Effects of Pedagogical Leadership on The Student Achievements at Secondary Level

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Effects of Pedagogical Leadership on Student Achievement at Secondary Level

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Abstract

This research was conducted to examine the influential role of pedagogical leadership in the secondary schools of Lahore, Pakistan. The central premise of this research was to ascertain the effects of pedagogical leadership on the life achievements of students at secondary level which they carried up to the college. The main focus was how school principals and teachers play their role as pedagogical leaders to prepare students for academic achievements and life achievements. A quantitative survey was held to conduct this study. Data was collected from student of intermediate enrolled in different colleges in the arts, science and commerce programs of the Higher Secondary School Certificate by Lahore Board, Pakistan. Six public and private colleges of Lahore (male and female) which enroll students with high academic achievements were targeted. Data was collected from 600 students using cluster sampling and each targeted college was taken as a cluster. Descriptive and inferential analyses were used to determine the relationships among various constructs of pedagogical leadership of secondary school teachers and principals used for inculcating lifelong learning skills in students and promoting the self-efficacy beliefs of achievement. The study concludes that pedagogic leadership roles played by principals and teachers are of equal importance; however, pedagogic leadership provided by principals is more effective in supportive and managerial roles. On the other hand, teachers’ pedagogic leadership is realized in their professional commitment exhibited in everyday teaching and learning. The study also identifies certain gaps in the achievement of 21st century life skills of students which are vital for survival and sustainability in the current era.

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**Introduction**

Leadership is the process of influencing a group of individuals to contribute for the achievement of the desired objectives of the organization in which they are working. Leadership involves the capacity to motivate or persuade people to engage in tasks which lead to the achievement of common goals (House, Hanges, Javidan, Dorfman & Gupta, 2004; Stoll, Harris & Handscomb, 2012; Redmond & Dolan, 2016). Key components necessary to cultivate young leaders include skills development, environmental factors and commitment to their actions (Redmond & Dolan, 2016; Stoll, Harris & Handscomb, 2012).

Pedagogical leader establishes a productive learning environment in terms of what and how teacher is teaching and what and how students are learning (Pigozne, Surikova, Gonzalez, Medveckis & Pigoznis, 2019). Pedagogical leader does not take into account good grades only as student achievement but also focuses on student development which may enable them to live, work and survive in a complex world (Wu, 2017; Andrews, 2009). The earlier concept of pedagogy was associated with the teachers’ way of teaching, that is, “how to teach”. Later, this term acquired more meaning as stated by Heikka and Waniganayake, (2011, p.503) that pedagogy is a “relational and holistic approach to working with people”. Kyriacou, Ellingsen, Stephens, and Sundaram (2009, p.75) and Male and Palaiologou (2015) describe pedagogy as “going beyond subject learning”. Pedagogy is viewed as a triangular process which involves theory, practices and a set of social relationships among school and community, so that the knowledge of learners can be enhanced through the recognition of their context and culture (Male & Palaiologou, 2012; 2015; Ugwuozor, 2017).

**1.1 School Principals as Pedagogic Leaders**

In a school, the principal’s role as a leader is essential. Day, Gu and Sammons (2016) suggest that school leaders may combine the approaches of transformational and instructional leadership to reach the all important goal of student achievement in their schools. Both of these approaches can
be used together systematically in tiers for continuous improvement in school climate.

Students are the central part of the educational system; all efforts are made for enhancing student achievement and purposeful learning outcomes (Day et al., 2016; Adediwura & Tayo, 2007). Although many variables have their effect on student achievement in school but the role of school leadership is vital in this regard. It has been observed that the leadership of principals in schools affects multiple school outcomes (Hitt & Tucker, 2016). High student achievement in schools is largely due to the effective role of leadership (Hallinger, 2003; Heck & Hallinger, 2009; Sun & Leithwood, 2012, 2015; Moswela, 2014).

The achievements of students in school are associated with the commitment and dedication of teachers and principals. Day and others (2010) advocate that school leadership is considered the second most significant component for student achievement after classroom teaching. The school leader works for important school outcomes which link with students’ learning (Hallinger, 2011; Hitt & Tucker, 2016; Day, Fleenor, Atwater, Sturm & McKee, 2014).

