Organizational Culture and Learning Organization: An Empirical Study of the Colleges in Bhutan

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Original Research Article

ABSTRACT

Aims: The study assessed the learning organization (LO) dimensions, dominant culture, and the relationship between the organizational culture and learning organization dimensions of the colleges of Royal University of Bhutan (RUB).
Study Design: It was a correlational study.
Place and Duration of Study: The sample consisted of teaching and non-teaching staff of the colleges of RUB. The survey was conducted in Bhutan between February and April 2022.
Methodology: The study participants were 201 teaching (161) and non-teaching (40) staff of the colleges of RUB. The Organizational Culture Assessment Instrument (OCAI) was used to analyze the culture of the colleges. The Dimensions of the Learning Organization Questionnaire (DLOQ) was used to examine the LO characteristics of the colleges. IBM SPSS (Statistical Product and Service Solutions) version 21 was used for data analysis.
Results: RUB can be considered as a learning organization, as the average (4.051) of the DLOQ dimensions' ratings by the staff is higher than the DLOQ scale average. The DLOQ dimension, connect the organization to its external environment, achieved the highest score. The DLOQ dimension, foster inquiry and dialogue, achieved the lowest score. The dominant culture of the colleges of RUB is clan culture. Clan culture significantly positively predicted, and hierarchy culture significantly negatively predicted the dimensions of a learning organization – continuous learning, inquiry and dialogue, team learning, strategic leadership for learning, systems to capture learning, empower people, and connect the organization. These predictors predicted 17.86 percent to 25.72 percent of the variance in the learning organization dimensions.

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> **Conclusion:** The dominant culture of the colleges can promote or act as a barrier to the LO practices in the organization. The colleges need to shift orientation from control to collaboration to promote LO characteristics in the colleges.

1. INTRODUCTION

Organizational learning (OL) was first coined by Cyert and March [1] to describe the adaptive behavior of an organization – learning from experience. An organization that has a greater ability to continuously learn and change is a learning organization (LO). It has a culture to provide resources for individual learning, facilitate dialogue and inquiry at all levels, gather suggestions for change, stress team learning and collaboration between teams, create systems to record and share learning, empower people to create a collective vision, establish connections between the organization and its environment, scan the environment to anticipate future needs, and provide leaders and managers who facilitate learning [2]. Culture is the most important factor in influencing an organization's ability to grow [3]. The shared assumptions (vision, values, history, memory) of an organization is its culture.

Numerous studies have shown that OL has a significant impact on organizational performance [4]. The direction of the relationship is constantly positive [2]. To endure in an uncertain environment, individuals and organizations must learn continuously [5,6,2]. The culture of the organization plays a vital role in building a LO by creating an environment that supports and enables learning [7].

In Bhutan, higher education institutions (HEIs) are facing major issues like an increase of tertiary enrolment in the country without a substantial increase in financial support, promotion of high-quality research with limited financial and human resources, an increase in the number of unemployed graduates, and imparting right knowledge, skills, and attitude to the college graduates needed to build a knowledge economy [8]. To meet the above-mentioned challenges, learning at an individual level will not be sufficient. Colleges must conform to the criteria of a LO to successfully operate in an uncertain and rapidly changing environment in the knowledge age [9,10]. But colleges and universities are believed not to learn effectively and lack the attributes of a LO [11]. Education reform is imminent with the grant of the Royal Kasho on December 17, 2020 [12]. OL causes sustainable educational reform [13].

The representation of the education sector in LO studies in the East is rare [5,4]. Few empirical studies have investigated the effect of culture on organizational learning [14]. The purpose of the present study is to address this gap by focusing on the colleges of Bhutan to (1) examine their LO characteristics, (2) examine their culture, and (3) investigate the nature of the relationship between their culture and LO characteristics.

2. LITERATURE SURVEY

Universities around the world are increasingly facing new challenges – growth in globalization, reduction in funding from the state, increased usage of information technology, change in employers' demands, volatile environment, and growing competition in the labor market [9,10,2]. They need to possess the capabilities to respond effectively to the challenges in the environment. Hence, the need for universities to become LOs [15,5,4,16,17,10].

Organizational Learning (OL) is considered a central concept in organizational theory [2]. Cyert and March [1] were the first to coin the term "organizational learning" to describe the behavior of an organization adapting to a changing environment. Organizations learn from experience by exploration and exploitation [18]. Exploration is the process of generating new knowledge through research and development. Organizations exploit established technologies and markets. Scholars call the organizations that learn effectively to change and improve performance "learning organizations." Geus [19] coined the term "learning organization." OL is the process by which organizations transform into a LO [20]. LO is an organization that learns continuously to drive continuous improvement [21]. The implementation of the concept of LO does not vary based on the size, the type of activity, or the internal structure of an organization [22].

