic problem solving. Women prefer an alternative leadership approach that characterized by cooperativeness, collaboration of leaders and subordinates, lower control for the leader, and problem solving based on intuition and empathy.

In view of the above literature review, it is evident that controversial results were revealed in regard to leadership practices of male and female head teachers and school effectiveness. There is no large scale study available in the context of secondary schools in Pakistan, therefore the researchers intended to investigate the relationship between leadership practices and school effectiveness and compare leadership practices and school effectiveness of male and female head teachers at secondary level in Pakistan. The main focus of this study was to identify the leadership practices of two broad categories i.e. democratic and authority.

To achieve the objectives of the study 'to determine the relationship between leadership practices and school effectiveness, and to compare leadership practices of male and female head teachers' for school improvement, following research questions were addressed:

- Is there any relationship between leadership practices of head teachers and school effectiveness
- Is there any difference between leadership practices of male and female head teachers
- Is there any difference between school effectiveness of male and female secondary schools

Following null hypotheses were developed to seek the answer of these research questions:

Ho1: There is no significant relationship between leadership practices of head teachers and school effectiveness at secondary level

Ho2: There is no significant difference between leadership practices of male and female head teachers of secondary schools.

Ho3: There is no significant difference of effectiveness between the schools headed by male and female head teachers

Experimental

Population and Sample Selection

There were 556 government boys and girls secondary schools in four districts of the Lahore region with the break-up of two-third in rural and one-third in urban areas (Government of Punjab, 2011). Estimated teachers in these schools were 19,756 (Government of Pakistan, 2011). The descriptive survey was carried out in 108 (20%) secondary schools. A sample of 108 head teachers and 216 teachers was drawn by using stratified and simple random sampling techniques. As most of the secondary schools in urban areas had no their primary portion, therefore, primary school teachers were excluded from the

sample. From each selected secondary school the head teacher, one secondary and one elementary school teacher was selected by using simple random sampling technique. The sample of each category can be seen in Table 1.

Instrumentation and Data Collection

Three major sources were used for data collection that includes: 1) Statistical information about secondary schools and teachers' strength from the Office of Education Management Information System (EMIS) Punjab; 2) Annual results of secondary school students (grade 10) of the Board of Intermediate and Secondary Education (BISE) Lahore for the years 2009 to 2011 with the purpose to find the academic achievement of students; and 3) Survey questionnaire that comprised of three parts.

1. Demographic information: it includes name and type of the school; gender (male/female) and locality (rural/urban); academic and professional qualification; teaching and administrative experience;
2. 34-items related to six major aspects of leadership practices that include: decision making process, delegation of powers, communication, instructional behavior, interpersonal relationships and professional attitude. Each item was developed at 5-point rating scale (Likert Scale) ranging from '1' indicating never to '5' indicating always in terms of how frequently they practiced different behavior;
3. 32 items on six major aspects of school effectiveness that include: clear goals and consensus about goals; high academic standards and recognition of academic success; maximized learning time; order and

discipline; staff development and stability; cooperative and friendly atmosphere and evaluation process. Each item was developed at 5-point rating scale (Likert Scale) ranging from '1' indicating strongly disagree to '5' indicating strongly agree; a selection of '3' indicated don't know or uncertain.

The validity and reliability of the instrument was ensured through experts' opinions and pilot testing in the filed. The overall reliability of the questionnaire was established at 0.901 Alpha level, which was acceptable to launch the study at large scale (Gay, 2002). The data was collected either personally or through mail with necessary follow up through personal visits and on telephone. The data collected was reviewed and entered in SPSS for descriptive and inferential statistical analysis.

Result and Discussion

Demographic Features

The descriptive statistics revealed three major demographic features: response rate; academic and professional qualifications; teaching and administrative experience of the respondents. Of the total 108 secondary schools that responded to the survey questionnaire, 36 (33%) were urban and 72 (67%) were rural; 38 (35%) were female and 70 (65%) were male.

The second demographic feature studied was respondents' qualifications: both academic and professional. It was found that the respondents held varying qualifications from just intermediate (twelve years education) with Certificate in Teaching (CT) or equivalent professional certificate/degree to M.Phil and/or master degree in Education. A little less than two-thirds of the

respondents held academic qualifications as master degree in any subject or content area. The academic qualification ranked at second was B.A or B.Sc. A few (3%) of the respondents held M. Phil as academic qualification. With regard to professional qualifications, the highest percentage (45%) was those holding M.Ed or M.A. Education. Those who held B.Ed or CT were equal in proportion - all these comprise 55% of the total.

