

Full Length Research Paper

The impact of school management trainings and principals' attitude on students' learning outcomes

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School management trainings play an important role towards school effectiveness. The contemporary education systems place a high value on school management trainings for attaining improved learning outcomes. The purpose of this study is in two folds: firstly, to assess the effects of management trainings on student learning outcomes and secondly, to ascertain the extent to which principals' attitudes mediate the relationship of school management trainings and student learning outcomes. The pertinent data was collected from 170 principals, 340 teachers as well as 850 students. The findings of the study reveal that school management trainings equip principals with desired school management skills which enable them to manage respective schools effectively. The study also statistically found significant effects of such trainings on principals' attitude. Trained principals showed conscious commitment towards motivation and satisfaction of their teachers as well as students. Trained principals mobilize their resources for improving school environment, providing attractive study settings, ensuring adequate community involvement, and developing their teaching faculty professionally. The conclusion of the study points out towards the overall improvement in students' learning outcomes.

Key words: School management trainings, school effectiveness, student learning outcomes, and principals' attitudes.

INTRODUCTION

Improving Student Learning Outcomes (SLOs) is a critical phenomenon that is rapidly receiving a significant attention of educational administrators across the globe. It is supported through a wide range of initiatives, especially in terms of developing an effective school leadership (Alam, 2009). Many previous researches suggest that school leaders may come from nontraditional backgrounds (Slanning, 1999). They need special training programs to manage schools effectively. School leadership has indeed become one of priorities in education policy agendas internationally. It plays a pivotal role in improving school outcomes by influencing school climate and environment. School leadership is expected to provide motivation as well as building capacities of

school teachers (Alam et al., 2009). That is why effective school leadership is considered essential to ensure the efficiency and competence of schooling. Additionally, according to Wong (2002) most of the schools are evaluated for their academic achievements and scholastic effectiveness, and their reputation is based on the public examination results of their students. The leadership capacity needed to develop a supporting culture is both attention demanding and complex. According to Sackney and Walker (2006) school principals need skills in group process facilitation, communication, conflict negotiation, inquiry and data management. Lin (2001) states that in Taiwan reinventing schools demands outstanding school leaders; such leaders require a commensurate level of support and professional development to make the required role shift and, in many cases, this has not been forthcoming.

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In the context of Pakistan, SMT received a little

attention of educators, policy makers and government officials. A few institutions are imparting management training program to their principals. The trend of such training programs, however, is rapidly increasing in the schools which are managed by not-for-profit organizations. These programs are seemingly designed to equip the school principals with knowledge, skills and attitude which are essential for effective school management. A deeper analysis of the strengths as well as weaknesses of these programs and everything else that can be done to improve the school leadership programs are the need of the time. We need a clearer picture of what is and is not known about the specific features and program attributes that can influence leaders' beliefs and behaviors in ways that improve SLOs. We are required to better understand the costs and relative benefits of the different types of programs being undertaken in Read Foundation school system, and how to identify and sustain the most effective ones (Alam and Haque, 2010). We need to investigate the effects which SMTs leave on SLOs, and the role which Principal's Attitude (PA) plays in affecting relationship of these both.

The present study was undertaken to assess the effectiveness of SMT programs which is being implemented in Read Foundation School System (Introduction to Read Foundation is given in Annex 1). It was aimed at ascertaining the effects of SMT program on SLOs in terms of their students' results, engagement with classroom and school activities. It also investigated how principal's attitude mediates SMTs–SLOs relationship. The reason for undertaking this study was that a little research has addressed this field in education sector particularly not-for-profit sector of Pakistan. The study discusses three variables i.e. SMTs as an independent variable, SLO as a variable of primary interest, and PA as a mediating variable.

The study is aimed at investigating consequences of school management trainings on students learning outcomes, and identifying the attributes of these trainings which affect attitudes of the school principals. The study primarily intends to address two research questions; (1) how do school management trainings affect the student learning outcomes and (2) which attributes of school management trainings motivate attitudes of the school principals.

Literature review

The investors of education have paramount concern with student performance and achievement (Alam et al., 2010). SLO assessment has become an increasingly important component of the learning environment in education, especially higher education (Terenzini, 1989). It is because investors and educators are keen to know what changes and differences schools are creating among the students. School leaders are at the forefront in

terms of initiating and managing these changes. Smith (1999) recounts that behavior disposition of school leaders has long been recognized as being of strategic importance in school change. Murphy (2003) asserts that school leaders must be developed as educators with much more knowledge about the core technology of education in particular. School management remains concerned with school effectiveness. The effectiveness criterion refers to student outcomes; this might be learning gain in the cognitive domain, but it might also be any other outcome that schools are supposed to have for students (Creemers, 1996).