Culture is the most important factor in influencing OL [23,24,3]. The capacity of an organization to learn unceasingly depends on its culture. What organizations do is profoundly affected by their culture [2]. Culture of an organization influences OL, which in turn influences the performance [25]. Meyer [26] backs up the cultural viewpoint on OL with empirical evidence. He mentions two types of OL – resilience and retention. Resilience is the capacity to survive a crisis and return to normalcy. Retention is preserving new routines and knowledge generated by adjusting to the crisis.

There is little consensus about how culture should be defined [27]. The collectively possessed and symbolically expressed ideas members have about the nature of an organization and the work they do are referred to as organization culture [28]. The culture of an organization plays a critical role in promoting OL in a turbulent environment [7].

Abbasi and Zamani-Miandashti [15] found a positive and significant relationship between organizational culture and OL in the case of public agricultural institutes in Iran. Similarly, a study conducted by Dajani and Mohamad [29] in Egypt on the academicians of the universities found that adhocracy culture had the strongest influence in the promotion of OL. In a study of the universities in Syria, Alsabbagh et al. [14] established that adhocracy culture is the sole culture to have a significant positive influence on OL. In contrast, hierarchy culture had a negative influence on the learning of an organization. However, Yazici and Karabag [30] discovered hierarchy culture to be the dominant culture in higher education institutions in Germany. Organizational culture had a significant positive relationship with OL. The participation of managers, lecturers, and researchers in the decision-making process was found to have a significant positive effect on the learning and performance of a public university in Vietnam [31]. Academic and non-academic staff from a collectivist culture are more likely to be committed to the process of changing to a LO than those from an individualist culture [5]. Different cultures of an organization influence OL in different ways [32].

Learning initiatives can help organizations perform better. Various aspects of a learning culture (empowering people with a collective vision, collaboration and team learning, and promotion of inquiry and dialogue) are by themselves not strong enough to impact performance. All of the learning efforts in organizations are mediated by leaders and managers who provide strategic leadership for learning. It is the most important variable in influencing the performance of organizations [33].

Higher education institutions are centers of teaching and research. They facilitate learning of individuals and groups and contribute to the advancement of the society in any country. They operate in a constantly changing environment. Learning is considered as the only sustainable competitive advantage [19]. The institutions need to transform to learning organizations to successfully respond to the challenges in the environment [15,5]. The education institutions of the East are underrepresented in LO empirical studies [5]. Moreover, the relationship between culture and learning in the colleges needs to be examined.

2.1 Research Questions

1. What are the staff perceptions of their colleges as learning organizations?
2. What is the dominant culture of the colleges in Bhutan?
3. What is the relationship between the culture and the LO dimensions of the colleges of RUB?

3. METHODOLOGY

A quantitative research methodology was employed to determine the relationship between organizational culture and LO dimensions of the colleges in Bhutan. Quantitative research uses empirical evaluations involving numerical measurement and analysis to address research objectives [34]. In quantitative research, correlational designs are techniques to measure the degree of association between two or more variables using the statistical method of correlational analysis [35].

To collect data from the staff regarding their opinions about the culture and the LO dimensions in their colleges, a cross-sectional survey design was employed. Researchers used a cross-sectional survey design to collect data at one point in time to describe the opinions of a population. Questionnaires were used to collect data from the staff of the colleges as it is a quick, economical, and effective form of data collection [35].

For the present study, the definition of the LO by Marsick and Watkins has been adopted. It is one of the most widely used models in research [36]. It is a complete model of OL encompassing the individuals, teams, organization, and its environment [37]. The seven dimensions of the model, as mentioned in Table 1, are the action imperatives to transform an organization into a LO. These actions occur at four different levels – individual, team, organization and society [38].

The Organizational Culture Assessment Instrument (OCAI) was used to diagnose the dominant culture of the colleges. It is based on a theoretical model - the competing values framework (CVF). The CVF, one of the most influential and widely used models in the field of organizational culture studies, has two dimensions [40]. One dimension distinguishes criteria for organizational effectiveness of flexibility, discretion, and dynamism from stability, order, and control. The other dimension distinguishes criteria for organizational effectiveness of internal orientation, integration, and unity from external orientation, differentiation, and rivalry [41]. These two dimensions form four quadrants as shown in Fig.

2. Clan, adhocracy, market, and hierarchy are the labels given to each quadrant to highlight its most important features. Each quadrant represents a culture type.

