

Impact of Distributed Leadership and Psychological Empowerment on Organizational Learning Culture

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Abstract

The purpose of this study was to measure the impact of distributed leadership and psychological empowerment on organizational learning culture through teachers' perspectives. Distributed leadership is a practice in which the leadership responsibilities are shared within those with related skills and expertise. Psychological Empowerment involves motivational reasoning formed by environment conducive to active involvement in the work roles. Distributed Leadership Questionnaire (DLQ) was developed by the researchers, while Psychological Empowerment Scale (PES) and Urdu version of Dimensions of Organizational Learning Culture (DLOQ) were adopted to address the purpose of the study. Using multistage sampling technique, 613 teachers from forty secondary schools were selected as the sample of study. The reliability coefficients of the three scales ranged from .75 to .88. Exploratory factor analysis of the distributed leadership questionnaire yielded four factors of the construct. Initially, Pearson correlation was found among all factors grouped in each construct. Simple linear regression analysis reveals that Dimensions of Distributed leadership (Shared responsibility, Leadership practices, Decision making, and Professional development) as well as Psychological empowerment (Meaning, Competence, Self-determination and Impact) significantly impact learning organization culture. Multiple regression analysis, further demonstrates that 7 of 8 factors of Distributed Leadership and Psychological Empowerment constructs significantly combine to impact learning culture of high schools. The R^2 value shows that almost 67% of the observed variance in learning culture in the schools can be explained by 7 factors of the distributed leadership and psychological empowerment constructs.

Keywords: Distributed leadership, Psychological empowerment, Learning culture, Professional development, Competence

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Introduction

The purpose of this study was to measure the impact of distributed leadership and psychological empowerment on organizational learning culture. Distributed leadership involves sharing leadership practices among the faculty who can demonstrate skills expertise in the areas they are interested (Spillane, Halverson, & Diamond, 2004). In school context, distributed leadership is meant for head teachers that instead of assuming greater responsibilities, they focus on producing mechanism where employees demonstrate collective responsibility, and share learning culture (Harris, 2008). Spillane et al. (2004) argued that distributed leadership involves combined efforts of multiple leaders, in formal as well as informal positions, to maximize instructional success, leading to continued student success (Spillane, 2005). McLaughlin and Talbert (2006) stated that an effective head teacher controls the steps of learning and encourages the teachers to developing leadership capacities among them and perform effectively.

Elmore (2000) argued that a leader is not always the center of all educational activities in an institution; rather he or she involves everyone in assuming leadership roles so that a combined effort can produce effective results. A similar view of distributed leadership was presented by Gronn (2000) and Mayrowetz (2008) who suggested that this leadership is a collective phenomenon to maximize employee's interaction and building their capacity to lead schools. Mayrowetz further recommends that distributed leadership promotes the idea that by employing various individuals in leadership roles, a collective capacity of the organization would emerge which can lead toward successful completion of instructional activities. Thus, the idea of distributing leadership roles among employees expands the boundaries of leadership from one person to everyone to create a common culture of expectations around the use of individual skills and abilities.

The other independent variable of this study is psychological empowerment which is defined as a set of motivational strategies designed under an environment conducive to learning and where employees can demonstrate active participation in their job roles (Spreitzer, 1995). When people are psychologically empowered, there will be a change in attitude, cognition, and behavior, which most leads to a positive change in value orientation, increased patriotic actions, and improved Self-esteem (Hall, 2008; Koberg, Boss, Senjem & Goodman, 1999), self-efficacy (Conger & Kanungo, 1988), self-consciousness (Deci, Connell, & Ryan, 1989) and better psychological well-being (Oladipo, 2008).

Thomas and Velthouse (1990) argued that psychological empowerment is a construct which involves different concepts and varied understanding. They stated that psychological empowerment involves four cognitive considerations which lead to increased intrinsic motivation in employees; they are *meaning*, *competence*, *self-determination*, and *impact*. So, once the people feel they are empowered, they demonstrate higher level of self-efficacy, greater motivations, and higher level of job

satisfaction. Avolio, Zhu, Koh, and Bhatia (2004) found that empowering people towards exercising more skills creates higher level of job satisfaction, organizational commitment, and increased performance among the employees. Similar findings have also been reported by various other authors such as Kraimer, Seibert, and Liden, (1999) Spreitzer, (1995) and Thomas and Velthouse (1990).