Creemers and Reezigt (1997) with others advocated further linkage between school effectiveness and school improvement, for their mutual benefit. The pivotal role of the school leader as a factor in effective schools has been corroborated by findings of school effectiveness research in recent decades. Extensive empirical efforts of quantitatively oriented school effectiveness research – mostly in North America, Great Britain, Australia and New Zealand, but also in the Netherlands and in the Scandinavian Countries – have shown that leadership is a central factor in school quality and outcomes (Reynolds, 1976). For all phases of the school development process, school leadership is considered vital and is held responsible for keeping the school as a whole in mind, and for adequately coordinating the individual activities during the improvement processes (Hall and Hord, 1987). The model shown in the Appendix predicts that school management trainings have effect on student learning outcomes on one hand; and principal's attitude mediates the relationship of school management trainings and student learning outcomes on the other hand.

School principals/managers

Cheng et al. (2003) recount that leaders are often perceived as the key actors mobilizing their institutions and members at the site-level to face up with those challenges and make educational services and provision more quality effective and accountable". How each principal performs these tasks will inevitably vary. Nonetheless, the literature suggests three primary modes of leadership that promote student learning:

1. Principal as an Effective Leader: Effective school leaders make concerted efforts towards developing and maintaining a focus on academic improvement and student learning while safeguarding teachers from all sorts of interferences from within and without environment (Pont et al., 2008).
2. Organizational Capacity of a Principal: Successful principals consistently strive for availing the best human resources, innovative ideas, creative programs, and comprehensive curricula that could be catalytic towards

objective-oriented teaching learning while focusing on an ongoing strategic plan conducive to contemporary and future challenges. Principal in the role of an effective organizer ensure promoting a participatory approach by actively engaging parents, teachers, students while mobilizing the entire community for eventually turning the school in to an effective center of learning and development (Pont et al., 2008).

3. Principal as a Management Guru: Effective principals make sure that they collect as well as process, fine-tune and update essential data pertaining to their respective communities for creating an enabling environment towards student learning and academic improvement (Alam et al., 2010). They focus on building teachers' professional skills through customized trainings both on-job and through other professional training outfits. Effective principals also excel in time management and enhancement of their schools' financial resources for providing incentives to their teachers' ensuring their sense of ownership, longevity, increased knowledge as well as optimal contribution towards teaching learning.

The significance of developing school leadership

The central importance of educational leadership is, therefore, one of the clearest messages of school effectiveness research (Gray, 1990). Louis and Miles (1990) also categorize the administrative and organizational activities as "management," while attaining educational goals, inspiring as well as motivating others is considered as "leadership (Pont et al., 2008)." They are of the view that all administrative tasks, such as planning, coordinating or distributing resources and managing them or tasks pertaining to the quality of leadership also fall under the banner of "educational leadership." Promoting a conducive environment to creativity and innovation, encouraging initiatives, allowing perspectives, ensuring a collective vision and advancing congeniality and collegiality as well as garnering a cooperative school culture and sustaining it is also considered to be permanent facets of effective school leadership (Pont et al., 2008). Developing school leadership is deeper than occasional or need-based interventions. It actually shapes up through both formal and informal processes at all stages of leadership practices in a sequential as well contextual manner.

1. Ensuring Essential Leadership Training: Formal and structured initial orientation as well as essential leadership training is a must regardless of governance models of different countries. Governments can design customized training and orientation programs, collaborate with local level governance structures and develop incentives to ensure that school leaders must participate in such training programs (Hoque et al. 2010). Investing time, energies, financial resources can be fully justified if

the principals fit in the criterion of "right person for the right job."

2. Sharing Experiences and Challenges: Frequent periodical conventions of principals and vice principals can prove to be invaluable through sharing individual experiences and challenges as well as innovative solutions to different challenges (Pont et al., 2008). Such exchanges can greatly benefit school leadership in terms of addressing and reshaping ongoing school leadership practices. Principals' conventions can provide vital networks for principals to share their problems, concerns, challenges and their effective solutions. These conventions can be instrumental in providing a combination of theoretical and practical knowledge and insight to combat all sorts of challenges that each individual school faces from time to time.

