Teachers' Perceptions of the Relationship between Principals' Instructional Leadership, School Culture, and School Effectiveness in Pakistan

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Abstract

Low performance in government schools in Pakistan can be attributed to causes including poor leadership at national level (Ali, Sharma, & Zaman, 2016) and insufficient budget (Ministry of Finance [MOF], 2010). In this survey research, a conceptual model is developed to measure school effectiveness and thereby aid self-development of the education system in Pakistan without additional cost. Self-development means that schools themselves are intended to apply the model and make changes based on what is learned and not necessarily the government. The data were collected from 367 teachers of secondary schools in Mardan district of Khyber Pukhtunkhwa province. To analyze the data and find the levels of each of the variables (school effectiveness, school culture, and instructional leadership) and their relationships, descriptive and predictive statistics were used. The results showed that the present levels of instructional leadership and school culture are low, while school effectiveness is moderate in Pakistani context. The correlation between these variables was found to be significant and strong. The results of the study provided evidence that school cultures developed by educational leaders can make contributions to school development and productivity without any extra cost.

Introduction

The objectives of education vary from country to country and even individuals, but there is consensus that in general, education is possible only through effective institutions. Various studies (e.g. Aggarwal-Gupta & Vohra, 2010; Ali et al., 2016; Bredeson, 1985; Reynolds & Teddlie, 2000) have identified internal factors (e.g., high expectations of stakeholders, professionalism, shared decision making, clear policies, cohesiveness, and behaviours etc) accounting for school effectiveness, while Coleman et al. (1966) found external factors (e.g., socioeconomic-status of students) that were effective. Other school effectiveness factors, such as inputs (e.g. Reynolds & Teddlie, 2000), outputs (e.g. Yeşil & Kaya, 2012), and process (e.g. Brookover, Beady, Flood, & Schweithzer, 1979; Edmonds, 1979; Rutter, Maughan, Mortimore, & Ouston, 1979), also improved school effectiveness.

Recent empirical research studies has stressed the role of "instructional leadership" aimed at better school effectiveness in improving schools (Bodla & Nawaz, 2010; Khan, 2013b; Masuku, 2011;

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Peleg, 2012; Rizvi, 2010; Yeşil & Kaya, 2012). Leadership is a *"process of influencing a group forwards [to] the achievement of goals"* (Bodla & Nawaz, 2010, p.208) and helps to shape a school's culture (Hallinger & Heck, 1998). School culture is a system of behaviors composed of beliefs, values, and ideas (Maxwell & Thomas, 1991), and the development of the school culture is widely viewed to be the responsibility of school leaders (Baig, 2010; Turan & Bektas, 2013). The revised Model-B of Hallinger and Heck (1998, p. 162), adopted from Pitner (1988, pp. 105-108), supports an indirect relationship of instructional leadership and school effectiveness through intervening variables for example "people, events, and organizational factors: such as teacher commitment, instructional practices, or school culture" (Hallinger & Heck, 1998, p. 167).