The dependent variable of study is learning culture of an organization. In this study we take school as an organization. Learning culture refers to an organization where employees find plenty of opportunities to create, acquire, and transfer their knowledge as well as modify their behavior to reflect new knowledge and insights (Garvin, 1993).

Organizations often expect that learning and knowledge creation take place continuously for individuals and that they will share what they know in ways that promote learning in groups and throughout the organization. Leadership is one of the most significant dimensions of a learning culture. Leadership within the school setting can no longer be left to one individual. In order to improve the effectiveness of schools, administrative leaders need to establish leadership teams that work collaboratively to implement the complex demands and roles associated with school reform (Akram, Watkins, & Sajid, 2013). Marsick and Watkins (2003) stated learning culture is established on myriad components such as leadership, the process of learning, system connections, and inquiry and dialogue between the employees. This provides evidence of increased organizational commitment and performance.

Based on these variables, the researchers were interested in measuring whether the distributed leadership and psychological empowerment of school teachers impact learning culture of the schools. It is significant to measure the impact of distributed leadership and psychological empowerment on learning culture of schools as the research tells that by improving the learning culture of organizations we can increase productivity of the employees (Spreitzer, Kizilos, & Nason, 1997). Since distributed leadership has previously shown impact on student achievement (Hallinger & Heck 1998; Gordon, 2005), organizational productivity (Leithwood & Jantzi, 1998), leadership (Copland, 2003; Gronn, 2003; Spillane et al., 2004), collaboration (Gray, 1989) and empowerment (Rappaport, 1987), and psychological empowerment has impacted employee performance (Spreitzer, 1997), and organizational commitment (Sylviz, Nabila, Azwa, & Ambad, 2012), it is significant to measure the impact of distributed leadership and psychological empowerment factors on the dimensions of learning organizational culture. In Pakistan, the previous literature lacks in providing evidence of the distributed leadership and psychological empowerment on learning culture. This research study is an effort to fill this gap.

Review of the Related Literature

Distributed leadership (DL) is a conceptual understanding of how leadership takes place among the people and in framework of organization. Distributed leadership

is a practice that illustrates that leadership responsibilities are shared among subordinates in accordance with their tasks. In schools, head teachers play the role of distributed leaders through shared learning culture rather than carrying full responsibilities on their own (Harris, 2003). Distributed leadership refers to interaction between the leader, supporters and circumstances (Spillane, 2005). Spillane et al. (2004) are of the view that distributed leadership is meant for multiple individuals, working in formal and informal leadership positions, to organize instructional inventions. School improvement and their success or failure depends on the practice of distributed leadership in school community. Distributed leadership is grounded on the interaction of head teachers and school (Hallinger, 2007).

Learning outcomes increase when a head teacher involves teachers in decision making and developing leadership in the school. Every person is not expert to make decisions but their involvement in this process is necessary. Teachers are encouraged to participate in school activities and satisfied to work in the school (McLaughlin & Talbert, 2006). Much has been written on distributed leadership during the last two decades. The literature around the globe tells that distributed leadership has significantly impacted various constructs in school settings. Gordon (2005), for example, investigated effect of distributed leadership on student achievement by employing 1257 educational practitioners in Connecticut State, USA. The study found a significant difference between the leadership dimensions in high and low performing schools.

Obadara (2013) conducted a study involving 200 public secondary school teachers to find out the relationship between distributed leadership and school improvement. The findings revealed significant relationships between distributed leadership and school goal achievement, teachers' professional development, effective teaching and learning, and promotion of school climate. Another study conducted in Malaysia found out the relationship between distributed leadership practices of head teachers and their level of motivation in primary public schools (Wahab, Hamid, Zainal & Rafik, 2013). Others found distributed leadership significant influenced school performance (Shakir, Issa, & Mustafa, 2011) and teachers' organizational commitment (Ali & Yangaiya (2015).

In Pakistani schools, distributed leadership is exercised in various forms. Though informally, the Head of the school, in many cases, assigns duties to a senior teacher to work as deputy headmaster/headmistress and assume various responsibilities of the head such as school supervision, classroom observation, timetable issues, co-curricular activities, and so on. Further, Head teacher assigns examination responsibility to another teacher; still head sections are other individuals who look into the matters of the teachers and students of the pertinent sections. By assigning leadership roles to various faculty members, head teacher involves them into decision-making regarding various important aspects of the school.