A workplace with a hierarchy culture is governed by formal rules and policies. The considerations of the organization are stability, predictability, and efficiency. Such a culture is expected to hamper OL activities as members will be reluctant to share and adopt new knowledge [42]. An organization with a market culture functions as a market itself. Competitiveness and performance are the core ideals of such an organization. It is oriented towards results and values the significance of obtaining, operationalizing, creating, and circulating knowledge [43]. A family-type organization with a friendly work environment has a clan culture. It emphasizes teamwork, participation, and agreement. A collaborative culture encourages the growth of OL [25]. A dynamic, entrepreneurial, and innovative workplace has an adhocracy culture. OL activities are higher in such an organization, according to many empirical studies [44].
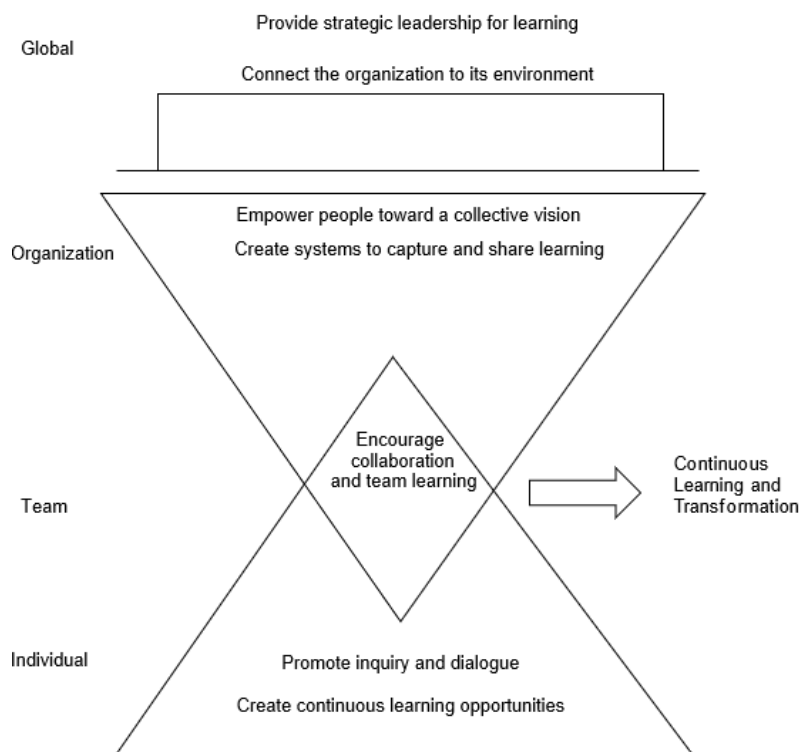

Fig. 1. Watkins and Marsick's model of learning organization
Source: From [39]

Table 1. Definitions of constructs for the dimensions of the learning organization questionnaire

| Dimension	Definition
1. Create continuous learning opportunities (Individual Level)	Learning is designed into work so that people can learn on the job; opportunities are provided for ongoing education and growth.
2. Promote inquiry and dialogue (Individual Level)	People gain productive reasoning skills to express their views and the capacity to listen and inquire into the views of others; the culture is changed to support questioning, feedback, and experimentation.
3. Encourage collaboration and team learning (Team or group level)	Work is designed to use groups to access different modes of thinking; groups are expected to learn together and work together; collaboration is valued by the culture and rewarded.
4. Create systems to capture and share learning (Organization level)	Both high- and low-technology systems to share learning are created and integrated with work; access is provided; systems are maintained.
5. Empower people toward a collective vision (Organization level)	People are involved in setting, owning, and implementing a joint vision; responsibility is distributed close to decision making so that people are motivated to learn toward what they are held accountable to do.
6. Connect the organization to its environment (Organization level)	People are helped to see the effect of their work on the entire enterprise; people scan the environment and use the information to adjust work practices; the organization is linked to its communities.
7. Provide strategic leadership for learning (Organization level)	Leaders model, champion, and support learning; leadership uses learning strategically for business results.

Source: From [33]
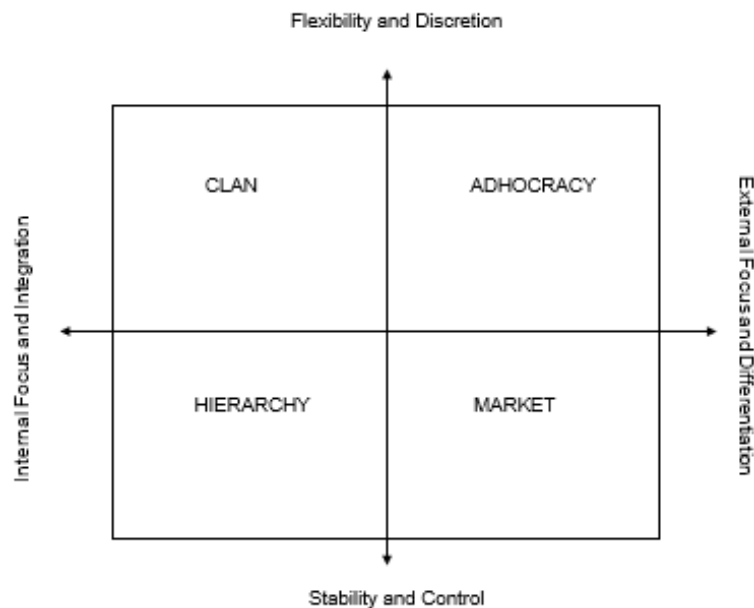
Fig. 2. The competing values framework

OCAI has six aspects – dominant characteristics, organizational leadership, management of employees, organization glue, strategic emphases, and criteria of success. These six aspects were used to assess the four types of organizational culture – clan, market, hierarchy, and adhocracy.