The field of educational leadership has accrued a body of research that explains how leaders influence student achievement through the enactment of various practices. Yet, differences exist in the substance of frameworks that assert the various areas leaders should focus (Ugwuozor, 2017; Hitt & Tucker, 2016). In a recently developed framework, Sun and Leithwood (2012) describe through a review of the literature that leadership in schools focuses on practices or activities that enhance the achievements of students (Sun & Leithwood, 2015). The framework comprises five domains including (a) setting directions, (b) building relationships and developing people, (c) developing the organization to support the desired practices, (d) improving the instructional program, and (e) securing accountability” (Hitt & Trucker, 2016, p.8).

Educational leadership roles are also changing in the 21st century; emphasis on inculcation of skills which enhance an individual’s survival and sustainability in work-life is increasing (Harris, 2013; Rojewski & Hill, 2017). Parents as chief stakeholders are also demanding holistic
development of their children, rather than focusing only on traditional teaching and learning (Retna & Ng, 2016; Male & Palaiologou, 2015). In this scenario, pedagogical leadership is viewed as the best recipe to exercise meaningful leadership in schools (Gay, 2010; Genao, 2016; Khalifa, Gooden & Davis, 2016; Kruse & Johnson, 2016).

According to Redmond and Dolan (2016), in the description of skills important elements include social and emotional intelligence, collaboration with others, problem solving, the ability to articulate a vision and finally, gaining insight into a specific area. In environmental conditions, authentic opportunities are important that help young people to practice and hone their skills. Regarding action, the ability to inspire and motivate followers having high expectations and role modelling lead to having a good team on which to build youth leadership. “This, together with mastery as developed through the ability to persist and endeavor, is critical to any successful youth leader” (Redmond & Dolan, 2016, p.1).

1.2 School Teachers as Pedagogic Leaders

Researchers (Moswela 2014; Sebastian, Allensworth and Huang, 2016) argue that teachers’ role is very influential in the education of children because they spend more time with students in classroom during teaching activities than either principals or parents. A teacher has better knowledge about his/her students instead of others and knows what kind of knowledge, content and skills are particularly needed by learners (Bolman & Deal, 2018). It is emphasized that a principal’s task is to create an overall favorable school climate for which s/he may perform multiple tasks, such as regular visits of classrooms and meeting with teachers, parents and other stakeholders for effective problem solving (Harris, 2013; Khan& Iqbal, 2014). An ideal principal frequently contacts the students and teachers and is available all the time to teachers, students and parents for tackling any issues (Sauve & Schonert, 2019).

Pedagogical leadership has emerged with the slogan of learning-centered leadership which emphasizes building strategies that align with the teaching and learning process to solidify students’ successful learning outcomes. It establishes a conducive learning environment in terms of what and how a teacher is teaching and what and how students are
learning. Therefore, it is expected that secondary school leaders directly view the quality of instructions, examine whether appropriate content is being taught to students, and give constructive feedback to teachers and students for the sake of improvement (Marzano, Waters, & McNulty, 2005).

A teacher plays his/her pedagogical leadership role which mainly revolves around managing all activities which take place in the classroom. 21st century teacher understands which strategy is more effective at a particular time (Stoll, Harris, & Handscomb, 2012). Sergiovanni (2006) presents the teacher as a pedagogical leader who plans a variety of methodologies for delivering the content in a better way. Fullan and Langworthy (2014) have introduced new pedagogic repertoire under three major concepts including learning partnership, deep learning tasks, and digital tools and resources.

Van Manen (2015) argues that pedagogy does not revolve around any one definition of teaching, it is multidimensional. A teacher’s phenomenological pedagogy comprises sharing life experiences with other teachers and students. It is an inquiry based knowledge which emphasizes that teachers must know about the life of their students whom they teach. A teacher’s most important role is to design teaching lessons following the inquiry based instructional model, so that students can be equipped to get new knowledge through exploration (Seashore Louis, Dretzke & Wahlstrom, 2010). It is also stated that a good teacher translates the information gleaned from life experiences into knowledge and adds wisdom to it, so that a student would be able to understand, retain and pass it to others (Adediwura & Tayo, 2007).