In a nutshell, distributed leadership includes the activities of multiple individuals to accumulate instructional improvements. Collaborative culture is developed in school when a head teacher involves teachers in planning process, decision making and encourages them to participate in achievement of goals (McLaughlin & Talbert, 2006). Mayrowetz (2008) stated that distributed leadership is the core component to build human capability and to increase school improvement because multiple individuals are involved in distributed leadership who are best aware of their tasks and the problems faced by school.

Psychological empowerment is multidimensional construct and involves a set of motivational intellects of individuals and imitating individual's association in work related tasks (Spreitzer, 1995). Psychological empowerment is defined as a work environment and individual's involvement in their tasks (Spreitzer, 1995). Empowered individuals show assertiveness, reasoning in their actions which is central to devoted actions and satisfaction of individuals desires (Hall, 2008), self-efficacy (Conger & Kanungo, 1988), and self-consciousness (Deci, Connell, & Ryan, 1989). Various other studies on psychological empowerment found interesting findings about this construct. The studies found that psychological empowerment has been significantly positively correlated with organizational commitment (Sylviz et al., 2012), organizational learning (Ghaffari, Saki & Savari, 2014), monitoring behaviors of the employees (Spreitzer, Janasz & Quinn, 1999) and learning culture (Akram et al., 2013), and job satisfaction (Carless, 2004; Namasivayam, Guchait and Lei (2014). Researchers believe that individuals' actions, perceptions, and performance get changed if they are psychologically empowered and are capable of fulfilling their own desires to perform devoted actions (Hall, 2008; Koberg et al., 1999). Self-efficacy (Conger, & Kanungo, 1988) and self-consciousness (Deci et al., 1989) lead them to a constructive transformation (Oladipo, 2008).

Empowerment is of two types: the relational perception and the psychological perception. Relational empowerment has been referred as highest-lowest handling (Conger & Kanungo, 1988) in addition to systematic (Quinn & Spreitzer, 1997). Empowerment takes place when administrators share powers with their followers (Spreitzer, 1997; Wilkinson, 1998). The collaborative perception sustains new practices and authority is distributed to workers. The psychological aspect of empowerment focuses on the employee's opinion (Spreitzer, 1997).

One of the important works on learning culture has been done by Senge (1990) who visions learning culture involves groups of people who continuously focus on improving their capabilities. Senge stated that employees under learning culture expand their level of thinking, develop collective efficacy, and continuously combine their efforts for successful and increased learning. He, further, identified five factors of learning culture that include *Systems thinking, Personal mastery, Mental models, Building shared*

vision, and *Team learning*. These factors are highly compatible with the dimensions of learning organization of Marsick and Watkins (2003).

The literature on distributed leadership and psychological empowerment demonstrates that creating and improving learning culture is required as various studies provide evidence that school culture that is conducive to learning impacts student achievement (Akram et al., 2013; Macneil, Prater & Busch (2009); Hallinger & Heck, 1998). It is important, therefore, that school leaders should establish strong school cultures by getting the relationships between teachers, students, and parents to improve student performance and improve overall performance of the schools. It was equally significant to measure the impact of distributed leadership and psychological empowerment on learning culture of schools as the research tells that by improving the learning culture of organizations we can increase productivity of the employees (Spreitzer, Kizilos, & Nason, 1997). Since distributed leadership has previously shown impact on student achievement (Hallinger & Heck, 1998), organizational productivity (Leithwood & Jantzi, 1998), leadership (Copland, 2003; Spillane et al., 2004), collaboration fosters an ideology of participation and consensus (Gray, 1989) and empowerment (Rappaport, 1987), it is significant to measure the impact of distributed leadership factors on the dimensions of learning organizational culture.

Research Questions

- 1) Is there significant impact of distributed leadership on organizational learning culture?
- 2) Is there significant impact of psychological empowerment on organizational learning culture?
- 3) Do Distributed leadership and psychological empowerment combine to predict learning culture of public schools in Punjab?