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Different organization cultures influence LO dimensions in different ways. Thus, the following hypotheses were proposed in this study:

H1: Clan culture positively influences LO dimensions.

H2: Adhocracy culture positively influences LO dimensions.

H3: Market culture positively influences LO dimensions.

H4: Hierarchy culture negatively influences LO dimensions.

3.1 Population

The Royal University of Bhutan was established in 2003. The decentralized university manages nine constituent colleges and two affiliated colleges. The population of the study was the teaching and non-teaching staff of the colleges of RUB. The university has 543 teaching staff and 522 non-teaching staff [45]. Royal Thimphu College has 87 teaching staff and 101 non-teaching staff. Norbuling Rigter College

has 25 teaching staff and 35 non-teaching staff [46].

3.2 Sample

Data was collected from 201 staff of the various colleges in Bhutan. The response rate is 15.3%. The faculty, staff working in the library, finance, and administrative sections of the colleges were study participants. The permanent and contract staff of the colleges were included in the survey. Royal University of Bhutan has a common email address for all the staff of its affiliated colleges. The data was collected by emailing the online questionnaire developed using Google Forms to this email address and to the email addresses of the staff available on the college's websites. An opportunity sampling design [47] was employed to select the subjects of the study, due to the travel restrictions in Bhutan because of COVID-19 pandemic. The survey was conducted in Bhutan between February and April 2022. Meeting the staff in the college campus was not possible as classes were being held online. Electronic mailing was the viable communication mode. Most of the staff did not respond to the survey even after repeated e-mails.
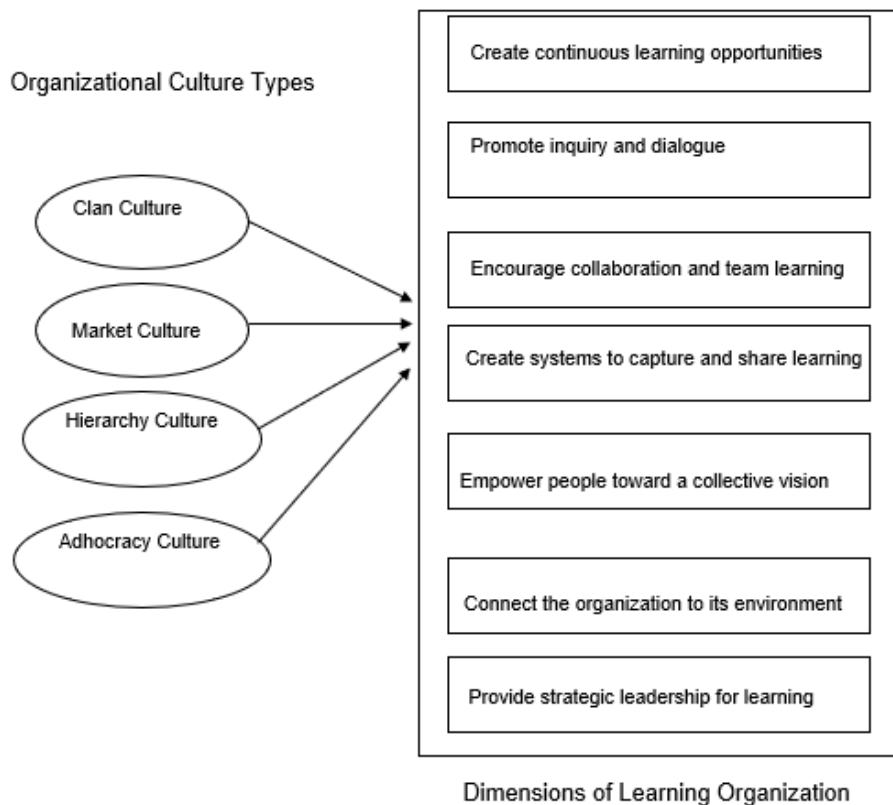

Fig. 3. The hypothesized model

3.3 Instrument

The questionnaire consisted of three sections: Demographics (college name, gender, age, education, work role, work experience), Organizational Culture Assessment Instrument (OCAI), and Dimensions of the Learning Organization Questionnaire (DLOQ).

The OCAI was used to analyze the culture of the colleges [41]. The OCAI has demonstrated reliability and validity in numerous studies across countries, cultures, and organizations [30]. It measures the degree to which clan, adhocracy, market, and hierarchy cultures are prevalent in an organization. The OCAI consists of 24 items and six dimensions. For each dimension, 100 points need to be divided among four statements – A, B, C, D, considering the current state and future desired state of the organization separately. Then, the average scores were calculated for the items marked A (clan), B (adhocracy), C (market), and D (hierarchy) separately. The highest average score determines the dominant culture of the college.