1.3 Positive School Climate

However, the most preferable task for school leaders is to give attention toward establishing a positive school climate. It is actually a milestone for student learning and achievement because it creates a sense of belonging among students; they feel safe and comfortable in school environment and become willing to stay in the school for a day-long. Teachers contribute significantly in establishing school culture and maintaining successful team work for enhancing student achievement.
They know the philosophy of teaching and learning behind advance and effective classroom practices and provide clinical supervision to students. Teachers’ moral support, empathy, encouragement and understanding of students’ problems creates good impression in the mind and personality of students.

Children spend almost eight hours in the school away from their home protection; therefore, it is expected that the school norms and values create a climate in which students feel secure socially, emotionally and physically. A positive school climate leads to less disciplinary problems (Thapa, Cohen, Guffery, & Higgins, 2013), behavioral aggressiveness (Shirley & Cornell, 2012), and less school dropouts (Lee, Cornell, Gregory & Fan, 2011). A positive school climate is linked with students’ academic motivation and engagement as well as their psychological well-being (Sammons, Lindorff, Ortega & Kington, 2016). It also reduces the rate of student absenteeism (Cross, Gottfredson, Wilson, Rorie & Connell, 2009). Moreover, a pleasant school climate ascertains lower levels of bullying and harassment (Meyer & Conner, 2008; Bottiani, Johnson, McDaniel & Bradshaw, 2019; Attar-Schwartz, 2009).

The discussion above summates that pedagogical leadership is the need of the time to raise students with positive beliefs of self-efficacy regarding academic and life achievements. Pedagogy means to have a close relationship with students and to understand their educational issues. Many factors have been identified as important in pedagogic leadership which contribute in students’ academic and life-long skill achievements including their self-efficacy about their academic and life achievements, principals’ leadership role, teachers’ leadership role and a positive school climate. The current study explores the interaction of these factors as pedagogical leaders play their role to work for student achievement in Pakistani schools.

2. Statement of the Problem

Keeping in view the importance of pedagogical leadership, this research has been conducted to examine the effective role of pedagogical leadership in student achievement at secondary school level in Lahore. Both teachers and principals are understood as leaders; 1) what teacher
does in the classroom for student achievement (Muijs, Kyriakides, van der Werf, Creemers, Timperley & Earl, 2014); and 2) What principal does for ensuring a productive school climate (Harris, 2013).

2.1 Research Questions

The following research questions guide this study.

1. What is the role of school principals as pedagogical leaders in student achievement in the secondary schools of Lahore, Pakistan?
2. What is the role of school teachers as pedagogical leaders in student achievement in the secondary schools of Lahore, Pakistan?
3. What is the interactive role of school principals, school teachers, school climate and its effect on student achievement in the secondary schools of Lahore, Pakistan?

3. Methodology

The quantitative research method was employed to conduct this study. A questionnaire was used as the research instrument which was designed in the light of research questions and the objectives of the study and it also reflected the literature review. The sample constituted students of intermediate enrolled in different colleges in the arts, science and commerce programs and studying in the 2nd year of the Higher Secondary School Certificate by Lahore Board, Pakistan. Cluster sampling was used to target students with high achievements. Six colleges of Lahore, both public and private, which enroll students of high merit were selected purposively; each college was taken as a cluster and only the 1st year and the 2nd year students enrolled in the college were approached. Data was collected from 100 students of each college setting the cut point of B Grade as academic achievement level. It was assumed that students with high academic achievements will experience life achievements as well.

3.1 Instrumentation

A questionnaire was self-constructed based on extensive literature review and it contained 50 items to suit the purpose of the study. Part A of the questionnaire consisted of demographic variables, while part B comprised 12 items selected as important 21st century skills and their acquisition at school level was inquired into. Part C comprised 40 items to
assess the effect of pedagogical leadership on student achievement at secondary level. These 40 items were grouped into four major constructs labeled student self-efficacy beliefs for achievement, school principals’ leadership role, school teachers’ leadership role, and positive school climate. The response options for all items included in the above mentioned constructs were 1= “strongly disagree,” 2=“disagree,” 3=“neutral,” 4= “agree,” and 5=“strongly agree.” The obtained data was recorded and analyzed using SPSS 20. Data was reduced by using confirmatory factor analysis (CFA). The internal consistency of each factor (construct) was measured using Cronbach’s alpha which was found more than 0.7 for all factors (See Appendix A).

