Role of Distributed Leadership and Readiness to Change Dimensions in Public and Private Schools Regarding Commitment to Change

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Abstract

Virtually every sector is affected with the breeze of change and globalization, education sector is not an omission. This study aims to analyze the relationship between distributed leadership and teachers' normative, and continuance commitment to change with meditating role of emotional, intentional, and cognitive readiness to change. Data were collected from 308 public and private schools of Punjab, Pakistan through cluster sampling technique, and subsequently the data were analyzed by using SPSS and AMOS. Findings revealed that there is significant relationship between distributed leadership and normative commitment to change while, insignificant between distributed leadership and continuance commitment to change. However, there is partially significant relationshop between distributed leadership and normative, and continuance commitment to change with mediation of intentional, emotional, and cognitive readiness for change. This study is novel for the reason such relationship has barely studied prior especially in the countries like Pakistan. Study contains limitations, implications, and future guidelines.

Keywords: Distributed leadership, normative commitment to change, continuance commitment to change, intentional readiness for change, emotional readiness for change, cognitive readiness for change, education sector, distributed leadership theory.

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Introduction

Change is critical to create new opportunities, development and competitiveness in the today's era for an organization to sustain. It is one of the criterions to sustain and grow, but the most important thing is the organizational ability to adapt market trends. Similarly, education system and policies need to be improved to meet the global challenges. It is the aim of every country to pursue higher quality of education. Since, economies became global, a number of countries are striving to improve their education standards to gain competitiveness, especially the Asia's dynamic economy (Sales, Moliner, & Francisco Amat, 2017; Thien, 2019). In this regard, the change and improvement in education depends on teachers' perception and behavior. School personnel especially the teachers are the change implementers. It has been widely acknowledged that talented and skilled teachers provide a better foundation for driving vision, core objectives and change, and ultimately improving schools (NPBEA, 2015). Concerning this a successful change implementation is pushed by the leadership which impacts the teacher's commitment to change. Preceding studies (Torres, 2019; Woods, Jeffrey, Troman, & Boyle, 2019) provide evidence that transformational leadership can increase teachers' involvement in the school change process to improve education standards and also affect their commitment positively. Distributed leadership is an approach refers to the decentralized decision making and leadership team cooperation. Prior studies (Liu & Werblow, 2019; Sánchez, de Haro-Rodríguez, & Martínez, 2019) proved a significant relationship among the perceived distributed leadership, level of participation and organizational commitment. It is based on a concept to share responsibilities, because the single leader or principal cannot manage the school efficiently.

Numerous studies provide support to this rational by proving the shift of single leadership to shared leadership (Bush & Ng, 2019). Distributed leadership influences the employee's readiness for change. A leader prepares his followers mentally and emotionally, for the change process and thus reduces the resistance for the change. Previous studies proved that the basic requirement to bring change is employee readiness which are their believes, attitudes, and intentions towards change. Employee's beliefs, attitudes, perception and intentions have strong interrelation with change and performance (Farahnak, Ehrhart, Torres, & Aarons, 2019; Qureshi, Waseem, Qureshi, & Afshan, 2018; Vaishnavi, Suresh, & Dutta, 2019). Readiness is essential to reduce resistance and increase employee engagement in change process (Matthysen & Harris, 2018).

It is evident that in every country, nearly all organizations are highly concerned with employees' ability to change, for the reason that ability to alter or make them able to adapt innovations, new ideas and new curriculum. The education sector in Pakistan faces deficiency of teachers' commitment which is one of the basic cause of students' poor

academic performance. The National Education Policy draft Pakistan, (2017-2025) has indicated that the quality of education is not adequate. Barely 40% students have competency in mathematics and science. It further stated the reasons which includes the lack of teacher's commitment and competency, lack of coordination among management, low quality books and overloaded curriculum. Moreover, in 2019 the Government of Punjab has introduced School Information System (SIS Punjab) and Human Resource Management System (HRMS) in collaboration with Punjab Information Technology Board, which is used by public schools to self-report data in real-time (Rehman, 2019; Taj, 2019). This change was not acceptable for a huge number of teachers as they were used to of the customary paper-pencil school system, and incompetency. Not only Pakistan but other underdeveloped and developing countries are going through the same problem of insufficient teachers' commitment, who relatively have same classroom environment and curriculum. If the commitment towards change is not improved, the level or quality of education will keep on declining, and our students will not have the potential and desired capabilities to compete in the global market. Although, there is a plethora of studies on continuance and normative commitment for alteration, but very rare studies have been done in educational sector. There is perhaps no study which has analyzed the effect of distributed governance functions on prescriptive and continuance dedication towards change especially in the countries like Pakistan. No one studied the relation between distributed leadership functions and normative and continuance commitment towards alteration alongside mediation of capacity of cognitive, intentional and emotional readiness for changing.

