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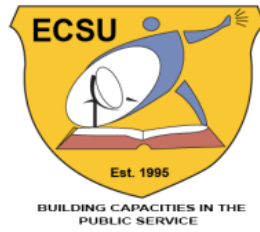
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**Ethiopian Civil service University**

**P.O.Box 5648, Addis Ababa, Ethiopia  
[www.ecsu.edu.et](http://www.ecsu.edu.et)**



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# Determinants of Knowledge Sharing Behavior in Public Sector Organizations: The case of Addis Ababa City Administration Bureaus

Asnakech Tufa<sup>1</sup>

## Abstract

The study examined the determinants of knowledge-sharing behavior of employees in Addis Ababa City Administration Bureaus. The study was based on three main theories of knowledge sharing behavior: social capital, social cognition, and social exchange theories. A sample 400 employees from five selected bureaus were taken as a sample through rule of thumb to collect the primary data through self-administered questionnaire. The data were analyzed using both descriptive and inferential statistics. The findings showed that trust; organizational support, information technology, perceived reciprocal benefit and extrovert personalities were the main determinants which had statistically significant positive effect on employees' knowledge sharing behavior. However, introvert personalities had a statistically significant negative effect on knowledge sharing behavior, but perceived reputation enhancement had insignificant influence on employees' knowledge sharing behavior. The study concluded that except reputation enhancement all of the determinants had a statistically significant influence on knowledge sharing behavior of employees. It also concluded that organizational support has high effect size followed by information technology as compared to other determinants. The study offered empirical evidence on knowledge sharing determinants and how they affect employees' knowledge sharing behavior. It empirically supports the need for developing organizational cultures that enhance trust, organizational support, use of information technology, and employee extrovert personalities.

**Key words:** trust, organizational support, information technology, perceived reciprocal benefit, introvert personality, extrovert personality

## 1. Introduction

In today's knowledge-based economy an organization's success is primarily dependent on its capacity to effectively create, manage, share, and apply knowledge. This idea is crucial for public organizations, as they can greatly increase operational efficiency by increasing the value of their knowledge assets through efficient knowledge sharing techniques (Biloslavo & Trnavcevic, 2007). Even though knowledge sharing is crucial, many public organizations fail to

<sup>1</sup>PhD, Assistant professor at the Ethiopian Civil Service University, Department of Development Management, College of Finance, Development and Management, email: [asnakech.tufal@ecsu.edu.et](mailto:asnakech.tufal@ecsu.edu.et)

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recognize it as an essential aspect for their survival and growth. Staff members' reluctance to share their knowledge presents a serious problem and could jeopardize the overall capacity of public organizations tasked with knowledge creation and sharing (Lin et al., 2008).

Scholars like Ardichvili (2017) list obstacles to knowledge sharing, including interpersonal, procedural, technological, and cultural challenges. Furthermore, Seba et al. (2012) stress the importance of organizational context in promoting a knowledge-sharing culture, contending that knowledge of cultural values and practices is crucial, particularly in Asian contexts (Nguyen, 2020). Organizations in the public sector are especially knowledge-intensive, and encouraging efficient knowledge sharing among staff members is essential for enhancing customer services, developing new services, and reducing expenses (Willem, 2007).

The lack of extensive and detailed research shows knowledge gap, which denotes the lack of systematically recorded knowledge or discoveries in this area, implying that managers, researchers, and policymakers might not completely comprehend the factors that encourage or impede knowledge sharing among staff members in their organizations. This study is hoped to contribute to the body of knowledge management and leadership literature already in existence. By comprehending how various leadership styles affect knowledge sharing, leaders in public bureaus can implement successful tactics to foster a culture of knowledge sharing, which is essential for organizational learning and innovation. With this understanding, this study aimed to assess existing knowledge sharing practices, key determinants influencing knowledge sharing behaviors, and their effects on knowledge sharing behaviors of employees.

## **2. Review of Related Literature**

### **2.1 Theoretical Literature Review**

#### **2.1.1 Concepts of Knowledge Sharing**

Mousakhani and Gharakhani (2012), stated as knowledge sharing is an organizational belief, behavior, culture, or network that illustrates the sharing of information, expertise, and experience between departments and employees. Another way to describe it would be as a tool that facilitates information sharing within an organization. Therefore, in order to improve employee collaboration and performance, the knowledge sharing process in an organization is becoming increasingly significant.

Most authors concur that individual characteristic like motivation, experience, values, and beliefs impact knowledge sharing (Albino et al., 2004). According to Lam and Lambermont-Ford (2010), sharing knowledge is a difficult task because one of the primary obstacles is a person's willingness to share and incorporate their knowledge. In Ethiopia context, even if there is no enough studies, most previous studies regarding knowledge management were conducted in healthcare organizations such as Dessie et al. (2021) and Asemahagn (2014) but they have not addressed knowledge sharing separately and factors affecting individuals' behavior in knowledge sharing. On the other hand, a few researchers have focused on the practices of knowledge sharing in higher education (Amin et al. (2019).Asfaw & Mekonnen et al. (2012)). In addition,

some studies have been made on practices and enablers of knowledge management in higher education of Ethiopia (Bayu, 2018; Ebuy, 2013 & Temtime, 2020).

### **2.1.2 Determinants of Knowledge Sharing Behavior**

- **Trust**

Social exchange theorists consider trust to be the most important of the key variables. Therefore, trust between the parties to an exchange relationship is essential to the growth and continuation of social exchange. If employees feel that sharing their knowledge will benefit both them and the organization as a whole, they are more likely to do so. This proves that knowledge-sharing behavior improves when an organization maintains member trustworthiness (Gambetta (2000).

- **Organizational Support**

According to the social exchange theory, employees' desire to adopt behaviors that align with the support they receive from the organization has led researchers to find a connection between knowledge-sharing behavior and organizational support (Jolaei et al., 2014).

- **Information Technology**

Technology and tools that are thought to be easy to use and acquire are expected to have a positive impact on knowledge sharing behavior. Thus, IT is a very helpful enabler for preserving explicit knowledge (Nguyen, 2020).

- **Perceived Reciprocal Benefits**

Human behavior is explained by the Social Exchange Theory in terms of social exchange. According to earlier research, people share knowledge in the hopes that others will satisfy their future knowledge needs. Reciprocity is a key motivator for people to contribute knowledge to electronic knowledge repositories, according to Kankanhalli et al. (2005). It is therefore hypothesized that knowledge workers' perception that others will satisfy their future knowledge requirements in exchange for their knowledge sharing is likely to have a favorable impact on their knowledge-sharing behavior.

- **Perceived Reputation Enhancement**

According to the Social Exchange Theory, social interactions produce social rewards like a sense of acceptance, prestige, and respect. Because reputation depends on an individual's traits and behaviors that are apparent to others, people choose a specific self-image that they wish to reflect, alter their behavior to reflect it, and decide to reflect that self-image (Carroll et al., 2003).

- **Personality**

A person's emotions, sense of self, worldview, thoughts, and behavioral patterns make up their personality. Personality traits can affect how people share knowledge at work on an individual basis and most individuals can be categorized into introversion and extroversion according to popular belief (Paliszkiewicz, 2011).

### **2.1.3 Theories Related to Knowledge Sharing**

- **Social Capital Theory**

In this theory social capital has been identified as consisting of trust, recognition, a common language, and a common vision. One paradigm for understanding the importance of interpersonal connections and group resources is the social capital theory (Chiu et al., 2016).

- **Social Cognitive Theory**

According to this theory, factors such as a person's personality, their environment, and their behavior all have a big impact on how they interact with others (Lu et al., 2006).

- **Social Exchange Theory**

According to this theory, organizational and supervisor support have an impact on an individual's behavior to share knowledge, since a person's desire to interact with others is driven by the hope of gaining social benefits like respect, status, and acceptance (Ford and Staples, 2010).

## **2.2 Empirical Literature Review**

Bock and Kim's (2005) early research on public sector employees showed how knowledge sharing is impacted by expected contributions and rewards. Kwok and Gao (2005) turned their attention to college students and looked into the functions of absorptive capacity and extrinsic motivation. While Lin (2007) assessed perceived organizational rewards and the satisfaction gained from assisting others in Taiwanese businesses, Bock et al. (2005) also addressed social relationships and anticipatory rewards in Korea's private sector. Study by Palo and Charles (2015), has examined how organizational commitment and reputation enhancement influence the sharing behavior of sales personnel. Fullwood and Rowley (2017) took an academic perspective, analyzing the relationship between organizational culture and knowledge sharing, particularly in the UK context. Suman (2023) confirmed that individual motivations, perceptions of organizational support, cultural factors, technology, and trust play significant roles in facilitating knowledge sharing. Other acknowledged influences include organizational structure, climate, size, and reward mechanisms.

In the Ethiopian context, Dessie et al., (2021) and Asemahagn, (2014) conducted studies on existing practices of knowledge management on healthcare organizations. Some attention has been given to higher education practices in knowledge management and enablers (Amin et al., 2019; Asfaw & Mekonnen, 2022), Bayu, (2018); Ebuy, (2013); Temtime, (2020) highlights practices and enablers of knowledge management.

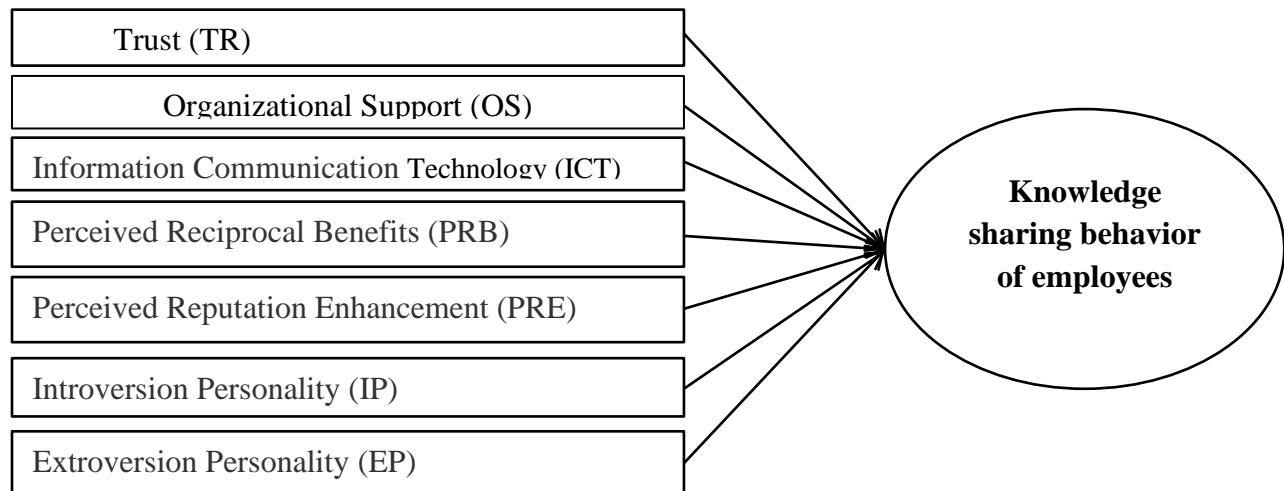
## **2.3 Conceptual Framework**

The conceptual framework of this study describes the major determinants which comprises trust, organizational support, it, perceived reciprocal benefits, personality (extroversion introversion)



and perceived reputation enhancement (Independent variables) that affect knowledge sharing behavior of employees.