4. Data Analysis

4.1 Demographic Distribution of Data

The male participants were 39.5% and female were 60.5%. Regarding institution wise distribution, 19.7% students were from Lahore College for Women University, 14.2% students were from Kinnaird College for Women, 22.3% students (boys)were from Foreman Christian College, 17.5% students (boys) were from Government College Lahore; 13.8% students were from Punjab Girls College and 12.5% students were from Concordia Girls College. Regarding their academic achievement, 38% students had achieved A* grade, 39% students had achieved A grade, 16% students had achieved B* grade, whereas 7% students had achieved B grade in their secondary board examination.

4.2 Students’ Skills Development During School Education

The second part of the survey questionnaire consisted of twelve life-long learning skills constituting a central paradigm for students’ future academic and professional achievements. To find out the opinion of students about the extent to which they were equipped with these respective skills during their school education, they were asked to mark YES for those skills in which they felt proficient and their school contributed well to inculcate those skills in them and put NO for those skills in which they felt lacking. These twelve skills are tabulated below.
Table 1

*Percentage of Acquired and Not Acquired Skills in School*

<table>
<thead>
<tr>
<th>No</th>
<th>Skills</th>
<th>Acquired %</th>
<th>Not Acquired %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Academic skills</td>
<td>84</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>Independent learning</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>3</td>
<td>Social skills</td>
<td>62</td>
<td>38</td>
</tr>
<tr>
<td>4</td>
<td>Conflict resolution</td>
<td>45</td>
<td>55</td>
</tr>
<tr>
<td>5</td>
<td>Self-management</td>
<td>74</td>
<td>26</td>
</tr>
<tr>
<td>6</td>
<td>Self-discipline</td>
<td>82</td>
<td>18</td>
</tr>
<tr>
<td>7</td>
<td>Citizenship</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>8</td>
<td>Taking initiatives</td>
<td>61</td>
<td>39</td>
</tr>
<tr>
<td>9</td>
<td>Language skills to express ideas</td>
<td>45</td>
<td>55</td>
</tr>
<tr>
<td>10</td>
<td>Creative thinking &amp; problem solving</td>
<td>74</td>
<td>26</td>
</tr>
<tr>
<td>11</td>
<td>Communication skills to inspire</td>
<td>82</td>
<td>18</td>
</tr>
<tr>
<td>12</td>
<td>Self-motivation for achievements</td>
<td>63</td>
<td>37</td>
</tr>
</tbody>
</table>

*Figure 1.* Graph to represent acquired and not acquired skills in school life
Most of the students perceived that they were capable of acquiring the needed skills for life-long achievement in their schools. Academic skills, self-discipline, communication skills and creative thinking and problem solving skills got the most affirmative responses, respectively. Whereas, students denied acquiring language skills and conflict resolution skills adequately during their school life.

4.3 Pearson’s Rho, Bivariate Correlation Analysis

Pearson’s product moment correlation was run to measure the strength of relationships among the variables of the research divided into factors and sub-factors as follows, 1) student self-efficacy for life achievements, 2) student self-efficacy for academic achievements, 3) role of school principals’ pedagogic leadership (principal counseling, principal management, and principal support), 4) role of school teachers’ pedagogic leadership (teacher commitment and teacher guidance), and 5) school climate (school belongingness and healthy school atmosphere). The results demonstrated a strong and positive correlation among all these factors and sub-factors as significant at 0.01 level. The results are elaborated in table 2.

Regarding school principals’ pedagogic leadership, principal support showed a moderate and positive correlation with students’ self-efficacy for life achievements ($r= .444; p=.000$), whereas with academic achievements it was relatively better ($r= .479; p=.000$), although other relationships were relatively weaker.

Regarding school teachers’ pedagogic leadership, teacher commitment showed a moderate and positive correlation with students’ self-efficacy for life achievements ($r= .489; p=.000$), whereas with academic achievements it was relatively better ($r= .507; p=.000$), although other relationships were relatively weaker.