Conceptual Framework

Miles and Huberman (1994) defined a conceptual framework as a visual or written product, one that “explains, either graphically or in narrative form, the main things to be studied—the key factors, concepts, or variables—and the presumed relationships among them” (p. 18). In our proposed study, the graphic product demonstrates the factors that are presumed to demonstrate relationships and impact. The figure shows that the factors of distributed leadership and psychological empowerment will demonstrate significant relationship with and impact on learning culture of the schools sampled in the study (see Figure 1).

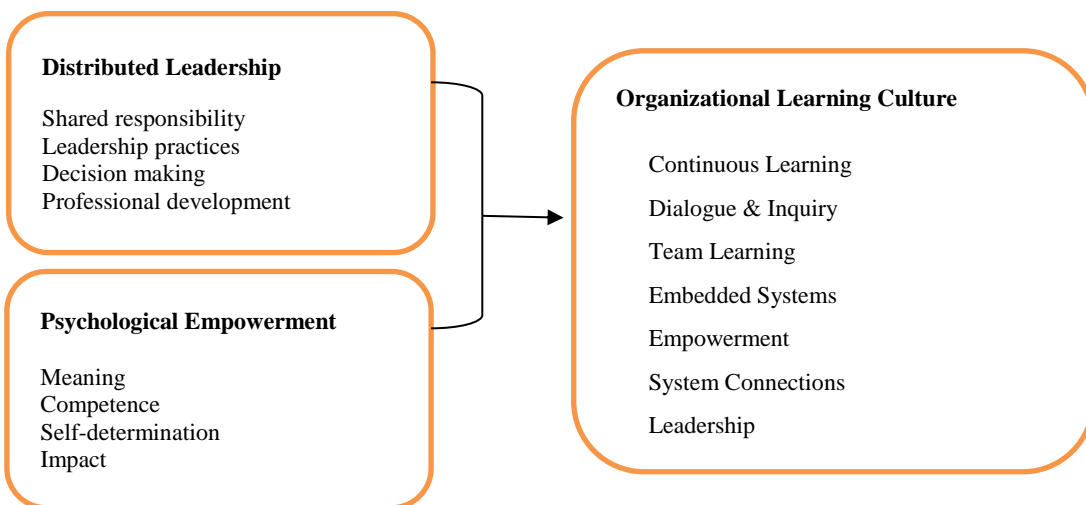


Figure 1: Conceptual Framework

Method

This quantitative study used a well-connected design and structure to measure the impact of distributed leadership and psychological empowerment on organizational learning. The population, over which the results can be generalized, included all public secondary school teachers in province Punjab, Pakistan. Using the multistage sampling technique, initially, out of 36, 10 % districts (4) were randomly selected. Next, among the four districts, 40 [20 rural and 20 urban (10 boys and 10 girls for rural and urban)] secondary schools were randomly selected as the sample of the study. Next, all male and female rural and urban teachers of 40 selected schools were the sample of the study.

Instrumentation

Three instruments were used in this study. Initially, the *Distributed Leadership Questionnaire* (DLQ) was developed based on work of Gordon (2005). A dimension *Mission, Vision, and Goals* was not fit in Pakistani school context. Another dimension *culture* was not included in the distributed leadership due to avoidance of redundancy as learning culture is a separate variable of this study. So, the researchers developed DLQ according to Pakistani situation and context. The researchers developed the DLQ that comprised 26 items covering four factors: *Shared responsibility, leadership practices, decision making, and professional development*. The content validity of the DLQ was established by seeking guidance of content expert panel that consisted of 5 professors of Educational Leadership area. The panel after their careful review of the items of the questionnaire, they reduced item to 22. Each item was recorded given the agreement or disagreement score on five-point Likert Scale responses. The reliability of the

questionnaire based on 30 questionnaires collected as pilot testing was found good ($\alpha=0.82$).

The questionnaire for Psychological Empowerment Scale (Spritzer, 1996) was adopted for this study. The Psychological Empowerment Scale comprises 13 questions covering the factors such as *Meaning, Competence, Self-determination* and *Impact*. Psychological empowerment is defined as a set of motivational cognitions shaped by a work environment and reflecting an individual's active orientation to his or her work role (Spritzer, 1995). Building on the work of Conger and Kanungo (1988), Thomas and Velthouse (1990) argued that four cognitive assessments represent a comprehensive task-specific evaluation and interpretation that determines intrinsic task motivation, hence, psychological empowerment. These four assessments are meaning, competence, choice, and impact. The questionnaire demonstrates five levels of the scales such as strongly agree, agree, to some extent, disagree, and strongly disagree. The highest score on the psychological scale will demonstrate highest agreement with the empowerment and the vice versa. The reliability of the questionnaire found in the literature was good ($\alpha=0.75$).

