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The Role of Learning Culture on Perceived Workforce Performance in Selected Capacity Building Public Organizations of Ethiopia

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Abstract

The study aimed to examine the role of learning culture on workforce performance within the context of selected capacity-building public organizations in Ethiopia. Explanatory and descriptive research designs were used. The research employed mixed research approach. The population of the study was the selected capacity-building public sectors workforce. Both or proportionate simple random sampling and purposive sampling techniques were used based on the nature of the data and the relevancy of the information. Questionnaires, interviews, and focus group discussions were used to collect firsthand data. Quantitative data was analyzed quantitatively using SPSS Version 26 and process software. Descriptive and inferential statistics were used to analyze the data based on the specific objectives. Qualitative data was analyzed using thematic analysis and triangulated with the quantitative results. The finding of the study shows that there was a gap in the implementation of learning culture dimensions. The regression analysis indicated that the dimensions of the learning culture of an organization positively and significantly affect the workforce performance of organizations. In addition, the result shows that human capital variables such as education and years of experience of employees positively mediate workforce performance. It was concluded that linking learning culture dimensions with education and years of experience improves workforce performance. Recommendations were given based on the core results.

Key words: Learning Culture, Human capital, Performance, Workforce

1. Introduction

Nowadays, many organizations operate in a complex and highly competitive working environment and depend profoundly on availability and access to high-quality skilled workforce. Successful organizations are aware of a skilled and developed workforce which is ~~a~~ key to delivering organizational outcomes. Recruiting, developing, and retaining the right skills is an important part of human resource practice (Antunes & Pinheiro, 2020; Tseng & Mclean, 2007). To be able to remain relevant in a challenging and dynamic world of work, organizations must think strategically about how they invest in and develop important human capital which consists of the knowledge, skills, and abilities of the workforce (Antunes & Pinheiro, 2020; Zou et al.,

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2016). This argument is highly relevant for public organizations that are currently overwhelmed by diverse public interests that need to employ an appropriate learning culture to satisfy them(Mitiku et al., 2017; Winkler & Fyffe, 2016).

Learning culture is a concept related to learning organization and is sometimes used interchangeably. It is a learning environment where a group of people work together collectively to enhance their capacities to create results they care about. Learning culture demands individual learning, and those who make the shift from traditional organization thinking to learning organizations develop the ability to think critically and creatively. The highly complex, interrelated, and integrated global economy of the 21st century presents new challenges to managers and the workforce attempting to effectively compete in such a dynamic working environment(Čirjevskis, 2019; Wilden et al., 2013). Implementing the characteristics of a learning organization which is a learning culture will help managers and the workforce meet these challenges by providing them with tools to pursue a creative vision, learn and work together effectively, and adapt to change(Arain et al., 2020; Senge, 1947).

Scholars in learning organizations and knowledge management spheres argue that to support learning at an individual and organizational level, organizations need to create an environment that embeds learning into the way they do things (Cardoni et al., 2020; Hui et al., 2013;Hartono et al., 2017). Organizations having learning culture attributes are called organizations having a learning culture(Journal & Review, 2018). Recent researches identified those organizations in which learning culture has a deep impact on key behaviors and is supported by learning interventions and programs that experience better effectiveness, efficiency, and productivity. Creating a supportive environment for building a learning culture is understandably a key concern for learning & development professionals such as researchers, trainers, and consultants (Chartered Institute of Personnel and Development,2020; Rehman, 2020).

A learning culture involves different dimensions that should be integrated. The widely used learning culture characteristics model has been of Senge. The author emphasized systems thinking, personal mastery, mental models, building shared vision, and team learning. Apart from the importance of these learning culture dimensions, many organizations simply focus on roles of formal training and education as well as researchers give due attention to these formal training and education too without integrating them with it (Rehman, 2020; Soderstrom & Bjork, 2015; *Hernández*, 2014). However, the importance of building a learning culture goes beyond the formal approach to knowing and change as well as the training and education facilitates the linkage between learning culture and workforce performance (Kim et al., 2015; Park, 2008; Song et al., 2014).

A review of the literature indicates that most of the research that has been done so far ~~mostly~~ focused on learning organization and knowledge management processes, and different aspects of learning culture at the cost of paying attention to provide explanations in the context of "building a learning culture" (Ferreira & Pilatti, 2013; Impact et al., 2009; Zou et al., 2016). However, by building ~~a~~ learning culture attributes mentioned above, employees and organizations can advance their capacity to perform and achieve improved results continuously (Hui et al., 2013; Leufvén et

al., 2015b; Commitment, 2017; Hartono et al., 2017). The intention of the present study goes around developing a framework that helps think in an integrated way, whenever one thinks of "building a learning culture" that transforms an organization and ensures continuous improvement of performances at employee, team, and organization levels.

There are theoretical evidences based on learning organization without contextualizing it to a "learning culture, even the existing ones are mostly in higher formal education (Ather & Awan, 2021; Kavengi, 2021; Kaya, 2013; Ul et al., 2021). However, there is less robust, controlled research that demonstrates its impact on workforce performance in practice. In addition, there has been no adequate literature on a learning culture in the context of capacity building public organizations which this research intends to address. Moreover, most of the researches done so far focused on factors affecting learning organizations and culture, while more emphasis was given to assessing the status of learning organization characteristics (learning culture) (Arain et al., 2020; Baskerville & Dulipovici, 2006; Luesia, 2021). Beyond this, the present study gave more room for explanatory type of research design that allows to explain the relationship between the learning culture and the workforce performance of the organizations. The former studies ~~were~~ also emphasized organization level performance (dependent variable) (Elliott, 2020;Dangara et al., 2019; Liu et al., 2021; Mavuso et al., 2021; Ramírez et al., 2011), but the workforce performance is so critical since each and every member should contribute to the broader context. The present study emphasized employee level performance as a dependent variable.

Moreover, the previous studies did not give attention to explicate the mediating role of human capital in the relationship between the learning culture and workforce performance. At this juncture, the study tested the mediating role of human capital variables, especially employees' level of education and years of experience in the relationship.

The current dynamic and ever-changing environment coupled with increasing public demand requires every organization to acquire and build the capacity to deliver competitive service (Fort, 1999; Igberaese, 2010; Practitioner & Quarterly, 2010). Many scholars reach consent that the ability to build a learning culture is becoming increasingly crucial in today's knowledge economy (Anantatmula & Stankosky, 2008; Igberaese, 2010; Kimble, 2013; Laal, 2011; Ambula, 2015).

As this study was conducted on capacity-building public organizations, it would be expected that these organizations need to build their organizational capacity through building and implementing a learning culture. In this context, capacity-building public organizations are organizations whose missions are to build the capacity of different organizations and their members through training, consultancy, and research. They are organizations that provide different capacity-building activities for other organizations to empower others to achieve their respective organizational goals. Thus, these organizations have double responsibility: capacitating themselves and their customers, and other organizations. To deal with such double responsibility, the organizations need to develop a learning culture which in turn helps to keep pace with ever-changing public demands and preferences. A learning culture embeds learning

into how things are done at an individual, team, and organizational level which requires adequate education and exposure (experience).

Research shreds of evidence indicate that the factors that underpin a learning culture could be reframed as the 'learning environment', allowing workplaces to tie these factors to tangible practices and behaviors, rather than merely attempting to undergo dramatic organizational culture change (Phongsichomphu, n.d.; Rahbi, 2017, Arain et al., 2020; Schniederjans et al., 2020; Song et al., 2007). There is theoretical evidence based on learning organization without contextualizing it to a "learning culture, even the existing ones are mostly in higher formal education (Ather & Awan, 2021; Kavengi, 2021; Kaya, 2013; Ul et al., 2021). However, there is less robust, controlled research that demonstrates its impact on workforce performance in practice. In addition, there has been no adequate literature on a learning culture in the context of capacity-building public organizations which this research intended to address. Moreover, most of the research done so far focused on factors affecting learning organization and culture as well as more emphasis was given to assessing the status of learning organization characteristics (learning culture) (Arain et al., 2020; Baskerville & Dulipovici, 2006; Luesia, 2021), but the current study paid attention to the effect of the learning behaviors on the workforces performance. The former studies also emphasized organization-level performance (dependent variable) (Elliott, 2020; Dangara et al., 2019; Liu et al., 2021; Mavuso et al., 2021; Ramírez et al., 2011), but workforce performance is so critical since every member should contribute for the broader context. The present study emphasized employee-level performance as the dependent variable.

Moreover, the previous studies did not give attention to explicating the mediating role of human capital variables in the relationship between the learning culture and workforce performance (Asnakech, 2021; Dereje, 2024). Instead they gave more attention to the linear relationship between other variables and organizational performance. Another gap was lack of adequate literature on the capacity building public organizations. At this juncture, the study addressed this gap by examining the mediating role of human capital variables, especially employees' level of education and years of experience.

The general objective of the study was to examine the effect of building a learning culture on workforce performance through the mediating effect of human capital variables, level of education, and years of experience of employees.

Specifically, the study aims 1) to assess the practice of the learning culture of the capacity-building public organizations' workforce; 2) to assess the perceived workforce performance of capacity-building public organizations; 3) to analyze the effect of learning culture on workforce performance of capacity-building public organizations; and 4) to examine whether human capital (level of education and years of experience) mediates the relationship between learning culture and workforce performance.