Pakistan education statistics for 2013-14 revealed that government schools enroll 63% of students in Pakistan (Ministry of Education [MOE], 2015); thus, the ineffectiveness of these schools (Saleem, Naseem, Ibrahim, Hussain, & Azeem, 2012) is an important issue. The gross enrollment rate (GER) at primary level is 72% in the country, while at secondary level it is only 42%, second-lowest in the world (Institute of Social and Policy Sciences [I-SAPS], 2015); this makes a major contribution to Pakistan's placement at 113th out of 124 countries in the Human Capital Index (Ahmad, 2015).
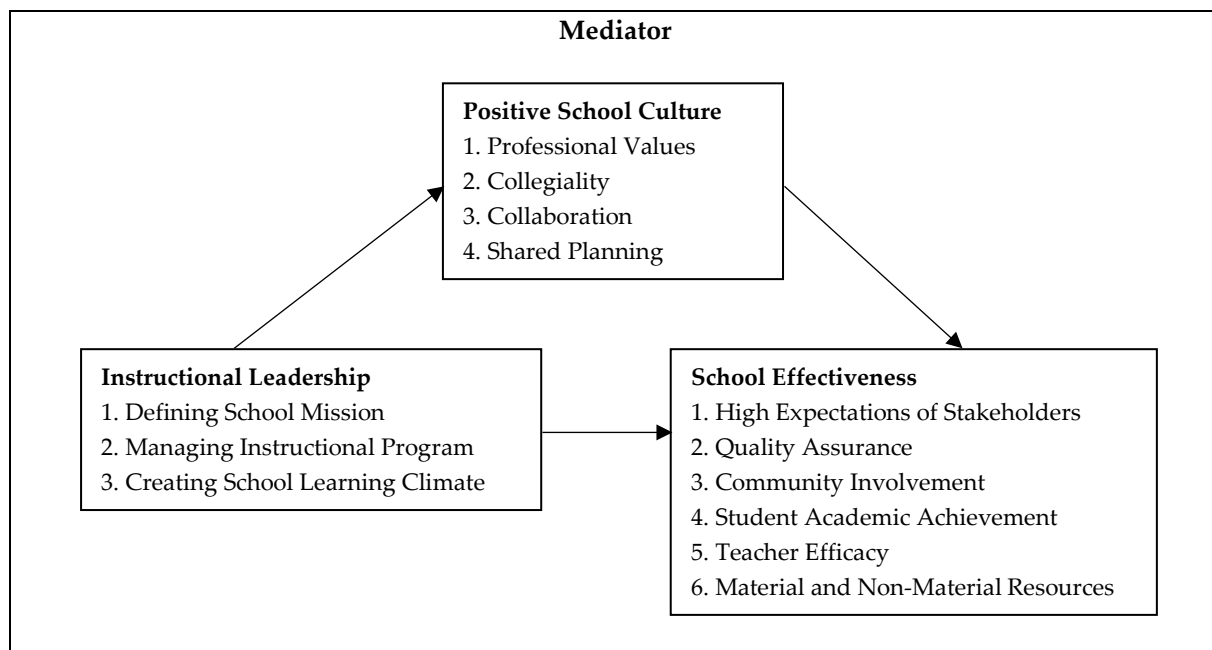
As instructional leaders, principals in Pakistan are responsible for addressing this Situation. Mostly, however, principals are not aware of their leadership role in schools, because the needed qualifications to be a principal, the Bachelor and Master of Education degrees, have no practicality in schools (MOE, 1998). It was stated already that these degrees stated are concerned mostly with teaching-learning process only. In addition, nor do the Bachelor and Master of Arts degrees held by school leaders yield any capacity to produce leadership skills in Pakistan (Rizvi, 2010) because, these stated degrees are concerned with a specific subject, and not with educational leadership. Though, a 60-year-old principal has plausibly had 35 years since his or her degree to learn things-possibly, one of them could have been some leadership, or a minimal level of interest in improving the functioning of his or her school and knowledge about related challenges. But, here in Pakistan the case is other, as "the principals of the stated schools are focusing managerial tasks, rather than leadership concerns" (Ali, 2017a, p. 200). The principals are not giving the related leadership training to run the position they held. The reality behind education leadership in Pakistan is that teachers are promoted to the post of principal on a seniority basis, not for leadership qualities, skills or trainings (Alam, 2012, Ali et al., 2016). Therefore, their master or bachelor degree is of no use, as those degrees are generally related to teaching. It is a common belief that majority of the principals are unable to run the schools in an organized way.

Currently in Pakistan, little research work is occurring on instructional leadership (e.g. Ali et al., 2016; Rizvi, 2010; Simkins, Sisum, & Memon, 2003). Till now, Pakistan has produced only ten research papers on instructional leadership, among which only three papers were published in the last twelve years (Hallinger & Bryant, 2013).

Therefore, this study had identified some relevant factors and knowledge which should certainly be reflected in such a system. This may call as self-development model for education in Pakistan, because possibly it can be introduced by the school principals in the context, the need for which has been suggested (e.g. Rahman, 2014). To do so, this study analyzed the levels of instructional leadership (IL), school culture (SC) and school effectiveness (SE) and the relations between these variables in the secondary schools of Mardan district in Pakistan's Khyber Pukhtunkhwa (KP) province.

Conceptual Framework
The conceptual framework presented in this section was adopted as a basis upon which to investigate the levels of instructional leadership, school culture and school effectiveness, and to find out the relationships between them.

Mediator

Positive School Culture
1. Professional Values
2. Collegiality
3. Collaboration
4. Shared Planning

Instructional Leadership
1. Defining School Mission
2. Managing Instructional Program
3. Creating School Learning Climate

School Effectiveness
1. High Expectations of Stakeholders
2. Quality Assurance
3. Community Involvement
4. Student Academic Achievement
5. Teacher Efficacy
6. Material and Non-Material Resources

Figure 1. Conceptual Model

Instructional leadership is a term used to refer to principal or teacher involvement in classroom interaction (Ali, 2017a; Ali, Sharma, & Kannan, 2017; Hallinger & Heck, 1998; Niqab, Sharma, Ali, & Mubarik, 2015). The practices of a principal such assuring effective teaching and learning, monitoring instructional improvement, standards-based reform, team-building, developing a school learning environment, and effective communication with all stakeholders were discussed (Goldring et al., 2008). These stated practices foster a strong school culture, serving as a system of values and a path to school effectiveness (Cavanagh & Dellar, 1997).

Literature Review
Relationship between Instructional Leadership and School Effectiveness

Bredeson (1985, p.31) related good principals to high-performing schools and poor principals to low-performing schools by stating that *"behavior of the school principal is the single most important factor supporting high quality educational programs"* (as cited in Masuku, 2011). This is because the behavior of principals creates school culture (Robbins & Alvy, 2003) and thereby school effectiveness (Ali et al., 2016).