The third demographic feature was teaching and administrative experience of the respondents. Analysis indicates that the respondents held varying teaching and administrative experience. About two-thirds of the respondents held teaching experience more than five years. A little less than half of them held an experience of more than 10 years. With regard to administrative experience, two of the ten respondents held administrative experience five years or less. About half of them held an experience of 6-15 years. About one-fourth of the respondents held more than 15 years administrative experience. This was good on the part of the research that a marked majority of the respondents were well-aware of the leadership practices of head teachers and various aspects of school effectiveness.

Relationship between Leadership Practices and School Effectiveness

The leadership practices of head teachers were measured on the basis of overall mean values and Standard Deviation (SD) for 34 items related to different leadership behaviours of head teachers that they were practiced. The head teachers who had mean value in rating less than average mean value, they were declared as authoritative and those who had mean value more than average mean value, they were falling in democratic category. The school effectiveness was measured using two types of indicators, the process and environment indicators, and product indicators. The process and environment indicators include: clear goals and consensus about goals; high academic standards and recognition of academic success; maximized learning time; order and discipline; staff development and stability; cooperative and friendly atmosphere and evaluation process. The product indicator of the school effectiveness was measured on the basis of secondary school certificate examination results of the three-year 2009 to 2011 conducted by Board of Intermediate and Secondary Education Lahore. These results were collected in the form of pass percentage.

Table.1 Sample of each Category of the Study

Sr. No.	Type of sample	Sample size		
		M	F	Total
1.	Head Teachers of Secondary Schools	70	38	108
2.	Secondary School Teachers/Educators	70	38	108
3.	Elementary School Teachers/Educators	70	38	108
	Total	210	114	324

Table.2 Correlation between Leadership Styles and School Effectiveness

** Correlation is significant at the 0.01 level (2-tailed).

Leadership practices	School effectiveness		
	N	r	Sig. 2-tailed
Authoritative	65	.064	.165
Democratic	43	.160**	.000
Overall	108	.705**	.000

Table.3 Comparisons of Leadership Styles of Male and Female Head teachers

Gender	N	Mean	SD	t-test for Equality of Means (α = 0.05)		
				t	df	2 tailed sig.**
Male	70	99.07	35.02			
Female	38	111.57	33.83	-5.233	903	.000

** 2-tailed significance value less than 0.05 shows significant difference.

Table.4 Comparison of School Effectiveness of Male and Female Secondary Schools

Gender	N	Mean	SD	t-test for Equality of Means (α = 0.05)		
				t	df	2 tailed sig.**
Male	70	163.71	46.19			
Female	38	184.49	38.42	-7.253	779.002	.000

** 2-tailed significance value less than 0.05 shows significant difference.

To investigate the relationship between leadership practices of head teachers and school effectiveness, Pearson Correlation was calculated at 0.01 level of significance. The analysis revealed that there was a significant positive correlation between leadership practices and school effectiveness, r = 0.705, p < .001 (Table 2). Hence, the null hypothesis that there is no significant relationship between leadership practices of head teachers and school effectiveness was rejected. It can be concluded that there was a significant positive relationship between leadership practices and school effectiveness.

Democratic leadership practices had more strong positive significant correlation with school effectiveness as compared to authoritative leadership practices of head teachers. Correlation coefficient value (.160**) for democratic leadership practices of head teachers reveals that democratic leadership practices had positive significant correlation with school effectiveness at 0.01 level of significance. It means that schools headed by democratic leaders had better academic results and school effectiveness as compared to those schools which were headed by authoritarian head teachers.

It is interesting to mention that previous researches carried out on this aspect support this key finding of the study (Leithwood and Reil, 2003; Glickman et al., 2001; Mitchell and Sackney, 2000; Silins and Mulford, 2002). It was found a positive relationship between sharing of leadership roles and academic performance of students (Louis and Marks, 1998). Leithwood and Jantzi (2000) concluded that distribution of a larger amount of leadership activities to teachers has a positive effect on teachers' effectiveness and students' engagement. Research also found positive relationships between the degree of teachers' involvement in decision making and student motivation and self efficacy (Harris and Muijs, 2004). Other studies also concluded that improvements in the schools' performance were achieved through the head teachers working through teams and involving a wide range of stakeholders in decision making (Harris and Chapman, 2002; Moller et al., 2005; Gurr et al., 2005). Basically, these leaders are more associated with people and systems than the traditional model of leadership and they distribute and share leadership in order to generate institutional development and change. This change and development are enhanced when leadership is broad based and where teachers have opportunities to collaborate and to actively engage in change and innovation (Hopkins, 2001).