Significance of the study: Evidence show that the 'best practice mentality' has been greatly affecting the degree to which an organization is strategically oriented. The mere pursuit of best practice may lead to organizational effectiveness which can end up somewhere in the meantime. On the other hand, especially, in developing countries policies, strategies and plans are unable to

address context-specific issues since they are not contextualized (Conțu, 2020; Limsila & Ogunlana, 2007; Kazmi & Naaranoja, 2015). Different study results and reports indicate that the failure of change management tools implementation is mostly subject to the low level of creativity and innovativeness of implementers at different levels. Similarly, policymakers need to have the analytic and innovative capacity to embed the policy with effective policy instruments and problem-solving approaches (Ebrahimi et al., 2016). Thus, this study brought the "building a learning culture" concept and provided a comprehensive and integrated framework that can be used by implementers and policy makers (decision-makers) to enhance workforce performance.

2. Review of Related Literature

2.1 Concepts and Meaning of Learning Culture

Among others, one is a learning culture that embeds learning into how things are done at an individual, team, and organizational level (Bouranta, 2013.; Islam & Ahmed, 2015; Wang, 2016). This requires strong leaders to follow a strategic learning model and to support employees toward a collectively shared vision and positive change through open dialogue and reflection. The factors that underpin a learning culture could be reframed as the 'learning environment', allowing workplaces to tie these factors to tangible practices and behaviors, rather than attempting to undergo dramatic cultural change (Dangara et al., 2019; Ding, 2016). There is considerable theoretical evidence based on learning culture, but there is lack of robust, controlled research that demonstrates its impact on organizational outcomes in practice.

2.2 Theory of Learning Organization and Culture

The learning organization theory describes an organization with an ideal learning environment that is perfectly in tune with the organization's goals (Liu et al., 2021). Organizations characterized by learning culture a place where people continually expand their capacity to create the results they desire, where new, creative, and expansive patterns of thinking are fostered, where collective aspiration is developed and maintained as well as and where people are continually learning to see the whole together (Watkins and Marsick, 1995; Administra, 2010).

2.3 Creating a Learning Culture

Creating a learning culture is a challenge to organizations in developing human capital that is capable of competing in an environment that is changing constantly, rapidly and dramatically. According to Robelo and Gomes (2009), organizational learning culture is an atmosphere that encourages employees (Tran, 2008) to put effort into enhancing knowledge and developing individual competency through partnership and interaction with each other for the benefit of the development and achievements of the organization. A culture of learning through effective organization, can give space to employees to be more creative (Ding, 2016) and innovative (Park, 2008; Rehman, 2020). It also can shape attitudes and promote continuous improvement (Baskerville & Dulipovici, 2006; Bouranta, 2013). The Dimensions of Learning Organizations

Questionnaire (DLOQ) which is used to measure learning culture includes five dimensions (Watkins and Marsick, 1997)

H_1. *The learning culture significantly and positively affects the workforce performance of CBPOs.*

2.4 Role of Human Capital in Bridging Learning Culture and Workforce Performance

Human capital theory emphasizes that organizations are expected to develop and protect core competences through investment in education and retention of talented staff (Abuaddous et al., 2018; Safitri & Isa, 2022; Tohidi, 2016). Ambula (2015) forwards the idea that organizations should build and develop resources internally only when investments in employee skills are justifiable in terms of future productivity; because the value of employees to the organizations is dependent on their uniqueness and the value of capabilities and skills. Therefore, according to the human capital theory, the value of human skills, experience, and knowledge is at the mercy of its potential to contribute to uniqueness and competitive advantage (Safitri & Isa, 2022; Samsudeen & Kaleen, 2020).

To utilize this theory, in the context of this study, the researcher focused on the mediating role of education and years of experience.

H_2: *Level of education significantly mediates the relationship between learning culture and workforce performance.*

H_3: *Years of experience (seniority) significantly mediate the relationship between learning culture and workforce performance.*

2.5 Performance Measurement Perspective

A review of available literature shows that organizational performance can be measured from different perspectives. The variation has resulted from contexts (Administra, 2010; Kavengi, 2021; Ngah & Ibrahim, 2007). The underlying intention of building a learning culture is to maximize an organization's effectiveness and to improve learning from success and mistakes at individual, team, and organizational levels. In addition, learning from colleagues and learning from external parties enhances performance (Timbrell et al., 2005; Alkatheeri, 2018).

In this study, workforce performance indicates the outcomes of various organizational processes that occur in the course of its daily maneuvers. For capacity-building-oriented organizations (CBPOS) similar to higher educational institutions, it is suggested that workforce performance is represented by various dimensions such as problem-solving competency of members, quality of training, research results, responsiveness, and social responsibility (Crisp et al., 2000; Igberaese, 2010; Practitioner & Quarterly, 2010).

Chartered Institute of Personnel and Development (2020); Commitment(2017) and Daniele(2007) argue that the learning culture outcome can be manifested in different ways. Among others, they include increased efficiency, effectiveness, and profit, employee satisfaction

and decreased turnover, improvement mindset among employees, developed sense of ownership and accountability, ease in succession/transition, and enhanced ability for workers to adapt to change.

For learning to be effective in an organization, the knowledge that is encouraged must be related to the business. With this assumption, individuals in an organization should be working and learning together and individually as shared learning enables companies to increase their staff quickly and solve problems more efficiently (Ali, 2019; Allameh & Rezaei, 2014; Ferreira & Pilatti, 2013).

To track and measure performance, mangers/leaders or organizations are expected to set key performance indicators (KPIs) for staff members, roles, or departments. The key performance indicators are standards or targets that the entities can track and use as a benchmark to measure success. They also provide the workforce with focus and clarity about what is expected of them. This dimension at the employee/individual level deals with the extent each employee offers a more expanded range of products/services previous performance, which could happen as the result of the learning culture in the organization.

In the context of capacity-building public organizations, workforce performance could be measured in areas or activities such as research, training and consultancy, planning, community service, and decisions.

This could be measured in terms of output produced/service delivered as per the internal standards of the organization (Hussein et al., 2014; Ambula, 2015). For instance, the extent of resource wastage in the production or delivery process could be low, medium, or high; the number of defective outputs/services is also a concern of this dimension. Thus, the core activities of the organization are expected to be performed as per the standards and expectations. In this study, the researcher assessed or examined the workforce performance based on the perceived effectiveness, efficiency, enhanced ability to solve complex problems, and employee (members) satisfaction as responded by the organizational members (Ding, 2016; Usman et al., 2017).

2.6 Conceptual Framework

Based on the critical review of the literature, the researcher has developed the following conceptual framework that displays the interplay of important variables.

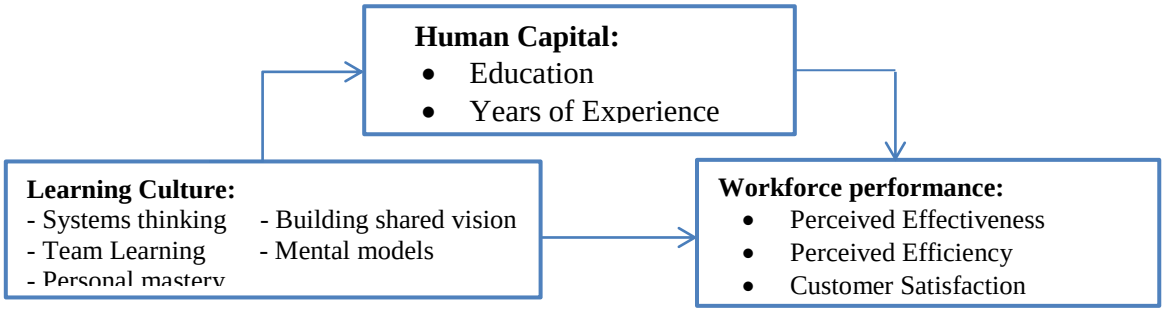

Figure 2.1 Conceptual Framework
Source: Developed based on the reviewed literature (Senge 1947; Watkins & Marsick, 1997)

3. Research Methodology

3.1 Research Design

Descriptive and explanatory (concurrent) research designs were used in the current study. This design helped the researcher to embed the qualitative data into the quantitative data so that the complexity of qualitative text data can be managed in a more meaningful.

3.2 Research approach

The researcher employed a mixed research approach as it assists the researcher ion compensating the weakness of one approach with the other strength. This mixed approach allowed the researcher to get comprehensive data and information during collection and to have depth understanding and analysis in reporting the research. Thus, it gives more full meaning and implications for the audience.

3.3 Population of the Study

The population of the study included employees of selected capacity-building public organizations whose mandate and mission is to build the capacity of other public or private sectors through, training, consultancy, research, and development activities. Employees of training, research, and development institutes, and management consultants were consulted to obtain relevant data. Specifically, Ethiopian Management Institute (EMI), Ethiopian Civil Service University (ECSU), Oromia State University (OSU), Policy Studies Institute (PSI), Addis Ababa Leadership Academy (AALA), and Ethiopian Vocational and Training Institute were the target organizations from which the respondents were drawn. The reason the researcher considered these organizations was that their mission and mandate are related to capacity-building activities and they are also relevant for getting important data with the topic under study. These are also considered knowledge-intensive organizations where learning culture is anticipated. The total target populations of the study were 2,425 members.