**Figure 2.1** Conceptual Framework



Source: Adapted from Chung & Pham (2022)

### 3. Materials and Methods

The study used mixed research approach where the researcher combines all elements of qualitative and quantitative research approaches. Both descriptive and explanatory concurrent research designs were employed. Primary data was collected through a questionnaire and focus group discussion. 400 employees were selected from selected bureaus for survey through systematic random sampling technique. Furthermore, focus group discussion discussants were selected using a purposive sampling technique. To analyze the collected data both descriptive and inferential statistics were employed. To examine the effects of each determinant on knowledge sharing behavior of employees Structural Equation Modeling Partial Least Square (PLS) model was used. Qualitative data was analyzed in narrative way to support the quantitative data.

### 4. Results and Discussion

#### 4.1 Descriptive Analysis on Existing Practices of Determinants of Knowledge Sharing

Under this section data collected on all determinants of knowledge sharing behavior were analyzed and discussed by using descriptive statistics. Regarding the existing practice of determinants of knowledge sharing researcher used Ling et al., (2015) mean cutting point to interpret the mean scores where mean score below 3.39 are deemed low, those between 3.40 and 3.79 are considered moderate, and those above 3.79 are considered high.

#### 4.1.1 Existing practices of Trust

**Table 4.1** Existing practices regarding trust

Items	Mean	Standard Deviation
Colleagues often consulted me at work	3.21	1.023
Colleagues often appreciate my opinion	3.19	1.083
Colleagues appreciate my work experience	3.32	1.082
Colleagues believe in my expertise	3.18	1.069
Colleagues want to learn from my work experience	3.30	1.129
<b>Cumulative Mean</b>	<b>3.27</b>	<b>1.076</b>

Source: SPSS output based on survey data, 2023

Respondents were asked whether their colleagues often consulted them at work, and they rated moderately as shown by the mean score of 3.21 and the standard deviation of 1.023. This implies that employees received little assistance from their coworkers. In addition, respondents were asked if their colleagues often appreciate their opinion, and, the respondents rated low, as evidenced by the mean score of 3.19 and a standard deviation of 1.083. This indicates that their colleagues value their opinions less than respondents perceive.

Respondent's response shows that their colleagues rated their work experience poorly with a mean score of 3.32 and standard deviation of 1.082. This indicates that their colleagues have less trust in their work experiences than they perceived. Respondents asked that their colleagues believe in their expertise, and the response shows that their colleagues rated their expertise lowly, as evidenced by a 3.18 mean and a 1.069 standard deviation. Additionally, participants were asked whether their colleagues wanted to learn from their work experiences, and they replied that employees were less interested in learning from the work experiences of their colleagues. Moreover, the cumulative mean (3.27) and Std. 1.076 indicate that there was low trust among employees of selected bureaus to share knowledge and to help each other in their work place.

#### 4.1.2 Organizational Support

As far as existing practice of organizational support in knowledge sharing behavior was concerned, respondents replied that there is low organizational support to increase employee's possibility of getting a well work assignment by transferring knowledge with their coworkers, with a mean of 2.67 and a standard deviation of 1.051. The respondents were also asked if sharing knowledge with coworkers increased their chances of getting promoted, and the respondents responded that there was inadequate organizational support to give employees who shared knowledge with coworkers a chance of promotion, as evidenced by a mean score of 2.43 and a standard deviation of 0.873. Besides, respondents were asked whether their organization supported them in getting incentives as a result of their behavior of knowledge sharing with their co-workers. The responses obtained indicated that there was low organizational support for

improving the knowledge sharing behavior of employees via incentives as exhibited by a mean score of 2.53 and standard deviation of 0.92.

**Table 4.2** Existing practices regarding organizational support

Items	Mean	Standard Deviation
Sharing information with coworkers increases my likelihood of receiving a better work assignment	3.72	0.785
Sharing knowledge with my co-workers improves the likelihood of getting a promotion for me	3.62	0.810
Sharing knowledge with my co-workers improves the likelihood of getting a higher salary for me	2.53	0.923
Sharing knowledge with my co-workers improves the likelihood of getting a bonus for me	2.45	0.871
I expect to get more job security when I share knowledge with my co-workers	2.58	0.932
My organization encourages employees to share knowledge with their colleagues	2.84	1.090
My organization provides most sources of information so employees can share knowledge with their colleagues	2.23	0.836
<b>Cumulative Mean</b>	<b>2.43</b>	<b>0.83</b>

Source: SPSS output based on survey data, 2023

Respondents were asked if they anticipated that sharing their knowledge would increase their job security, and they replied that there is less expectation on their organization's support to get a chance for more job security, as evidenced by a mean score of 2.58 and standard deviation of 0.93. Their organization was seen as less supportive in encouraging them to share knowledge among their co-workers, as seen from mean 2.84 on average, with a 1.09 standard deviation.

Furthermore, respondents were asked if their organization provided required sources of information to initiate them in sharing of knowledge with their colleagues and they replied as there is no provision of resources to encourage employees to share knowledge as supported with a mean of 2.01 and 0.44 Std. Finally the existing practice of organizational support to improve employee's knowledge sharing behavior was low as exhibited by a cumulative mean of 2.43 and Std. of 0.83.

### 4.1.3 Information Technology

Respondents were asked if they widely used information technology to access knowledge, as response they replied as there is low utilization of IT to access knowledge as evidenced by a mean of 3.12 and Std. of 1.116. Employees were requested if they are allowed to use software, intranet to discuss with colleagues about work; their response shows that employees are less utilizes software and intranet for sharing of knowledge related to their work as evidenced wit mean of 3.09 and 1.092 Std.

Respondents were asked whether they were permitted to talk about work with coworkers via software and the intranet and their response indicates there was less practice in having appropriate technology to support knowledge sharing as evidenced with a mean of 2.78 and Std of 1.001. Employees were inquired as they regularly trained in IT to share knowledge; they replied they were moderately trained in IT as exhibited by mean of 3.58 and 0.980 Std.

**Table 4.3** Existing practices regarding information communication technology

Items	Mean	Standard Deviation
Employees are widely used information data to access knowledge	3.12	1.116
Employees are allowed to use software, intranet to discuss with colleagues about work	3.14	1.093
My organization has appropriate technology in place	3.23	1.118
Employees are regularly trained in information technology to share knowledge	3.09	1.092
My practiced virtual interactions to enhance knowledge sharing	2.78	1.001
<b>Cumulative Mean</b>	<b>3.12</b>	<b>1.084</b>

Source: SPSS output based on survey data, 2023

Moreover, respondents were asked whether their organization practiced virtual interactions to enhance knowledge sharing and they responded that there was low practice of virtual interaction to enhance knowledge sharing as supported with a mean of 3.23 and Std. of 1.118. The cumulative mean for utilization of IT shows there is less use of IT in their organization as exhibited with a mean of 3.14.

#### 4.1.4 Perceived reciprocal benefits

**Table 4.4** Existing practices regarding perceived reciprocal benefits

Items	Mean	Standard Deviation
When I share knowledge with my co-workers, I expect them to respond to my knowledge needs	3.52	1.009
When I share knowledge with my co-workers, I believe that my queries for knowledge will be answered	3.61	1.004
I know that my co-workers help me, so it is only fair to help them out when they are in need of knowledge	3.69	0.881
<b>Cumulative Mean</b>	<b>3.6</b>	<b>0.95</b>

Source: SPSS output based on survey data, 2023

The mean score of 3.52 and a standard deviation of 1.009 indicated that respondents moderately expected their coworkers to respond to their knowledge needs when asked if employees share knowledge with their coworkers by expecting them to do so. The mean of 3.61 and standard deviation of 0.966 indicate that respondents' questions about knowledge sharing were moderately

answered. They were also asked if they thought that would be answered with their coworkers when they shared knowledge or not. Respondents asked because they believe it is only right to assist them when they need information and because they are aware that their coworkers assist them. They responded that there is a moderate degree of reciprocal expectation because their coworkers assist them when they need it, which is supported by a mean score of 3.69 and 0.881. As demonstrated by a standard deviation of 0.952 and a cumulative mean of 3.6. Employees' reciprocity benefits to improve their knowledge-sharing behavior are moderate.

#### 4.1.5 Perceived reputation enhancement

**Table 4.5** Existing practices regarding perceived reputation enhancement

Items	Mean	Standard Deviation
My co-workers respect me, when I share knowledge with them	3.63	0.917
Sharing knowledge with my co-workers improves others recognition of me	3.01	1.118
I share my knowledge to improve my reputation in the organization	3.33	1.112
<b>Cumulative Mean</b>	<b>3.32</b>	<b>1.049</b>

Source: SPSS output based on survey data, 2023

When asked if their coworkers respect them when they share knowledge with them, respondents rating moderately (mean of 3.63, standard deviation of 0.917). With mean scores of 3.01 and 1.118, respondents gave sharing knowledge with their coworkers a low rating in terms of improving others' recognition of them. This shows that employees' feel their co-workers have low respect to them. Respondents' replies low regarding sharing of their knowledge to improve their reputation in the organization was low, as can be seen from the mean score of 3.33 and Std of 1.112. This implies that employees perceived sharing of knowledge to their co-workers had low contribution to get reputation in their organization.

#### 4.1.6 Personality (Introversion and Extroverts)

**Table 4.6** Existing practices regarding personality (introversion and extroverts)

Items	Mean	Standard Deviation
I rarely express my actual feelings when I speak	3.54	1.028
I seldom bring up sharing with others	3.44	.949
I do not easily trust strangers	3.50	.983
I am someone who would rather listen than speak	3.58	.998
I never share my opinions with others	3.25	1.060
<b>Cumulative Mean</b>	<b>3.46</b>	<b>1.004</b>

Source: SPSS output based on survey data, 2023

For question stated as they rarely express their actual feelings when they speak, their response was moderate which is exhibited with a mean of 3.54 and 1.028 Std. This implies that they are moderately introverted to share their knowledge. Besides, respondents' reply if they seldom bring up sharing with others was also moderate with mean of 3.44 and Std. of 0.949. This indicates that employees rarely interacted with others to share knowledge. Respondents demonstrated a moderate level of trust in strangers, as indicated by a mean score of 3.5 and a standard deviation of 0.983. This implies that employees moderately trust the strangers to share ideas with them. Additionally, a moderate mean score of 3.58 and a standard deviation of 0.998 indicate that respondents tended to prefer listening over speaking. This indicates that employees have perceived themselves as they are listener than talking with others.