The importance of teachers' commitment and role of leadership is being ignored in Pakistan, which is one of the core elements to bring and implement change activities affectively, and to develop a creative and cooperative environment in schools. Objective of study is to highlight the importance and effects of distributed leadership as well as the significance of teachers' commitment so that the higher authority may bring changes in educational structure accordingly.

Aims of research

Major aims of research are:

1. To investigate direct effects of distributed leadership, on teacher's continuance and normative commitment to change in the education sector of Pakistan.
2. To analyze the indirect relation with mediation of readiness for change, between distributed leadership and normative commitment towards change, in the education sector of Pakistan.
3. To check the relationship between distributed leadership and normative commitment towards change, with mediating role of readiness for change, in Pakistan's education sector.

Prior studies (Holloway, Nielsen, & Saltmarsh, 2018) have demonstrated that distributed leadership is advantageous to increase the commitment to change and is affiliated positively with school performance altogether, even US initiated different leadership programs and provided incentives to encourage employees' participation. The Ministry of Education has emphasized to move from administrative leadership to distributed leadership (Bush & Ng, 2019). Policymakers now have better understanding that readiness and commitment of teachers are the core grounds to improve educational structure and quality. To achieve the research objectives, the proceeding parts of this paper also contains the critical literature review which includes the relational literature between distributed leadership and normative and continuance obligation to alter, with mediation of cognitive, intentional and emotional willingness to change. Furthermore, research methodology has also been given in which population sampling and data collection details are given along with analysis section, results and the conclusion section.

Literature review

Distributed leadership theory

Distributed leadership theory is a framework of research by which understanding of leadership practices develops in an organization, including the activities in form of conventional, unconventional, organized and arising activities (Leithwood, Harris, & Hopkins, 2019; Torres, 2019). Distributed practice defines it as coordination between people and the main situation or problem to which they are facing. Distributed leadership is the center of interaction among staff members. (Huggins, Klar, Hammonds, & Buskey, 2016; Hussain et al., 2018) defined distributed leadership as social interaction, which acts as key management operations. Linking it with social interaction, distributed leadership is known as team leadership, shared leadership, and democratic leadership. In education context, some use distributed leadership to designate that school leadership by having multiple leaders. Some argues that distributed leadership is attributed to organizational efficiency not to individuals.

Distributed leadership and normative commitment to change

Distributed leadership is analytical approach for understanding how the leadership works with different minds of people in a complex organization. Distributed leadership is not just sharing of tasks but in fact it is an approach that is shared with all staff members who are efficiently engaged and affect the culture, philosophy and direction (Price Waterhouse Cooper: 2017). Leaders prepare their employees with their full interest for any advancement of change. Commitment to change is explained as such a state in which employees are given awareness about change, possessed expertise those are compulsory for execution of that change, and are motivated for that change by giving suitable rewards

(Costello & Lawler, 2015). Herskovits and Meyer conceptualized (2016) three components of the commitment for change: "(a) affective commitment to change (b) normative commitment to change (c) continuance commitment to change."

Normative commitment for alteration develops when an individual faces some experiences and feels need to response those experiences. Normative willingness for change creates a feeling of commitment to be encouraged (Herscovitch and Meyer, 2016). The workers with strong normative commitment feel that they should stay with organization (Meyer & Allen, 2015). The past studies proposed that teachers operating with distributed leader are more accomplished to their schools and illustrate less pulling out behavior (Bono & Judge, 2015; Bush, Weber & tony, 2016; Lawler, 2016; Wang, Lawler & Shi, 2016). The school leaders have direct relation with school's stakeholders, valuing unique perspectives and providing opportunities for all the partners to show their views (Shapiro, 2002; 2003). However, it is criticized that in Pakistani education sector, relation among distributed leadership and normative commitment to change is never explained before in previous studies. Through this point, it is anticipated that greater level of distributed leadership can impact normative willingness to alter significantly. So, it can be proposed that:

Hypothesis 1 (H1): Distributed leadership has a significant relationship with normative commitment to change.