3.4 Unit of Analysis

Unit of analysis refers to units and categories of the study population from which respondents are selected. The workforce (employees) is a unit of analysis.

3.5 Sample Size Determination

The sample size was determined using an appropriate formula for a known population. In line with this, the minimum sample required for the present study was determined using Yemane's (1967) formula, sample size determination. However, using the concept of increasing the sample size, the researcher

$N=N/ (1+N.e^2)$

Where: n: is the sample size; N: is the population size, e: is the margin of error (usually 0.05)

The calculated sample size for organizational employees was 453 with an attrition rate. Thus, these samples were selected based on the size of selected organizations.

Table 3.1 Sample size and techniques

N$^{o.}$	Capacity Building Public Organization	Members	Sample	Technique
1	Ethiopian Management Institute	320	88	Proportionate stratified random sampling technique
2	Ethiopian Vocational and Training Institute	430	99	
3	Oromia State University	535	107	
4	Policy Studies Institute	280	73	
5	Addis Ababa Leadership Academy	300	86	
	Total	2,425	453	

Source: Data from Sampled Organization, 2023

In addition, one FGD for each sector was considered, and interviewees for each organization were selected based on their experience and position in the manner it is relevant to this study. Saturation principle was used to select interview participants.

3.6 Data Collection Tools and Procedures

To collect relevant data for the study, the researcher used questionnaires, interviews, and FGDs. A five-point Likert scale type with values ranging from 1 to 5: 1=not at all, 2= little extent, 3=some extent, 4 large extent, and 5= very large extent was developed. The questionnaires were used to collect data from trainers, researchers and consultants, planners, and administrators. The study also employed interviews to collect qualitative data from managers, supervisors, team leaders, and highly experienced trainers, consultants, researchers, administrators, and experts. Unstructured and Semi-structured interview guides were used to collect the data. The saturation principle was used to gather these qualitative data. Moreover, to obtain more robust and integrated data, the researcher employed FGDs.

3.7 Reliability Test

3.7.1 Cronbach's Alpha

The reliability of the questionnaire was tested through the computation of Cronbach's Alpha. In line with Nunnally's (1978) recommendation, only constructs earning Cronbach's Alpha above 0.70 values were considered for further analysis as they are deemed to be internally consistent. Discriminant and convergence validity measures were conducted too.

3.7.2 Factor loadings

Factor loadings enable a researcher to test to what extent items of a construct are correlated with their respective construct. In this case, it is necessary for items of a construct to have a correlation of greater than 0.6 to be considered. Thus, the researcher was able to proceed to further analysis. This assumption was also assured.

3.7.3 Construct reliability

Construct reliability refers to an assessment that allows the evaluation of the extent to which a variable or set of variables is consistent in what it intends to measure (Straub, Boudreau, & Gefen, 2004). Usually, construct reliability is tested using composite reliability and Cronbach's alpha values. In calculating and assessing Cronbach's Alpha value, SPSS can be used. Nunnally and Bernstein (1994) both values of the reliabilities are interpreted taking 0.7 as a benchmark for a modest reliability applicable.

Where λ represents factor values of loadings

$CR=(Sum\ \lambda_i)^2/ (Sum\ \lambda_{i)}^2+(Sum\ e_{i)}$

$e_i= 1-\lambda i^2$

Where λ represents the value of standardized factor loading for item i and ei represent the respective error variance for item i. The error variance is calculated or estimated based on the value of the standardized loadings.

Table 3.2: AVE, Sqrt of AVE and C.R

Constructs(variables)	No. of item	AVE	SQR AVE	CR
Systems thinking	4	0.731	0.855	0.891
Personal mastery	4	0.734	0.856	0.874
Mental model	4	0.731	0.855	0.861
Building shared vision	4	0.734	0.856	0.864
Workforce performance (dependent)	13	0.707	0.841	0.851

Source: Own Survey Data, 2023

The internal reliability test of the study, as has been displayed in the above Table, indicates that the instruments used to collect the data were adequately reliable as the Cronbach's alpha value for each construct and composite reliability tests were equal or greater than the minimum value (0.7) as indicated by Sekaran & Bougie (2003). Thus, since reliability assumptions were satisfied for all constructs as stated by Hair et al. (2017), it was possible to proceed to further process.

3.8 Validity tests

3.8.1 Convergent validity

Convergent validity indicates the degrees to which multiple measures of a construct that are argued theoretically to be related are related (Paul et al., 2021). It further helps to remove any unreliable item in ensuring the uni-dimensionality of multiple responses (Bollen, 1989). To conduct convergent validity, the researcher used outer loadings of items (indicators) and average variance extracted (AVE). The confirmatory factor analysis (CFA) shows that the outer loadings of indicators fulfilled the minimum cutoff value of loadings for (0.5 and above.) (Asif et al., 2019; Rigdon et al., 2020; Wilden et al., 2013). Items obtaining loading values less than 0.5 were dropped as per the recommendation of Mohamad (2019) and Paul et al. (2021). Therefore,

the outer loading of items showed there was no convergence validity problem to proceed to further analysis.

3.8.2 Average variance extracted (AVE)

Average Variance Extracted (AVE) is used which indicates how much of the indicators' variance can be explained by the latent unobserved variable, and AVE greater than 0.50 provides empirical evidence for convergent validity (Bagozzi & Yi, 1988). In line with this, for the current model, since the AVE values are greater than 0.50, it provides empirical evidence for convergent validity.

3.8.3 Discriminant validity

To assess the degree to which the constructs of this model are truly distinct from each other, the researcher empirically tested discriminant validity employing the Fornell-Larcker criterion and cross-loadings stated by Hair et al. (2017).

3.8.4 Fornell-Larcker Criterion

Usually, discriminant validity is measured through the use of the square root value of AVE to compare with inter-construct correlation values in which the square root of AVE should be higher than inter-construct correlation as recommended by Hair et al. (2017). In line with this argument, the validity test has been attained in this study as has been shown in the following table.

Table 3.3: Fornel-Larcker criterion test

Construct	1	2	3	4	5	6
Workforce performance (1)	**.841**					
Systems thinking (2)	.371	**.855**				
Personal mastery (3)	.652	.412	**.856**			
Mental model (4)	.502	.365	.383	**.855**		
Building a shared vision (5)	.575	.463	.235	.287	**.856**	
Team learning (6)	.341	.211	.231	.321	**.410**	**.821**

Source: Own Survey Data, 2023

As the above table shows, the values indicated in bold are the square root of AVE. In view of the Fornell-Larcker Criterion, the correlation results were satisfied that all the square root values of each construct's AVE on the diagonal of the matrix were greater than the correlation coefficients of the other constructs as recommended by Hair et al. (2017). Therefore, it was possible to proceed to further analysis since there was no discriminant validity problem.

3.8.5 Cross-loadings

As stated by Hair et al. (2017), the factor loadings for each construct showed that it was less than 0.8. Therefore, the researcher could continue with the data for further tests.

3.9 Normality tests

The researcher runs the normality test of the distribution of the data as it is a requirement when employing OLS. For the study, the test results for both skewnes (every item which the absolute value of skewness is 1.0 or lower indicates the data is normally distributed) and kurtosis (from−10 to +10 considered normally distributed) are in the acceptable range as stated by George & Mallery (2019), Collier (2020) and Hair et al. (2022) that the researcher could proceed to further analysis considering the data as normally distributed. This implies that the researcher could use the data for further analysis.

3.10 Data Processing and Analysis Methods

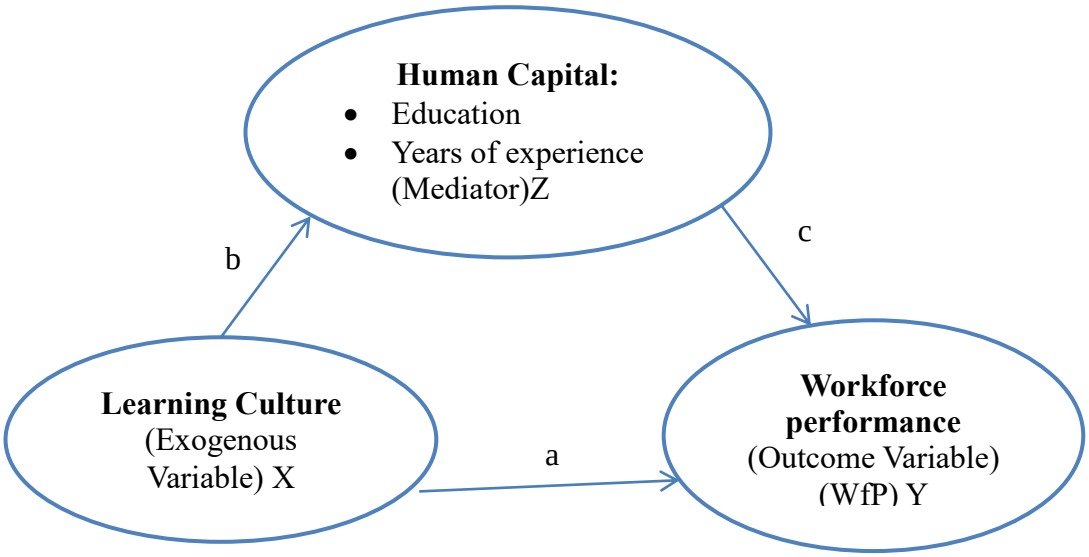

Figure 3.1 Conceptual Model of Mediation Effect developed
Source: Developed by the researcher from theories and empirical literature reviewed (2023)