Moreover, employees tended to have a low tendency to inquire or share their opinions with others, as reflected by a mean score of 3.25 and a standard deviation of 1.060.. This implies that employees share their opinion with others to some extent. The cumulative mean shows that employees of the selected bureaus were moderately introverted to share knowledge. Respondents demonstrated a moderate level of sociability and approachability toward others, as indicated by a mean score of 3.57 and a standard deviation of 1.054. This indicates that employees are sociable to some extent. They also rated themselves as moderately comfortable working with others, with a mean score of 3.49 and a standard deviation of 0.995. This implies that employees have a perception that they are comfortable to work with others to some extent. Besides, employees rated low ( $m=3.37$ ,  $Std=0.984$ ) regarding enjoy in socializing and interacting with others. This shows that employees' perceived as they enjoy less as they are socializing and interacting with other's action and interaction. Furthermore, Employees perceived themselves as low in loving being an inspiration, with a mean score of 3.26 and a standard deviation of 1.074. This indicates that employees were not in love to motivate others in sharing knowledge. The cumulative mean (3.45) show that employees moderately perceived themselves as extrovert. This implies that some employees are tried to interact and share knowledge with others.

#### 4.1.7 Knowledge Sharing Behavior

**Table 4.7** Existing practices regarding knowledge sharing behavior

Items	Mean	Standard Deviation
I am a sociable and approachable individual	3.57	1.054
I am always comfortable working with people	3.49	.995
I enjoy socializing and interacting with others	3.40	.976
I am always comfortable working in groups	3.58	.935
I love being an inspiration	3.39	1.037
<b>Cumulative Mean</b>	<b>3.45</b>	<b>1.013</b>

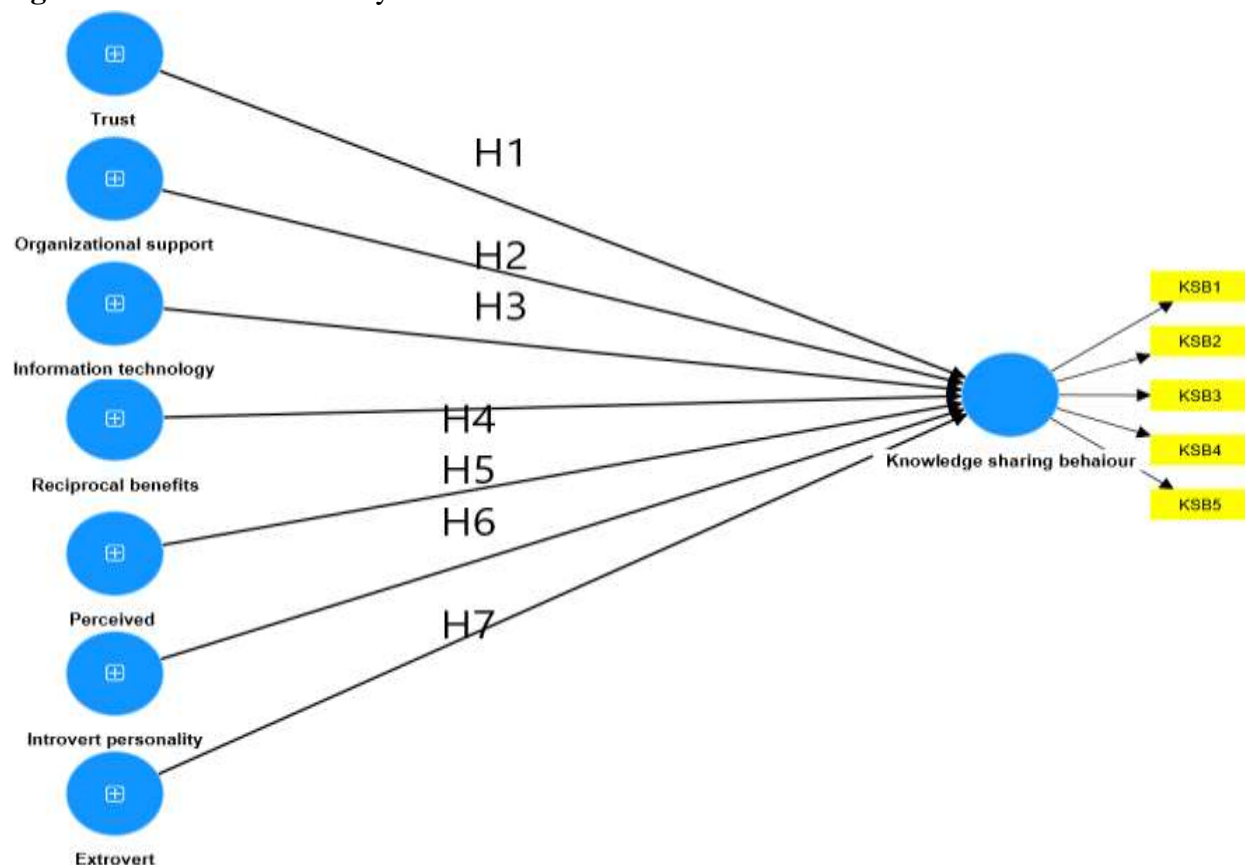
Source: SPSS output based on survey data, 2023

When asked about their organization's practice of sharing organizational knowledge with employees, the employees' perception of knowledge sharing behavior was found to be low, with a mean score of 3.11 and a standard deviation of 1.144. This indicates that employees perceived that their organization has inefficient practice in sharing its knowledge to employees. Respondents also perceived low ( $m=3.14$ ,  $Std=1.157$ ) on their practice to share what they know to co-workers. Employees rated low ( $m=3.11$ ,  $Std=1.088$ ) their behavior to share their work experiences with co-workers. This indicates that employees' sharing behavior is low, with a mean score of 2.97 and a standard deviation of 1.189, reflecting limited practice of sharing skills with co-workers. Besides there is low ( $m=3.22$ ,  $Std=1.128$ ) trends of sharing expertise they get from education or training with their co-workers. Finally, the cumulative mean shows as there is low (3.11) behavior of knowledge sharing among employees of selected bureaus. This implies that employees have

## 4.2 Inferential Analysis

The researcher used PLS-SEM and Smart PLS4 software to investigate the effects of each determinant on knowledge sharing behavior of employees as seen below.

**Figure 4.1** Model of the study



Source: PLS output based on survey data, 2023

A measurement model displays each exogenous construct (introverted personality, extrovert personality, perceived reciprocal benefits, ICT, trust, organizational support, and perceived image enhancement) along with the indicators that go along with it. However, the structural model illustrates the relationship between independent and dependent variables. Under the measurement, or outer model, the study focused on evaluating the reflective model's criteria (tests), which include discriminant validity (Fornell and Larcker criteria), convergent validity (outer-loadings and average variance extracted/AVE), and composite reliability.

#### 4.2.1 Evaluation of Measurement Model (Outer Model)

- **Composite Reliability**

The composite reliability values should be equivalent to or higher than 0.70 (Hair et al., 2021).

**Table 4:8** Composite reliability and Convergent validity test

Constructs	Cronbach's alpha	Composite reliability (rho_a)	Average variance extracted (AVE)
Trust	0.801	0.873	0.664
Organizational support	0.715	0.893	0.679
Information technology	0.761	0.792	0.558
Perceived reciprocal benefit	0.814	0.840	0.664
Perceived reputation enhancement	0.702	0.720	0.546
Introvert personality	0.744	0.774	0.513
Extrovert personality	0.793	0.828	0.660
Knowledge sharing behavior	0.730	0.758	0.574

Source: PLS output based on survey data, 2023

The composite reliability was 0.873 for trust, 0.893 for organizational support, 0.792 for information technology, 0.840 for perceived reciprocal benefit, and 0.720 for perceived reputation enhancement, 0.774 for introvert personality, 0.828 for extrovert personality, and 0.758 for knowledge behavior. Following recommendations by Hair et al., (2021) all of the values are greater than the cutoff point (0.7) and less than 0.95. The result shows that the model complies (conforms) to the internal consistency criteria.

The AVE values for trust (0.664), organizational support (0.679), information technology (0.558), perceived reciprocal benefit (0.664), Perceived reputation enhancement (0.546), Introvert personality (0.513), Extrovert personality (0.660), and 0.574). The results implies that on average the construct accounts for more than half of the variation of its indicators and confirms the absence of a problem with convergent validity of the model. Table 4.9 shows the values for the Fornell-Larcker Criterion, which states that the square root of each construct's AVE should be greater than its highest correlation with any other construct.



Consequently, the diagonals (highlighted values) in Table 4.9 represent the square root of the AVE, while the other scores represent the square correlations. The eight (8) constructs' inter-correlation ranged from 0.237 to 0.605, falling below Hair et al. (2021)'s suggested upper limit of 0.8. The outcome thus demonstrates that each construct's square root of AVE is higher than its highest correlation with any other construct. Therefore, since a construct is distinct from other constructs; discriminant validity is not an issue.

**Table 4.9** Discriminant validity (Fornell-Larcker Criterion)

Constructs	EP	ITC	IP	KSB	PRB	PRE	Trust	OS
EP	0.716							
ITC	0.481	0.708						
IP	0.605	0.544	0.762					
KSB	0.577	0.403	0.573	0.757				
PRB	0.478	0.359	0.400	0.313	0.778			
PRE	0.456	0.496	0.390	0.329	0.532	0.739		
Trust	0.339	0.237	0.328	0.271	0.40	0.370	0.751	
OS	0.338	0.435	0.401	0.309	0.402	0.428	0.475	0.799

Source: PLS output based on survey data, 2023

The researcher evaluated the structural model using Hair et al.'s reflective model criteria (2021). The criteria include evaluations of predictive relevance Q<sup>2</sup>, effect size/or f<sup>2</sup>, R<sup>2</sup> values, path coefficients, and collinearity. Collinearity between exogenous variables was assessed using the variance inflation factor (VIF) prior to the structural model assessment, as indicated in Table 4.10. Each variable's VIF value should be less than five, per Hair et al. (2021).

**Table 4.10** Collinearity statistics (VIF)

Independent variables	Knowledge sharing behavior
Extrovert personality	1.022
Information technology	1.066
Introvert personality	1.113
Knowledge sharing behavior	
Perceived reciprocal benefit	1.139
Perceived reputation enhancement	1.241
Trust	1.016
organizational support	1.009