Comparison of Leadership Practices of Male and Female Head Teachers

The difference between leadership practices of male and female head teachers of secondary schools was determined through applying Independent Sample t-test at 0.05 level of significance. Analysis revealed significant difference in the leadership practices of male and female head teachers, either assuming equal variance or unequal variance for Levene's Test (Table 3). Therefore, the null hypothesis that there is no significant difference between leadership practices of male and female head teachers was not accepted at $\alpha = 0.05$. The findings indicated that female head teachers were relatively more democratic than their male counterparts. They were more consultative and participative as compared to male head teachers. They mostly shared authority and delegated some responsibilities to their subordinates; involved staff members in the process of decision making and other school activities. They mostly gave respect to their subordinates and raised their confidence and arranged regularly meetings with teachers, students and parents to know teachers and students' problems and their solutions. As compared to female head teachers, majority of the male head teachers sometimes and/or rarely adopted these strategies. They mostly concentrated on powers and rarely involved staff members in decision-making process. They mostly followed hard and fast rules and directions of authorities. Overall, it can be concluded that female head teachers were more democratic and participative as compared to male head teachers who were more authoritative and directive.

Previous research supports this key finding as Eagly et al. (1992) in their review of 50 studies found that female principals employed a more democratic or participative style and a less autocratic or directive style than male principals. It was also found that majority of the female leaders were participative, employee-centered, team-based leader and encouraging employees to share their vision. They encouraged subordinates to work together towards common goals (Stanford et al., 1995). Eagly and Johnson (1990) in their meta-analysis on gender and leadership styles found that women used a more democratic or participative style and men adopted a more

autocratic or directive style. There may be many reasons to indicate that male and female leaders may differ to some extent in their leadership practices. One such reason recognizes the possibility of ingrained sex differences in personality traits and behavioral tendencies. Research has also emphasized the importance of childhood events that are different for the sexes such as experiences that occur in sex-segregated play groups in which girls and boys play in different styles and use different methods of influencing one another. Hence, it is possible that biological sex differences and sex-differentiated prior experiences cause men and women to be somewhat different kinds of leaders (Maccoby, 1988).

Comparison of School Effectiveness of Male and Female Secondary Schools

The school effectiveness was measured through two types of indicators, the process and environment indicators, and product indicators. The product indicator of the school effectiveness was measured on the basis of secondary school certificate examination results of the three-years 2009 to 2011 conducted by Board of Intermediate and Secondary Education (BISE) Lahore. These results were collected in the form of pass percentage. These were calculated and average scores were obtained. Independent Sample t-test was applied to compare students' achievement of male and female secondary schools. Analysis indicated that there was a significant difference between students' achievement of male and female secondary schools. The female secondary schools had better academic results having relatively high mean value (65.5) as compared to male secondary schools (56.5). With regard to the overall school effectiveness, analysis also indicates a significant difference between effectiveness of schools headed by the male and female

head teachers. Those schools headed by the female head teachers had better school effectiveness than those schools which were headed by the male head teachers. This difference was measured by using Independent Sample t-test which is significant at 0.05 level, assuming unequal variance of Levene's Test (Table 4). Therefore, the null hypothesis that there is no significant difference between effectiveness of schools headed by the male and female head teachers was rejected at $\alpha = 0.05$. It can be concluded that female secondary schools had better effectiveness having relatively high mean value and low SD as compared to male secondary schools.

Findings indicated that female secondary schools have better academic results and school effectiveness as compared to male secondary schools. This might be due to the democratic and participative behaviours of female head teachers. Research suggests that certain feminine characteristics, such as heightened communication skills; advanced intermediary skills; well-developed interpersonal skills, a soft approach to handling people, gentleness and empathy give the woman leader an advantage. They may gain confidence as leaders by making collaborative decisions that they can determine are in line with their associates' expectations (Helgesen, 1990). Therefore, participative and collaborative style may enable many female leaders to win acceptance from others, gain self-confidence, and thereby be effective leader.

To sum up the discussion, it can be concluded that it might not be appropriate to exactly generalize the results of the study at large scale owing to small sample of 108 schools and 216 teachers. But as these results are in line with the previous studies, so these may help the education departments and other policymakers to at least consider that what should be the role and

responsibilities of a head teacher of secondary school?

References

Bell, L., R. Bolam, and Cabrillo, 2003. A Systematic Review of the Impact of School Head Teachers and Principals on Student Outcomes. Institute of Education, London.

Cantor, D.W. and T. Bernay, 1992. Women in Power – the Secrets of Leadership. Houghton Mifflin, Boston, MA.

Eagly, A.H. and B.T. Johnson, 1990. Gender and Leadership Style: A Meta-Analysis. Psychological Bulletin, 108 (2): 233-256.

Eagly, A.H., S.J. Karau and B.T. Johnson, 1992. Gender and Leadership Style among School Principals: A Meta-Analysis. Educational Administration Quarterly, 28(1) : 76-102.

Gay, L.R., 2002. Educational Research: Competencies for Analysis and Application. National Book Foundation, Lahore.