3. On-job Training: On-job and or in-service programs are to be designed considering the actual need and context based on prior learning opportunities for school leadership. Where there are no other initial requirements, basic in-service programmes should encourage development of leadership skills (Alam et al., 2009; Alam, 2009).

Studies on school development and improvement also emphasize the importance of school leaders, especially from the perspective of the continuous improvement process targeted at an individual school (Altrichter et al., 1998). Principal leadership was related to certain attributes of effective schools, namely, increased student achievement (Sagor, 1992); declining dropout rates; high student and faculty morale; and improved school climate (Kendrick, 1988). A recent review of research on transformational leadership in schools suggests that there are a few studies that have investigated the relationship of transformational leadership with student learning outcomes in the context of the secondary school (Leithwood et al., 1999).

Almost every single study of the school effectiveness has shown both primary and secondary leadership to be a key factor (Sammons et al., 1995). Newmann and Wehlage's (1995) widely-cited research found that good leadership is essential for developing a collective school-wide focus on high quality student learning. Murphy (2003) calls educational leaders to instill new dimensions in their approach to all pupils at their schools, by becoming moral stewards, educators and community builders. Stalsett (2000) writes that the leadership focus in schools should be on 'pedagogical leadership', that is, to concentrate on planning for and inspiring the main pedagogical processes of school as well as learning and development.

In summary, it seems that there are compelling theoretical and other reasons for advocating transformational leadership in schools at the current time, but there is still considerable work to be done in clarifying empirically the effects of this form of leadership practices on students (Leithwood et al., 1999). One area needing further

investigation is the nature of the relationship between transformational leadership practices through the mediating variables of teacher satisfaction, teacher commitment, and school culture with student learning outcomes. Hallinger et al. (1996) also reported a few direct effects of principal leadership on student achievement. Rather, the effect of principal leadership, e.g. instructional focus, provision of resources for instruction and staff, and accessibility, on school effectiveness, i.e. aggregated student achievement, occurred largely through principal actions, such as providing a clear school mission and optimizing student learning by grouping practices that shaped the school's learning climate (Hashim et al., 2010).

Development of Hypothesis

The study tested the following hypotheses:

H₁: There is a positive relationship between school management trainings and student learning outcomes.

H₂: Principal's attitude influences the relationship of school management trainings and student learning outcomes.

METHODOLOGY

The Departmental Guidelines for Student Learning Assessment Plans (San Diego State University, 2002) points out that multiple methods must be used in order to obtain valid information for developing a capstone course for synthesizing knowledge gained by students, and using direct and indirect approaches for assessing learning outcomes achievement. Considering this point along with study requirements, a purposeful combination of tools was employed the following tools to collect data from the study respondents.

Questionnaire

We adopted a structured questionnaire which was previously developed and used by OECD for its study with respect to Teaching and Learning International Survey (TALIS). We modified the questionnaire according to our study requirements. The questionnaire contains 40 items within three classifications in which the respondents were asked to express their judgments using a five point Likert scale ranging from strongly disagree (1) to strongly agree (5).

Interviews

Semi-structured interviews were conducted for obtaining information from the school teachers as well as students as to what role principals play towards motivating them. Interviews were also used for investigating the difference that school leadership was making towards teacher satisfaction and student performance.

Review of school records

Databases, manual registers and other information systems of the schools were reviewed for recording students' achievements, and for comparing the current achievements with the previous

achievements for determining the effectiveness of school leadership.

Personal observations

In order to cross-check the collated data, we personally observed study settings and school environments. The observation includes school records, curricula, and condition of educational as well as physical facilities. Personal observations turned out to be instrumental in obtaining additional school information.

Sample and respondents

We selected a sample of 50% respondents (170 principals out of 340) using a simple random sampling technique. All questionnaires (developed for principals) were returned with usable data, yielding a response rate of 100 percent. The respondents of the study were school principals, teachers and students belonging from Nursery to 12 grades, i.e. the senior most class of a higher secondary school or intermediate college. All of them were male and belonged to Read Foundation School System. The principals were selected based on their personal and professional characteristics.