Source: PLS output based on survey data, 2023

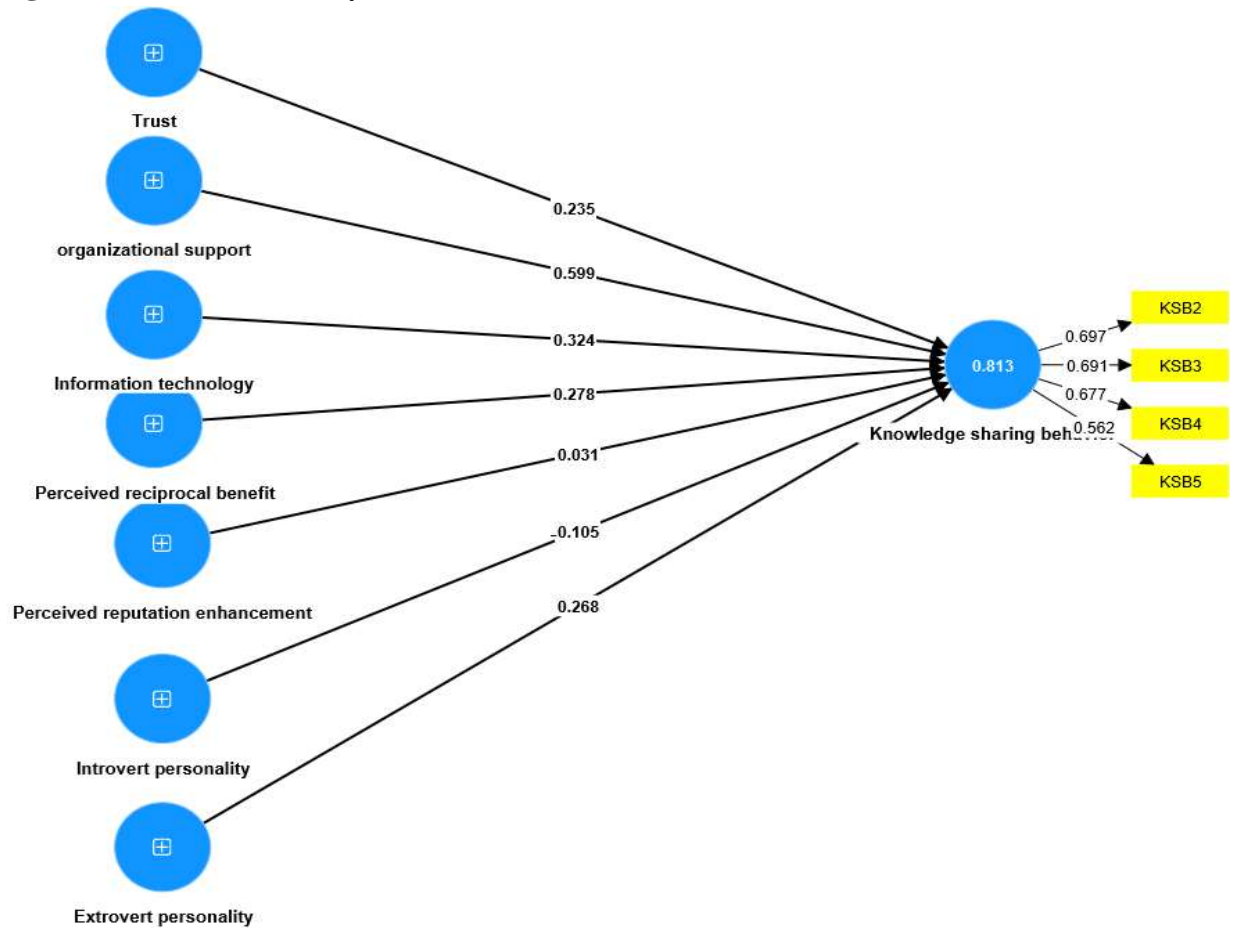
The results indicate that the values of multi-collinearity (VIF) for all independent variables (Trust=1.016, organizational support=1.009, information technology=1.066, perceived reciprocal benefit=1.139, perceived reputation enhancement=1.241, introvert personality=1.113, and

extrovert personality=1.022 are less than 5, which is the maximum threshold for collinearity. Hence, there is no a problem collinearity for the model under evaluation.

#### 4.2.2 Evaluation of Structural Model Results (Inner Model)

After testing all required requirements for PLS reflective model the researcher proceeded to the path coefficients, which represent the hypothesized relationships between the independent and dependent variables in PLS-SEM, which are displayed in the algorithm findings.

**Figure 4.2** Path model analyses (measurement and structural model)



Source: PLS output based on survey data, 2023

### 4.2.3 Coefficient of Determination Evaluation (R-square)

**Table 4.11** Coefficient of determination evaluation (R-square)

	R-square	R-square adjusted
Knowledge sharing behavior	0.813	0.809

Source: PLS output based on survey data, 2023

The R-square value for knowledge sharing behavior of employees was 0.813. This shows that the independent variables (trust, organizational support, information technology, perceived reciprocal benefit, perceived reputation enhancement, introvert and extrovert personality) account for 81.3% of the variation in knowledge sharing behavior of employees. This implies that about 81.3% of improvement in employees' knowledge sharing behavior was due to the change in these determining factors.

### 4.2.4 Path Coefficients ( $\beta$ ) for effects of each determinant on knowledge sharing behavior

The structural model path coefficients ( $\beta$  values) were calculated as displayed in figure 4.2 on previous and summarized on table 4.12.

**Table 4.12** Path Coefficients ( $\beta$ )

Effects of each determinant on KS behavior	Path coefficients
Trust -> Knowledge sharing behavior	0.235
organizational support -> Knowledge sharing behavior	0.599
Information technology -> Knowledge sharing behavior	0.324
Perceived reciprocal benefit -> Knowledge sharing behavior	0.278
Perceived reputation enhancement -> Knowledge sharing behavior	0.031
Introvert personality -> Knowledge sharing behavior	-0.105
Extrovert personality -> Knowledge sharing behavior	0.268

Source: PLS output based on survey data, 2023

As a result, the path coefficient ( $\beta$ ) for trust among employees was 0.235 which indicates that trust has a positive direct effect on employee's knowledge sharing behavior. Thus, the change in one standard deviation (SD) of trust of employees changes their knowledge sharing behavior with 0.235. Regarding organizational support ( $\beta$ ) was 0.599 which indicates that organizational support has a positive direct effect on employee's knowledge sharing behavior and the change in one standard deviation (SD) of organizational support changes the behavior of employees to share knowledge by 0.599. For information technology ( $\beta$ ) was 0.324, which shows the positive effect and the change in one standard deviation of information technology utilization alters employee's knowledge sharing behavior by 0.324. Path coefficient for perceived reciprocal benefit (0.278) shows as employees' perception for reciprocal benefit has a direct positive effect on their behavior to share knowledge to others and an increase in one SD of employee's

perception for reciprocal benefit changes their knowledge sharing behavior by 0.278. Path coefficient for perceived reputation enhancement (0.031) revealed that it has a very low positive direct effect on employees' knowledge sharing behavior. This indicates that as the perception of employees to enhance their reputation through knowledge sharing is a change in one SD, it alters their knowledge sharing behavior by 0.031 only.

On the other hand, introvert personality of employees had a negative direct effect on knowledge sharing behavior of employees as the path coefficient is -0.105. This indicates that as an introvert personality of employees increased by one SD, their knowledge sharing behavior reduced by 0.105. Finally, the path coefficient of extrovert personality of employees is 0.268 which points the direct positive effect of employees' extrovert personality on their knowledge sharing behavior. This means as there is a change in one SD of extrovert personality of employees there is a change in employees' knowledge sharing behavior by 0.268.

Even though all determining factors had effects on knowledge sharing behavior, organizational support had a greater influence with a path coefficient of 0.599 when compared to other constructs, and is followed by information technology with a path coefficient of 0.324. For testing hypotheses bootstrapping was calculated using 500 (default) sub-samples, a 95% confidence level (0.05 level of significance), and a two-tailed test, as shown in Table 4.13.

**Table 4.13** Hypothesis testing (P- values)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T-statistics ( O/STDEV )	P values	Status of hypotheses
Trust -> Knowledge sharing behavior	0.115	0.121	0.054	2.111	0.035	Supported
Organizational support -> Knowledge sharing behavior	0.247	0.101	0.097	4.909	0.000	Supported
Information technology -> Knowledge sharing behavior	0.236	0.234	0.049	4.815	0.000	Supported
Perceived reciprocal benefit -> Knowledge sharing behavior	0.170	0.172	0.052	3.305	0.001	Supported
Perceived reciprocal enhancement -> Knowledge sharing behavior	0.185	0.187	0.082	0.080	0.289	Not supported
Introvert personality -> Knowledge sharing behavior	0.189	0.041	0.055	2.108	0.043	Supported
Extrovert personality -> Knowledge sharing behavior	0.190	0.190	0.057	3.318	0.001	Supported

Source: PLS output based on survey data, 2023

**H<sub>a1</sub>** indicates that trust among employees has a statistically significant positive effect on knowledge sharing behavior of employees with 0.035 P-value which is less than the anticipated

cutoff (0.05), and the T-statistics value of 2.111, which was greater than the critical T-value (1.96) and the study's data confirms the predetermined hypothesis.

**Ha2** shows that organizational support has a statistically significant positive effect on knowledge sharing behavior of employees with a P-value of 0.000, and a T-statistics value of 4.909, which is greater than T-critical (1.96). The study's result confirms the pre-assumed hypothesis.

**Ha3** suggests that information technology has statistically positive significant effect on knowledge sharing behavior of employees with a p-value of 0.000, which is less than the threshold (0.05), and a T-statistic of 4.815, which is higher than the T-critical (1.96). Thus, the research provided evidence in support of the hypothesized relationship.

**Ha4** shows that perceived reciprocal benefit has a statistically significant positive effect on knowledge sharing behavior of employees with a path coefficient of, and P-value of 0.001 which less than 0.05, a T-statistic is 3.305 that is higher than the T-critical. This suggests that the finding supported the presumptive hypothesis.

**Ha5** shows that perceived reciprocal enhancement has no statistically significant effect on knowledge sharing behavior of employees with p-value of 0.080 and T-statistics of 0.289. This indicates that the data did not support the pre-stated assumption.

**Ha6** indicates that introvert personality has statistically significant negative effect on knowledge sharing behavior of employees.

**Ha7** revealed that extrovert personality has statistically significant positive effect on employees' knowledge sharing behavior. It confirms as the data support the proposed hypothesis.

### **4.3 Discussions**

The main objective of this study was to identify the main determinants of knowledge sharing (trust, organizational support, information technology, perceived reciprocal benefit, perceived reputation enhancement, and introvert and extrovert personalities) and investigate their effects on the behavior of employees in knowledge sharing. According to the study's findings, there was low organizational support, little employee trust, and low use of information technology to encourage knowledge sharing among staff members in particular bureaus. On the other hand the study found that employees perceived a moderate degree of reciprocal benefit and reputation enhancement from sharing knowledge with coworkers. Additionally, the study found that while only a small percentage of workers were introverts, some of them had extrovert personalities and excel at teaching others.

Similarly, the focus group discussion results show that low trust among employees and between employees and managers in sharing knowledge. Besides, there was low organizational support to motivate employees to engage in knowledge sharing activities. The response from group discussants also showed as there was low utilization of ICT for knowledge sharing activities even if there is better IT infrastructure in some bureaus. Moreover, the study found that organizational support, information technology, trust, a perception of reciprocal benefits, and an extrovert personality all had a statistically significant positive effect on employees' knowledge-

sharing behavior. Though perceived reputation enhancement had a modest positive influence on knowledge sharing behavior but introverted personalities had a statistically significant negative effect on this behavior.

The study's results showed that organizational support had the greatest influence on employees' knowledge-sharing behavior. The study conducted by Anwar et.al (2019) evidenced that culture and climate of an organization plays a vital role in building a knowledge sharing behavior of employees. On the other hand, among public sector workers, Bock and Kim (2005) looked at elements like expected rewards, expected contribution, and expected association have a significant influence on knowledge sharing behavior of employees. University students' extrinsic motivation, channel richness, and absorptive capacity were examined by Kwok and Gao in 2005 as all influence the behavior of students in sharing knowledge. Anticipated Extrinsic Rewards (AER), reciprocal relationships, and Sense of Self-Worth (SSW) among Korean private sector employees were examined by Bock et al. in 2005 as all of them affect behavior of employees.