Distributed leadership and continuance commitment to change

Continuance commitment for change is realization of cost linked with quitting the organizations (Meyer & Allen, 2015). Persons who have strong continuance commitment stay with their organizations because they think that cost of leaving organization is high (Meyer & Allen, 2015). Distributed leader can motivate and enhance employees' inspiration and commitment with organization and also understand their needs at individual level (Lawler, 2017). In schools' distributed leaders make safe learning environment where teachers are motivated and encouraged to take risks in their decisions (Shapiro, 2013). But it is criticized that past researchers did not study about the positive relation between distributed relationship and continuance commitment for alteration. So, about now, it is imposed that distributed leadership at a significant level can impact continuance commitment to change in an effective manner, so this study can propose that:

Hypothesis 2 (H2): Distributed leadership significantly impacts continuance commitment to change.

Mediating role of intentional readiness for change

Haffar (2015) explained change readiness as a point when an employee is ready physically, with full intentions and willing for accepting the change. Employees with high readiness for change will contribute and motivate the organizational promotional activities (Haffar, 2015). Employees know about norms and importance of change (Herscovitych& Meyer, 2016), and they realize that adapting change is compulsory (Choi, 2018). Conner (2015) developed the organizational change readiness scale as diagnostic tool that uses to indicate overall level of acceptance of organizational change. Bush, De, and van den Bass (2016) conceptualize readiness for change in three aspects: "(a) intentional readiness for change (b) cognitive readiness for change (c) emotional readiness for change."

According to Piderit (2018) in intentional readiness for change, intention is a desire to act in certain way toward an object or event. According to distributed leadership theory, intentional readiness for change is that people are agreeing for trying their best into any difficult task and relevant to Normative commitment to alter this manner that it is based on the concept of Aristotle ideas of good naming will have a good faith. According to past researches, employees have belief about commitment of that change that by doing so it will also a part of company's contract (S.Jaros, 2015). Yet, it is criticized that in education sector, the past researchers did not work on the relationship of distributed leadership and normative commitment for alteration with mediation of intentional readiness for alteration.

Hypothesis 3: Intentional readiness for change mediates between distributed leadership and normative commitment for change.

Continuance commitment to change is concerned with employee's impressions about stopping change they should not do such and in fact they should stay in contact with organization (Herscovitch & Meyer 2015). Commitment for continuance change is also a form of facing danger in which employees are afraid to do so because if they unable to pursuit then it will be loss for their co-workers and for themselves as well (S.Jaros. 2015). The literature said that distributed leaders help their followers by motivating them, preparing them for adapting the whole change process and involving them in process of decision-making processes and analyzing the employee's interests for development of their potential (Aurora, 2014; Bass, 2016). Distributed leaders have tactics of developing employee's interest at a separate level for the purpose of accomplishment of organizational goals (Shamir & Zakay, 2018). However, it is criticized that association of distributed leadership and continuance commitment to alter with mediating role of intentional readiness.

Hypothesis 4: Intentional readiness for change has mediation between distributed leadership and continuance commitment to change.

Mediating role of emotional readiness for change

In emotional readiness for change, affections are emotional responses towards any object or event. In cognitive readiness for change, cognition is basically responses of assumptions towards any event. This is actually beliefs of people towards any type of change (Conger & Karongu, 2016). Emotional readiness for change is playing a mediating role with normative commitment to change. The past studies said that leaders in their roles are much relaxed about developing or changing employee's beliefs and thoughts towards change (Shore, 2017). According to distributed leadership theory, the leader has to build sense of individuals by keeping their emotions and attitudes towards change is positive (Rafferty et al., 2013). Nevertheless, it is critiquing that relation between distributed leadership and normative willingness to change with mediation of emotional readiness had indirectly studied in past studies.

Hypothesis 5: Emotional readiness for change is mediating relationship between distributed leadership and normative commitment to change.

Emotional readiness for change has rooted from the concept of Thorndike thoughts of social interactions. There is evidence from literature of leadership and change management which is identifying the impact of change (Thorndike, 2015). When readiness for change occurs then organizations primary attention is on motivating that change and decreasing the hurdles. If members in organizations are not satisfied with change then organizations have to suffer loss in the form of obstruction. The theory on organizational change focuses the impact of leadership on readiness for change (Aurora & Bernardo, 1999). The past studies said that distributed leaders understand employee's feelings more nicely and can deliver their views more efficiently to them that in what way they can develop better relations with organization (Gardner & Shore, 2016). But it is highly criticized that relation between distributed leadership and continuance commitment to change with mediator of emotional readiness has insignificantly studied in past studies.

Hypothesis 6: Emotional readiness for change has mediating role between distributed leadership and continuance commitment to change.