3.11 Model Specification

[i. Direct effect

OP= β_{0+}**a**X+e……..……..…..……(1)

ii. Mediation Effect

Indirect Effect through HC (only) WfP(Y) = β_0+ b*c+e.....….(2)
Total effect = direct effect + indirect effect…….…….(3)
Total effect(Y)=**a+b*c**…….……..…….…..….(3)
a= indicates the main effect of Learning culture(X) on WfP(Y)
b=the effect of learning culture(X) on Human Capital, HC(Z)
c=the effect of HC on WfP(Y)

4. Results and Discussions

4.1 Descriptive Analysis and Results

4.1.1 Response Rate

Table 4.1 Response Rate

Capacity-building Public Organizations (CBPOs)	Distributed Questionnaire	Returned questionnaires		Unreturned & incomplete	
		count	%	count	%
Ethiopian Management Institute	88	76		0.85	
Oromia State University	99	86		0.86	
Policy Studies Institute	107	93		0.87	
Ethiopian Vocational and Training Institute	73	61		0.83	
Addis Ababa Leadership Academy	86	74		0.88	
Total	453	**390**	**86.1**	0.86	**13.9**

Source: Own Survey Data, 2023

The total response rate for this study, as indicated by the survey data of 2024, was 86.1%.

4.1.2 Background of the Respondents

Table 4.2: Biographic data of the respondents

Biographic variables	Measures	Frequency	Percent
Age of respondents	21-25years	27	6.92
	26-30years	55	14.10
	31-35years	114	29.23
	36-40years	111	28.46
	41-45	63	16.15
	46 & above years	20	5.12
Sex of respondents	Male	185	47.43
	Female	100	25.64
Educational status of respondents	First degree	20	5.12
	Masters	225	57.69
	PhD	53	13.58
Total		390	100%

Source: Own Survey Data, 2023

4.1.3 Descriptive Results on Learning Behavior of Organization

The learning behavior of an organization involves system thinking, personal mastery, a mental model, building shared vision, and team learning, which were derived from a learning organization theory.

Table 4.3: The Descriptive results of the learning behavior of organizations at item level analysis.

Items of measurement	Not at all (%)	Little extent (%)	Some extent (%)	Large extent (%)	Very large extent (%)	Total
Systems thinking						
STH1: Global perspectives	7.7	29.5	26.7	11.3	4.4	310
STH2: External stakeholders	7.7	29.5	26.7	11.0	3.8	307
STH3: Diverse perspectives	7.7	29.7	26.7	11.5	3.3	308
Personal mastery						
PM1:Personal understanding	7.7	29.5	27.2	10.0	3.8	305
PM2: Constant learning	7.7	29.7	26.7	11.5	4.4	312
PM3: Time management	7.9	30.5	26.4	11.0	3.3	309
Mental model						
MM1: Deep assumptions	8.5	33.6	33.3	14.4	5.1	390
MM2: Alternative decision	8.5	32.1	28.5	11.5	4.1	330
MM3: Multiple views	6.2	30.5	26.4	11.3	4.1	306
Building shared vision						
BShV1:Common purpose	5.1	30.0	27.2	11.5	3.8	303
BShV2: Internalization	6.4	31.0	26.7	11.0	3.6	307
BShV3: Total agreement	6.4	29.2	27.9	12.3	3.6	310
Team learning						
TL1: Adaptive goals	7.4	29.5	31.8	13.6	4.9	310
TL2: Revised thinking	7.4	29.7	31.8	13.6	4.6	310
TL3: Confidence in actions	6.7	28.5	33.3	14.4	4.4	340
Grand Mean						**2.717**
Standard Deviation						**0.81**

Source: Own Survey data, 2023

The above item level analysis was reduced to the composite level (to the specific dimension of the learning behavior of the organization). This was to reduce complexity and to make understanding easier.

Systems thinking: the study found that the Capacity-Building Public Organizations (CBPOs) exhibited limited systems thinking behaviors, as evidenced by their inadequate support for global perspectives, working with external stakeholders, and encouraging diverse perspectives. This could be understood from the mean score of 2.79 with standard deviation of 0.80.This lack of systems thinking may negatively affect the learning behavior of the organizations. By not encouraging global perspectives, working with external stakeholders, or fostering diverse perspectives, the CBPOs may miss out on valuable insights and opportunities for growth.

Table 4.4: Composite Descriptive results on the learning behavior of the organizations

Nº.	Variables	Min	Max	Mean	Std. Deviation
1	Systems thinking	1	5	2 .79	0.80
2	Personal mastery	1	5	2.68	0.82
3	Mental model	1	5	2.70	0.78
4	Building shared vision	1	5	2.73	0.80
5	Team learning	1	5	2.76	0.81
Cumulative mean				**2.71**	**0.81**

Source: Own Survey Data, 2023

Personal mastery: the descriptive results regarding personal mastery indicate that the Capacity-Building Public Organizations (CBPOs) had inadequate performance in this dimension of learning behavior as could be understood from mean score 2.68 with standard deviation of 0.82. The mean score obtained was low, suggesting that the organizations did not adequately support and encourage their staff to strive for personal growth and knowledge development. This indicates a gap in ensuring a constant state of learning for staff members, both in their work and personal lives. Additionally, the lack of support for flexible learning may have negatively impacted the overall learning behavior within the organizations.

Mental Model: The mean score obtained on this dimension was 2.70 and the standard deviation was 0.78. As the study found, the Capacity-Building Public Organizations (CBPOs) had limitations in influencing deeply founded assumptions and generalizations held by their staff. This adversely affected the CBPOs' ability to respond effectively to multiple demands and impeded the encouragement of diverse perspectives in decision-making.

Building a Shared Vision: The mean score earned on this dimension was 2.73, with standard deviation of 0.80**.** The result of the study indicated that the target organizations were facing difficulty in realizing a shared vision among their staff. This could be understood from the lack of a common purpose; poor organizational support for staff to internalize the organization's vision, and low agreement on the vision across all levels.

Team Learning: The study revealed that team learning behaviors were limited within the CBPOs. This was reflected in the low mean score obtained on this dimension which was 2.76 with standard deviation of 0.81. Teams lacked adequate freedom to adapt their goals, had low confidence in the organization's decisions, and had limited opportunities to revise their thinking through group discussions. These limitations may have discouraged staff from developing and manifesting learning behaviors.

To sum up, the overall mean score 2.71 with standard deviation of 0.81 indicates that the learning behavior of the organization was limited. This seeks relevant policy attention.

Qualitative Responses

Interviewees shared observations regarding various dimensions of the organization's learning behavior. In terms of systems thinking, the interview subjects replied that, "*There is little emphasis on global perspectives in our organization. Decisions are often made with a narrow*

focus, lacking consideration of broader, interconnected factors that could enhance strategic outcomes." This indicates that there seemed to be limitations in promoting this approach and fostering global perspectives, as indicated by the low mean response.

Similarly, the interviewees responded that: "*We do not receive enough support to expand our knowledge and skills. Training opportunities are limited, and there is little encouragement to pursue personal development beyond our immediate job responsibilities*". This implies that personal mastery and continuous learning appeared to be areas needing improvement, with the organization falling short in supporting staff to further their understanding and knowledge. Similarly, the mean score for personal mastery was rated as "low," indicating a gap in creating a conducive environment for learning and skill development

Moreover, the interview subjects replied that *"Decisions often follow traditional thinking without much challenge to assumptions. New ideas are rarely welcomed, and there is a tendency to rely on established practices rather than exploring innovative approaches".* This response indicated that the organization seemed to have limitations in influencing deeply held assumptions and encouraging diverse perspectives in decision-making, reflected in the relatively low mean response obtained on the mental model concept.

The interview participants also reflected *"It's hard to see a unified vision across different departments. Leadership does not consistently communicate the organization's purpose, leading to confusion and lack of commitment to long-term goals."* From this response it is possible to understand, building a shared vision seemed to be a challenge within the organization, with a lack of commonality of purpose and inadequate agreement on the organization's vision across all levels. This indicates the need for improvement measures to ensure alignment and clarity.

Lastly, the participants replied that *"Collaborative discussions rarely lead to adjustments in goals. While meetings occur, they often lack meaningful engagement, and feedback from team members is not always considered when setting priorities."* As could be understood from the response, team learning appeared to be limited, with a lack of opportunity for teams to adapt goals and revise thinking based on collaborative discussions. These observations signified the importance of initiatives to address these challenges and foster a culture of continuous learning and collaboration within the target organization.