Herrera (2010) has added, *"Show me a good school and I'll show you a good principal"* (p. 5). But, the principal practices different leadership functions to achieve school effectiveness (Blasé & Blasé, 1999, 2002; Bodla & Nawaz, 2010; Coleman, 2001; Goldring et al., 2008; Masuku, 2011). These functions were described as "teacher commitment, instructional practices, or school culture" (Hallinger & Heck, 1998, p. 167). It was concluded that the principals achieve school effectiveness through these functions, and not directly (Hallinger & Heck, 1998). The indirect relation of instructional leadership (through school culture) to school effectiveness as explained by this study, is supported by the path-goal theory of House (1971), which declares that the leaders use a path to reach their goals.

Relationship between Instructional Leadership and School Culture

Instructional leaders set positive directions for schools and their students and teachers by fostering a collaborative school culture. The main focus of instructional leaders always remains on the system of interaction in the school to make it positive, which in turn develops and nourishes a positive school culture (Ali, 2017b).

In the case of failure of the instructional leader to keep attachment to the school culture, the school culture will lose its strength (Turan & Bektas, 2013). Though, it is seems impossible for an instructional leader to become detached from the school culture but, in the context most of them remain busy in official file work and ignore the defined school culture (Ali, 2017a). On the other hand, a school culture developed by instructional leaders involves school members in different activities to improve the school (Portin et al., 2009). Thus, instructional leaders, through school culture, struggle to accomplish the organizational objectives (Ali et al., 2016; Tatlah, Ali, & Saeed, 2011). Therefore, it is essential for instructional leaders to focus on instructional programs (e.g., providing high quality instruction, assuring visibility, increasing instructional time etc.) on the one hand and understanding of school culture on the other (DuPont, 2009).

Relationship between School Culture and School Effectiveness

A consensusis found on the relationship of school culture to school effectiveness (Cavanagh & Dellar, 2003; Cheng, 1993; Kuen, 2009). There are also relationships between school culture and teachers' wellbeing (Aelterman, Engels, Petegem, & Verhaeghe, 2007), pupil outcomes (Brady, 2005), and teachers' job attitudes and organizational commitment of teachers (Cheng, 1989). As these all items are essential in school effectiveness. School culture has the main rolein school improvement which leads to school effectiveness (e.g. Cavanagh & Dellar, 1997, 1998,2003).

Schools in Mardan district needs an immediate concentration of the government to develop and improve leadership skills and intellectual capitals of the principals. To recover these schools, there is need of extra budget because; the allocated budget is mostly a non-develemental budget. In such a situation there is need for self-development of education (Rahman, 2014). Self-development of education means to adopt a system in the school which needs no extra budget but, mostly depends on instructional leadership, collegiality, collaboration, shared planning, and professional values.

Method

The research used a survey instrument and a quantitative approach. A closed-ended questionnaire form was used to collect data from the respondents, secondary school teachers.

Sample

The sample was composed of teachers of secondary schools of Mardan district. A total of 1755 teachers (627 female and 1128 male) from 138 secondary schools (62 girls' schools and 76 boy's schools) were the target population.

Instrument

A tool was developed to assess the three variables (IL, SC, & SE) in the conceptual framework and relationships between them. Table 1 below shows the different measurement indices adopted to check validity and reliability.

Table 1. Validity and Reliability Measurement Indices

Construct	CR	AVE	Cronbach Alpha
School Effectiveness (SE)	0,90	0,61	0,95
Instructional Leadership (IL)	0,92	0,73	0,95
School Culture (SC)	0,89	0,85	0,94

As the table shows, the values extracted are above the threshold values (CR≥0.60, AVE ≥0.50, and Cronbach's Alpha≥0.70] (e.g. Hair, Black, Babin, Anderson, & Tatham, 2009); therefore, the instrument's suitability for data collection was confirmed.

In Table 2, diagonal values are AVEs and the values in parentheses are R-squared; AVEs>R-squared, which indicated sufficient Discriminant validity.

Table 2. Fornell–Larker Criterion for Discriminant Validity

Latent Variable	SE	IL	SC
SE	0,61		
IL	**(0,372)**	0,73	
SC		**(0,532)**	0,85
			(0,722)

Analiz

The study used percentage distribution, Spearman's rho, and structural equation modeling (SEM) to analyze the data, with SPSS-22 and Amos-22.

Results

Level of School Effectiveness

Polat (2009), in Turkey, adopted five levels for school effectiveness, as, in the Indian context, did Dikshit and Dikshit (2014). Halawah (2005) described three levels in UAE, while, in the Pakistani context, so did Niqab (2015). Therefore, the researcher selected three levels—Low, Moderate, and High—for the variables in this study. Table 3 shows percentage frequency for each dimension of SE.