Regarding school principals’ pedagogic leadership, principal counseling showed a strong and positive correlation with other variables, that is, teacher commitment ($r= .636^{**}; p=.000$), teacher guidance ($r= .583^{**}; p=.000$), school belongingness ($r= .514^{**}; p=.000$) and healthy school environment ($r= .634^{**}; p=.000$). The construct of principal management exhibited a strong and positive correlation with teacher
Table 2
*Pearson Product Moment Correlation between Research Variables*

<table>
<thead>
<tr>
<th>Factors</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy for life Achievements</td>
<td>1</td>
<td>.571**</td>
<td>.389**</td>
<td>.389**</td>
<td>.444**</td>
<td>.489**</td>
<td>.414**</td>
<td>.359**</td>
<td>.392**</td>
</tr>
<tr>
<td>Self-efficacy for academic Achievements</td>
<td>1</td>
<td></td>
<td>.433**</td>
<td>.433**</td>
<td>.479**</td>
<td>.507**</td>
<td>.415**</td>
<td>.386**</td>
<td>.434**</td>
</tr>
<tr>
<td>Principal counseling</td>
<td>1</td>
<td></td>
<td></td>
<td>1.000**</td>
<td>.729**</td>
<td>.636**</td>
<td>.583**</td>
<td>.514**</td>
<td>.634**</td>
</tr>
<tr>
<td>Principal management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000**</td>
<td>.729**</td>
<td>.636**</td>
<td>.583**</td>
<td>.514**</td>
</tr>
<tr>
<td>Principal Support</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000**</td>
<td>.604**</td>
<td>.562**</td>
<td>.548**</td>
</tr>
<tr>
<td>Teacher commitment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000**</td>
<td>.740**</td>
<td>.586**</td>
</tr>
<tr>
<td>Teacher guidance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000**</td>
<td>.556**</td>
</tr>
<tr>
<td>School belongingness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000**</td>
</tr>
<tr>
<td>Healthy school atmosphere</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
commitment (r=.636**; p=.000), teacher guidance (r=.583**; p=.000), school belongingness (r=.514**; p=.000) and healthy school environment (r=.634**; p=.000); whereas principal support revealed a strong and positive correlation with teacher commitment (r=.604**; p=.000), teacher guidance (r=.562**; p=.000), school belongingness (r=.548**; p=.000) and healthy school environment (r=.632**; p=.000).

Regarding school teachers’ pedagogic leadership, teacher commitment showed the strongest positive correlation with school belongingness (r=.586**; p=.000) and healthy atmosphere (r=.670**; p=.000); whereas teacher guidance also showed the strongest positive correlation with school belongingness (r=.556**; p=.000) and healthy atmosphere (r=.621**; p=.000).

### 4.4 Multiple Linear Regression

In order to assess the predictability of the dependent variables, multiple regression models were obtained using a stepwise formula. Students’ self-efficacy for academic achievements and life achievements was taken as the dependent variable whose predictability was determined by school principals’ and school teachers’ pedagogic leadership roles as well as school climate. Two independent models were generated and the details are explained below.

Model 1: Predictors of students’ perception of self-efficacy for life achievements included school principals’ pedagogic leadership role (principal counseling, principal management, and principal support), school teachers’ pedagogic leadership (teacher commitment, teacher guidance), and school climate (school belongingness and healthy atmosphere). Only teacher commitment and principal support were found to be eligible predictors of student achievement for life, whereas all other variables were excluded from the model.

Model 1.1 illustrates that teacher commitment is the prime predictor of students’ life achievements and it singularly explains 48% of the variation in students’ perceptions (r=0.489, P =.000). Model 1.2 illustrates that teacher commitment and principal support collectively explain 58% of the variation (r=0.348, P =.000) ;(β=0.233, p<.000) respectively in students’ perceptions of life achievements (r=0.348, P =.000; r=0.233, P =.000).
Table 3
Stepwise Regression (Students’ Life Achievements is the Dependent Variable)

<table>
<thead>
<tr>
<th>No</th>
<th>Predictor Variables</th>
<th>β</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Teacher commitment</td>
<td>.489</td>
<td>13.701</td>
<td>.000</td>
</tr>
<tr>
<td>1.2</td>
<td>Teacher commitment</td>
<td>.348</td>
<td>7.942</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Principal Support</td>
<td>.233</td>
<td>5.328</td>
<td>.000</td>
</tr>
</tbody>
</table>

Model 2: Predictors of students’ perception of self-efficacy for academic achievements included school principals’ pedagogic leadership role (principal counseling, principal management, and principal support), school teachers’ pedagogic leadership (teacher commitment, teacher guidance), and school climate (school belongingness and healthy atmosphere). Only teacher commitment, principal management and principal support were found to be eligible predictors of students’ academic achievements, whereas all other variables were excluded from the model.