The DLOQ was used to measure the prevalence of LO characteristics of the colleges [33]. The DLOQ consists of seven dimensions. The abridged version of DLOQ consisting of 21 items was used for the study for ease of completion. It possesses reliability and validity [48]. The items were measured with a six-point Likert scale (1 = almost never and 6 = almost always). The average score was calculated for each of the seven dimensions and for all the 21 items to determine if the colleges have LO characteristics.

IBM SPSS (Statistical Product and Service Solutions) version 21 was used for data analysis.

4. RESULTS

The participants of the study were 201 teaching and non-teaching staff of the colleges of RUB. 80.1 percent and 19.9 percent of the staff belonged to the teaching and non-teaching categories respectively. The sample consisted of 61.7 percent female and 38.3 percent male staff. The survey comprised of staff from 11 colleges (in percent): GCBS (24.4), RTC (15.9), JNEC (11.4), CST (9), NRC (8.5), SCE (7.5), SC (7.5), PCE (7), CNR (5.5), GCIT (2), and CLCS (1.3). The composition of the sample (in percent), work experience-wise (in years): 0 to 4 (39.8), 10 to 19 (25.9), 5 to 9 (21.4), 20 to 29 (10), and 30 or more (2.9). Age-wise, of the surveyed staff, 46.2

percent were of 30 to 39 years, 25.6 percent were less than 30 years, 23.1 percent were between 40 and 49 years, and 5.1 percent were 50 years and more. In the sample, most (57 percent) of the staff had a master's degree, 24.5 percent had an undergraduate degree, 11 percent had a doctoral degree, and 7.5 percent were high school graduates.

Table 2. Sample characteristics

Variables	Frequency (n)	Percentage (%)
College		
GCBS	49	24.4
RTC	32	15.9
JNEC	23	11.4
CST	18	9.0
NRC	17	8.5
SCE	15	7.5
SC	15	7.5
PCE	14	7.0
CNR	11	5.5
GCIT	4	2.0
CLCS	3	1.3
Gender		
Female	124	61.7
Male	77	38.3
Role		
Teaching staff	161	80.1
Non-teaching staff	40	19.9
Experience (years)		
0-4	80	39.8
10-19	52	25.9
5-9	43	21.4
20-29	20	10.0
30 or more	6	2.9
Age (years)		
30-39	92	46.2
Less than 30	51	25.6
40-49	46	23.1
50 or more	10	5.1
Education		
Master's	114	57.0
Undergraduate	49	24.5
Doctoral	22	11.0
High school	15	7.5

Note. GCBS = Gedu College of Business Studies, RTC = Royal Thimphu College, JNEC = Jigme Namgyel Engineering College, CST = College of Science and Technology, NRC = Norbuling Rigter College, SCE = Samtse College of Education, SC = Sherubtse College, PCE = Paro College of Education, CNR = College of Natural Resources, GCIT = Gyalphozing College of Information Technology, CLCS = College of Language and Cultural Studies. Source: Survey

Table 3. DLOQ: Cronbach's alpha, means and standard deviations

DLOQ Dimensions	α	M	SD
1. Continuous Learning	0.831	4.093	0.081
2. Inquiry and Dialogue	0.810	3.856	0.082
3. Collaboration and Team Learning	0.831	3.997	0.077
4. Provide Strategic Leadership for Learning	0.887	4.156	0.086
5. Systems to Capture Learning	0.838	3.964	0.078
6. Empower People	0.822	4.019	0.081
7. Connect the Organization	0.847	4.270	0.081

Source: Survey

Table 4. One-way analysis of variance of organizational learning by levels

	Individual		Team		Organization		F	p	η^2
Dimension	M	SD	M	SD	M	SD			
Learning	3.971	1.062	4.002	1.062	4.107	1.053	0.91	0.405	0.247

Source: Survey

Table 5. Organizational Culture Types: Cronbach's alpha, means and standard deviations (N=201)

College Culture Types	α	M	SD
1. Clan Culture	0.956	41.721	25.314
2. Adhocracy Culture	0.965	37.453	25.485
3. Market Culture	0.928	36.428	24.693
4. Hierarchy Culture	0.937	40.940	24.172

4.1 Learning Organization

As shown in Table 3, the DLOQ was found to be highly reliable (α=0.970). The continuous learning subscale consisted of three items (α=0.831, M = 4.093, SD = 0.081), the inquiry and dialogue subscale consisted of three items (α=0.810, M = 3.856, SD = 0.082), collaboration and team learning subscale consisted of three items (α=0.831, M = 3.997, SD = 0.077), strategic leadership for learning subscale consisted of three items (α=0.887, M = 4.156, SD = 0.086), systems to capture learning subscale consisted of three items (α=0.838, M = 3.964, SD = 0.078), empower people subscale consisted of three items (α=0.822, M = 4.019, SD = 0.081), and connect the organization subscale consisted of three items (α=0.847, M = 4.270, SD = 0.081). The average of the DLOQ dimensions' ratings by the staff of the colleges is 4.051, which is higher than the DLOQ scale average [10]. The dimension, connect the organization to its external environment, achieved the highest score (M = 4.270). The dimension, foster inquiry and dialogue, achieved the lowest score (M = 3.856).