Table 3. School Effectiveness (N=367)

Dimensions of SE Variable	Min	Max	Median	Level		
				Low (%)	Moderate (%)	High (%)
Community Involvement	0	24	4	68,4	23,7	7,9
Teacher Efficacy	0	18	15	15,8	22,9	61,3
Student Academic Achievement	0	18	12	10,4	59,9	29,7
High Expectations of Stakeholders	5	27	21	12	33,2	54,8
Material & Non-Material Resources	0	18	13	19,3	28,3	52,4
Quality Assurance	2	27	18	25,1	47,4	27,5
Overall School Effectiveness	**31**	**123**	**87**	**13,6**	**45,8**	**40,6**

As Table 3 shows, a high percentage of teachers (68.4%) perceive *community involvement in* their school as low; 23.7% perceive it as moderate and 7.9% as high. However, 61.3% of teachers perceive the level of *teacher efficacy* as high—and 22.9% as moderate, and 15.8% as low. For *expectations of stakeholders* (teachers, parents, and students), 54.8% perceived it as high, 32.2% as moderate, and 12% as low. For student *academic achievement*, (based on the previous examination) about 59.9% perceived it as moderate, 29.7%as high, and10.4% as low. For the next item, 52.4% perceived the level of *material and non-material resources* is high, 28.3% as moderate, and19.3% as low. For *quality assurance*, 47.4%perceived it as moderate, 27.5% as high, and 25.1% as low.

For the overall *school effectiveness* (SE) variable, the plurality (45.8%) of teachers perceiveitas moderate, 40.6% as high, and 13.6% as low.

Level of Principal's Instructional Leadership

Table 4. Instructional Leadership (N=367)

Dimensions of Variable IL	Min	Max	Median	Level		
				Low (%)	Moderate (%)	High (%)
Creating School Learning Climate	2	38	12	73,3	26,4	0,3
Managing Instructional Programs	2	43	11	68,9	30	1,1
Defining School Mission	0	27	7	64,6	32,7	2,7
Overall IL	**5**	**107**	**29**	**70,3**	**29,4**	**0,3**

As seen in Table 4, among the teachers, 73.3% perceive the level of *creating school learning climate as* low, 26.4% as moderate, and only about 0.3% as high. For *managing instructional* programs, 68.9% it level as low, about 30% as moderate, and only 1.1% as high. As for *defining school mission*(in terms of its perceived quality), about 64.6% teachers perceive it as low, 32.7% as moderate, and 2.7% as high.

Overall, 70.3% of teachers perceive *instructional leadership* as low, 29.4% as moderate, and 0.3% teachers as high.

Level of School Culture

Table 5. School Culture (N=367)

Dimensions of Variable SC	Min	Max	Median	Level		
				Low (%)	Moderate (%)	High (%)
Shared Planning	0	19	4	79,0	19,9	1,1
Collaboration	0	18	4	77,4	21,8	0,8
Collegiality	0	23	5	71,7	27,5	0,8
Professional Values	0	22	5	70,8	26,2	3,0
Overall SC	**2**	**74**	**19**	**71,4**	**28,1**	**0,5**

As seen in Table 5, among the teachers, 79% perceive *shared planning to* be of low level, while 19.9% perceive it as medium and 1.1% more as high. Shared planning means here how much the school members are involved in planning for future task of the school. For collaboration, 77.4% of teachers perceive it as low, 21.8% as moderate, and 0.8% as high. Then, 71.7% perceive that *collegiality* is of low level, while 27.5% perceive it as medium and 0.8% as high. Finally, 70.8% perceive *professional values as* low, 26.2% as moderate, and 0.3% as high.

Thus, for overall school culture, 71.4% perceive it as low, 28.1%as moderate, and 0.5% as high.

Relationship between Principal's Instructional Leadership and School Effectiveness

Figure 2 shows the results for the estimated model. First, it is essential to affirm the fit of individual measurements (e.g., CFI, RMSEA, and Chi-square) and the overall measurement model (confirming fitness of all the stated indices). The results obtained by running the model in SEM [CFI=0.97, RMSEA=0.077 &chi-sq/df=3.56] showed that the overall model is fit and can undergo further analysis. As Table 5 shows, as significant p-value (at 0.05) is evident for the effect of IL on SE. This significant effect was checked using AMOS (SPSS-22).