Mediating role of Cognitive readiness for change

Cognitive readiness is defined as preparing employees mentally like by knowledge, abilities and behavior so that person can behave well and in an efficient manner in any complex organization (Morrison, 2016). Distributed leadership and cognitive readiness for change are interlinked through a strong bond. Distributed leaders have key intentions on employee's involvement in their work. Some are effective leaders who have abilities of delivering their knowledge to their employees efficiently. Some are passive leaders who cannot deliver the accurate knowledge to their subordinates and so that they cannot prepare

them for future. The past research said that distributed leader urges employees on more indulgent in their work with more passion and immersing simulations towards their work (Fletcher, 2018). Yet, there is great criticism that distributed leader's relation with normative commitment with mediator of cognitive readiness is generalized study due to limited sample size.

Hypothesis 7: Cognitive readiness for change is a mediator between distributed leadership and normative commitment to change.

In continuance commitment to change, employees are motivated for change by giving them various types of incentives so that they remain loyal to their organization. In distributed leadership theory, distributed leaders have abilities to transforming their employee's wrong belief in an effective and meaningful point (Shore, 2016). The lower and higher level of an employee's satisfaction depends upon the training of distributed leader. Organizations are always very choosy about employees because they are the developers of their key strategic objectives. The past studies said that distributed leaders recognize the employee's attitudes towards change in an effective manner because of their interactions with their employees (Stanley, 2015). Yet, it is critiquing that relation between distributed leadership and continuance commitment with mediating effect of cognitive readiness to change has indirectly studied in past research.

Hypothesis 8: Cognitive readiness for change has mediation between continuance commitment to change and distributed leadership.

Figure 1 below is presenting the impacts of distributed leadership on normative commitment to change and continuance commitment to change, moreover, the figure shows the impacts of distributed leadership on international readiness for change, emotional readiness for change and cognitive readiness for change. Moreover, mediation of international readiness for change, emotional readiness for change and cognitive readiness for change has also been shown in the figure above.
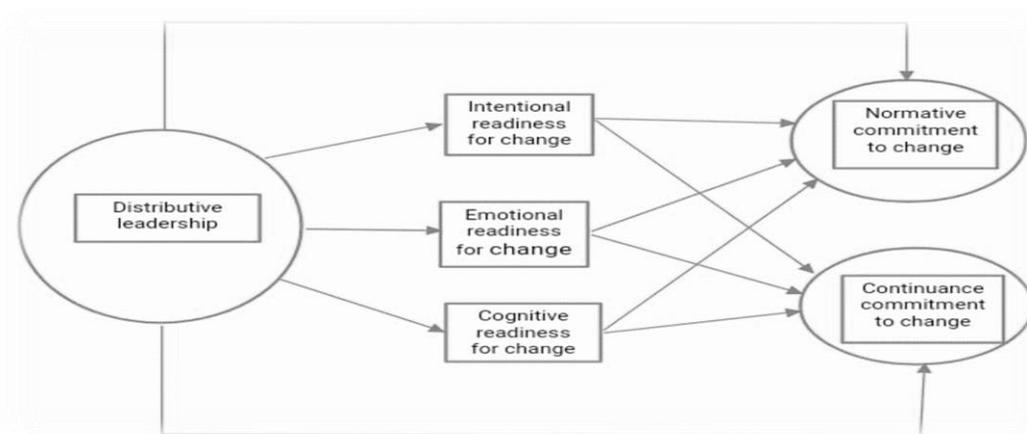
Figure 1. Conceptual model

Research methodology

Population and sample

In this quantitative study, cross-sectional method and survey method is applied. In this research our population consists of teachers of Pakistan public and private schools. In Pakistan, our targeted area was public and private schools of Punjab. This research involves cluster sampling for data collection. Teachers who have experience of 5 years and less than 5 years considered as early career teachers and those who have experience of more than five years were evaluated as mid-career teachers.

Data collection

The data was collected from both senior and junior teachers. The targeted province was Punjab from where sample data was collected. Total 308 schools were opted out of all of the cities. The mean of teachers chosen from every school was calculated by design effect. The design effect is an arrangement of all results of survey sample size because of sampling technique. By this the total number of 3080 teachers were selected from 308 schools.

Table 1

Sampling Frame Details

Institution name	Number of Respondents
Allied School	513
Government High School	370
Pakistan International Public School	456
Dar e Arqam School	505
The City School	378
The Educators School	489

After getting permission from "Punjab Ministry of Education and State Education Department", the structured questionnaire was given to the respondents personally. The completed questionnaires were distributed in 2711 persons. Out of 3080 persons, only 1697 were useful. Remaining 1383 were not useful and out of these 383 were totally blank. More than half of participants were of high experienced teachers.