RESULTS

Both qualitative and quantitative techniques were used to analyze data. Using qualitative techniques, the judgments of the participants were wrote down and assembled during the interview sessions. On the basis of these judgments, information was analyzed and subsequently the findings were drawn. Data was summarized using the triangulation approach in order to converge on an accurate representation of data reality. This approach was mainly employed to interpret and synthesize data from the already gathered judgments. It also led to minimize biases that could have distorted the results of the study. In quantitative techniques, Analysis of a Moment Structures (AMOS) and Statistical Package for Social Sciences (SPSS) were employed for data analysis. Descriptive frequencies, percentage, standard deviations, and mean average were drawn by using SPSS while the study variables were regressed using AMOS. The students were studied over a two-year period, cross-classified by their previous year (2008-09) and current year (2009 - 2010) annual results. Their academic performance was calculated through standardized test scores for students in each school.

Data analysis

It was found that school principals are not solely responsible for the outstanding educational outcomes observed, but their leadership has been found an inevitable factor in producing the environment where these outcomes occur. The empirical study findings suggest a strong relationship of school management skills on student achievements. Principals create improvement culture among schools; and this they learn from school management trainings. It was found that school principals have high and clearly

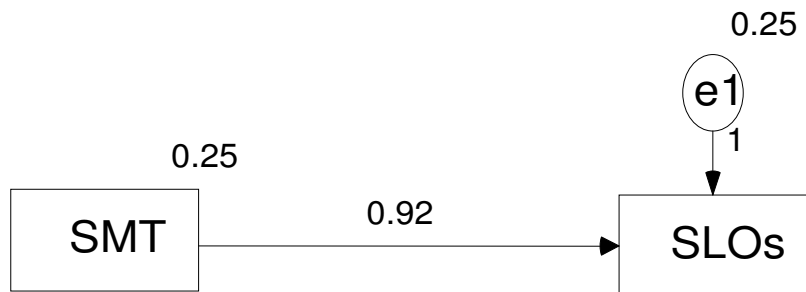


Figure 1. Structural Equation Model.

Table 1. Model summary.

Hypothesis	Estimate	S.E.	C.R.	P	Decision
H ₁ : There is a positive relationship between school management trainings and student learning outcomes.	0.923	0.075	12.23	0.00	Accept

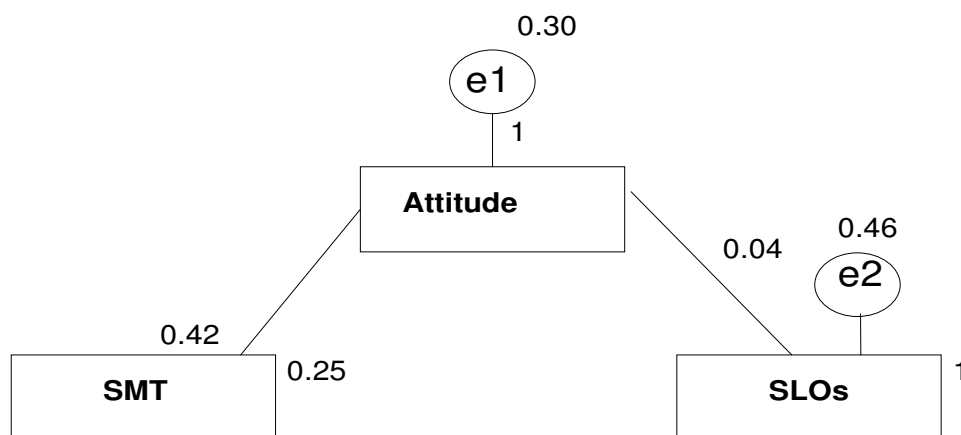


Figure 2. Structured Equation Model.

understood expectations of others. As noted by one member of staff: "Our principal has expectations and standards which are passed on and these things happen". School principals are aware of the importance and value of providing professional support, and of treating staff professionally, expecting a high standard of professionalism in return. These Principals realize the importance of school pride, identification with the school and its reputation in the community. Quality school leaders, the evidence suggests, understand teaching and are respected by their staff. As Sackney and Walker (2006) explain: "By keeping issues of teaching and learning at the forefront of the dialogue, these leaders built organizational capacity by consistently expressing the norms and values that defined the school's vision and initiating conversations about improving teaching and learning." Huber's (2004) research for school improvement and development supports the crucial role that

leaders play in driving and maintaining ongoing growth.