Table 6. The Direct Effect of Principal's Instructional Leadership on School Effectiveness

		Beta Estimate	SE	CR	p	Result
School Effectiveness (SE)	← Principal's instructional leadership (IL)	0,74	0,050	14,575	0,00	Significant
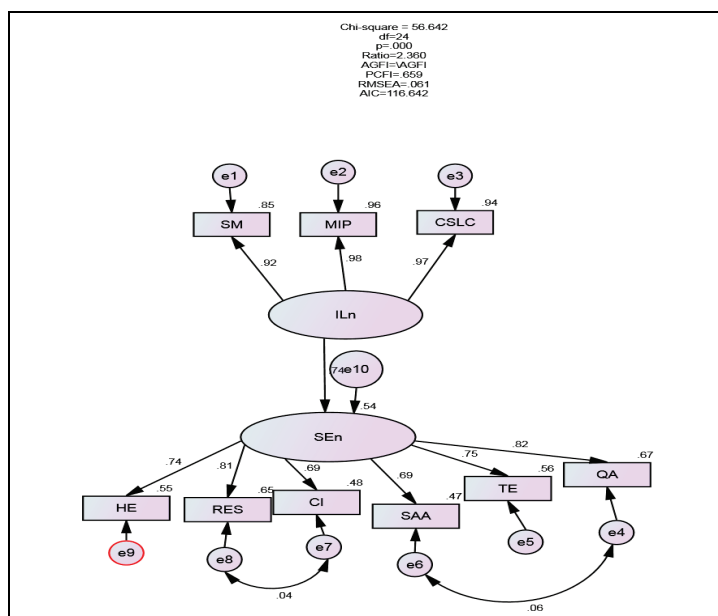
Figure 2. Estimated Model

Spearman's rho correlation was conducted for further in-depth analysis. Table 7 below shows the results.

Table 7. Correlation between Principal's Instructional Leadership (IL) and School Effectiveness (SE) (N=367)

		Instructional Leadership			
		SM	**MIP**	**CSLC**	**Overall (IL)**
SE	QA	0,633**	0,597**	0,627**	
	TE	0,616**	0,589**	0,627**	
	SAA	0,615**	0,583**	0,580**	
	CI	0,617**	0,614**	0,644**	
	RES	0,624**	0,589**	0,632**	
	HES	0,540**	0,512**	0,534**	
	Overall (SE)				**0,665****

Note: [p**<0.01, p*<0.05 (sig: 2-tailed), SE=school effectiveness, IL=instructional leadership, SM=defining school mission, MIP=managing instructional program, CSLC=creating school learning climate, SE=school effectiveness, QA=quality assurance, TE=teachers efficacy, SAA=student academic achievement, CI=community involvement, RES=material and non-material resources, HES=high expectations of stakeholders].

As Table 7 shows, the correlation values for all the dimensions of IL and the all the dimensions of SE have strong (at more than 0.5) significant (at 0.01) positive relationships, as do the overall variables [ϱ=0.665, p<0.01].
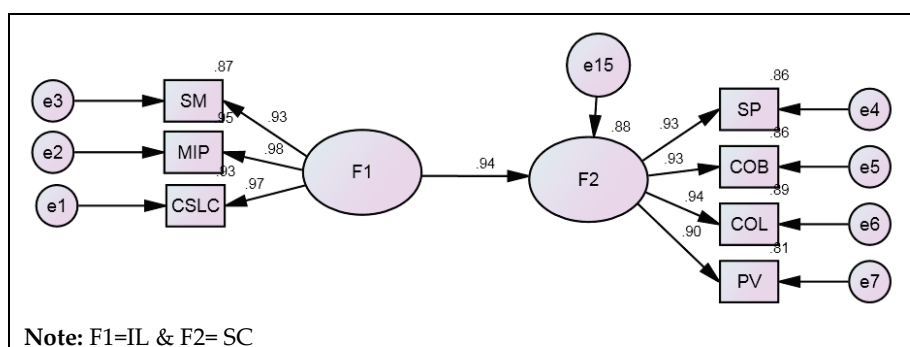
Relationship between Principal's Instructional Leadership and School Culture

To find whether there is a significant relationship between IL and school culture SC, the SEM technique was used. The table below shows the results.

Table 8. Relationship between Instructional Leadership and School Culture

	Estimate	SE	CR	P
SC <--- IL	0,74	0,042	28,14	0,00

As Table 8shows, there is a significant relationship (p<0.05) between instructional leadership and school culture.

Note: F1=IL & F2= SC

Figure 3. Estimated Model

Table 9 shows the results of in-depth analysis to find the significant relationships between the dimensions of IL and of SC, again using Spearman's rho.

Table 9. Correlation between Principal's Instructional Leadership and School Culture (N=367)

IL → SC ↓	SM	MIP	CSLC	Overall (IL)
PV	0,880**	0,864**	0,829**	
COL	0,872**	0,845**	0,861**	
COB	0,830**	0,830**	0,827**	
SP	0,880**	0,864**	0,829**	
Overall (SC)				**0,923**

Note: [p**<0.01, p*<0.05 (sig: 2-tailed), SC=school culture PV=professional values, COL=collegiality, COB=collaboration, SP=shared planning, SM=defining school mission, MIP=managing instructional programs, and CSLC=creating school learning climate].

The result [ϱ=0.923, p<0.01] between IL and SC revealed strong positive correlation exist; as Table 9 also shows, all the dimensions have high correlations [>0.50, p<0.01].