In the focus group discussions (FGDs), participants provided insights into various aspects of the organization's learning behavior dimensions. Concerning systems thinking, participants noted limitations in the organization's encouragement of global perspectives and engagement with external stakeholders.

Concerning systems thinking, several participants noted limitations in how the organization encourages global perspectives and engages with external stakeholders. One participant remarked, *"We rarely look beyond our own departments, let alone think about what is happening globally or in other sectors."* Another participant added, "*There is not enough emphasis on learning from external partners or stakeholders we are kind of stuck in our own context"*
Participants also cited a lack of inclusion of diverse perspectives in decision-making processes. One participant shared, "*Decisions are mostly top-down. It feels like different viewpoints are not*

really welcomed or considered." This reflects a need for greater emphasis on systems thinking to foster holistic understanding and collaboration.

Regarding personal mastery and continuous learning, participants expressed concern about insufficient organizational support. As one participant put it, *"There is no clear pathway or resources for professional development unless you push for it yourself."* Another echoed this sentiment, saying, *"They talk about learning, but when you actually need training or resources, it is not available or prioritized."* These perspectives reveal a gap between the organizational rhetoric around learning and the actual support provided to staff.

Regarding mental models, participants identified challenges in influencing deeply held assumptions and promoting alternative decision-making approaches within the organization. One participant commented, *"People tend to stick to the way things have always been done even when it is clear change is needed."* Another added, *"It is hard to challenge the status quo here. New ideas are often dismissed without much discussion."* However, participants also emphasized the importance of encouraging diverse viewpoints and challenging conventional thinking to enhance responsiveness and innovation. As one respondent noted, *"We need to create space where people feel safe to question and bring different perspectives it is the only way to grow."*

Building a shared vision emerged as another area demanding attention, with participants perceiving gaps in understanding and commitment to the organization's goals and objectives across different levels and work units and divisions. One participant said," Different *departments seem to be working toward different goals there's no common understanding of where we are all headed."* Another participant expressed, *"We lack clarity and alignment. It is like everyone's pulling in different directions."*

In discussing team learning, participants pointed out gaps in the organization's ability to facilitate adaptive goal-setting and promote a culture of open dialogue and knowledge sharing. As one participant shared, *"Teams don't really sit down to reflect or share ideas. We're always in execution mode."* Another observed, *"There's little room for learning from mistakes or experimenting with new approaches."*

They emphasized the need for greater flexibility and empowerment within teams to drive innovation and problem-solving. One participant noted, *"If teams had more autonomy, we could adapt faster and come up with better solutions."*

Overall, the FGDs echoed the findings from the interviews, emphasizing the importance of addressing these challenges to foster a more dynamic and collaborative learning culture within the target organization.

The integration of interview and FGD responses reflected the importance of addressing these challenges to foster a more dynamic and collaborative learning culture within the organizations. Therefore, by promoting systems thinking, supporting personal mastery and continuous learning, challenging mental models, building a shared vision, and enhancing team learning, organizations can create an environment conducive to innovation, adaptability, and overall performance improvement.

4.1.4 Descriptive Results on Organizational Performance

The descriptive analysis of organizational performances of the organizations has been displayed in the following Table 4.5 followed by its statement form descriptions.

Table 4.5: Results on Workforce performance

Items of measurement	Not at all	Little extent	Some extent	Large extent	Very large	Total
Effectiveness						
OPef1: Designing effective principles	9.5	20.5	27.7	22.3	20.0	390
OPef2: Delivering problem-solving services	9.2	19.2	24.9	21.8	24.9	390
OPef5: Pioneering new methods	9.5	20.5	24.9	20.8	24.4	390
OPef6: Providing practical policy input	9.5	21.3	20.5	19.5	29.2	390
OPef7: Providing adequate training	8.7	20.0	19.0	26.4	25.9	390
Mean Score	**3.13**					
Standard Deviation	**0.96**					
Efficiency						
OPeffi1: Utilizing time effectively	9.5	20.5	28.7	22.1	19.2	390
OPeffi2: Ratio of effective services to total	9.0	20.3	24.9	21.8	24.1	390
OPeffi3: Staff knowledge meeting standards	9.2	24.1	25.6	21.8	19.2	390
OPeffi4: Decrease in reworks	9.5	18.7	25.1	21.8	24.9	390
Mean Score	**2.91**					
Standard Deviation	**0.92**					
Customer satisfaction						
OPCS1: Satisfaction with services	9.2	22.8	24.9	18.5	24.6	390
OPCS2: Appreciation for prompt service	9.5	22.8	24.9	17.9	24.9	390
OPCS3: Satisfaction with capacity building	9.5	22.3	24.1	17.9	26.2	390
OPCS4: Satisfaction with quality	9.5	20.8	24.9	18.5	26.4	390
Mean Score	**2.90**					
Standard Deviation	**1.0**					
Grand Mean	**2.94**					
Standard Deviation	**1.0**					

Source: Own Survey Data, 2023

The results in the Table 4.5 indicate that the mean score obtained on the effectiveness aspect of the performance was 3.13 with standard deviation of 0.96. The study found that the target organizations, capacity-building public Organizations (CBPOs), had average effectiveness in designing training, research, and consultancy principles. However, they faced gaps in delivering problem-solving services, adopting innovative approaches, and incorporating staff recommendations into decision-making. Additionally, while the quantity of training sessions was adequate, the quality and effectiveness were not as such sounding.

On the efficiency aspect of the performance, the mean score obtained was low (mean score=2.91 and standard deviation of 0.92). This indicates that the CBPOs were found to be inefficient in utilizing time for essential tasks, optimizing resource allocation, and providing adequate training to staff. Inefficiencies resulting from rework were also prevalent. Interviews further reinforced challenges in standardizing performance and objectively evaluating efficiency as per demand.

Customer Satisfaction: the mean score obtained on the customer satisfaction was 2.90 with the standard deviation of 1.0. This was low as the mean value was below the expected. The CBPOs struggled to meet customer expectations in terms of promptness, service quality, and knowledge-oriented capacity-building activities. Customers were dissatisfied with the quality of research output, training, and consultancy services.

Qualitative Responses

The interviewees' and FGDs' responses mentioned several areas where the organization could enhance its performance. In terms of effectiveness, there was a discrepancy between the conceptualization and implementation of training and consultancy principles, and the proposed solutions often fell short of addressing the clients' needs comprehensively. In relation to this, one respondent noted, *"We have good ideas on paper, but when it comes to practice, they don't fully meet client needs."* For this, participants suggested better task management and knowledge use. As one put it, *"There's too much overlap we need to prioritize and work smarter."* To improve efficiency, the organization needed to streamline tasks, prioritize activities, and optimize knowledge management processes, given the context.

Furthermore, customer satisfaction could be enhanced by actively listening to clients, understanding their deep concerns, and delivering services while being conscious of time. One participant said, *"Clients don't just want services—they want to feel heard and valued."* Another added, *"Timeliness matters. We need to deliver on time and with clarity."*

Therefore, these findings signify the need for improved alignment between strategic planning and operational execution, tailored solutions, and a customer-centric approach in capacity-building organizations.

4.1.5 Descriptive Results on Human Capital of the CBPOs

Descriptive statistics were also used to assess if there was practice of effective efforts to enhance human capital variables such as education and years of experience. The level of education among employees plays a crucial role in shaping their interaction with the organization's learning culture. A significant proportion of employees with diverse educational backgrounds feel highly empowered by their education to leverage the learning resources provided by the organizations. This was supported by the low mean score earned in this dimension. The mean score was 2.88 with standard deviation of 0.99. As they replied, education also significantly influences employees' perceptions regarding the effectiveness of the organization's learning initiatives, with higher levels of education associated with greater benefits. Moreover, education is a foundational pillar for professional competence and proficiency, enabling individuals to excel in their

respective roles within the organization. Higher levels of education among employees also positively contribute to the overall effectiveness of the organization's learning culture. Additionally, educational diversity fosters a culture of innovation and creativity within the organization. Therefore, these findings highlight the significant impact of educational level on employees' engagement with the organization's learning culture. In this case, one may understand that higher levels of education not only enhance individuals' ability to understand and apply knowledge but also contribute to the overall effectiveness and innovation within the organization's learning ecosystem.

Table 4.6 Results on human capital variables

Items of measurement	**Not at all (%)**	**Little extent (%)**	**Some extent (%)**	**Large extent (%)**	**Very large extent (%)**	**Total**
Level of Education						
Understanding and applying knowledge from a learning culture	7.4	15.9	25.6	20.5	30.5	390
Advancement of skills and abilities	7.2	15.4	25.1	21.8	30.5	390
Contribution of higher education to learning culture effectiveness	7.4	15.9	25.1	21.0	30.5	390
Educational background enhancing job performance	7.4	16.7	23.6	22.1	30.3	390
Benefit of higher education in learning initiatives	6.9	15.6	**23.1**	23.6	30.8	390
Mean Score	**2.88**					
Standard Deviation	**0.99**					
Years of experience						
Utilization of resources provided by learning culture	7.4	15.9	26.2	20.0	30.5	390
Complementarity of practical knowledge and theoretical aspects	7.2	15.6	25.1	21.8	30.3	390
Greater benefits for longer-tenured employees	6.7	17.7	27.7	23.6	24.4	390
Mentorship and support for newer employees	7.4	15.4	25.6	23.6	27.9	390
Performance levels of employees with more experience	7.2	18.5	25.1	19.7	29.5	390
Mean Score	**3.10**					
Standard Deviation	**1.12**					
Grand Mean	**2.95**					
Standard Deviation	**1.0**					

Source: Own Survey Data, 2023

The result in the Table shows mean score of 3.10 and a standard deviation of 1.12 which reflect a low overall agreement regarding the influence of years of experience on various aspects such as

learning resource utilization, the integration of practical and theoretical knowledge, mentorship, performance, and perceived benefits for tenured employees.