The study used the structural equation model technique to analyze data and test the first hypothesis. Figure 1 and Table 1 present the results of this study and show a highly significant positive relationship between school management trainings and students' learning outcomes. Figure 1 and Table 1 represent the structural equation model of this study in which two variables were tested i.e. school management trainings and student learning outcomes. The value of P in above table is 0.000, which is well below 0.05, therefore study findings accept H1. The model fit also meets required criteria. It shows the positive nature of relationship between school management trainings and student learning outcomes. Figure 2 and Table 2 represent the structural equation model of this study in which three variables are tested, that is, school management training, principal's attitude and student learning outcomes. The values of P in Table 2 are

Table 2. Model summary.

		Estimate	S.E.	C.R.	P	Label
SMT	<--- Attitude	0.420	0.083	5.066	0.023	accepted
Attitude	<--- SLOs	0.040	0.090	0.441	0.045	accepted

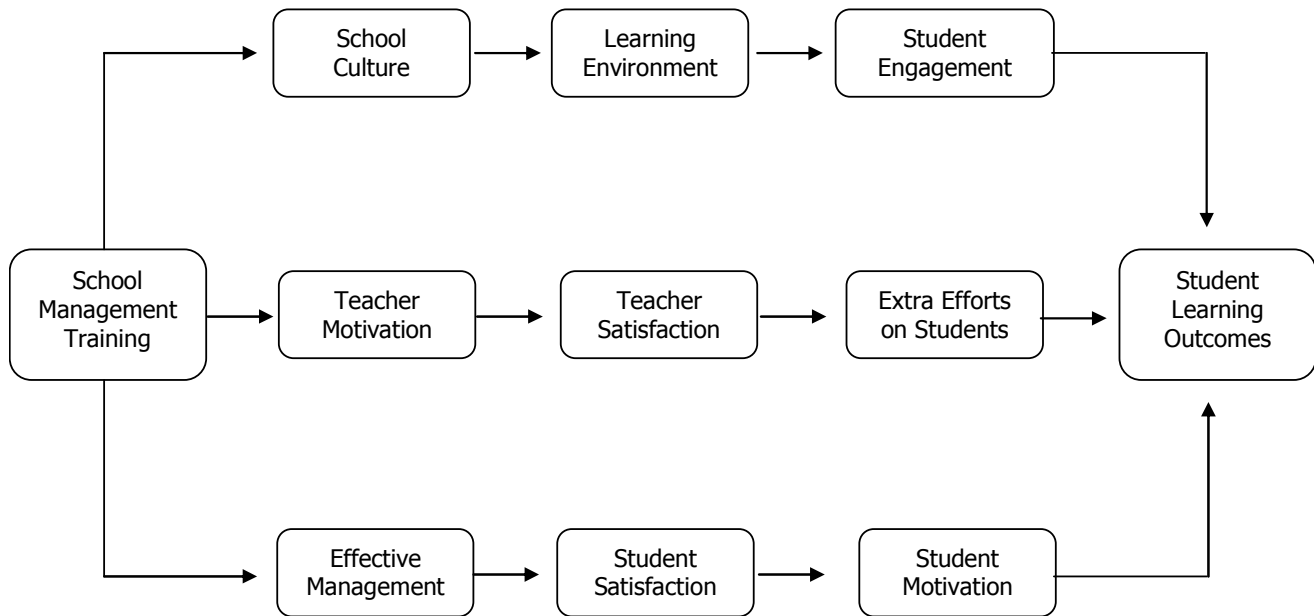


Figure 3. Logical sequence of school management training programs.

0.023 and 0.045, which are below 0.05, therefore study findings accept Hypothesis 2 that is, Principal’s attitude influences the relationship of school management trainings and student learning outcomes. The model fit also meets required criteria. It shows the positive nature of the relationship between school management trainings and student learning outcomes.

The study empirically found that school management trainings built and polished skills and abilities of 86% school principals while remaining 14% commented that they were capable enough to manage their schools and achieve satisfactory student results without receiving any professional school management training. Responses of principals, students and teachers as well as empirical evidence from the school records and databases reveal that school management trainings do have a strong positive relationship with student learning outcomes. In the light of empirical study findings, also supported by literature, we observed a model which illustrates the logical sequence of the impact of school management training programs on student learning outcomes. The model is given in Figure 3.