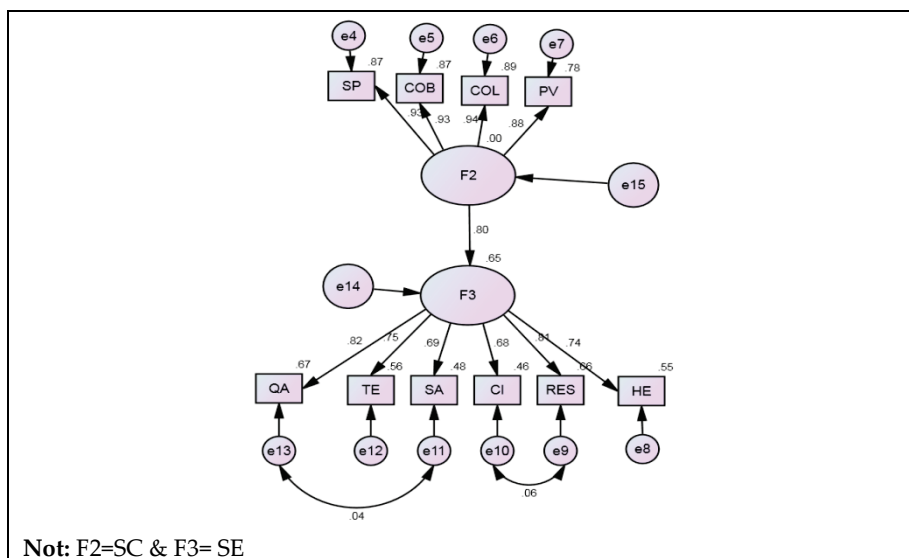### Relationship between School Culture and School Effectiveness

As before, SEM was applied to analyze the data; the obtained values are given in Table 10.

Table 10. Relationship between School Culture and School Effectiveness (N=367)

	Estimate	S.E.	C.R.	P
SE <--- SC	0,941	0,141	6,65	0,00

Not: F2=SC & F3= SE

Figure 4. Estimated Model

As Table 10 shows, the relationship between school effectiveness and school culture is significant and positive (p<0.01). Thus, the relationship was examined further through Spearman's rho, with results in Table 11.

Table 11. Correlation between School Culture and School Effectiveness (N=367)

SC → SE ↓	PV	COL	COB	SP	Overall (SC)
QA	0,647**	0,653**	0,655**	0,671**	
TE	0,617 **	0,659**	0,633**	0,667**	
SAA	0,615**	0,636**	0,642**	0,660**	
CI	0,641**	0,650**	0,667**	0,678**	
RES	0,641**	0,688**	0,689**	0,697**	
HE	0,534**	0,579**	0,615**	0,596**	
Overall (SE)					**0,736**

Note: [p** < 0,01, p* < 0,05]

As seen, there is an overall positive high correlation [ϱ=0.736, p<0.01] between SE and SC. Furthermore, the in-depth analysis revealed positive high correlations [>0.50, p<0.01] among all dimensions of SC and those of SE.

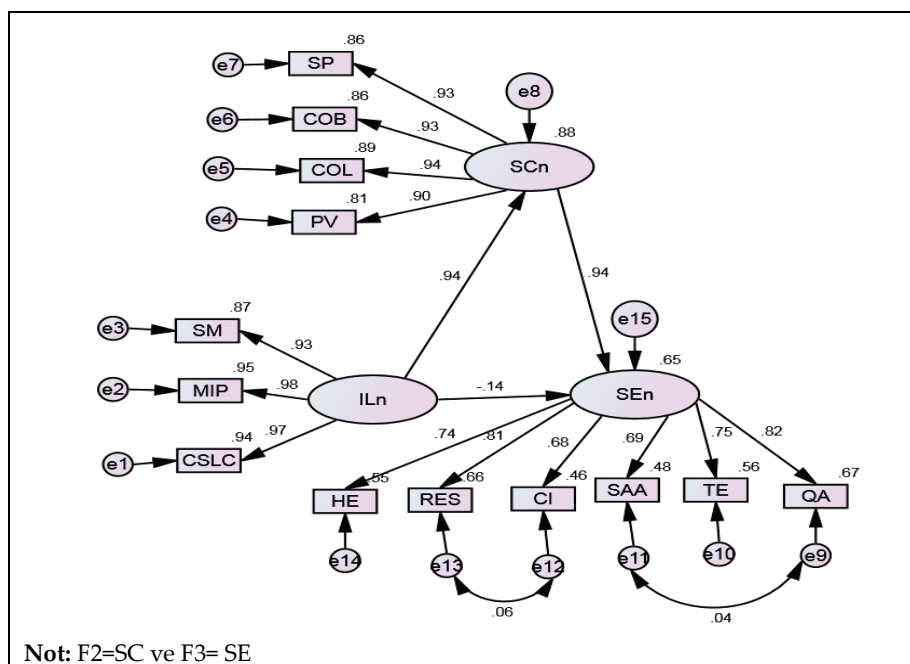*Relationships between Instructional Leadership, School Culture, and School Effectiveness*

Figure 5. Estimated Indirect Effect Model

Table 12. Multiple Regression Weights (N=367)

			Beta Estimates	S.E	C.R	P	Results
SC	⟵	IL	1,016	0,033	30,52	0,00	Significant
SE	⟵	IL	-0,147	0,143	-1,03	0,303	Insignificant
SE	⟵	SC	0,909	0,141	6,45	0,00	Significant

Note: All the achieved levels are in accordance with the required fitness indices.