#### **4.4 Conclusions**

Concerning the present status of the determinants of knowledge sharing, the study concluded that there is low organizational support, low employee trust, and insufficient use of information technology to encourage staff knowledge sharing behavior. Although employees acknowledge as knowledge sharing has a moderate potential to improve reputation and yield reciprocal benefits, the current inadequacies prevent these benefits from being fully realized. The study also concluded that trust, information technology, organizational support, the sense of reciprocal benefits, and extroverted personality traits significantly encourage employees to share their knowledge.

#### **4.5 Recommendations**

By offering incentives and resources, it is recommended if leaders actively encourage a culture of knowledge sharing. To make knowledge sharing simpler and more efficient, it is better if organizations assess and improve their technology infrastructure by putting in place software that promotes employee communication and resource sharing, knowledge management systems, or collaborative platforms. A more encouraging atmosphere can be produced by trust-building initiatives, such as team-building exercises, open communication, and cooperative opportunities. Employees' worries about knowledge sharing can be alleviated by promoting open communication.

#### **Acknowledgement**

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

Dereje Olani Ayana<sup>2</sup>

### 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.,

<sup>2</sup>PhD, Assistant professor and Senior Researcher at the Ethiopian Civil Service University, Department of Development Management, College of Finance, Development and Management, email: [der4jeolani@gmail.com](mailto:der4jeolani@gmail.com)  
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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<sub>1</sub>: 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<sub>2</sub>: Level of education significantly mediates the relationship between learning culture and workforce performance.*

*H<sub>3</sub>: 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).

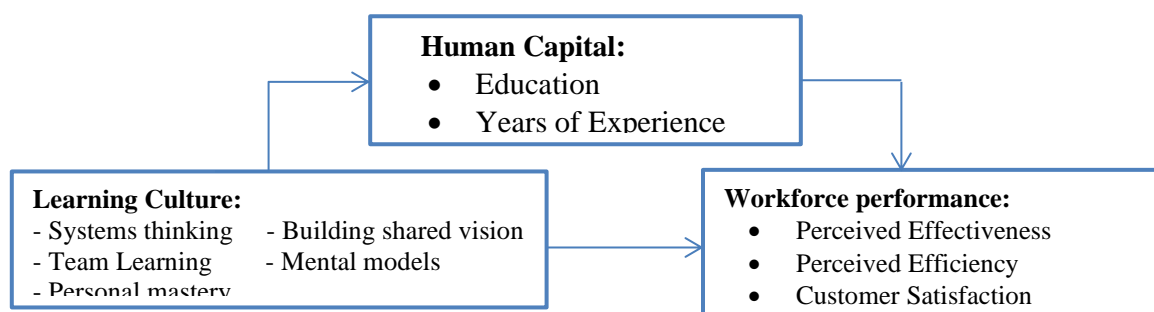
To track and measure performance, managers/leaders or organizations are expected to set key performance indicators (KPIs) for staff members, roles, or departments. The key performance indicators are standards or targets that the entities can track and use as a benchmark to measure success. They also 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 in 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

$$N = \frac{n}{1 + N \cdot e^2}$$

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 <sup>o</sup>	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  $\lambda$  represents factor values of loadings

$$CR = (\text{Sum } \lambda_i)^2 / (\text{Sum } \lambda_i)^2 + (\text{Sum } e_i)$$

$$e_i = 1 - \lambda_i^2$$

Where  $\lambda$  represents the value of standardized factor loading for item  $i$  and  $e_i$  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

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

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.

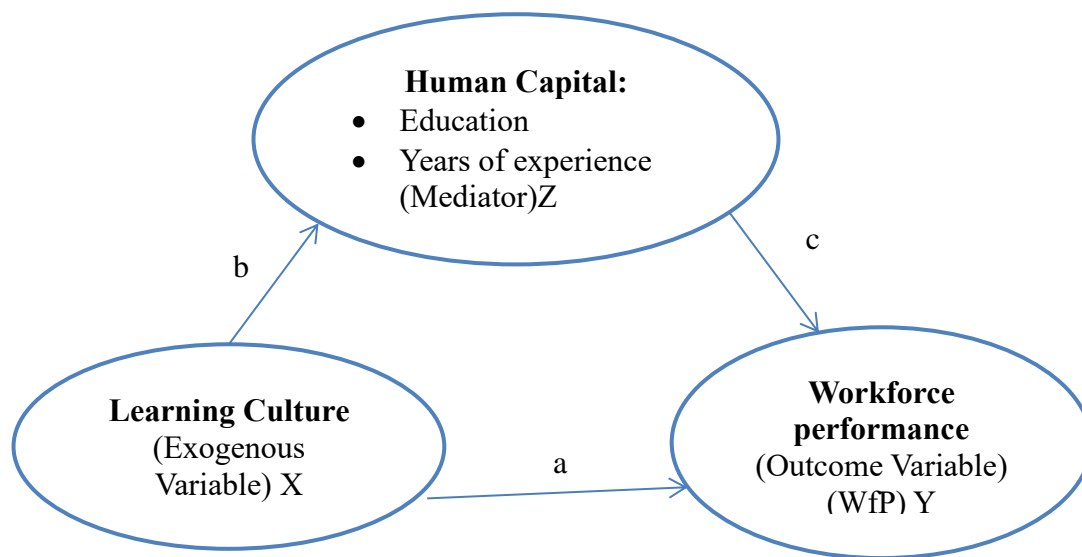
### 3.8.5 Cross-loadings

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 skewness (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*

$$OP = \beta_0 + aX + e \dots \dots \dots (1)$$

#### *ii. Mediation Effect*

$$\text{Indirect Effect through HC (only) WfP(Y)} = \beta_0 + b \cdot c + e \dots \dots \dots (2)$$

$$\text{Total effect} = \text{direct effect} + \text{indirect effect} \dots \dots \dots (3)$$

$$\text{Total effect(Y)} = a + b \cdot c \dots \dots \dots (3)$$

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	
<b>Total</b>	<b>453</b>	<b>390</b>	<b>86.1</b>	<b>0.86</b>	<b>13.9</b>

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
<b>Systems thinking</b>						
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
<b>Personal mastery</b>						
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
<b>Mental model</b>						
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
<b>Building shared vision</b>						
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
<b>Team learning</b>						
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
<b>Grand Mean</b>						<b>2.717</b>
<b>Standard Deviation</b>						<b>0.81</b>

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

N <sup>o</sup> .	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
<b>Cumulative mean</b>				<b>2.71</b>	<b>0.81</b>

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
<b>Effectiveness</b>						
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
<b>Mean Score</b>	<b>3.13</b>					
<b>Standard Deviation</b>	<b>0.96</b>					
<b>Efficiency</b>						
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
<b>Mean Score</b>	<b>2.91</b>					
<b>Standard Deviation</b>	<b>0.92</b>					
<b>Customer satisfaction</b>						
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
<b>Mean Score</b>	<b>2.90</b>					
<b>Standard Deviation</b>	<b>1.0</b>					
<b>Grand Mean</b>	<b>2.94</b>					
<b>Standard Deviation</b>	<b>1.0</b>					

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
<b>Level of Education</b>						
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	<b>23.1</b>	23.6	30.8	390
<b>Mean Score</b>	<b>2.88</b>					
<b>Standard Deviation</b>	<b>0.99</b>					
<b>Years of experience</b>						
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
<b>Mean Score</b>	<b>3.10</b>					
<b>Standard Deviation</b>	<b>1.12</b>					
<b>Grand Mean</b>	<b>2.95</b>					
<b>Standard Deviation</b>	<b>1.0</b>					

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 <sup>2</sup>
			Unstanda rdized	Standard ized				
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	<b>WfP=0.722</b>
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+0.09 0=.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 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<sup>2</sup> Change due to mediation

Variable	R-squared (R <sup>2</sup> )
Without mediation	0.630
With mediation	0.722
R-squared (R <sup>2</sup> ) 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<sup>2</sup>) 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<sup>2</sup>) 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<sup>2</sup> from an unmediated effect to the mediated effect of the learning behavior of the organization on the workforce performance. Accordingly, the R<sup>2</sup> 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<sup>2</sup> was 0.63, indicating that learning behavior explains 63% of performance variance. With mediation, R<sup>2</sup> increased to 0.722, showing that mediated learning behavior explains 72.2% of performance variance. The R<sup>2</sup> 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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## Determinates of Financial Inclusion and its Effect on the Growth of Micro and Small Enterprises in Addis Ababa: Empirical Evidence from Selected Wordas in Lemi kura Subcity Addis Ababa

Sofoniyas Mekonnen<sup>3</sup>

### Abstract

Examining the determinants that influence financial inclusion and how they affect the growth of micro and small enterprise in Addis Ababa was the aim of this study. The following specific objective served as the study's compass: to determine the primary factors that influence financial inclusion and to investigate how financial inclusion affects MSE growth. The study, which focused on the 2651 MSE operators of the four chosen Wordas (03, 04, 08, and 13) in Lemi Kura Sub-city, employed a descriptive mixed research approach. Conveniently, 336 operators were selected from the population. The data was examined for descriptive statistics once the completed surveys were entered into the SPSS statistical program. Eight criteria were used in the study to gauge MSE operators' financial inclusion. The results showed that financial inclusion is positively and significantly affected by outreach, penetration, availability, technology, financial knowledge, trust, and income. The conclusion was that financial inclusion is significantly affected by both supply-side and demand-side factors. However, the perceived advantages of use had a detrimental and substantial impact on financial inclusion. Additionally, financial inclusion significantly increases the growth of MSEs. According to the survey, MSE operators should participate in training courses designed to fill in any knowledge gaps around financial inclusion. In addition to the training, financial literacy, spending habits, and saving habits should be promoted. Such a program would improve MSE operators' saving practices, improving their wellbeing and increasing productivity at work.

**Key words:** Financial Inclusion, Micro and Small Enterprise

### 1. Introduction

Financial inclusion has become an attractive topic at the global level with governments, financial institutions, and policymakers, developing interest in understanding it more deeply (Amoah et al. 2020). The existence of financial exclusion has been acknowledged by many developed and developing nations as one of the socio-economic challenges on the agenda (Wentzel et al., 2016). The World Bank in its 2020 targets placed universal financial access as one of its objective (Demirguc-Kunt et al., 2018). This shows how financial inclusion has become an attractive topic

<sup>3</sup>PhD, Assistant professor, trainer and consultant at the Training Institute of the Ethiopian Civil Service University, email: [sofo.mekonnen@gmail.com](mailto:sofo.mekonnen@gmail.com)

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globally and more than 50 countries made headline financial inclusion commitments as of the end of 2014 (Demirguc-Kunt et al., 2018). In 2017, the World Bank Group (WBG) made it abundantly evident that numerous nations are creating National Financial Inclusion Strategies (NFIS) to guarantee that the necessary tools and measures are implemented in order to fulfill their financial inclusion commitments. Since firms in Sub-Saharan Africa still have notably limited access to external funding (WBES, 2018), the data from (WBES, 2018), show that on average, only 22% of enterprises have a loan or a line of credit. Small businesses in Sub-Saharan Africa have a significant obstacle when trying to obtain external loans, just as in other parts of the world. According to a number of studies, MSEs in both developed and developing nations face greater financial constraints than larger businesses. In developing economies including Sub-Saharan Africa, MSEs are typically more credit-constrained than large firms, severely affecting their possibilities to grow (Beck et al, 2005). Calomiris and Hubbard (1990) noted that when the company is smaller, the restrictions on credit are greater. Furthermore, according to Beck et al., (2006) cited in El-Said et al., (2013), small firms consistently report more financing obstacles than medium and large enterprises.