The study reveals that all of the school management factors that come in to play via school management trainings enable principals to manage their schools

effectively. These factors include management of school environment, human and financial resources, quality of education, infrastructure, discipline and performance. The mosaic of all these factors collectively makes a principal turn into a story of success. We found that student learning outcomes are positively related to school culture and learning environment. According to the study findings, 89% school principals pay substantial considerations to school culture and learning environment. The previous researches also support this finding. A positive school culture is associated with higher student motivation and achievement, improved teacher collaboration and improved attitudes among teachers towards their jobs (Stolp and Smith, 1995). Educational outcomes can be viewed as both an element of classroom culture (Boland et al., 2001) and as the result of an effective classroom culture. Research (Sashkin and Walberg, 1993) suggests that school culture does not operate in a vacuum and crucial to its creation and maintenance are the leadership practices of the school principal. Further, evidence from several studies (Sashkin and Sashkin, 1990) provides strong support for the claim that transformational leadership contributes to more desirable school cultures. A number of factors have been found to influence students’ approaches to learning. For instance,

Table 3. SMTs and student/teacher satisfaction: participants' responses.

S/no.	Response	M	SD
1	I focus on providing attractive environment to the students.	4.1647	0.70244
2	I ensure school gives maximum satisfaction to the students.	4.6529	0.47744
3	I take students' opinions before setting school goals.	3.8176	0.60253
4	I put strong emphasis on the test results of the students.	4.0353	1.01407
5	I appreciate teachers as well as students on their achievements.	3.3647	0.98326
6	I try to solve students and staff related issues immediately.	4.3471	0.94375
7	I promote improvement seeking behaviors in the school.	4.1647	0.70244
8	I promote atmosphere of caring and trust among students.	3.8176	0.60251
9	I review teaching practices in classrooms regularly.	3.3647	0.98236

SMTs and Teacher Motivation: Participants' Responses

	Response	M	SD
1	I regularly give honest feedback to my staff.	4.1353	1.01436
2	I regularly acknowledge staff accomplishments.	3.8176	0.60251
3	I consult my staff while I plan something.	4.3471	0.94375
4	I comfortably delegate tasks to others.	4.2059	0.91598
5	I appreciate teachers as well students on their achievements.	3.3647	0.98326
6	I try to address issues of staff immediately.	4.3471	0.94375
7	I motivate teachers and students spontaneously.	4.6529	0.47744
8	I promote atmosphere of caring and trust among the staff.	3.8176	0.60251
9	I put special emphasis on professional development of my staff.	4.0353	1.01407
10	I review teaching practices in classrooms regularly.	3.3647	0.98236
11	I promote respect of teachers in the school.	4.3571	0.94375
12	I consult with teachers before taking important decisions.	4.2059	0.95981
13	I review staff members' tasks and try to simplify them.	4.1176	0.84841
14	I involve teachers and staff in devising school goals.	4.6571	1.28265

it has long been accepted that students' perceptions of their learning environments have a significant influence on their approaches to learning and the quality of their learning outcomes (Ramsden, 1992).

In the USA, Sweetland and Hoy (2000) have all found close links between school environments and improved student learning. Students' satisfaction and motivation is linked with some important school factors, such as study settings, culture, environment, learning aids and teacher commitment etc. Lizzio et al. (2002) found that student perceptions of their learning environment have a greater impact on student learning outcomes than prior achievement (scores) in school (Table 3). Students who perceive themselves to be in a superior learning environment perform better than those with more negative perceptions, even when controlling for scores from tests taken prior to entering a specific learning environment. Research in the Netherlands (Wubbels et al., 1991) compared students' and teachers' perceptions and found that, first, both students and teachers preferred a more positive classroom environment than that perceived as being actually present and, second, teachers tended to perceive the classroom environment more positively than did their students in the same classrooms.

The study explored that school management trainings lead to enhanced teacher motivation and satisfaction. Martino (2003) supports this finding since he found a significant correlation between transformational leadership and job satisfaction. Data analyzed by multiple regression analysis revealed that there is a statistically significant relationship between leadership and teacher satisfaction, teacher perceptions of effectiveness, and teacher willingness to exert extra efforts (Small, 2003). It was found that transformational leadership was related to teacher satisfaction, perception of principal effectiveness, and the willingness of teachers to give extra effort. Similar results also were found from the study done by Niedermeyer (2003).

The study also revealed a positive relationship between teacher satisfaction and student performance. It was noticed that 63% principals encourage and motivate their teachers that, consequently, result in teachers' satisfaction. When teachers are satisfied, they put extra efforts for their students and help them improve their performance. They show their strong commitment with their profession which in long-run will uplift learning outcomes of students. Park, (2004) found that the commitment, which contributes to higher student achievement stems

from school goals focused on academic achievement, a commitment that is not always the case.