As Table 12 suggests, school culture is a mediating variable for the relationship between principal's instructional leadership and school effectiveness. It is to be noted, however, that when school culture enters the model as mediator, the strong, positive direct effect of instructional leadership on school effectiveness becomes insignificant and negative, from 0.74 to -0.147. Therefore, it was concluded that there is a fully mediated indirect relationship between principal's instructional leadership and school effectiveness.

Discussion

This study was aimed at furthering the possibility of self-development of the education system in the secondary schools of Mardan district in KP province, Pakistan, a response to the low budget for education in Pakistan (MOE, 2009),unsatisfactory job performance by emerging graduates (Saleem et al., 2012), negligible contribution of in-service training (Khan, 2013a), irrelative educational trainings for leadership in schools (i.e., to get training as a teacher and taking charge as a principal) (MOE, 1998), professional development pursued only using limited foreign funds (i.e., mostly the in-service professional training are funded by UNISCO and NGOs) (Khan, 2013a; 2004), and lack of leadership skills (Rizvi, 2010). Data was collected from 367 teachers of secondary schools in Mardan district. In this section, the findings are interpreted and discussed in detail.

The findings on *school effectiveness* show that the overall effectiveness of the secondary schools of Mardan district is moderate (see Table 3). The dimensions of "teacher efficacy," "expectations of stakeholders," and "material and non-material resources" were high, while "quality assurance" and "student academic achievement" were moderate and "community involvement" was low. Taking these

findings in reverse order, we should first note that in Pakistan principals take community involvement in schooling negatively (Ahmad & Bin Said, 2013) and believe that parents and community may create management problems if they get involved. This is in contrast to findings that strong relationships of an organization with different stakeholders are an asset for the organization (Talavera, 2008), which in the education context should improve students' academic achievement and motivates students and teachers (Ahmad &Bin Said, 2013).The role of instructional leader is very important in the development of the home–school relation (Stelmach & Preston, 2008; Van Velsor & Orozco, 2006); in Pakistan, however, teachers are promoted to the post of principal without any prior leadership training (Alam, 2012)or relevant professional qualification, leaving them unable and reluctant to involve the community.

Regarding teacher efficacy, the B.Ed. and M.Ed. degrees have no practical application in school context as perceived by the teachers. It is essential that teachers have productive and reactive abilities and strong management capabilities (Lim, Chan, & Dallimore, 2010); refresher courses and in-service training can help inculcate these skills (Marimuthu, Arokiasamy, & Ismail, 2009). But the budget problem again emerges here.

Student academic achievement, which teachers perceived as moderate, is hampered by the large number of children not in school, as gone over in the introduction.

Regarding stakeholder expectations, which were perceived as high, teachers are expected to engage in ongoing professional growth, but opportunities are very few(Khan, 2013a; 2004) and poorly conceived and impractical (MOE, 2009); high expectations of stakeholders are the only way high targets are likely to be achieved (Kristic, 2012; Bourne & Walker, 2008; Takim, 2009).

The "material and non-material resources" dimension showed a high level, although it is clear that the schools are not always provided with facilities such as water, electricity, and playgrounds, again due to lack of funding. Therefore, the two types of resources (tangible and intangible i.e. money and intellectual capitals of the teachers) that are a part of school effectiveness (Awan & Saeed, 2014) may not be provided always.

The "quality assurance" dimension was moderate, presumably not higher due to the irrelevant professional training of the teachers and inadequate leadership skills of principals (Alam, 2012), and even the problems with infrastructure such as unavailability of water and electricity.

The overall findings on *instructional leadership* show that it is perceived as low (see Table 5), as are its components (creating school leaning climate, managing instructional programs, and defining school mission). The main question that arises here is *"Why is leadership crucial?"*(Louis, Leithwood, Wahlstrom, & Anderson, 2010,p. 9). Though, the principals might not be solely responsible to get school effectiveness but still, some authors considered them as a centre point. For example, in school, the principal is responsible for creating an effective school learning climate, which enhances the performance of the principal and teachers, and the achievement and behavior of students (Halawah, 2005). Similarly, it was stated that *"Creating the conditions under which that can occur is the job of the principal"* (Wallace Foundation, 2011, p. 2). It can be concluded that being a leader the principal should take any initiative for school effectiveness.