Ethiopia's Industrial growth Strategy places a high priority on the growth of micro and small businesses. Particularly since the creation of jobs is the main goal of the nation's development plan and MSEs are the primary tools for doing so in urban areas. The role of MSEs as the principal job creators is not properly promoted. Because a lot of empirical studies show that; MSEs lack confidence, appropriate products, rigid policies, and requirements, as well as very high bank charges and interest rates in most financial institutions, are were the main influences for their failure to transact through the formal channels (Hassan, 2014).

Additionally; the MSE sector in Ethiopia is taken as an instrument in bringing about economic transition by effectively using the skill and talent of the people particularly women and youth without demanding high-level training, much capital, and sophisticated technology (Nega and Hussien, 2016). However, evidence from different empirical studies shows the reverse (Wolday and Gebrehiwot, 2004).

Therefore, improving MSEs' access to finance is significantly important in promoting performance and firm productivity in the country (World Bank, 2015). In addition to this, despite the enormous importance of the MSEs sector to the national economy with regards to job creation and the alleviation of abject poverty, many of the MSEs are unable to realize their full potential due to the existence of different factors that inhibit their growth and performance (Wolday and Gebrehiwot, 2004). One of the leading factors contributing to the unimpressive growth and performance of the enterprises in Ethiopia are limited access to finance and the financing gap to MSEs can be attributed to both the demand side and supply side (Wolday and Gebrehiwot, 2004). In this regard, a lot of studies were conducted in Ethiopia.

For example; ((Nega and Hussien, 2016), (Abera et.al, 2019), (Negash and Kumera, 2016), (Ageba and Amha, 2006), (Hadis and Ali, 2018), (Seyoum et.al, 2016), (Ashenafi, 2012), (Wolday and Gebrehiwot, 2004) and (Hassan, 2014)) were conducted studies to identify the main determinant factors that influence financial inclusion among MSEs in Ethiopia. Even

though, the above research studies identify the main determinate factors of financial inclusion, but not analyze determinates of financial inclusion with the link of its effect on the growth of the enterprises. Geographically, this study restricted in Addis Ababa selected wordas in lemi kura subcity. In addition, methodologically this study will use structural equation modeling approach. Hence, by considering the above research gap, this study focus on identify the main determinate of financial inclusion and its impact on the growth of Micro and Small Enterprises in Addis Ababa selected wordas from Lemi kura Subcity.

The general objective of study was to identify the main determinate of financial inclusion and its impact on the growth of Micro and Small Enterprises in Addis Ababa, selected wordas from Lemi kura Subcity. The following were the specific objectives of this study: 1) to identify the main determinates of financial inclusion; and 2) to examine the effect of financial inclusion on the growth of MSE.

## **2. Review of Related Literature**

### **2.1 Financial Inclusion**

Financial inclusion is more straightforward to define and recognize. Lower-income countries tend to see a large portion of their population and firms not having access to formal financial services for a number of reasons, including: limited branch networks of banks and other financial institutions; limited availability of automatic teller machines (ATMs); the relatively high costs of servicing small deposits and loans; limitations on satisfactory personal identification; and limitations on collateralizable assets and credit information. Two definitions are:

“Financial inclusion aims at drawing the “unbanked” population into the formal financial system so that they have the opportunity to access financial services ranging from savings, payments, and transfers to credit and insurance” (Hannig & Jansen 2010).

“... the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost. It primarily represents access to a bank account backed by deposit insurance, access to affordable credit and the payments system” (Khan 2011).

Financial inclusion is most commonly thought of in terms of access to credit from a formal financial institution, but the concept has more dimensions. Formal accounts include both loans and deposits, and can be considered from the point of view of their frequency of use, mode of access, and the purposes of the accounts. There may also be alternatives to formal accounts, such as mobile money via mobile telephones. The main other financial service besides banking is insurance, especially for health and agriculture (Demirguc-Kunt & Klapper 2012).

### **2.2 Key Determinants of Financial Inclusion**

#### **2.2.1 Outreach and Financial Inclusion**

Outreach is the ability of a bank or financial institution to provide the necessary knowledge and help needed to clear the doubts of consumer and bring them under the umbrella of financial

inclusion (Chattopadhyay, 2011). Chakravarty and Pal (2013) studied different indicators of outreach that are important for financial inclusion. Garg and Agarwal (2014) concluded that insufficient outreach is a big issue in banks' lending models. Thus, it is hypothesized that outreach is related to financial inclusion.

*H<sub>1</sub>: Outreach has a significant impact on financial inclusion.*

### **2.2.2 Penetration and Financial Inclusion**

The depth to which the bank can provide the financial services and products to the entire section is called as penetration. It can be demographical depth, cultural depth or any other depth that may hinder financial inclusion. Penetration is an important factor for the creation of water markets, which in turn affects financial inclusion (Kelkar, 2010). Anand and Chhikara (2013), and Lal (2017) related economic growth of a nation to financial inclusion of rural households and identified penetration as an important determinant of financial inclusion. Kabakova and Plaksenkov (2018) analyzed and observed different patterns of financial inclusion based on different penetration levels. Penetration, as implied by the items measuring it, is focusing more on the adequacy part of the services. Taking into account the definition of financial inclusion, simply focusing on accessibility may not bring out a significant result as focusing on adequacy of services as well would. There is a clear line drawn between the two constructs. Because what's accessible may not always be adequate as per consumer's need or demand. Thus, the hypothesis being tested for this study is:

*H<sub>2</sub>: Penetration has a significant impact on financial inclusion.*

### **2.2.3 Availability and Financial Inclusion**

The availability or the lack of proper setup for providing financial products and services to every individual is a major contributor to financial inclusion or exclusion. Shankar (2013) in her study addressed the access barriers of financial inclusion and lack of financial product that result into exclusion of certain sections. Thus, it is hypothesized that availability is an important aspect of financial inclusion, as the lack of availability leads to exclusion. Sarma and Pais (2011), Dixit and Ghosh (2013), and Anand and Chhikara (2013) all developed an index of financial inclusion with availability as a dimension of financial inclusion. Accordingly, it is hypothesized that:

*H<sub>3</sub>: Availability has a significant impact on financial inclusion.*

### **2.2.4 Accessibility and Financial Inclusion**

The physical aspects like the distance to bank branches, ATMs, necessary documentations, among many others, is termed as accessibility (Paramasivan & Ganeshkumar, 2013). In a developing country, access to affordable banking services and innovation can lead to total financial inclusion (Shafi & Medabesh, 2012). Access to financial services endorses inclusion (Kelkar, 2010) and access to financial services empowers individuals economically (Lal, 2017).

From the financial inclusion point of view, accessibility is more about the convenience and ease of using the available banking services. In general, there are always products and services that are available to consumers but not every service is accessible, the reason for which vary from consumer to consumer. In the study, accessibility is taking into consideration the suitability of the available financial services and products for the respondents rather than just focusing on their availability. From inclusion point of view, it is significant to ensure smooth availability as well as accessibility of products and services, both of which are different aspects of financial inclusion. Thus it is hypothesized that:

*H4: Accessibility has a significant impact on financial inclusion.*

### **2.2.5 Technology and Financial Inclusion**

The technology aspect of financial inclusion covers new technologies in banking sector like internet banking and mobile banking, the reliance of which has been increased for improving financial inclusion (Kabakova & Plaksenkov, 2018). Even social media has a huge impact on access and use of financial services (Bongomin et al., 2017). Sharma and Kukreja (2013) suggested use of technology for its potential to deliver financial services even in remote or rural areas. Ramakrishna and Trivedi (2018) and Rastogi and Ragabiruntha (2018) in their studies identified technology as an important and positively influential factor of financial inclusion.

*H5: Technology has a significant impact on financial inclusion.*

### **2.2.6 Financial Literacy and Financial Inclusion**

Financial literacy is the degree to which the households and individuals are informed or aware of the knowledge required to make informed financial decisions. Kabakova and Plaksenkov (2018) in their study concluded that financial literacy is a decider between inclusion and exclusion, but Fischer (2011) concluded that financial literacy is not as important as utilization. Financial attitude, financial behavior and financial knowledge determine the level of financial literacy which in turn helps in determining financial inclusion (Rastogi & Ragabiruntha, 2018; Rai et al., 2019; Shankar, 2013). Thus, it is hypothesized that:

*H6: Financial literacy has a significant impact on financial inclusion.*

### **2.2.7 Perceived Benefits of Usage and Financial Inclusion**

The perceived benefits that an individual feels when they can access financial services as and when required are very essential from financial inclusion point of view (Anand & Chhikara, 2013). Iqbal and Sami (2017) implied that government has been taking a lot of steps to ensure passing on the benefits of financial services to economically weak or the neglected sections of the society. Ramakrishna and Trivedi (2018) concluded that a benefit of having a bank account positively influences financial inclusion as banks are more reliable, helpful and trustworthy. Thus, it is hypothesized that:

*H7: Perceived benefits of usage have a significant impact on financial inclusion.*

### **2.2.8 Trust and Financial Inclusion**

Trust is one of the biggest barriers to inclusion due to lack of knowledge leading to people's lack of trust in a formal bank or financial institution channel. Garg and Agarwal (2014) related financial inclusion or exclusion to human aspects like religion and trust. Shankar (2013) suggested that lack of trust leads to financial exclusion. Thus, we can say that trust is an important aspect when talking about finances and financial inclusion. Deb and Agrawal (2018) related attitude and trust to India's potential for financial inclusion as a result of adoption of mobile banking. Hence it is hypothesized that:

*H8: Trust has a significant impact on financial inclusion.*

### **2.2.9 Financial inclusion and growth of MSE**

Inadequate access to cheaper credit is recognized the world over as a major challenge facing MSEs, and these therefore constraint the growth of the existing MSEs. Shah, Nazir, Zaman, and Shabir (2013) opined that it is very difficult to access financial services from formal financial institutions due to their unrealistic demand for collateral, loan guarantees and securities, and high interest rates. Prohorovs and Beizitere (2015) posit that access to finance and financial services has been some of the major factors constraining the growth and development of MSEs.