Instrumentation & Measures

Herscovitch and Meyers' (2015) Scale has been adopted to measure normative commitment to change, consisting on six items with the help of a 5-point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). The continuance commitment to change was measured by adopting the scale used by Leithwood consisting of six items ranging from 1 (strongly disagree) to 5 (strongly agree). The distributed leadership was calculated by ten items and it was introduced to assess role of leaders at individual level and rating of items were drawn by "5-point Likert scale", initiating at 0 that is equal towards strongly disagree and 4 which is equal to strongly agree. This research applied Bouckennoghes' scale for measuring teacher's intentional, emotional and cognitive readiness to change. For this purpose, nine items were rated by 5-point Likert-type scale ranging from 1(strongly agree) to 5 (strongly disagree). In total, complete questionnaire was consisted of 31 items for measurement of these six variables.

For measuring emotional readiness to change, the six original items were developed, for "instructional changes", as learning and teaching expertise in 21st century in Pakistani schools. For example, the sample item like ''I experience the change as a positive process''. This was revised in this way ''I experience change as a constructive process for escalating students' competencies'' and '' I have a good feeling about the change'' was amended as '' I have good affection about bringing the development in schools''. Items were amended and upgraded based on the comments from the researchers. A small-scale test was made for checking wording, formatting, and grammar skills with five primary school teachers. Then these five teachers were eliminated in the main studies.

Data Analysis

The data was analyzed by using SPSS and AMOS. In SPSS this study has drawn the results from descriptive statistics, reliability analysis, while on AMOS this study has drawn confirmatory factor analysis, model fitness and Structural Equational Modeling. AMOS was (Cieciuch & Davidov, 2016; Massara, Hakim, Wicaksono, & Basri, 2018) picked because it is a casual modeling software to draw models graphically via simple drawing tools. It's pretty easy to judge reliability of the data through the path drawn in SEM model. Moreover, it provides better results, give well understanding of the proposed model, and handle model complexity (Tóth et al., 2015). Significance level, p=0.05 was selected.

Results an analysis

Common method bias

Campbell and Fiske (1959) ascribe the common method bias, they identified that the variance in relationship of variables occur due to the method already used. When we use same questionnaire for multiple studies there are chances that the common method bias or common method variance may occur (Jordan & Troth, 2019). For the purpose the CMV analysis has been done on the undertaken variables, and a notable contrast has been seen the value of R^2.

Table 2
Descriptive Statistics

	Min	Max	Mean	SD	Skewness
DL	1.00	5.00	3.4945	1.15915	-.668
IR	1.00	5.00	3.5514	1.16045	-.763
ER	1.00	5.00	3.5933	1.08886	-.825
CR	1.00	7.50	3.4135	1.14262	-.135
NC	1.00	5.00	3.5508	1.09836	-.838
CC	1.00	5.00	3.4518	1.12951	-.563

Table 2 manifests the descriptive statistics outcomes of the study. Mean value for DL=3.4945, IR=.3.5514, ER=3.5933 and soon. Mean values of all variables are approaching to 4 demonstrating that the respondents agree with the statements being asked in the questionnaire. Skewness is measured to check the normality of data. Skewness is between -1 and +1 which shows that the distribution is normal.

Table 3
Factor Loading and convergent Validity

	CC	NC	DL	IR	ER	CR	CR	AVE
CC6	.902						0.965	0.821
CC3	.897							
CC5	.896							
CC4	.883							
CC2	.860							
CC1	.809							
NC4		.846					0.944	0.738
NC3		.837						
NC5		.829						
NC6		.820						
NC2		.777						
NC1		.701						
DL3			.841				0.941	0.800

DL2	.841				
DL4	.830				
DL1	.799				
IR3		.878		0.928	0.812
IR2		.843			
IR1		.820			
ER2			.854	0.904	0.759
ER1			.803		
ER3			.797		
CR1				.763	0.812	0.683
CR2				.762		

"Table 3 shows the output of factor loading and Convergent Validity. Composite reliability (CR) and Average Variance Extracted (AVE) are indicators for convergent validity. CR for CC=0.965 and for NC=0.944 and the rest. CR values for all variables are greater than threshold value which is greater than 0.7 which means there is no cross-loadings. The AVE threshold is 0.5 or more. The table demonstrates, AVE of constructs is higher than threshold as AVE for CC= 0.821, NC=0.738 and so on which infers that convergent validity in data is highly adequate (Hair, Hult, Ringle, Sarstedt, & Thiele, 2017).