On the other hand, regarding school learning climate, some authors believed that *"it is neither teachers alone nor principals alone who improve schools, but teachers and principals working together"* (Schmidt-Davis & Bottoms, 2011, p. 2).The principals in the schools under study rarely or never take time to talk informally with students and teachers during recess and breaks, because they are promoted to this post from teaching without having adequate leadership training (Alam, 2012). In contrast, the school leaders with proper leadership training were perceived as improving teaching and learning process through commitment, staff motivation, and by making working condition suitable (Leithwood, Day, Sammons, Harris, & Hopkins, 2006, p. 5). Therefore, it was concluded that there is an *"empirical link between school leadership and improved student achievement"* (Wallace Foundation, 2011, p. 3).

This study has found that, majority of the principals in the schools here have not defined a school mission. In fact, this dimension is concerned with the role of the principal in determining the central purpose of the school (Hallinger, 2009). Every decision, solution and action should be directed towards achieving the school's mission (Zepeda, 2014). In addition, the findings of this study have shown that the principals in Mardan district almost never develop a focused set of annual school-wide goals, including academic goals, which are easily understood by teachers. Though, the public schools in Mardan district might mostly have very generic, similar missions, defined by the district management, but each of the schools might also have different contextual targets. These targets might be defined and communicated effectively to the teachers in school goals.

As the results show, the overall school culture is of low level in Mardan district (see Table 5). Similarly, all the four dimensions were found to be of low level. This indicates towards the lower level of interaction system, lake of collegiality, and collaboration between teachers in the schools context. On the same way, it indicates that the principals are failing to share the school plan, which might affect the achievement of school goals. Though *"a school's culture builds commitment to and identification with core values"* (Peterson & Deal, 2011, p.11). But here in the context the situation is other.

In the target schools, the low level of collaboration indicates that school members do not support each other. Lack of collaboration can produce individualism. By individualism the researcher means a situation of non co-operative school culture, in which each person seeks individual preferences instead collective one. Through reflective practice, (keeping focus on collaboration, collegial relationships, and professional learning) a structure for supporting and sustaining improved teaching and learning can be provided (DuFour & Eaker, 1998; Hord, 2004; Kelly & Cherkowski, 2015; McLaughlin & Talbert, 2001; Stoll & Louis, 2007).

Collegiality, used in a better way can provide a starting point towards building a collaborative culture (e.g. Hargreaves & Fullan, 2012). Bergiel, Bergiel, and Upson (2012) note that if school members don't focus on group concerns, the school culture will be individualized—based (as explained above) on these findings, a good description of the situation in these secondary schools.

It was seen in the analysis (see Tables 6 and 7) that instructional leadership and school effectiveness have a strong positive correlation. Instructional leaders are responsible for achieving high-quality education (Khan, 2013b).

These findings were similar to those of Khan (2013b) and Hallinger (2009) relating the school mission to the role of the principal. Furthermore, other studies (e.g. Day et al., 2010; Hallinger, 2003, 2010; Leithwood et al., 2006; Leithwood, Patten, & Jantzi, 2010; MacBeath & Cheng, 2008; Mulford & Silins, 2003; Robinson, Lloyd, & Rowe,2008) correlated "managing instructional programs" with school effectiveness and student achievement.

This study has revealed a high correlation between instructional leadership and school culture (see Tables 8 and 9). Principals who are more involved with teachers rather than just sitting in their offices are more likely to help teachers solve behavioral issues (Ohlson, 2009).Similarly, other researchers (e.g. Ayek & Atas, 2014; DuPont, 2009; Le Clear, 2005; Mees, 2008) also found a high correlation between school culture and leadership characteristics. Generally, collaboration must be a part of one's professional identity: that means working together (Howard, 2010), or "*alignment*" (Senge, 1990, p.234). In this study, collaboration means struggling collectively for the sake of institution in terms of effectiveness. It was revealed by the analysis that, collaboration is an essential item in school effectiveness of the context.

This study has also revealed a high correlation between school culture and school effectiveness in Mardan district (see Tables 10 and 11). This finding is quite similar to findings of previous research studies (e.g. Ebadollah, 2011; Hoy& Ferguson, 1985; Miskel, Fevurly, & Stewart, 1979; Mott, 1972).

Thus, taken together, the findings of this research show that instructional leaders can make their schools effective by focusing on developing a strong school culture, which can improve the effectiveness of schools effective through better involvement and motivation of staff members and students.

Conclusion

The minimal educational budget in Pakistan may not be able to spur development in the education system, leaving the onus on local instructional leaders for self-development of the education system through development of a strong school culture. However, these leaders are untrained and unqualified (Rizvi, 2010), and as this study has empirically revealed, show a low level of leadership, making them ineffectual. Alongside this empirical contribution, this study makes the theoretical contribution of showing an indirect relationship between leadership and school effectiveness in the Pakistani context.

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