*H9: financial inclusion has a significant impact on the growth of MSE.*

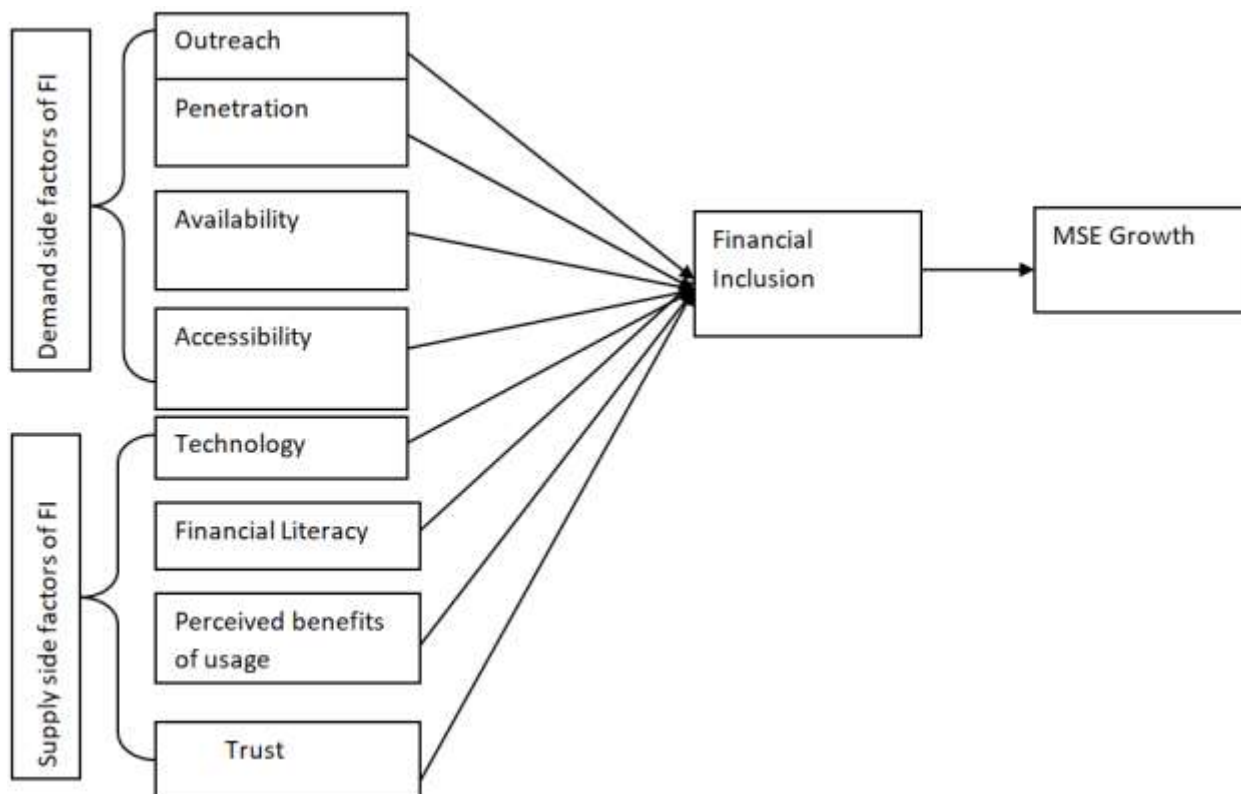
## **2.3 Financial Inclusion and Micro and Small Enterprise**

Financial inclusion (FI) refers to a change in one's mindset as an economic agent on how to see money and profit, and aims to eliminate any barrier in accessing and utilizing financial services, and this is supported by the existing infrastructure. It is noted that more than half of the world's economically challenged adults do not have bank accounts, and this therefore leaves them vulnerable to exploitation and theft, and this results to heavy losses (World Bank, 2012). UNIDO (2015) opines that the cost associated with the capital transaction is always too high which greatly affects the performance of MSEs. The World Bank (2016) establishes that high concentration, weak competition, and the prevalence of public ownership in the financial intuitions are specifically some of the key constraints in financing MSEs. Financial inclusiveness supports the principle of financial stability which provides strong risk management and financial facilities. It would also close the financial inclusion gap within the MSEs, and these can bring a significant gain in the growth. However, a very low financial inclusion in the region suggests important untapped potential for the growth of increased access to finance by SMEs. Popov and Rocholl (2016) posit that increased constraints to financing during recession may put more pressure on employment by MSEs than by large firms. Kazimoto (2014) observed that governments and other stakeholders should therefore avail financial facilities and access to finance at a reasonable interest rate and use up-to-date information and communication

technology in business and marketing, and these can be through improved network and training. Lega (2015) establishes that MSEs in Africa face a lot of challenges and among them include financial inclusion, non-favorable laws, regulations, and poor infrastructure, which affect the growth of MSEs. The government should take the responsibility of providing MSEs with a conducive environment for their growth and development, seeking international and local opportunities for its MSEs, developing fair and encouraging policies, and making it easy for MSEs to access financial facilities at a fair and affordable rate (Fariza, 2012). Moreover, the existing literature does not offer substantial information on the financial inclusion and growth of micro and small enterprises in Ethiopia thus making the current study timely.

## 2.4 Conceptual Framework

The figure below shows the proposed conceptual model for the study derived from the literature review with some modification, it has been well established that the below mentioned factors are key contributors of successful financial inclusion. But one conclusion that could be drawn from the past literatures is that the impact and the significance of these determinants have been changing from time to time and place to place. Hence this needs to be continuously monitored and analyzed.



**Figure 2.1** Conceptual Framework

Source: adapted from Yashwant, 2020

### **3. Materials and Methods**

#### **3.1 Research Approach**

In this study the researcher used concurrent triangulation mixed strategy. In concurrent triangulation strategy, both quantitative and qualitative data were collected simultaneously and the qualitative data were used to triangulate in the quantitative data during the analysis.

#### **3.2 Research Design**

The study used explanatory research designs to determine the factors of financial inclusion and its effect on the growth of MSE. Since, explanatory research design deals with the determination of causes and effects through hypothesis testing and its results and conclusions constitute the deepest level of knowledge (Creswell, 2009).

#### **3.3 Sources of Data**

The primary data was gathered from the sampled Micro and Small enterprise operators. The data relevant to the issues of the study will be collected using questionnaires. Then the questionnaire will be translated in to Amharic language for easy understanding of the respondents by the researcher prior of distribution. In addition, the researcher used focus group discussion with the sampled to obtain the necessary information. The secondary data were collected from different manual, reports and strategic plan documents of micro and small enterprise office.

#### **3.4 Data Collection Instrument**

The researcher used survey to collect information from respondents by asking questions in order to describe the characteristics of the population-sample. The survey was conducted using both open and closed ended structured questionnaires. The questionnaires distributed to the respondents had two parts the first part aimed at the collection of demographic information of the participants and the second had questions related to the determinants of successful financial inclusion and MSE growth. Respondents were asked to rate each item based on their degree of agreement or disagreement to the statement in question. A five-point Likert scale was used to measure the degree of agreement, where 1 stood for 'Strongly Disagree', 2 for 'Disagree', 3 for 'Neither Agree nor Disagree', 4 for 'Agree' and 5 for 'Strongly Agree'. A pilot test of the questionnaire was conducted for validating the measurement instrument. On receiving satisfactory results in accordance to the objectives of the study, the research continued with data collection process.

#### **3.5 Population of the Study**

Addis Ababa Lemi Kura Sub-city has ten woredas from this due to the location advantage and large number of MSE operators the researcher has selected four wordas namely, wereda 03, 04, 08 and 13. Thus, the four woredas had the total number of 2651 MSE operators. Therefore, the above 2651 were the target population for this study.



### 3.6 Sample Size and Sampling Technique

In order to take a sample from the target population the researcher used Cochran (1963) sample size formula.

$$n = \frac{Z^2 \alpha/2 [P (1-P)]}{e^2 + \frac{Z^2 \alpha/2 [P (1-P)]}{N}} \quad n = \frac{1.96^2 [0.5(1-0.5)]}{0.05^2 + \frac{1.96^2 [0.5(1-0.5)]}{2651}} = 336$$

The sample size distributed proportionally for the four wordas MSE operators. Furthermore, the questionnaires were distributed randomly for each operating sector.

### 3.7 Methods of Data Analysis

Statistical techniques for data analysis involved Structural Equation Modeling (SEM) using SPSS-AMOS.

### 3.8 Model Specification

#### 3.8.1 Description of the Observed and Latent Variables

The table below depicts the SEM path model with successful financial inclusion factors namely outreach, penetration, availability, accessibility, technology, financial literacy, perceived benefits of usage, and trust are as exogenous variables. Financial inclusion is considered as the endogenous variable. In other way to analyze the impact of financial inclusion on its growth of the enterprises financial inclusion become exogenous variable and growth of the enterprise becomes endogenous variable. The description of the latent variables and the number of observed variables are shown in 3.1.

**Table 3.1** Description of the Observed and Latent Variables

	Latent variables	Number of observed variables
Financial inclusion factors (exogenous variables)	Outreach (OU)	6 (OU1,OU2,OU3,OU4, OU5, OU6)
	Penetration (PE)	6 (PE1,PE2,PE3,PE4, PE5 PE6 )
	Availability (AV)	6 (AV1,AV2,AV3,AV4, AV5, AV6)
	Accessibility (AC)	6 (AC1,AC2,AC3,AC4 ,AC5, AC6)
	Technology (TE)	6 (TE1, TE2, TE3, TE4, TE5, TE6)
	Financial literacy (FL)	5 (FL1,FL2,FL3,FL4, FL5)
	Perceived benefits of usage (PB)	5 (PB1,PB2,PB3,PB4,PB5, PB6)
	Trust (TR)	6 (TR1,TR2,TR3,TR4, TR5, TR6)
Endogenous/Exogenous variable	Financial inclusion (FI)	7(FI11,FI2,FI3,FI4, FI5, FI6 FI7)
Endogenous variable	MSE Growth (MG)	7(MG1,MG2,MG3,MG4 MG5, MG6, MG7)

### 3.8.2 Structural Equation Model

$$\text{➤ } FI_i = \beta_0 + \beta_1 OU_i + \beta_2 PE_i + \beta_3 AV_i + \beta_4 AC_i + \beta_5 TE_i + \beta_6 FL_i + \beta_7 PB_i + \beta_8 TR_i + \varepsilon_i \dots Eq. 1$$

Where:

$FI_i$  = Financial inclusion as dependent variable

$OU_i$  = Outreach as independent variable

$PE_i$  = Penetration as independent variable

$AV_i$  = Availability as independent variable

$AC_i$  = Accessibility as independent variable

$TE_i$  = Technology as independent variable

$FL_i$  = Financial literacy as independent variable

$PB_i$  = Perceived benefit of usage as independent variable

$TR_i$  = Trust as independent variable

$$\text{➤ } MG_i = \beta_0 + \beta_1 FI_i + \varepsilon_i \dots \dots \dots Eq. 2$$

Where:

$MG_i$  = Micro and small enterprise growth as dependent variable

$FI_i$  = Financial inclusion as independent variable

## 4. Results and Discussions

### 4.1 Data Reliability

Before proceeding to analyze the results found from the questionnaire the reliability of determinates of financial inclusion parameters distributed to MSE operators are checked using SPSS software. Table 4.1 shows the data reliability of each parameters of financial inclusion. Cronbach's  $\alpha$  (alpha) (Cronbach, 1951) is a coefficient of reliability. It is commonly used as a measure of the internal consistency or reliability of a psychometric test score for a sample of examinees.

**Table 4.1** Data Reliability Checking

Nº.	Parameters	Number of items	Cronbachs $\alpha$
1	Financial Inclusion	6	0.898
2	Outreach	4	0.870
3	Penetration	4	0.857
4	Availability	4	0.900
5	Accessibility	5	0.921
6	Technology	5	0.923
7	Financial literacy	5	0.822
8	Perceived benefit of usage	4	0.887
9	Trust	5	0.925
10	MSE Growth	9	0.946

Source: Field Survey, 2024

As cited by Mihretie (2013) the reliability coefficients of the factors exceeded the value of 0.7 recommended by (Nunnally, 1978). Therefore, the above table shows that the reliability coefficients of all parameters exceed 0.7; hence, each of the factors and the related items are analyzed and interpreted.