The Urdu version of the Dimensions of the Learning Organization Questionnaire (Akram et al., 2013) was used to measure the learning environment of their organizations. The Urdu version was actually translated version of the original DLOQ developed by Watkins and Marsick (1993) who illustrated seven dimensions namely (1) continuous learning, (2) dialogue and inquiry, (3), team learning, (4) embedded systems, (5) empowerment, (6) systems connections, and (7) provide leadership. This questionnaire comprises 43 items related to learning culture, and has already been validation and found reliable ($\alpha=.88$) (Akram et al., 2013).

Data Collection

The data were collected from the secondary school teachers. The reason of collecting data from the teachers was that teachers were better able to perceive and demonstrate their perception on distributed leadership, psychological empowerment, and learning organizational culture. The researchers distributed 650 questionnaires to the teachers of the sampled schools and received 613 (303 male and 310 female) Questionnaires in complete form.

Data Analysis

Data were analyzed on the basis of comparisons of factors of Distributed leadership, Psychological Empowerment and Organizational Learning Culture. Factor wise items given in questionnaire were separated and comparison was made. Exploratory Factor Analysis (EFA) was run to evaluate the appropriateness of the data. The EFA examined the 20 items using the principal component abstraction method with varimax rotation. Interrelations of 20 items were calculated and studied resulting matrix of Interrelations Bartlett's test of sphericity, $\chi^2=2.9$, $df=190$, $p<0.00$. The eigenvalues

greater than 1 showed that there were 4 factors that represented 54.05 % of the variance which is considered good. The overall reliability of the questionnaire was high ($\alpha=.87$). The Cronbach alpha reliabilities of the scales were assessed as shared responsibilities (.76), Leadership practices (.69), Decision making (.70), and professional development (.71). Psychological empowerment Scale and DLOQ were also found to be highly reliable (.83 and .86) respectively. Further analyses were run after getting reliabilities of the subscales of these constructs which ranged from .69 to .82.

Table 1

Descriptive Statistics of Distributed leadership, Psychological Empowerment, and Learning Culture (n=613)

Factors	Min	Max	Mean	S. D.
Distributed Leadership				
Shared Responsibilities	3.00	15.00	12.49	1.66
Leadership Practices	7.00	20.00	16.52	2.13
Decision-making	9.00	20.00	16.87	1.73
Professional Development	6.00	15.00	12.76	1.45
Psychological Empowerment				
Meaning	5.00	15.00	13.13	1.26
Competence	9.00	15.00	12.96	1.13
Self Determination	9.00	15.00	13.02	1.01
Impact	9.00	20.00	17.07	1.39
Dimensions of Learning Culture				
Continuous Learning (CL)	21.00	49.00	40.85	4.62
Dialogue & Inquiry (DI)	16.00	42.00	35.60	3.67
Team Learning (TL)	16.00	42.00	35.03	3.97
Embedded Systems (ES)	17.00	42.00	35.24	3.80
Empowerment (E)	17.00	42.00	35.16	3.83
System Connections (SC)	16.00	42.00	34.54	4.12
Leadership (L)	18.00	42.00	34.80	3.82

Table 1 presents the descriptive statistics of the data. Of the four dimensions of distributed leadership, the decision-making dimension ranked highest (M. =16.87, S.D. =1.73), followed by leadership practices (M. =16.52, S.D. =2.13). Of the four dimensions of psychological empowerment, impact had the highest mean (M. =17.07, S.D. =1.39), which shows that teachers believed that they have impact on what occurs in their schools

and that they have an impact on the activities surrounding them. The Meaning dimension ranked second (M. =13.13, S.D. =1.26), this result could indicate that teachers in schools felt proud of and happy with their work and believed that their work environment enabled them to perform their jobs in meaningful ways. Of the seven dimensions of Learning organization culture (DLOQ), Continuous Learning had the highest mean (M. =40.85, S.D. =4.62). The Dialogue Inquiry dimension ranked second (M. =35.60, S.D. =3.67).