Table 4
Discriminant Validity

	NC	DL	CC	IR	ER	CR
NC	0.859					
DL	0.598	0.894				
CC	0.479	0.356	0.906			
IR	0.505	0.596	0.399	0.901		
ER	0.540	0.579	0.446	0.478	0.871	
CR	0.577	0.363	0.702	0.416	0.452	0.827

Table 4 illustrates discriminant validity. Discriminatory validity means the level to which all factors are discrete and uncorrelated with each other. To ensure discriminant validity it is a compulsion that each construct have higher square root value of AVE than the highest correlation of a construct as compared to other constructs in the tables. The outcomes in sloping portion of table is displaying that each variable is more linked with itself rather than with other variables, as NC=0.859, DL=0.894 and so on the others. Hence, the results indicate discriminant validity of the construct.

Table 5

Model Fitness and KMO

CFA Indicators	CMIN/DF	GFI	IFI	CFI	RMSEA	KMO
Threshold Value	≤ 3	≥ 0.80	≥ 0.90	≥ 0.90	≤ 0.08	0.6 – 1.0
Observed Value	2.562	0.869	0.952	0.952	0.070	0.925

"Model Fitness and Kaiser Meyer Olkin test statistics are presented in table 5. The KMO test results are used to judge the sampling adequacy of the data. The threshold range is between 0.6 and 1. As the reported value of KMO is 0.9> (0.6-1), demonstrating that the sample size was appropriate. Model fitness test indicates whether that the shape of our model is in accordance with data. The fit indexes,Goodness fit index (GFI)=0.80 ≥ (0.80), incremental fit index (IFI)=0.952 ≥ (0.90), comparetive fit index (CFI)=0.952 ≥ (0.90), Root Mean Square Error of Approximation (RMSEA)=0.925= (0.08), indicates that the data and model are consistent with each other.

The figure .1 is hypothesized model in which CC and NC has six items for each construct. While,DL, IR, ER, CR have four items for each construct, demonstrating the model fitness."
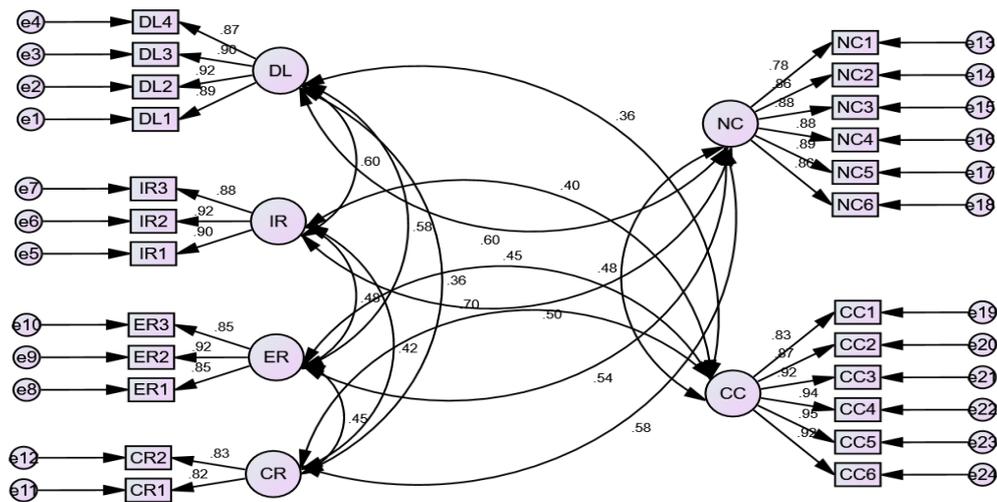

Figure 2.*MF*

Table 6
Structural Equation Modeling

Hypothesis	B-Value	SE	P-Value	Decision
DL→NC	.346	.054	.000	Accepted
DL→CC	.035	.058	.572	Rejected
DL→IR→NC	.063	.047	.010	Accepted
DL→IR→CC	.062	.047	.010	Accepted
DL→ER→NC	.081	.046	.010	Accepted
DL→ER→CC	.086	.046	.010	Accepted
DL→CR→NC	.097	.041	.010	Accepted
DL→CR→CC	.168	.041	.010	Accepted