Therefore, organizations are expected to prioritize educational initiatives and investments to cultivate a highly educated workforce that can drive continuous learning and innovation, thereby maintaining a competitive edge in today's dynamic working landscape.

4.2 Inferential Analysis and Results

Under this section, based on the relevant tests associated done in methodology section, multiple linear regressions (OLS) have been dealt with as in the case of the previous inferential statistics part.

4.2.1 Estimates of the direct effect of learning behavior of organization dimensions on workforce performance

The researcher investigated the direct effect of organizational learning behavior on workforce performance in Capacity-Building Public Organizations (CBPOs). Hypotheses were derived from dynamic capability theory and learning organization theory to guide the study. Regression coefficients were calculated to determine the effect of each organizational learning behavior dimension on workforce performance. Then after, the researcher proceeded to test the mediation effect.

Regression coefficients were calculated to determine the effect of each organizational learning behavior dimension on workforce performance, including systems thinking, personal mastery, mental models, building shared vision, and team learning. The results showed significant positive relationships between all five dimensions and workforce performance. Systems thinking, personal mastery, mental models, building shared vision, and team learning were all positively associated with improved workforce performance.

Table 4.7: Estimates and hypothesis testing

Dependent and independent variables			Path coefficients		S.E.	c.r.	P	R^2
			Unstandardized	Standardized				
Systems thinking	<---	OP	.040	.070	.018	2.22	.0125	.63
Personal mastery	<---	Op	.344	.615	.127	2.714	.000	
Mental model	<---	Op	.052	.084	.025	4.400	.000	
Building shared vision	<---	OP	.073	.114	.029	2.517	.031	
Team learning		OP	0.63	.113	.028	2.616	.030	

Dependent: Workforce performance

Source: Own Survey and Data Analysis, 2023

These findings suggest that organizations that invest in fostering these organizational learning behaviors are likely to achieve higher levels of performance and effectiveness in their capacity-building endeavors. The R-squared value of 0.63 indicates that approximately 63% of the variance in workforce performance is explained by these factors, indicating a strong relationship between the independent variables and the independent (outcome of interest). This implies that the model comprising these factors is fairly effective at predicting and understanding variations in workforce performance. These findings stress the importance of investing in these organizational aspects to drive positive outcomes, suggesting that organizations that prioritize these factors are likely to achieve higher levels of performance and effectiveness in their capacity-building performance. Thus, specific hypotheses, the five dimensions of the learning behavior of an organization (LBO) were accepted.

4.2.2 The Mediating Role of Human Capital (level education and years of experience) in the relationship between learning behavior of Organization and Workforce performance

As mentioned earlier, the main objective of this unit was to examine the mediating role of the human capital variables mentioned in the subtopic. Before conducting the hypothesis testing reliability and validity tests, normality tests, and fitness tests associated with the model were conducted. These activities were followed by estimating the regression coefficients of the mediation effect and hypothesis testing for the same. Moreover, the change in coefficient of determination (R^2) was examined and explained in terms of significance and implication for the moderation effect.

4.2.3 Regression coefficient estimates and hypothesis testing of the effect of the mediating role of human capital variables on workforce Performance of CBPOs

Table 4.8: The Regression coefficients of the moderation effect

Dependent and independent variables	Estimates Path coefficients		S.E.	C.R.	P	R2
	Unstandardized	Standardized				
WfP <--- LBO(Direct effect)|	.405	.776	.017	30.30	.000	**WfP= 0.722**
WfP <--- HC<--- LBO Indirect Effect of LBO on Op = (HC <--- LBO(Direct effect) **X** OP <--- HC(Direct effect)	0.120	.775*.1204 =.090	.018	7.20	.006	
Total Effect=direct effect plus indirect effect (Mediated)	.981	.776+0.090 =.866	.114	7.800	.0001	

Dependent: Workforce performance

WfP = workforce performance, HC=human capital, LBO=learning behavior of organization

Source: Own Survey and Data Analysis, 2023

In the table above, the primary focus is on understanding the intricate dynamics between organizational learning behavior (LBO), human capital (HC), and workforce performance (WfP).

The analysis begins by scrutinizing the direct impact of LBO on WfP, revealing a significant coefficient of 0.405. This suggests that as organizational learning behavior increases, there is a notable positive effect on the workforce performance of the organization. This finding aligns with established literature emphasizing the crucial role of organizational learning in enhancing the productive and efficient workforce of the organizations. This finding suggests that organizations prioritizing learning initiative strategies are likely to show tangible improvements in their workforce's performance metrics.

Furthermore, the study explored the mediating role of human capital variables, especially education status and years of experience, in the relationship between LBO and WfP. The indirect effect analysis displays a coefficient of 0.120, indicating that for every unit increase in LBO, there is an indirect increase of 0.090 units in WfP through the influence of human capital. This mediation effect brings an understanding of the importance of human capital as a conduit through which the learning behavior of an organization translates into enhanced workforce performance. This implies that not only does organizational learning directly influence performance, but it also cultivates human capital, which, in turn, further bolsters workforce performance. This highlights the interconnectedness of learning activities and human resource development in driving organizational effectiveness and success.

Overall, the findings indicate the intertwined nature of learning organization, human capital development, and workforce performance enhancement. The results also emphasized the significance of enhancing a learning-oriented culture within organizations, as well as investing in human capital development initiatives. Through this, organizations can not only reap the direct benefits of enhanced performance but also leverage human capital as a strategic asset to amplify the effect of their learning endeavors. This signifies the importance of adopting holistic approaches to organizational change and development that recognize and nurture the synergies between learning behavior, human capital variables, and workforce performance.

Thus, a specific hypothesis that posits "Human capital variables (education status and years of experience) (HC) mediate the relationship between learning behavior of organization and workforce performance (WfP) of the organizations**."** was statistically supported.

As a result, as the learning behavior of the organization increases, it not only improves workforce performance through direct means but also enhances the human capital profile of employees along it. As a result, this finding indicates that individuals with higher levels of education and more extensive work experience are better equipped to contribute meaningfully to organizational goals and objectives attainment, thereby further enhancing the workforce performance of their respective organizations.

4.2.4 Examining the coefficient of determination (R-squared) for the mediation effect model

When applying mediation models to any other intervening variables, a researcher is expected to evaluate for any change that could in result in viewing the model result without the mediation variable(s). In line with this argument, specific to this study, the learning behavior of an organization was considered as an independent variable, human capital (as measured from

education level and years of experience) was the mediator variable and the workforce performance was independent(outcome) variable. Therefore, as the evaluation of the R-squared (coefficient of determination) showed, there was a change in the magnitude of the coefficient (positively increased) between the direct (unmediated) effect and the indirect (mediated) effects of the learning behaviors of an organization.

Table 4.9: R^2 Change due to mediation

Variable	**R-squared (R^2)**
Without mediation	0.630
With mediation	0.722
R-squared (R^2) change	0.63-0.722 = 0.092

Source: Own survey and data analysis, 2023

As exhibited in the Table 4.9, the coefficient of determination (R^2) for the direct effect of learning behavior on workforce performance that is without the mediator variable's influence was 0.63. It was estimated that the learning behavior of an organization as a predictor of workforce performance explains 63.0 percent of its variance. In other words, the error variance of workforce performance was approximately 37.0 percent of the variance itself. Here, the residual or unexplained percentage is below the explained amount that the R-squared obtained for the model was acceptable.

On the other hand, the coefficient of determination (R^2) for mediated effect was 0.722. In this case, it was estimated that the mediated learning behavior as a predictor of workforce performance explains 72.2 percent of its variance. In other words, the error variance of organizational performance was approximately 27.8 percent of the variance of workforce performance itself.

However, the most attention-seeking issue here was the magnitude of change in R^2 from an unmediated effect to the mediated effect of the learning behavior of the organization on the workforce performance. Accordingly, the R^2 change was 0.722 minus 0.630 which was 0.092, and this accounted for about 9.2%. This change implies that about 9.2% of the variation in workforce performance of capacity-building public organizations was explained by the mediated effect of the learning behavior of an organization. This is related to the total effect of learning behavior on the workforce performance of the CBPOs obtained 0.866 which was enhanced as the result of the interaction with the mediator variable.

To sum up, initially, without mediation, R^2 was 0.63, indicating that learning behavior explains 63% of performance variance. With mediation, R^2 increased to 0.722, showing that mediated learning behavior explains 72.2% of performance variance. The R^2 change due to mediation was 0.092, suggesting that about 9.2% of performance variance is explained by the mediator variable (HC=education level and years of experience). This signifies the importance of the mediator variables in enhancing the relationship between learning behavior and workforce performance in capacity-building public organizations.