Correlations among the dimensions of distributed leadership were calculated using Pearson' r values. Significant moderate positive relationships were found between all dimensions of the distributed leadership construct, ranging from highest (r=.40) between professional development and shared responsibilities (.40), and lowest between decision making and professional development (r=.30). For psychological empowerment, *meaning, competence, self-determination, and impact* were significantly correlated. *Self-determination* showed highest significant relationship with *impact* (.57), followed by the relationship between *competence* and *impact* (.44). The lowest correlation was found between *meaning* and *impact* factors. All scales of DLOQ including Continuous learning, Dialogue Inquiry, Team learning, Embedded System, Empowerment, System Connections, Leadership were significantly correlated. The highest correlation was found between embedded systems and system connection (.75), followed by the relationship between *empowerment* and *leadership* (.67). Continuous learning and team learning showed lowest positive significant relationship (.38).

Further, the researchers were interested in measuring the relationships between the three major variables of the study i.e. distributed leadership, psychological empowerment, and learning culture. The results are given in Table 2.

Table 2

Pearson correlation analysis (N=613).

	CL	DI	TL	ES	E	SC	L
<i>Distributed Leadership Factors</i>							
Shared Responsibility	.25*	.27*	.45*	.31*	.51*	.44*	.37*
Leadership practices	.44*	.51*	.36*	.44*	.40*	.45*	.31*
Decision making	.41*	.57*	.24*	.48*	.39*	.41*	.34*
Professional Development	.35*	.31*	.27*	.25*	.45*	.21*	.32*
<i>Psychological Empowerment Factors</i>							
Meaning	.20*	.13*	.15*	.16*	.33*	.15*	.22*
Competence	.17*	.14*	.14*	.19*	.22*	.21*	.23*
Self determination	.13*	.21*	.18*	.16*	.14*	.15*	.18*
Impact	.15*	.29*	.30*	.37*	.23*	.24*	.17*

* P<0.05(2-tailed)

Table 2 describes the correlation analysis of Dimensions of learning organization culture to distributed leadership. Table 2 shows that all dimensions of distributed leadership significantly correlated with the dimensions of learning organization. The highest correlation was found between decision making (factor of DL) and embedded learning (dimension of DLOQ) as $r=.48$, followed by the relationship between shared responsibility (factor of DL) and team learning (dimension of DLOQ) as $r=.45$. Impact (factor of PE) and team learning (dimension of DLOQ) showed significant positive but weak correlation ($r=.30$); other factors of PE showed even weaker but significant positive relationships with all the dimensions of DLOQ.

Table 3

Factor-wise regression analysis of distributed leadership to predict learning culture

<i>Distributed Leadership Factors</i>	Parameter Estimate (b)	Standardized Estimate (Beta)	t	Sig.
Shared Responsibilities	2.37	.18	6.79	.000*
Leadership Practices	1.94	.19	6.99	.000*
Decision Making	2.83	.22	8.58	.000*
Professional development	1.27	.08	3.10	.002*

* $P<.001$

Table 3 shows that each dimension of distributed leadership significantly predicted learning culture of schools. Shared responsibilities significantly predicted learning culture as $F(1,611)=178.99$, $p=.000$ with 23% of variance, Leadership practices as $F(1,611)=246.612$, $p=.000$ with 29 of variance, Decision making as $F(1,611)=225.533$, $p=.000$ with 27% of variance, and, Professional development as $F(1,611)=138.85$, $p=.000$, with 16% of variance in learning culture of schools. In overall, distributed leadership significantly predicted 51% of variance in school learning culture, $F(4,608)=157.116$, $p=.000$.

Table 4

Regression analysis of psychological empowerment to predict learning culture

<i>Psychological Empowerment Factors</i>	Parameter Estimate (b)	Standardized Estimate (Beta)	t	Sig.
Meaning	1.23	.07	2.72	.007*
Competence	-.09	-.04	-1.71	.088
Self determination	-1.42	-.06	-2.27	.023*
Impact	2.70	.17	5.85	.000*

* $P<.001$

Table 4 shows that 3 of 4 dimensions of psychological empowerment significantly predicted learning culture of schools. The meaning factor explained 6% of variance as Shared $F(1,611) = 39.210, p = .000$; self-determination explained 3% of variance as $F(1,611) = 19.692, p = .023$, and impact explained 7% of variance in learning culture of schools, $F(1,611) = 46.529, p = .000$. In overall, psychological empowerment significantly predicted 11% of variance in learning culture of school, $F(4,608) = 18.897, p = .000$.