A one-way ANOVA was performed to compare organizational learning by levels. There was no statistically significant difference in organizational learning at individual, team and organization levels, $F(2, 593) = 0.91$, $p > .05$, $\eta^2 = 0.247$.

4.2 Organizational Culture

The OCAI was found to be highly reliable (α=0.982). The clan culture subscale consisted of six items (α=0.956). The adhocracy culture subscale consisted of six items (α=0.965). The market culture subscale consisted of six items (α=0.928). The hierarchy culture subscale consisted of six items (α=0.937). The dominant culture of the colleges of RUB is clan culture (M = 41.721, SD = 25.314).

4.3 Organizational Culture and Learning Organization

The distributions were significantly non-normal for the variables clan (W = 0.922, p = 0.000), adhocracy (W = 0.863, p = 0.000), market (W = 0.862, p = 0.000), hierarchy (W = 0.905, p = 0.000), continuous learning (W = 0.980, p =0.005), inquiry dialogue (W = 0.985, p = 0.027), team learning (W = 0.979, p = 0.004), leadership (W = 0.968, p = 0.000), systems capture learning (W = 0.984, p = 0.021), empower people (W = 0.982, p = 0.011), and connect organization (W = 0.960, p = 0.000) according to Shapiro-Wilk

tests. The Spearman's correlation coefficients between the various types of culture and the DLOQ dimensions are shown in Table 6. Continuous learning had a significant positive correlation with clan culture ($r = 0.399$, $p < 0.05$) and adhocracy culture ($r = 0.294$, $p < 0.05$). Inquiry and dialogue had a significant positive correlation with clan culture ($r = 0.419$, $p < 0.05$), adhocracy culture ($r = 0.344$, $p < 0.05$), and market culture ($r = 0.208$, $p < 0.05$). Team learning had a significant positive correlation with clan culture ($r = 0.376$, $p < 0.05$), adhocracy culture ($r = 0.311$, $p < 0.05$), and market culture ($r = 0.172$, $p < 0.05$). Strategic leadership for learning had a significant positive correlation with clan culture ($r = 0.345$, $p < 0.05$) and adhocracy culture ($r = 0.289$, $p < 0.05$). Systems to capture learning had a significant positive correlation with clan culture ($r = 0.359$, $p < 0.05$), adhocracy culture ($r = 0.276$, $p < 0.05$), and market culture ($r = 0.198$, $p < 0.05$). Connect the organization had a significant positive correlation with clan culture ($r = 0.372$, $p < 0.05$), adhocracy culture ($r = 0.335$, $p < 0.05$), and market culture ($r = 0.167$, $p < 0.05$). Empower people had a significant positive correlation with clan culture ($r = 0.309$, $p < 0.05$) and adhocracy culture ($r = 0.253$, $p < 0.05$). Hierarchy culture did not have a significant correlation with any of the DLOQ dimensions. Based on the correlation analysis, the hypothesis H1 cannot be rejected. Clan culture is significantly positively related to all the LO dimensions. Also, the hypothesis H2 cannot be rejected. Adhocracy culture is significantly positively related to all the LO dimensions. The hypothesis H3 is partially rejected. Market culture is significantly positively related to some of the LO dimensions: inquiry and dialogue, team learning, systems to capture learning, and connect the organization. The hypothesis H4 is rejected. Hierarchy culture is not significantly related to any LO dimension.

Multiple linear regression was used to test if culture types significantly predicted DLOQ dimensions. The assumptions of multiple linear regression were checked. None of the cases had undue influence on the model as none of the variables in the analyses had a Cook's distance greater than one [49]. The data has not broken the assumptions of linearity and homosce-dasticity. Market and adhocracy cultures were not included in the regression model as their variance inflation factor (VIF) values were more than 5 [50]. Clan and adhocracy cultures emphasize flexibility values, whereas hierarchy and market cultures are characterized by stability

and control [51]. The regression analysis findings are presented in Table 7.

Clan and hierarchy culture significantly predicted continuous learning. The fitted regression model was: Continuous Learning = 3.574 + 0.037*Clan - 0.024*Hierarchy. The overall regression was statistically significant ($R^2 = 0.2293$, $F(2, 197) = 30.61$, $p = 0.0000$). It was found that clan culture significantly predicted continuous learning ($\beta = 0.756$, $p = 0.000$). It was found that hierarchy culture significantly predicted continuous learning ($\beta = -0.471$, $p = 0.000$).