The literature also shows significant relationship between teacher satisfaction and student performance. Analyzing student work samples in teacher study groups has gained momentum in many schools. In teams, teachers examine a common piece of student work, discuss its strengths and weaknesses, and suggest how they would proceed to help this student improve (Langer et al., 2003). The study also found that principals were more concerned with expending resources for improving school environment and study settings. It explored that such expending positively affect student learning outcomes. More recent studies have found statistically significant relationships between expenditures and college outcomes. For example, Astin (1993) found that expenditures for student services were positively related to retention. Based on analysis of three national data sets, Wenglinsky (1997) also found that expenditures had a positive indirect effect on student achievement, acting through teacher-student ratios.

Additionally, study relates that some other school factors developed by principals also lead to improved student performance. For example, the long summer vacation that follows the typical school year has been associated with a decline in achievement test scores (Cooper et al., 1996) and has been implicated as a major source of the gap in learning among students from different economic backgrounds, because of students' differential access to learning opportunities in the summer. Similarly, Helen and Edward (2003) showed that competition improve teaching and learning in schools. Vision and expectations of schools are communicated through recognition of staff and student achievements. Principals see teaching and learning as the pivotal purposes of the schools and were observed to take every opportunity to recognize student and staff achievements. They create a positive school climate of high expectations and success. They find ways for every student to feel and be successful, and for every teacher to receive appropriate recognition. Such recognition is perceived by students and staff as authentic, and is received in good humor. It eventually makes an impact, and an upward cycle is set in motion.

Staff development days and meetings are often given over to providing teachers with new skills and knowledge, and the confidence to try different teaching approaches. Often, a "champion" for this area and a small supporting team are empowered. Programs to support and develop such areas bring members and parts of the school together, leading to better understanding, commitment, improved efficiencies, and outcomes. Through empowering, encouraging and supporting teachers to become learners, school principals acknowledge and foster the leadership traits in others. They respect and recognize others' capacities as well as achievements.

They identify talent and potential of people, and encourage, coach and support these people, sometimes at the

risk of being accused of favoritism. They recognize that if change and improvement are to "take root" in the school culture, they need to distribute responsibility and leadership capacity throughout the school and to trust people. Sharing of responsibility – as opposed to delegation – also assists in successful leadership succession.

DISCUSSION

In this study, we found statistically significant direct effects of school management training programs on student achievements. The substantive contribution of our study is that it has demonstrated that principal's attitude and teacher's beliefs about their capacity as well as their professional commitment mediated the impact of school management trainings on student achievement. Although previous studies have identified variables that account for the indirect effects of leadership on achievement; these studies did not examined the effect of the teacher belief variables that we considered in our study. Our results indicate that principals who adopt a transformational leadership style are likely to satisfy their teachers, and improve learning outcomes of their students. Country practices and evidence from different sources show that school leaders need specific trainings to respond to broadened roles and responsibilities effectively. Strategies need to focus on developing and strengthening skills related to improving school outcomes and provide room for contextualization. Leadership development is broader than specific programmes of activities or interventions. It requires a meaningful combination of formal and informal processes throughout all stages and contexts of leadership practice.

Grimmett (1996) identified the roles that educational leaders should play in collaborative inquiry: accepting tension and dealing with conflict, modeling collegiality and experimentation, focusing teacher talk on action, helping teachers to frame their inquiry, and connecting action with student learning. It was found that the direct involvement of principals in school improvement initiatives is absolutely crucial, a result echoed in our own earlier investigation of the role of principals (Castle et al., 2002). Principals, regardless of the student populations they serve, are held accountable for student achievement in their schools. However, research reviews found that the direct effect of principals on student achievement is near zero (Hallinger and Heck, 1996). Holding principals accountable may be defensible if a principal can be found to have an indirect influence on achievement by creating the organizational conditions through which improved teaching and learning occurs. For example, Hallinger et al. (1996) found that principals contributed to reading achievement through the creation of a positive instructional climate (high teacher expectations, student opportunity to learn, clear mission, and grouping for instruction).

Our findings strengthen the claim for indirect leadership effects in the review by Hallinger and Heck (1996). Of the

15 "state of the art" studies examining indirect leadership that they reviewed, only one (a) focused on student achievement (as opposed to other dependent measures such as "school effectiveness" and "teacher perceptions of school effectiveness"), (b) used sophisticated analytic tools such as Structural Equation Modeling, and (c) included at least 100 schools. Our study met all three criteria. Our study avoided many of the problems afflicting leadership research, including common method variance (our model was tested with data from different sources: questionnaire, interview, personal observations and student assessments), over-reliance on modification indices without theoretical justification, and sample dependent models.