Table 5

Multiple Regression Analysis Model to Predict Learning Organization Culture

Factors	Parameter Estimate (b)	Standardized Estimate (Beta)	t	p
Distributed leadership	2.30	.77	31.06	.000*
Psychological empowerment	.55	.90	3.60	.000*

* $P < .001$

The overall model in Table 5 shows that distributed leadership and psychological empowerment significantly predicted learning culture of schools, $R = .80, F(2,610) = 572.75, p = .000$. The r^2 value showed that 65% of observed variance of learning organization culture could be predicted through distributed leadership and psychological empowerment. The results indicated that distributed leadership and psychological empowerment had significant impact on dimensions of learning organization culture. In overall, the results of the study provided evidence that the objectives of the study were achieved.

Results and Discussion

The study investigates Impact of distributed leadership (DLQ) and psychological empowerment (PEQ) on learning organization culture (DLOQ). The study found:

Finding 1

Dimensions of Distributed leadership (School culture, Shared responsibility, Leadership practices, Decision making and Professional development) significantly impacted school learning culture. The results support the findings of the study of Gordon (2005 and Obadara (2013). Another comparison of this study can be made with the study of Jacobs (2010) who found moderate, positive relationship between distributed leadership and the affective assurance of educators. Teachers showed a greater commitment to their schools then leadership was shared among all stakeholders, especially teachers ($r = .043$ to $0.52, p < .001$). Leithwood (2006) determined that a principal who actually distributes leadership roles among teachers engages them in establishing professional development activities, redesigning the school, and affecting school culture. Harris (2008) stated that leaders increase interactions with their

colleagues and focus on building teams. The findings of this study also conform the results of the study conducted by Woods, Harris (2004) who stated that teams and networking help increase collaboration among the employees and the leader.

Finding 2

Dimensions of Psychological empowerment (Meaning, Competence, Self-determination and Impact) significantly impact learning organization culture. These results are consistent with prior findings of Joo and Shim (2010) and Sylviz et al. (2012). The results of the current study are reliable with the previous research which shows that Dimensions of psychological empowerment shows significant positive relationship with learning organization culture. The results of our study are also compatible with the results of another study conducted by Safari, Haghghi, Rastegar, and Jamshidi (2011) who found that the factors of psychological empowerment such as self-efficacy, self-determination, impact and meaningfulness had the most power to predict the organizational learning respectively. These findings provide evidences that organizational learning can be enhanced by psychological empowerment.

Finding 3

Regression analysis shows that factors of distributed leadership and psychological empowerment significantly impacted learning culture of schools. Majority of the factors of Distributed Leadership and Psychological Empowerment (7 out of 8) significantly impacted learning culture of schools. The R² value of .67% of observed variance showed that dimensions of learning organization culture could be explained through distributed leadership and psychological empowerment. Competence and self-determination did not significantly contribute to dimensions of learning organization culture.

The results are consistent with previous of Kraimer, Seibert, & Liden (1999) who found that only self-determination and impact has positive relationship with organizational learning culture. On the other hand, impact of type of work (management and non-management) in relationship between psychological empowerment as well as organizational commitment has been measured by Cunningham, Hyman, and Baldry (1996). The findings of the study revealed that, psychological empowerment among the management staff has increased their commitment towards organization. Ghaffari, Saki, and Savari (2014) and Baek-Kyoo and Shim (2010) found similar results in Iran and Korea.

Recommendations

- The study found distributed leadership impacted learning culture of high schools. Given that, the researchers recommend that head teachers should distribute their leadership roles and involve teachers in their decision making; it will empower

their teachers who might impact learning culture of the schools as well as student achievement positively.

- The study also found that psychological empowerment impacted learning culture. Based on this finding, the researchers recommend that teachers as well as the head teachers should be made aware of the psychological empowerment construct and its factors. By empowering teachers might contribute to improve learning culture.
- Further studies might be conducted to compare psychological empowerment and distributed leadership practices in male and female, rural and urban schools to more precise picture of their practices.

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