The hypotheses were tested through structural equation modeling (Table 6, Fig. 3). First the direct association of distributed leadership and normative commitment to change was tested, this relationship was significant (β =.35, p < .0.05). thus, H1 was supported. However, there was association among distributed leadership and teachers' continuance commitment to change (β = 0.03, p < 0.05), then H2 was rejected. "Table 6 illustrates that intentional willingness to change partially mediated the relationship between distributed leadership normative commitment to change with distributed leadership dimension (β=0.56, p<0.05) and commitment dimension (β =0.11, p<0.05). Similarly, intentional readiness also weakly mediated between distributed leadership and teachers' continuance commitment to change with DL dimension (β = 0.32, p < 0.5) and CC dimension (β =0 .53, p < 0.05). hence, H3 and H4 were supported. Likewise, H5 and H6 were accepted as emotional readiness partially mediated the relationship between distributed leadership and normative commitment (β = 0.55, p < 0.05) with NC dimension (β = 0.15, p < 0.05), and between and distributed leadership continuance commitment to change (β = 0.15, p < 0.05) with CC dimension (β = 0.16, p < 0.05). Meanwhile, cognitive readiness also has partial mediating effect on relationship between distributed leadership and continuance commitment (β = 0.0.32, p = 0.05) with CC dimension (β = 0.53, p < 0.05), and between DL and teachers' normative commitment to change (β = 0.32, p < 0.05) with NC dimension 9β = 0.31, p < 0.05). Outcomes of the study imply that the mediation has partially significance effect, while direct relationship between distributed leadership and normative commitment was significant." On contrary there is insignificant relationship between distributed leadership and teachers' continuance willingness for change.
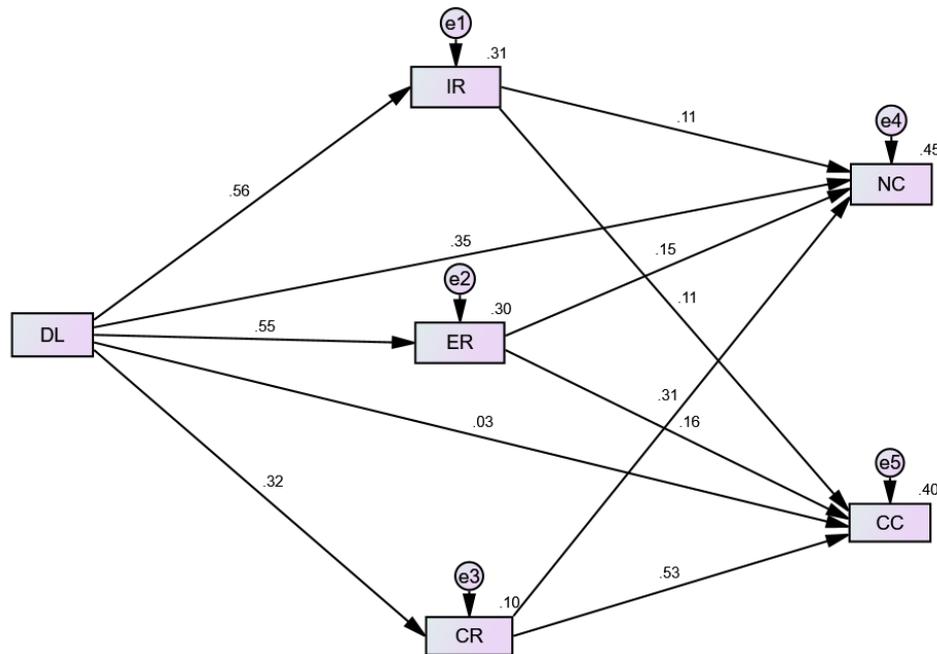
Figure 3. *SEM*

Discussion

It is unavoidable circumstances for every organization to change over the time for its survival. Concerning about education sector, competencies lie in teachers' commitment toward change. Attempt has been made in this study to examine the relationship between distributed leadership functions and the normative and continuance commitment to change also the mediating affects has been analyzed with intentional, cognitive and emotional readiness for change. The results have proved a significant relation between distributed leadership and the teachers' normative commitment to change which do not deviate from prior studies conducted in similar and other sectors (Tian, Risku, & Collin, 2016; Yousef, 2017). The focal cause behind this significant positive relation is that participative decision making and leadership team-cooperation enhances teacher's self-efficacy, trust, loyalty and performance and ultimately, they tend to be more committed with the organization (Al Halbusi, Ismail, & Omar, 2019; Astuti & Ingsih, 2019; Jain, Duggal, & Ansari, 2019; Saleem, Bhutta, Nauman, & Zahra, 2019). Moreover, the continuance commitment to change has a non-significant relation with distributed leadership. There are a number of things behind this non-significant relationship. It is observed in private as well as in public sector that around 28% newly joined teachers tend to leave their job (Grant, Jeon, & Buettner, 2019; Lee, 2019) due to multiple reasons, the foremost cause is administration issues.