Clan and hierarchy culture significantly predicted inquiry and dialogue. The fitted regression model was: Inquiry and dialogue = 3.290 + 0.039*Clan - 0.025*Hierarchy. The overall regression was statistically significant ($R^2 = 0.2572$, $F(2, 198) = 35.63$, $p = 0.0000$). It was found that clan culture significantly predicted inquiry and dialogue ($\beta = 0.797$, $p = 0.000$). It was found that hierarchy culture significantly predicted inquiry and dialogue ($\beta = -0.489$, $p = 0.000$).

Clan and hierarchy culture significantly predicted team learning. The fitted regression model was: Team Learning=3.571 + 0.037*Clan - 0.026* Hierarchy. The overall regression was statistically significant ($R^2 = 0.2405$, $F(2, 196) = 32.34$, $p = 0.0000$). It was found that clan culture significantly predicted team learning ($\beta = 0.798$, $p = 0.000$). It was found that hierarchy culture significantly predicted team learning ($\beta = -0.533$, $p = 0.000$).

Clan and hierarchy culture significantly predicted strategic leadership for learning. The fitted regression model was: Strategic Leadership for Learning = 3.810 + 0.038*Clan - 0.029*Hierarchy. The overall regression was statistically significant ($R^2 = 0.1985$, $F(2, 197) = 25.65$, $p = 0.0000$). It was found that clan culture significantly predicted strategic leadership for learning ($\beta = 0.726$, $p = 0.000$). It was found that hierarchy culture significantly predicted strategic leadership for learning ($\beta = -0.526$, $p = 0.000$).

Clan and hierarchy culture significantly predicted systems to capture learning. The fitted regression model was: Systems to Capture Learning = 3.526 + 0.036*Clan - 0.024*Hierarchy. The overall regression was statistically significant ($R^2 = 0.2258$, $F(2, 195) = 29.73$, $p = 0.0000$). It was found that clan culture significantly predicted systems to capture learning ($\beta = 0.757$, $p = 0.000$). It was found that hierarchy culture significantly predicted systems to capture learning ($\beta = -0.494$, $p = 0.000$).

Table 6. Correlations of the dimensions of organizational culture and learning organization (N=194)

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) Clan	-										
(2) Adhocracy	0.779*	-									
(3) Market	0.626*	0.706*	-								
(4) Hierarchy	0.782*	0.536*	0.727*	-							
(5) Continuous Learning	0.399*	0.294*	0.131	0.047	-						
(6) Inquiry Dialogue	0.419*	0.344*	0.208*	0.048	0.777*	-					
(7) Team Learning	0.376*	0.311*	0.172*	0.036	0.798*	0.795*	-				
(8) Leadership	0.345*	0.289*	0.110	0.002	0.779*	0.780*	0.811*	-			
(9) Systems Capture Learning	0.359*	0.276*	0.198*	0.036	0.760*	0.772*	0.793*	0.806*	-		
(10) Connect Organization	0.372*	0.335*	0.167*	0.037	0.781*	0.752*	0.803*	0.862*	0.787*	-	
(11) Empower People	0.309*	0.253*	0.105	0.011	0.785*	0.733*	0.776*	0.789*	0.800*	0.815*	-

*** P<0.01, ** P<0.05, * P<0.1

Table 7. Regression analysis of culture types on learning organization dimensions

Dependent Variable	Variables	Beta	Std. error	t	Prob	Adjusted R Square
Continuous Learning	Clan	0.756	0.005	7.58	0.000	0.2293
	Hierarchy	-0.471	0.005	-4.72	0.000	
Inquiry and Dialogue	Clan	0.797	0.005	8.15	0.000	0.2572
	Hierarchy	-0.489	0.005	-5.00	0.000	
Team Learning	Clan	0.798	0.005	7.88	0.000	0.2405
	Hierarchy	-0.533	0.005	-5.26	0.000	
Strategic Leadership	Clan	0.726	0.005	7.13	0.000	0.1985
	Hierarchy	-0.526	0.006	-5.16	0.000	
Systems Capture Learning	Clan	0.757	0.005	7.55	0.000	0.2258
	Hierarchy	-0.494	0.005	-4.93	0.000	
Empower People	Clan	0.683	0.005	6.62	0.000	0.1786
	Hierarchy	-0.463	0.005	-4.50	0.000	
Connect the Organization	Clan	0.770	0.005	7.73	0.000	0.2296
	Hierarchy	-0.519	0.005	-5.21	0.000	

Clan and hierarchy culture significantly predicted empower people. The fitted regression model was: Empower People = 3.645 + 0.033*Clan - 0.024*Hierarchy. The overall regression was statistically significant (R^2 = 0.1786, F(2, 196) = 22.53, p = 0.0000). It was found that clan culture significantly predicted empower people (β = 0.683, p = 0.000). It was found that hierarchy culture significantly predicted empower people (β = -0.463, p = 0.000).