4.3 Discussions

Learning behavior of organizations and human capital development are critical determinants of workforce performance in capacity-building public organizations. The analysis presented here demonstrates a strong positive correlation between the variables, indicating that investing in learning initiatives and human resource development is essential for achieving optimal organizational outcomes through the enhancement of workforce performance.

The main findings from the study emphasized the importance of nurturing a learning-oriented organizational culture and promoting team learning initiatives in and across the organization. It was found that systems thinking, personal mastery, and clearer mental models were all positively associated with improved workforce performance. Additionally, building a shared vision and supporting human capital development is crucial for maximizing the benefits of learning organizational culture in the target organizations.

The analysis further revealed that there is a mediating role of human capital (education and years of experience) in the relationship between learning behavior and workforce performance. Human capital acts as an outlet through which learning initiatives translate into enhanced performance of the workforce and organizational outcomes. This emphasizes the interconnectedness of the variables included in the model of this study and underlines the need for holistic approaches to organizational workforce performance and development.

5. Conclusion

In conclusion, the results provide strong empirical evidence for the theoretical frameworks of learning organization behavior and dynamic capabilities that organizations need to develop to attain continuous organizational effectiveness and success. Thus, by prioritizing variables indicated in the conceptual framework of this study, capacity-building public organizations can significantly improve their workforce performance and achieve greater effectiveness in their mission attainment.

6. Recommendations

For Capacity building public organizations:

- **Learning Organization Initiatives**: Capacity-building public organizations are recommended to prioritize investing in learning organization initiatives such as systems thinking training, personal mastery programs, and team learning activities to enhance workforce performance.
- **Human Capital Development aspect**: organizations to focus on developing human capital through education and training programs, as well as by providing mentorship and support for employees to improve their skills and abilities. This could be also done by retaining experienced staff.
- **Integration of Learning and Performance Management system**: Strong integration between learning initiatives and performance management systems enables to ensure that the

impact of organizational learning on workforce performance is effectively monitored and evaluated in the capacity-building organizations.

For Decision-makers:

- Decision-makers and managers within capacity-building public organizations are recommended to recognize the critical role of organizational learning behavior and human capital development in driving workforce performance. They need to allocate resources and support initiatives aimed at enhancing a culture of learning and continuous improvement in organizational effectiveness.
- **Training and Development segments**: Training and development departments are recommended to design and implement programs that enhances systems thinking, personal mastery, and team learning among employees. These initiatives need to be aligned with organizational goals and objectives to maximize their impact on workforce performance.

Future Research:

- Future research may focus on longitudinal studies to understand the long-term impact of organizational learning and human capital development on workforce performance.
- Additionally, institutional cross-cultural analysis and the impact of technological advancements on the learning culture dimensions are better if explored.
- Comparative design could be used to compare the capacity-building and non-capacity-building public organizations to drive lessons for learning, based on contextual variables too.

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Reference

Abuaddous, H. Y., Al Sokkar, A. A. M., & Abualodous, B. I. (2018). The impact of knowledge management on organizational performance. *International Journal of Advanced Computer Science and Applications*, *9*(4), 204–208. https://doi.org/10.14569/IJACSA.2018.090432

Administra, R. (2010). *The Study of Relationship between Organizational Learning and Organizational*.

Ali, J. (2019). *The impact of organisational structure on organisational learning Jamshid Ali Turi and Shahryar Sorooshian*. *August*. https://doi.org/10.1504/MEJM.2019.097817

Allameh, S. M., & Rezaei, A. (2014). *The Mediating Role of Organizational Learning between Knowledge Management Success Factors and Organizational Innovation : A Conceptual Framework The Mediating Role of Organizational Learning between Knowledge Management Success Factors and Organizational*. *October*.

Alshehhi, A. G. (2018). *Strategic Thinking and Strategic Planning : A Conceptual Exposition through a Case Study of the Police Force in the UAE A thesis submitted to The University of Manchester for the degree of*. 1–438.

Anantatmula, V. S., & Stankosky, M. (2008). KM criteria for different types of organisations. *International Journal of Knowledge and Learning*, *4*(1), 18–35. https://doi.org/10.1504/IJKL.2008.019735

Andreatta, B. B. (n.d.). *Creating a Culture of Learning in What is a culture of learning ?*

Antunes, H. de J. G., & Pinheiro, P. G. (2020). Linking knowledge management, organizational learning and memory. *Journal of Innovation and Knowledge*, *5*(2). https://doi.org/10.1016/j.jik.2019.04.002

Arain, G. A., Bhatti, Z. A., Hameed, I., & Fang, Y.-H. (2020). Top-down knowledge hiding and innovative work behavior (IWB): a three-way moderated-mediation analysis of self-efficacy and local/foreign status. *Journal of Knowledge Management*, *24*(2), 127–149. https://doi.org/10.1108/JKM-11-2018-0687

Asnakech, T (2021). The effect of Knowledge management on the Organizational performance of Ethiopian public University through Moderation role of organizational culture.

Ather, T., & Awan, R. (2021). *Effect of Knowledge Management Practices and Leadership Styles of Heads of Departments on University Teachers ' Performance*. *43*(159), 181–200.

Baskerville, R., & Dulipovici, A. (2006). The theoretical foundations of knowledge management. *Knowledge Management Research and Practice*, *4*(2), 83–105. https://doi.org/10.1057/palgrave.kmrp.8500090

Bonn, I. (1992). *Improving strategic thinking : a multilevel approach*. https://doi.org/10.1108/01437730510607844

Bouranta, N. (n.d.). *The link between organizational learning culture and customer satisfaction*. https://doi.org/10.1108/09696471311288528

Cardoni, A., Zanin, F., Corazza, G., & Paradisi, A. (2020). *Knowledge Management and Performance Measurement Systems for SMEs ' Economic Sustainability*.

Čirjevskis, A. (2019). The role of dynamic capabilities as drivers of business model innovation in mergers and acquisitions of technology-advanced firms. *Journal of Open Innovation: Technology, Market, and Complexity*, *5*(1). https://doi.org/10.3390/joitmc5010012

Commitment, O. O. (2017). *The Effect Of Organizational Learning On Organizational Commitment, Job Satisfaction And Work Performance*. *July*. https://doi.org/10.19030/jabr.v25i6.995

Conțu, E. G. (2020). *Organizational performance – theoretical and practical approaches ; study on students ' perceptions*. 398–406. https://doi.org/10.2478/picbe-2020-0038

Crisp, B. R., Swerissen, H. A. L., & Duckett, S. J. (2000). *Four approaches to capacity building in health : 15*(2).

Dangara, Y., Geraldine, C., Road, F., Corps, S., & Plant, N. (2019). *Evaluation of the Effect of Learning Environment on Student ' s Academic Performance in Nigeria .* 1–9.

Daniele, M. (2007). *Organizational Capacity Development*. 1–12.

Ding, J. (2016). *Effects of Organizational Learning Culture and Developmental Feedback on Engineers' Career Satisfaction in the Manufacturing Organizations in Malaysia.*

Ebrahimi, P., Moosavi, S. M., & Chirani, E. (2016). Relationship between Leadership Styles and Organizational Performance by Considering Innovation in Manufacturing Companies of Guilan Province. *Procedia - Social and Behavioral Sciences*, *230*(May), 351–358. https://doi.org/10.1016/j.sbspro.2016.09.044

Elliott, I. C. (2020). *Organisational learning and change in a public sector context*. *44*(0). https://doi.org/10.1177/0144739420903783

Evans, S., Raymond, C., & Perkins, D. D. (2018). *Organizational and Community Capacity*

Building. *December 2014*.

Ferreira, C. L., & Pilatti, L. A. (2013). *Analysis of the Seven Dimensions of Knowledge Management in Organizations*. *8*, 53–63.

Fort, A. L. (1999). *Technical Report 16 : Capacity Building In Training : A Framework And Tool for Measuring Progress* (Issue November).

Hartono, E., Wahyudi, S., & Harahap, P. (2017). *Does Organizational Learning Affect the Performance of Higher Education Lecturers in Indonesia ? The Mediating Role of Teaching Competence*. *12*(4), 865–878.

Hui, H., Wan, C., Wan, J., Radzi, M., Kheirollahpour, J. M., & Radu, S. (2013). *Impact of Knowledge Management and Organizational Learning on Different Dimensions of Organizational Performance : A Case Study of Asian Food Industry Impact of Knowledge Management and Organizational Learning on Different Dimensions of Organizational Per*. *May 2014*.

Hussein, N., Mohamad, A., Noordin, F., & Amir, N. (2014). *Learning Organization and its Effect on Organizational Performance and Organizational Innovativeness : A Proposed Framework for Malaysian Public Institutions of Higher Education*. *130*, 299–304. https://doi.org/10.1016/j.sbspro.2014.04.035

Igberaese, D. E. (2010). *Journal of Sustainable Development in Africa (Volume 12, No.2, 2010)*. *12*(2), 268–283.

Impact, T. H. E., Knowledge, O. F., Practices, M., Student, I., & Outcomes, L. (2009). *THE IMPACT OF KNOWLEDGE MANAGEMENT PRACTICES IN IMPROVING STUDENT LEARNING OUTCOMES*.