On contrary, the mediating role of "intentional, emotional, and cognitive readiness"to alter has partially significant effect on normative and continuance commitment to change. Although the relationship was proved to be positive, but it was slightly significant. To opt changes or be prepare for the change process multiple things are to assured (Ajayi & Olatunji, 2019) which definitely includes the intentions of the stakeholders involved in the process. The reasons behind this low significance are also some local context issue. For example, teachers are not being provided with the appropriate training to cope with the changes in the 21 century advancements. They lack competencies to transfer the compatible and competitive skill in their pupils, and thus end up resistance to change. (Li, Monroe, Oxarart, & Ritchie, 2019; Masud & Daud, 2019; Muhammad, Masood, & Anis, 2019; Thien, 2019) other important hurdles are administration politics, single member leadership (principal) and inadequate curriculum. Meanwhile, when SIS and HRMS was introduced by Punjab Government, senior teachers and school heads were reluctant to accept this change.The core reason was school culture and corruption, because these information systems were developed for student and teachers' registration module, students' and teachers' attendance tracking, e transfer, complains and leave issues. All the mediators who used to take bribe for multiple purposes ware hence were going to remove, due to which a majority of personnel were not happy with this change.

Conclusion

The purpose of this study was to investigate relationship between distributed leadership and commitment to change with the mediating role of readiness for change. This research also supported previous studies. This study proved that there is significant direct relationship between distributed leadership and teachers' normative commitment to change. The distributed leadership theory focuses on "leader plus" side of leadership that identifies directing and managing schools by ensuring participation of concerned personnel. Moreover, cross sectional quantitative survey method and design effect were applied in the study. This study concludes the results that there is significant relationship between distributed leadership and normative commitment to change. But there is no significant relationship between continuance commitment to change and distributed leadership. This study also supported the mediating effects of intentional, cognitive and emotional readiness for change between distributed leadership and commitment to change.

Theoretical and practical implications

The results of this study will contribute in school management and leadership. Distributed leadership is a poorly discussed topic in Pakistan and many such countries aside from some studies (du Plessis & Heystek, 2019; Thien, 2019). Studies have examined the relationship of distributed leadership with professional development, affective commitment, enrollment management teachers' satisfaction, and organizational performance. However, distributed

leadership can also impact teachers' normative and continuance commitment for change. It is compulsory to study the relationship between these factors with mediation of intentional, cognitive and emotional readiness. The priority of our government has always been, the management of education and education institutions and better outcomes in form of student and teachers' performance. This study implies that school leaders should develop and support a culture of shared decisions and participative decision making in order to attain teachers' continuance and normative commitment to change. Findings of this study will be helpful for policy makers, they should pay more attention in developing and restructuring school climate, and policies to ensure teachers' commitment to their school and ultimately better performance.

Recommendations for Education sector

Based on the findings of current study, education department needs to promote a shared learning culture in schools in order to grab new opportunities and make full use of the available talent. Similarly, if teachers are properly trained it would lead to a more collegial culture. The issue of incompetent teachers should be taken seriously which is a major barrier in the way of implementing new policies and to bring about change. Where Punjab Government is introducing some digital platforms and apps like SIS and HRMS to administer the issues of teachers, most of the teachers do not even know how to use these apps. Education department itself should ensure participative decision making, while making policies which must align the teacher's expectations along with the needs of the country, rather copying international policies and curriculum which are not parallel to our culture and needs. Another fact is the culture of Pakistan's schools and the background of the teachers, which highly impact their intentions to accept any change. Results suggests that teachers' readiness and intentions can be impacted by coaching and mentoring. Moreover, Government needs to develop a proper education planning and assessment for schools, if it intends to get affective consequences of the implemented policies and procedures, and to avoid conflicts which leads to disloyalty and lack of commitment.

Limitations & future research suggestions

This study applied cross sectional survey in which data was collected only once and it is not enough to lead informal results. In addition, this research conducted only in the education sector of Pakistan; in future it can also be done in another country. These findings just focused on educational sector because of limitations of resources. In future, research can be done on any other sectors like power and manufacturing industry. Another limitation was that this study just discussed teacher's normative and continuance commitment to change, next time it can also be in form of employees normative and continuance commitment to change. Sample size can also be increased in next future research. Only quantitative method has been used in this study, mixed technique can be used. This study

just explained term distributed leadership with commitment to change. In future, the dimensions of leadership i.e. Leadership team cooperation and participative decision making, which can also be taken as independent variables separately.

The findings of this study will shed light on the importance of teachers' continuance and normative commitment to change, and how distributed leadership influence it, and will contribute in literature by improving managerial and operational exercises in educational context. It is notable that readiness is an important factor to bring about change. It will be definitely helpful for the policy makers to pay more attention on teachers' competences and a collaborative culture in schools, through which students' performance will be improved.

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