Clan and hierarchy culture significantly predicted connect the organization. The fitted regression model was: Connect the Organization = 3.836 + 0.038*Clan - 0.027*Hierarchy. The overall regression was statistically significant (R^2 = 0.2296, F(2, 198) = 30.80, p = 0.0000). It was found that clan culture significantly predicted connect the organization (β = 0.770, p = 0.000). It was found that hierarchy culture significantly predicted connect the organization (β = -0.519, p = 0.000).

5. DISCUSSION

Royal University of Bhutan (RUB) can be considered a learning organization, as the average of the DLOQ dimensions' ratings by the staff is higher than the DLOQ scale average [10]. Similarly, universities in Estonia, Indonesia, and Spain were found to be learning organizations [52,53,10]. The staff in the colleges and universities are more educated than average. Teaching and mentoring students and conducting research requires constant individual-level learning that is transferred to the organization. The DLOQ dimension, foster inquiry and dialogue, achieved the lowest score. It indicates lack of feedback and open exchange

of ideas in the colleges. Low-listening cultures discourage conflicting perspectives. The colleges emphasize hierarchy and status over idea quality. Conversations do not encourage questioning. There may be a culture of fear in the colleges. This is in contrast with Estonian universities, where research funding is project-based, promoting teamwork [10]. The dimension, connect the organization to its external environment, achieved the highest score. It indicates that the colleges and the university can better adjust to the environment and are concerned with customers' opinions. It has to meet the employers' demands [54,55]. Such organizations consider the potential global effects on them. The finding is in contrast with the literature. It is said that universities find it difficult to adapt to the environment [56].

The dominant culture of the colleges of RUB is clan culture, characterized by a family type of organization, which is like that in public and private universities in Egypt and USA [29, 57]. But Yazici and Karabag [30] found hierarchy culture to be dominant in the higher education institutions (HEIs) in Germany. The workplaces are highly formalized and structured. In comparison to other national cultures, Germany has a high level of individualism and uncertainty avoidance [57]. In individualistic societies, tasks take precedence over relationships. The differences in the dominant culture of HEIs can be understood by considering the national culture.

The study explored the relationships between the various types of organizational cultures (Cameron & Quinn, 2011) and the learning organization dimensions [33] prevalent in the

colleges of RUB. Clan culture significantly positively predicted, and hierarchy culture significantly negatively predicted the dimensions of a learning organization – continuous learning, inquiry and dialogue, team learning, strategic leadership for learning, systems to capture learning, empower people, and connect the organization. These predictors predicted 17.86 percent to 25.72 percent of the variance in the learning organization dimensions. Similarly, Oh and Han [42] found that clan culture has a strong positive relationship with organisational learning in private sector companies in Korea. In Egypt, in public and private universities, clan culture was significantly positively associated with organisational learning capability [29]. Learning activities are promoted at numerous levels in a human-relations-focused culture [58]. In contrast, hierarchy culture was found to be prevalent in the higher education institutions in Germany [30]. Highest level of LO activities are achieved in HEIs with clan culture and lowest level of LO activities are achieved in HEIs with hierarchy culture. So, the HEIs need to orient themselves towards collaboration instead of control. Based on a study of teaching and non-teaching staff of universities in UK and Vietnam, Bui and Baruch [5] found that employees in a collectivist culture were more likely than those in an individualistic culture to be dedicated to the process of becoming LO.

One of the limitations of the study is the low response rate. Due to COVID-19 travel restrictions in Bhutan during the time of data collection, online surveys were the sole mode of data collection. Most of the respondents did not respond to the repeated e-mails sent by the researchers. Moreover, the participation of the non-teaching staff is low. Using self-reported data by college staff who volunteered their participation to measure the variables of the study may have led to response bias [55,59]. Future studies can use archival data and direct observations to enhance the validity of the findings. As it is a cross-sectional study causality among the variables may be speculated. Future research can also consider factors other than organizational culture, such as, job design, interpersonal trust, and individual motivation which affects the development of a learning organization.

6. CONCLUSION

The main contribution of the study is to provide insight into the important role of organizational culture in promoting organizational learning in the context of higher education in Bhutan. Clan culture can promote, and hierarchy culture may act as a barrier for OL activities. The management of the colleges needs to understand the importance of the different types of OC and make use of them suitably to stimulate learning activities in the colleges. Within an organization, learning takes place at multiple levels. Learning is a critical ability that enables organizations to adapt to changing circumstances and improve performance [42, 33].

Future research needs to consider other dimensions of culture to understand its influence on learning activities in an organization. Ethical and trusting cultures promote knowledge sharing within an organization [43]. Future studies should also examine whether hierarchy culture has only negative influence on learning activities of the colleges. Knowledge distribution throughout organizations is enabled by structured systems [60]. Controlling procedures that are well-designed provide more clarity [60].

The notion of learning organization is not just a passing fad. It has the potential to challenge established management practices [60]. Other areas of the economy are striving to implement the learning organization's ideals. Colleges and universities, because of their privileged position, have a unique opportunity to lead the development of the notion in both practice and theory.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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