Table 4
Stepwise Regression (Students’ Academic Achievements is the Dependent Variable)

<table>
<thead>
<tr>
<th>No</th>
<th>Predictor Variables</th>
<th>B</th>
<th>t-value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Teacher commitment</td>
<td>.516</td>
<td>13.207</td>
<td>.000</td>
</tr>
<tr>
<td>2.2</td>
<td>Teacher commitment</td>
<td>.346</td>
<td>7.865</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Principal Management</td>
<td>.317</td>
<td>7.192</td>
<td>.000</td>
</tr>
<tr>
<td>2.3</td>
<td>Teacher commitment</td>
<td>.296</td>
<td>6.010</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Principal Management</td>
<td>.253</td>
<td>4.848</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Principal Support</td>
<td>.131</td>
<td>2.270</td>
<td>.020</td>
</tr>
</tbody>
</table>

Model 2.1 illustrates that teacher commitment is the prime predictor of students’ academic achievements and it singularly explains 51% of the variation (r=0.516, P =.000). Model 2.2 explains that teacher commitment and principal management are collectively responsible for 65% of the variation in students’ perceptions of academic achievements (r=0.342, P =.000); (r=0.272, P =.000), respectively. Finally, model 2.3 illustrates that
teacher commitment, principal management and principal support are collectively responsible for 67% of the variation in students’ perceptions of academic achievements \( r=0.296, P =.000 \); \( r=0.253, P =.000 \); \( r=0.131, P =.000 \), respectively

5. Conclusion

The current study was conducted to examine the effective role of pedagogical leadership for student achievement in Pakistani schools. Two distinct roles of pedagogical leadership at school level (principal as school wide pedagogical leader and teacher as classroom wide pedagogical leader) were studied to examine their effectiveness for student achievement. Models of students’ self-efficacy for life achievements and academic achievements led to the conclusion that both leadership roles were equally important for student achievement.

The Pearson product moment correlation demonstrated that all constructs were positively and significantly related to each other, implying that change in one would lead to change in the other. However, both school principals’ and school teachers’ pedagogic leadership had a moderate effect on student achievement. Collective efforts of both principals and teachers contributed more toward creating a positive school climate, although it was more strongly related to the feelings of belongingness than achievement.

Based upon multiple linear regression, it was concluded that teacher commitment and principal support were the most significant predictors of students’ life achievements; whereas teacher commitment and principal management and support were the most significant predictors of students’ academic achievements. However, a positive school climate did not seem to affect students’ perceptions of achievements either for life or academics.

6. Discussion

Every organization needs leaders to run it smoothly and successfully and to best supervise its staff for the attainment of desired goals. Loyens, Magda and Rikers (2008) claim that leadership is all about motivating everyone to perform at their best, whether they are teachers or students.
Our results suggest that effective principals use teacher leadership to improve the schools’ learning climate, while they themselves work directly on professional development and school program coherence. Day et al., (2010) recommend that school heads may work as transformational leaders while promoting instructional leadership among their teachers. Thus, both principals and teachers need to add consecutive layers to their work in synchronization with each other for better student outcomes.

The results of the study indicate that both principal support and teacher commitment play a key role in promoting the sense of achievement for life and academics in the secondary schools of Lahore. However, the nature of both leadership roles is quite different. The principal’s role as supporter is more influential in creating a sense of self-efficacy both about life achievements and academic achievements; these results are in synchronization with (Sauve & Schonert, 2019). Similarly, teacher commitment plays a fundamental role in creating a sense of self-efficacy both about life achievements and academic achievements (Sebastianet et al., 2016). It means that students’ life and academic achievements mainly depend on teacher commitment (pedagogy of teaching) and management support (phenomenological pedagogy of relationships) (Van Manen, 2015). In short, the principals and teachers of secondary schools of Lahore, Pakistan have been successful in enacting their roles as pedagogical leaders.

Self-efficacy is another important factor of achievement because it helps an individual to recognize or identify his/her best potential (Cross, Marchand, Medina, Villafuerte & Rivas, 2019). According to Wang and Degol (2016), school climate receives attention as a way to enhance the achievements of students and to reduce problematic behavior. The role of principal as pedagogical leader (principal counseling, principal management, and principal support) has an effective correlation with student self-efficacy for life achievements and academic achievements. It means that these multifaceted roles of the principal as pedagogical leader effectively inculcate quality in students to get insight into their potential which leads them toward task achievement.