Intelligence, E. (n.d.). *Metrics for the Evaluation of Knowledge Transfer Activities at Universities Contact Details :*

Islam, T., & Ahmed, I. (2015). *The influence of organizational learning culture and perceived organizational support on employees ' affective commitment and turnover intention Nankai Business Review International Article information : January*.

Jenatabadi, H. S. (2015). *An Overview of Organizational Performance Index : Definitions and Measurements*. *May*. https://doi.org/10.13140/RG.2.1.4298.3849

Journal, I., & Review, M. (2018). *1 , 2 , 3 1*. *06*(02), 161–169.

Kavengi, J. (2021). *Research in Business & Social Science Exploring the role of inspirational motivation to institutions of higher learning : Empirical evidence from selected universities in Kenya*. *10*(4), 455–466.

Kaya, H. O. (2013). *African indigenous knowledge systems and relevance of higher education in South Africa*. *12*(1), 30–44.

Kazmi, S. A. Z., & Naaranoja, M. (2015). Cultivating Strategic Thinking in Organizational Leaders by Designing Supportive Work Environment! *Procedia - Social and Behavioral Sciences*, *181*, 43–52. https://doi.org/10.1016/j.sbspro.2015.04.864

Kim, J., Egan, T., & Tolson, H. (2015). *Examining the Dimensions of the Learning Organization Questionnaire : A Review and Critique of Research Utilizing the DLOQ*. https://doi.org/10.1177/1534484314555402

Kimble, C. (2013). Knowledge management, codification and tacit knowledge. *Information Research*, *18*(2), 255–256.

Laal, M. (2011). Procedia Computer. *Procedia Computer Science*, *3*, 544–549. https://doi.org/10.1016/j.procs.2010.12.090

Leufvén, M., Vitrakoti, R., Bergström, A., Kc, A., & Målqvist, M. (2015a). *Dimensions of*

Learning Organizations Questionnaire (DLOQ) in a low-resource health care setting in Nepal. 1–8. https://doi.org/10.1186/1478-4505-13-6

Leufvén, M., Vitrakoti, R., Bergström, A., Kc, A., & Målqvist, M. (2015b). *Dimensions of Learning Organizations Questionnaire (DLOQ) in a low-resource health care setting in Nepal*. 1–8.

Liedtka, J. M. (1998). Strategic Thinking: Can it be Taught? *Long Range Planning*, *31*(1), 120–129. https://doi.org/10.1016/s0024-6301(97)00098-8

Limsila, K., & Ogunlana, S. O. (2007). *Performance and leadership outcome correlates of leadership styles and subordinate commitment*. https://doi.org/10.1108/09699980810852682

Liu, C., Academy, N., & Educational, F. (2021). *Effects of peer learning on learning performance , motivation , and attitude Effects of peer learning on learning performance , motivation , and attitude Chia-Yu Liu Hung-Ling Chen *. February 2020*. https://doi.org/10.1504/IJEED.2020.10030596

Luesia, J. F. (2021). *The Relationship between Learning Styles and Academic Performance : Consistency among Multiple Assessment Methods in Psychology and Education Students*.

Management, C. (2013). *HUMAN CAPITAL MANAGEMENT IN A KNOWLEDGE ECONOMY : THE CASE OF SCIENTIFIC Classification Jel : O15 , M1 , O3 .*

Mavuso, M. P., Olawale, B. E., Mkosi, N., & Styles, L. (2021). *Integration of Indigenous Knowledge in the Intermediate Phase Curriculum : a case of South African Schools Integration of Indigenous Knowledge in the Intermediate Phase Curriculum : a case of South African Schools*. *July*.

Mitiku, A. A., Hondeghem, A., & Troupin, S. (2017). *Administrative leadership Understanding the preferred leadership roles of the Ethiopian civil service managers*. https://doi.org/10.1108/AJEMS-06-2016-0093

Nairobi, O. (2015). *Learning Organization, Knowledge Management, Employee Outcomes And Performance Of Large Manufacturing Firms In Kenya*.

Ngah, R., & Ibrahim, A. R. (2007). *Tacit knowledge sharing and organizational performance : Malaysian SMEs perspective*. 276–281.

Nuntamanop, P., & Igel, B. (2012). *A new model of strategic thinking competency*. *2002*. https://doi.org/10.1108/JSMA-10-2012-0052

Park, J. H. (2008). Validation of Senge's learning organization model with teachers of vocational high schools at the Seoul Megalopolis. *Asia Pacific Education Review*, *9*(3), 270–284. https://doi.org/10.1007/BF03026716

Phongsichomphu, W. (n.d.). *Factors Affecting Learning Organization and Innovative Organization*.

Practitioner, D., & Quarterly, V. S. (2010). *Conceptualizing Capacity Building*. *33*(1), 153–160.

Rahbi, D. Al. (2017). *THE EFFECTS OF LEADERSHIP STYLES ON TEAM MOTIVATION*. *16*(2), 1–14.

Ramírez, A. M., Morales, V. J. G., & Rojas, R. M. (2011). Knowledge creation, organizational learning and their effects on organizational performance. *Engineering Economics*, *22*(3), 309–318. https://doi.org/10.5755/j01.ee.22.3.521

Raudeliūnienė, J., Davidavičienė, V., & Jakubavičius, A. (2018). Knowledge management process model. *Entrepreneurship and Sustainability Issues*, *5*(3). https://doi.org/10.9770/jesi.2018.5.3(10)

Rehman, K. (2020). *Mediation of Organizational Learning and Organizational Culture on the Relationship between Knowledge Management and Organizational P erformance in HEI's of*

KP, Pakistan. 886.

Safitri, E., & Isa, A. (2022). *Finance & Banking Studies Human Capital , Organizational Learning and Their Effects on Innovation Behavior and Performance of Banking Employees*. *11*(1).

Samsudeen, S. N., & Kaldeen, M. (2020). *Impact of Human Capital Capabilities On Knowledge Management Process*. *March*. https://doi.org/10.37200/IJPR/V24I7/PR270045

Schniederjans, D. G., Curado, C., & Khalajhedayati, M. (2020). Supply chain digitisation trends: An integration of knowledge management. *International Journal of Production Economics*, *220*. https://doi.org/10.1016/j.ijpe.2019.07.012

Senge, P. (1947). *Peter Senge and the learning organization*.

Soderstrom, N. C., & Bjork, R. A. (2015). *Learning Versus Performance : An Integrative Review*. https://doi.org/10.1177/1745691615569000

Song, J. H., Joo, B. B., & Chermack, T. J. (2007). *The Dimensions of Learning Organization Questionnaire (DLOQ): A Validation Study in a Korean Context*. *20*(1). https://doi.org/10.1002/hrdq

Song, J. H., Lim, D. H., Kang, I. G., & Kim, W. (2014). *Team performance in learning organizations : Mediating effect of employee engagement The Learning Organization Article information : August*. https://doi.org/10.1108/TLO-07-2012-0049

Strategies for fostering Knowledge Management Programs in Public Organizations Hugo A. Mitre-Hernández. (2014).

Timbrell, G., Delaney, P., Chan, T., Yue, A., & Gable, G. (n.d.). *A S TRUCTURATIONIST R EVIEW OF K NOWLEDGE*. 247–259.

Tohidi, F. (2016). *The Role of Organizational Culture in Knowledge Management Seyed Mohammad Hosseini Fard 2*. *7*(5), 412–418. https://doi.org/10.5901/mjss.2016.v7n5p412

Tseng, C., & Mclean, G. N. (2007). *Strategic HRD Practices as Key Factors in Organizational Learning*.

Ul, Q., Saleem, A., Ameen, K., & Ashiq, M. (2021). *Personal knowledge and information management practices of life sciences research students in Pakistan*. *24*(2), 107–123.

Usman, A., Danish, R. Q., Waheed, N., & Tayyeb, U. (2017). *Moderating effect of employees ' education on relationship between feedback , job role innovation and organizational learning culture*. *11*(4), 1–7.

Wang, C. (2016). *Technology innovation and knowledge management in the high-tech industry Technology innovation and knowledge management in the high-tech industry Iuan-Yuan Lu * and Chun-Hsien Wang Chih-Jen Mao*. *April*. https://doi.org/10.1504/IJTM.2007.013437

Wilden, R., Gudergan, S. P., Nielsen, B. B., & Lings, I. (2013). Dynamic Capabilities and Performance: Strategy, Structure and Environment. *Long Range Planning*, *46*(1–2), 72–96. https://doi.org/10.1016/j.lrp.2012.12.001

Winkler, M. K., & Fyffe, S. D. (2016). *Strategies for Cultivating an Organizational Learning Culture*. 1–16.

Yadav, S., & Agarwal, V. (2016). *Benefits and Barriers of Learning Organization and its five Discipline*. *18*(12), 18–24. https://doi.org/10.9790/487X-1812011824

Zou, B., Guo, F., & Guo, J. (2016). Absorptive capacity, technological innovation, and product life cycle: a system dynamics model. *SpringerPlus*, *5*(1). https://doi.org/10.1186/s40064-016-3328-5