Conclusion

The study thoroughly investigated the effects of school management trainings in the schools about what goes on in the classrooms. It revealed that it is important to have decisive and goal-oriented school leadership in the schools, which also really empowers the teachers in terms of true delegation of power. If leadership is about improving teaching and learning, it should be geared towards the creation of the right conditions for learning, framed into clear expectations of what should be achieved. Furthermore, school management trainings also cause to handle effectively with all seriously hindered school issues like proverbial isolation of teaching staff, time and resource constraints, fragmented structures unable to ensure coordination of activities or exchange of knowledge, and lack of linkages between the school and the community.

The work of principals in the schools has certain consistent outcomes and themes. However, in examining these outcomes and themes, very few of them demonstrated how student outcomes are affected by the work of principals. Despite these trainings, some needs of the principals remain unmet which can be met by equipping them with additional need-based professional trainings. Further, this study suggests a linkage between the school management trainings and student reactions, examined to the degree possible in future empirical research. This study is not intended to be the final work regarding the relationship of school management trainings and student learning outcomes. Rather, it is meant to provide an impetus and means for understanding this form of impact on students.

Study limitations

The present study did not go without limitations. It was impeded by some undesirable limitations that hampered the researcher from utilizing a variety of options instead of conducting this study in confined settings. The study limitations:

1. The schools, selected for data collection, were headed by male school principals because female school principals were not available. So respondents of the study were male principals. Perhaps the results may be different if we could have access to involve female principals in our study.
2. School management trainings do lead to improved student learning outcomes; student learning outcomes, nonetheless, may also be result of some other contributing factors, such as student family background, additional tutorial help etc.
3. Minimum sample size of the students was taken because of time constraints.

Future research

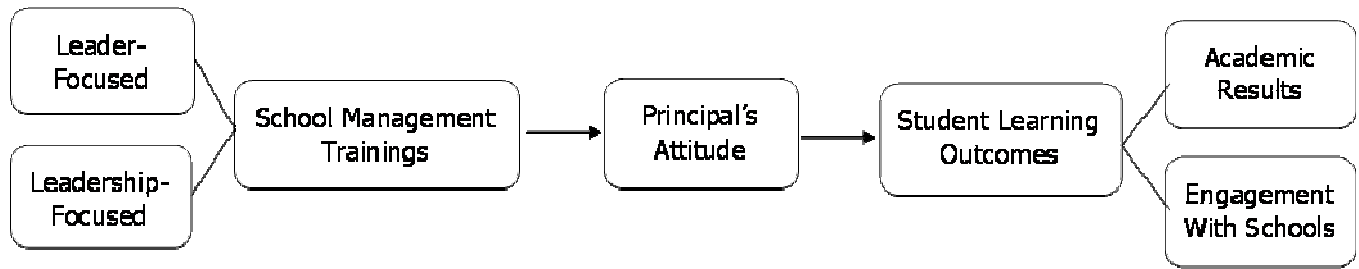
The present study investigated only the effects of school management trainings on student learning outcomes in terms of their academic results and engagement with school activities; there is still an open field for the researchers, however, to explore the impacts of such trainings on students' reactions as well as attitudes at their schools, homes and communities. Gender perspectives should be given adequate considerations in future research studies.

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Appendix



School management trainings model.

Annex 1: Introduction to Read Foundation

Formed in 1994, Read Foundation is a not-for-profit civil society organization striving for providing a quality education to underprivileged communities of the rural Pakistan. Starting its operations with 25 students and a teacher, Read Foundation currently runs a cohesive network of 339 schools. An ever-growing student body of over 70,000 children nurtured and aided by 3,250 teachers as reflects the effectiveness of program delivery and the expansion pace and prospects.

Read Foundation has 339 principals in its school system. They have been selected and appointed on the basis of appropriate academic qualifications necessary for school management. Majority of the principals joining

READ Foundation schools in far-flung rural and under-provided areas are without any professional education and training. Read Foundation places a special emphasis on professional development of its principals, and has been working on a comprehensive programme to provide necessary school management skills to all the principals in its school system.

The Human Resources (HR) Department at the Foundation's headquarters arranges and coordinates school management training programmes for principals. Beginning since 1998, it has benefitted around 1,100 participants through 55 school management trainings.