Rapid shifts are taking place in the world of work, where traditional skills of teaching and learning are becoming obsolete and are being
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replaced by new ones (Ugwuozor, 2017). In the past, schools were only responsible to impart knowledge in numeracy and literacy. Now, the educational demands of the 21st century have multiplied the significance of the holistic development of every student (Morreale & Pearson, 2008). The ultimate goal is to make every student an independent individual able to meet his / her own needs related to higher education, while attempting creative problem solving in life and developing healthy and productive relationships in their personal and professional lives (Bana & Khaki, 2015). School leadership needs to take account of such advancements and ensure that their student outcome matches with the 21st century workplace needs, thus providing the students with a chance of getting admission in higher education and securing decent employment; therefore, pedagogical leadership entails a holistic approach of student learning and development (Sergiovanni, 2004; Pigozne et al., 2019).

In educational settings, Lewis and Murphy (2008) state that a significant school wide change occurs due to effective leadership because of its continuous efforts for creating an environment of perpetual success for everyone. The hallmark of such a change is the optimization of all the available resources, establishing infrastructure, continuous improvement in the teaching content and methodology, and developing good and clear communication channels to keep everything aligned (Sergiovanni, 2006).

Pedagogical leadership solely emphasizes building strategies aligned with the teaching and learning process to solidify students’ successful learning outcomes according to their expected needs. It establishes a productive learning environment in terms of what and how teachers are teaching and what and how students are learning. The aim is the creation of a learning environment based on the interactions of learners, teachers, families and community in order to build the knowledge of students (Male & Palaiologou, 2015; Bottery, 2006). Students judge their teachers critically but they are highly influenced by teacher leadership characteristics, such as charisma, emotional intelligence and professional attitude (Pigozne et al., 2019. Wu (2017) highlights that successful pedagogical leadership roles are centered on a caring attitude and atmosphere.
7. Implications

Secondary education is the foundation of the development of students’ core competencies; higher education only adds value to the already built foundation. Schools’ pedagogical leadership must think about it to take into account the value of each and every student to ensure his/her life achievements. The purpose of examining the construct of developing life skills in students is considered vital for student achievement, especially at secondary level. They strengthen the skills of decision-making, taking initiatives, conflict resolution, confidence building, social interaction, and creativity, particularly due to science and art exhibitions. Students learn many skills unconsciously in an informal environment, rather than made to inculcate them forcefully. Bernstein, Phillips and Silverman (2011) say good schools have an understanding of their students’ necessities; they indulge their students in distinct activities which develop the skills of confidence, teamwork, leadership responsibilities and building good relationships which ultimately affect the teaching learning process.

It is a fact that the need and importance of life learning skills do matter for an individual to earn money for his/her survival and to serve as human capital for his / her country (Lipsitz, 2019). Skilled workers are the demand of the global world. On the other hand, these skills are also essential for an individual in order to spend a respectable life in the society. Social skills, self-management skills, problem solving skills, self-discipline skills, skills of citizenship, and the aspiration for hard work inculcate moral virtues in an individual. These individuals are useful in building a valuable society. The countries where educational institutions equip their students with these skills have more civilized and disciplined societies than those countries which ignore the importance of these skills.

Pakistani society is one of those societies where we can observe certain negative attitudes of people, such as fighting, intolerance, rough behavior, undisciplined life at an individual level, aggressiveness, and mismanagement of time and work and these traits are exhibited everywhere. There is no mutually respectful relationship among people. Bullying and abusive behavior are common. There is no difference in educated and uneducated people. We do not find that educated or highly qualified persons act with patience or treat others in a respectable way.
They are also extremist in their attitude. Even educated people indulge in social evils, commit suicide and bomb blasts. These realities and facts show that our educational institutions are not working on the development of students’ life learning skills, widely.

Schools in Pakistan are not working effectively to ensure student development in these essential skills. This is depicted by the data collected for the current research even though this data was taken from students who had completed their education in well-known schools and they were high achievers. In this case, what is the situation in schools of backward areas of Lahore or schools which are situated in remote areas? This is for sure that a large number of students are still deprived of these essential life skills and it will become obvious if data is collected in future from remote areas all over Pakistan. There is actually a mismatch in our educational objectives. Curriculum is prepared keeping in view the objective of enhancing the academic abilities of students but it leaves a vacuum in their life abilities.