Glickman, C.D., S.P. Gordon, and J.M. Ross-Gordon, 2001. Supervision and Instructional Leadership. Allyn & Bacon, Needham Heights, MA.

Government of Pakistan, 2011. Summary of Pakistan education statistics 2005-2006. Academy of Educational Planning and Management, Ministry of Education, Islamabad.

Government of Punjab, 2011. School education statistics 2005-2006. Education Management Information System, Department of Education, Lahore.

Gurr, D., L. Drysdale and B. Mulford, 2005. Successful Principal Leadership: Australian Case Studies. Journal of Educational Administration, 43(6) : 539-551.

Hargreaves, A. and D. Fink, 2004. The Seven Principles of Sustainable Leadership. Educational Leadership, 61 (7) : 8-13.

Harris, A. and C. Chapman, 2002. Effective leadership in schools facing challenging circumstances. National College for School Leadership (NCSL), Nottingham, UK.

Harris, A. and D. Muijs, 2004. Improving Schools through Teacher Leadership. Oxford University Press, London.

Helgesen, S., 1990. The Female Advantage – Women's Ways of Leadership. New Doubleday, York, NY.

Hopkins, D., 2001. School Improvement for Real. Falmer Press, London.

Iqbal, M., 2005. A comparative study of organizational structure, leadership style and physical facilities of public and private secondary schools in Punjab and their effect on school effectiveness, Ph.D thesis, Institute of Education and Research, University of the Punjab, Lahore.

Kunwar, F.S., 2001. School Leadership and School Effectiveness: Reflection and Research. Nawa Publication, Lahore.

Leithwood, K. and C. Reil, 2003. What we know about successful school leadership. Brief prepared for the Task Force on Developing Research in Educational Leadership. Division A: American Educational Research Association, Temple University.

Leithwood, K. and D. Jantzi, 1990. Transformational Leadership: How Principals Can Help Reform School Cultures. School Effectiveness and School Improvement, 1: 249-280.

Leithwood, K. and D. Jantzi, 2000. The effects of different sources of leadership on student engagement in school. In leadership for change and school reform, Eds., Riley, K. and K. Louis. London: Routledge, pp : 50-66.

Loden, M., 1985. Feminine Leadership or How to Succeed in Business without Being One of the Boys. Times Books, New York, NY.

Louis, K.S., and H.M. Marks, 1998. Does Professional Community Affect the Classroom? Teachers' Work and Student Experiences in Restructuring Schools. American Journal of Education, 106: 532-575.

Maccoby, E.E., 1988. Gender as a Social Category. Developmental Psychology, 24: 755-765.

Marks, H.M. and S.M. Printy, 2003. Principal Leadership and School Performance: An Integration of Transformational and Instructional Leadership. Educational Administration Quarterly, 39 (3) : 370-397.

Mehmood, S., 1995. A study of leadership behaviour and effectiveness of secondary school heads in Pakistan, Ph.D thesis, Institute of Education and Research, University of the Punjab, Lahore.

Miller, E. 1995. Shared Decision Making by Itself Doesn't Make for Better Decisions. Harvard Education Letter, 11(6) : 1-4.

Mitchell, C. and L. Sackney, 2000. Profound Improvement: Building Capacity for a Learning Community. Swets and Zeitlinger, Lisse.

Moller, J., A. Eggen, O.L. Fuglestad, G. Langfeldt, , A. Presthus, , S. Skrovset, E. Stjernstrom, and G. Vedoy, 2005. Successful school leadership: The Norwegian case. In the international successful school principalship project, Eds., Jacobson, S.L., C. Day and K. Leithwood, pp. 584 – 594.

Mortimore, P., P. Sammons, L. Stoll, D. Lewis and R. Ecob, 1988. School Matters. Open Books, Wells, England.

National Commission on Education, 1996. Success against the odds. Effective schools in disadvantaged areas. Routledge, London.

Office for Standards in Education, 1995. Teaching quality: The primary debate. OFSTED, London.

Silins, H. and B. Mulford, 2002. Leadership and school results. In second international handbook of educational leadership and administration, Eds., Leithwood, K., P. Hallinger, K. Seashore-Louis, G. Furman-Brown, P. Gronn, W. Mulford and K. Riley, Kluwer, Dordrecht.

Stanford, J.H., B.R. Oates and D. Flores, 1995. Women's Leadership Styles: A Heuristic Analysis. Women in Management Review, 10 (2) : 9-16.

Wallace, M., 2002. Modeling Distributed Leadership and Management Effectiveness: Primary School Senior Management Teams in England and Wales. School. Effectiveness and School Improvement, 13(2) : 163-186.

West, M., D. Jackson, A. Harris and D. Hopkins, 2000. Leadership for school improvement. In leadership for change, Eds., Riley K. and K. Seashore-Louis. Routledge Falmer, London.