The purpose of education should not be only to make students learn reading and writing. It should go beyond in order to educate the students in life skills, so that they can benefit from their education while fully participating in public, community and economic life. Liau, Liau, Teoh and Liau, (2003) state that emotional literacy is the best means through which students and educators will be able to fulfill the increasing demands of changing life.

References


### Appendix A

Table 4.19
*Exploratory Factor Analysis and Reliability Analysis*

<table>
<thead>
<tr>
<th>Factor</th>
<th>Student Self-efficacy (Items)</th>
<th>Loadings</th>
<th>Cronbach ‘s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Student Self-efficacy for life achievements</strong></td>
<td>I will be able to successfully meet the challenges in my personal &amp; social life.</td>
<td>.492</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I have the ability to identify and solve a conflict</td>
<td>.475</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I’m confident that I can any take any responsibility and deliver my best to accomplish the duties assigned.</td>
<td>.467</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I will be able to achieve most of the academic goals that I have set for future life.</td>
<td>.452</td>
</tr>
<tr>
<td>2</td>
<td><strong>Student Self-efficacy for academic achievements</strong></td>
<td>When I find something new about a topic that I am studying, I am able to connect it with other things that I already knew about the topic.</td>
<td>.476</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I am able to participate in discussions on any issue and can defend my point of view.</td>
<td>.529</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If I am given a new task to complete, I can complete it by applying the knowledge that I had already obtained from school.</td>
<td>.462</td>
</tr>
<tr>
<td>Factor</td>
<td><strong>School Principal’s Leadership Role</strong></td>
<td>Loading</td>
<td>0.728</td>
</tr>
<tr>
<td>3</td>
<td><strong>Principal Counseling</strong></td>
<td>Treated students with courtesy and respect.</td>
<td>.691</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Maintained favorable relationships with teachers &amp;</td>
<td>.638</td>
</tr>
</tbody>
</table>
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staff.

Offered counseling to students to manage their emotions & conflicts. Was easily approachable & discussed students’ issues with them.

4 Principal Management

Was fair and run the school with a firm hand. Actively worked to create a safe and welcoming environment for every student. Added to sanctity of school environment with his/her pleasing attitude.

5 Principal Support

Solved conflicts and removed misunderstandings between people. Provided equal opportunities for every student to pursue extracurricular interests and develop personal talent. Encouraged collaboration between parents & teachers for the better student achievement. Took keen interest in all school activities and supervises them.

Factor     School Teacher Leadership Role

6 Teacher Commitment

Had a pleasant way of teaching that enhanced my excitement for learning? Used different ways to measure what I had learned e.g.
(tests, projects, assignments, oral questioning)
Connected the topic they taught with real life scenarios. .628
Identified my mistakes and discussed with me in friendly manner. .625
In developing sound understanding of the subject & If I didn’t understand something, my teachers would explain it in a different way. .612
Used variety of resources to engage me in learning. .611

7 Teacher Guidance
Encouraged me to share my ideas confidently. .624
Provided moral support whenever I needed. .624
Always respected my cultural background. .618
Accepted nothing less than my best effort. .574
Used to console me & make me feel better whenever I was sad or angry. .499

Factor School Loading
8 School Belongingness
I felt safe and comfortable in the environment of my school. .681
I recommend admission in my school to people. .604
I love to go back to my school. .586
I am still in touch with my school teachers. .549
My school had clear rules to .703
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9 Healthy School Environment

<table>
<thead>
<tr>
<th></th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>maintain discipline.</td>
<td>0.849</td>
</tr>
<tr>
<td>My school had good infrastructure &amp; facilities</td>
<td>0.675</td>
</tr>
<tr>
<td>The examination system of my school was fair.</td>
<td>0.635</td>
</tr>
<tr>
<td>Students in my school treated each other with respect.</td>
<td>0.631</td>
</tr>
<tr>
<td>The school management was cooperative and provided quick service in any matter.</td>
<td>0.624</td>
</tr>
<tr>
<td>My school had an atmosphere of collegiality.</td>
<td>0.611</td>
</tr>
<tr>
<td>Harassment, threats, and bullying by other students was not a problem at my school.</td>
<td>0.519</td>
</tr>
</tbody>
</table>