#### 4.2 Financial Management Practices of MSE Operators

From the results, majority 48.2% of the respondents reported a monthly income of between Ethiopian birr 500 and 2000, 40.6% reported between 2001 and 5000, 6.7% reported an income of 5000 to 10000 and 4.5 % above 10000 as shown in table 4.2.

Majority (95.5%) of the respondents said they had bank accounts and the remaining 4.5% of the respondents had no bank account. Furthermore, 49.8% of the respondents reported that they save below 10% of their income every month, 24.0% of the respondents reported saving between 16 to 20 percent of their income every month, 15.7% of the respondents save between 1-15%, 7.3 % save between 21 to 25 percent, and 3.2% save above 25% of their income every months. A general rule of thumb is we should be saving at least 10% to 15% of our income. This is just a minimum amount; it is advisable to save more. This indicates that majority of the respondents save a small proportion of their income. This is illustrated in the table 4.2.

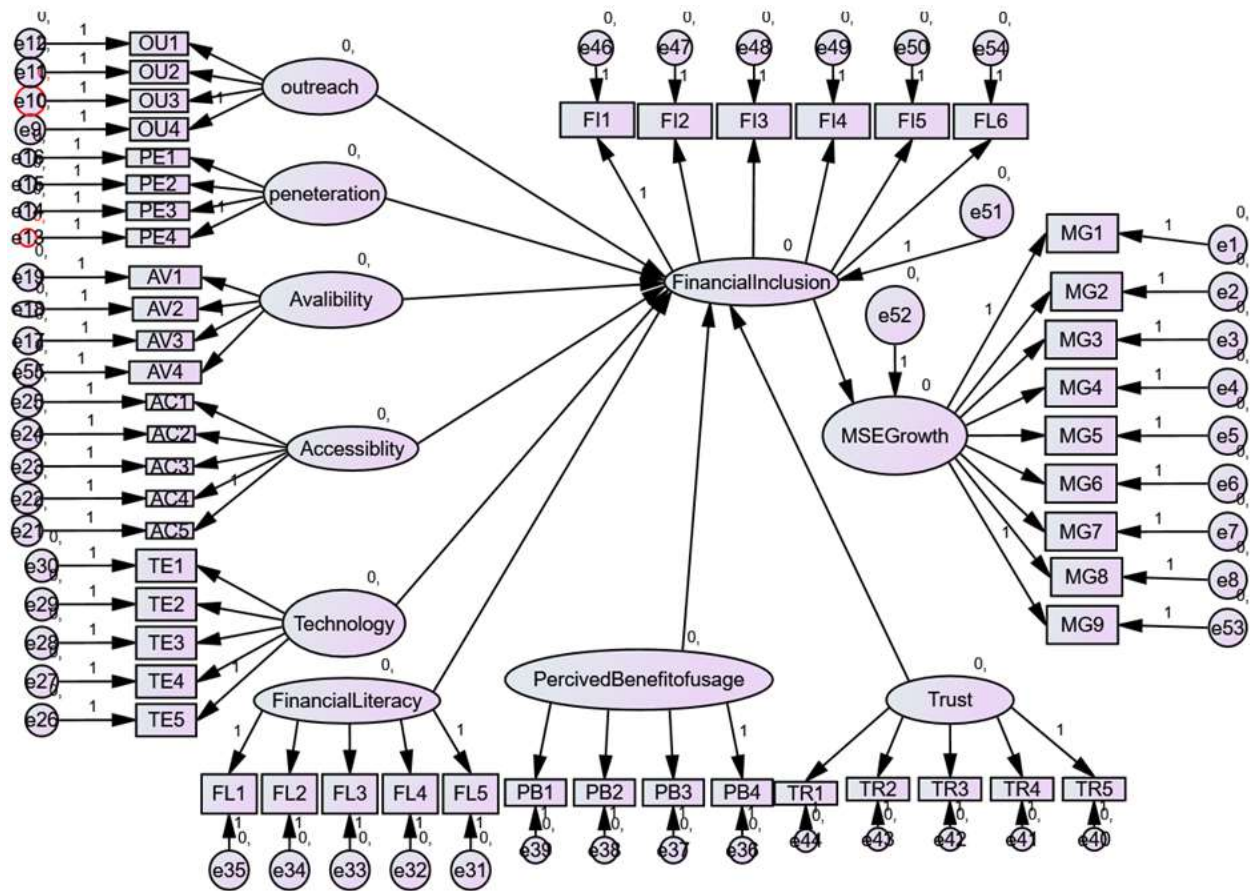
From the results, 78.3% of the respondents put their money on bank, 17.3% of the respondents save their money on saving and credit association and 4.5% of the respondents save their money other than bank and saving and credit association, which stated in the open ended question they put their money at home and Equb. The findings are shown in the table 4.2.

**Table 4.2** Financial management practices of MSE operators

Financial Management practices	Item	Frequency	Percent
Monthly income	500-2000	151	48.2
	2001-5000	127	40.6
	5001-10000	21	6.7
	Greater than 10000	14	4.5
Do you have bank account	Yes	299	95.5
	No	14	4.5
Saving amount	0-10%	156	49.8
	1-15%	49	15.7
	16-20%	75	24.0
	21-25%	23	7.5
	Above 25%	10	3.2
Where do you save	Bank	245	78.3
	Saving and Credit Association	54	17.3
	other	14	4.5

Source: Field Survey, 2024

### 4.3 Path Diagram



### 4.4 Goodness-of-Fit of the Model

#### 4.4.1 Chi-Square Test of Goodness-of-Fit for the Model

The results of the Chi-Square test of goodness-of-fit for the specified model the test statistics is 1414.6 with a p- value < 0.0001. Even if the statistics is considerably lower than that of the original model, still reject the null hypothesis that the model fits the data will.

Results (default model)

Minimum was achieved

Chi- Square = 1414.6

Degree of Freedom = 365

Probability level = 0.000

Then assess the goodness of fit of the specified model based on the model fit indices.

#### 4.4.2 The Root Mean Square Error of Approximation (RMSEA) of Model

**Table 4.3 The Root Mean Square Error of Approximation**

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.0576	.0922	.1030	.0000
Independence model	.1848	.1801	.1897	.0000

Source: SPSS-AMOS output, 2024

The above table shows that the RMSEA of the specified model is 0.0576. This figure is in fact below the threshold of 0.06 for a good model. Therefore, the specified model can still be considered as „marginal fit“ (or „mediocre fit“) to the data since the RMSEA is not greater than the threshold.

#### 4.4.3 Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) of the Model

**Table 4.4 Baseline Comparisons**

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.6922	.6576	.7519	.7213	.7495
Saturated model	1.0000		1.0000		1.0000
Independence model	.0000	.0000	.0000	.0000	.0000

Source: SPSS-AMOS output, 2024

From the above Table 4.4 the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) are both less than 0.95, this shows the model does not satisfy the measure of good-fit.

In general the use of RMSEA is very common, and it is considered an excellent general-purpose error metric for numerical predications (*Simon P. Neill 2018*). Therefore, based on the results of RMSEA the model fits reasonably well. As a result, it can interpret the results of tests of significance of the model parameters.

#### 4.5 Interpretation of the Final Model

Based on the regression weights results presented in Table 4.5 the latent independent financial inclusion factors outreach, penetration, availability, technology, financial literacy, perceived benefit of usage and trust are the p-values less than 0.05, indicating that all are statistically significant. The coefficients of outreach, availability, accessibility, technology, financial literacy and trust are positive, form this it can conclude that increases in outreach, availability, accessibility, technology, financial literacy and trust are associated with increase the level of financial inclusion. However, the coefficient of penetration and perceived benefit of usage are negative, form this it can conclude that increases in penetration and perceived benefit of usage are associated with decrease the level of financial inclusion.

SPSS – AMOS output of the fitted model is shown below

**Estimates (Group number 1 - Default model)**

**Scalar Estimates (Group number 1 - Default model)**

**Maximum Likelihood Estimates**

**Regression Weights: (Group number 1 - Default model)**

**Table 4.5** The fitted model

Dimension			Estimate	S.E.	C.R.	P	Label
Financial Inclusion	<---	Outreach	.300	.044	6.752	***	
Financial Inclusion	<---	Penetration	-.091	.033	-2.778	.005	
Financial Inclusion	<---	Availability	.395	.038	10.374	***	
Financial Inclusion	<---	Accessibility	.044	.026	1.699	.089	
Financial Inclusion	<---	Technology	.114	.032	3.540	***	
Financial Inclusion	<---	Financial Literacy	.403	.050	8.017	***	
Financial Inclusion	<---	Perceived Benefit of usage	-.550	.049	-11.225	***	
Financial Inclusion	<---	Trust	.134	.029	4.608	***	
MSE Growth	<---	Financial Inclusion	.607	.062	9.759	***	

Source: SPSS-AMOS output, 2024

The p-values corresponding to the latent independent variables financial inclusion with MSE growth is the p-value is less than 0.05, this indicating that it is statistically significant. The coefficient (0.607) is positive; from this it can conclude that increases in financial inclusion are associated with increase the level of MSE growth.

**Table 4.6** Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
Financial Inclusion	.777
MSE Growth	.321
AV4	.756
FL6	.741
MG9	.631
FI5	.764
FI4	.638
FI3	.713
FI2	.523

Source: SPSS-AMOS output, 2024

Based on the above estimated of the squared multiple correlations (R-Squared) for financial inclusion is 0.777. This indicates that 77.7% of the variations of the level of financial inclusion are explained by the change of eight financial inclusion factors (outreach, penetration, availability, accessibility, technology, financial literacy and perceived benefit of usage).

However, the squared multiple correlations (R-Squared) for MSE growth is 0.321. The figure 32.1% indicates that the variation in the level of MSE growth explained by the change of financial inclusion.

**Table 4.7** Total Effects – group model 1 – default model

Total Effects (Group number 1 - Default model)

	PerceivedBenefitofusage	FinancialLiteracy	Technology	Accessibility	Availability	penetration	outreach	Trust	FinancialInclusion	MSEGrowth
FinancialInclusion	-.550	.403	.114	.044	.395	-.091	.300	.134	.000	.000
MSEGrowth	-.334	.245	.069	.026	.240	-.055	.182	.081	.607	.000
AV4	.000	.000	.000	.000	1.052	.000	.000	.000	.000	.000
FL6	-.755	.554	.157	.060	.542	-.126	.413	.183	1.374	.000
MG9	-.334	.245	.069	.026	.240	-.055	.182	.081	.607	1.000
FI5	-.727	.533	.151	.058	.522	-.121	.397	.177	1.322	.000
FI4	-.573	.420	.119	.045	.412	-.095	.313	.139	1.043	.000
FI3	-.536	.393	.111	.042	.385	-.089	.293	.130	.976	.000
FI2	-.469	.343	.097	.037	.336	-.078	.256	.114	.852	.000
FI1	-.550	.403	.114	.044	.395	-.091	.300	.134	1.000	.000

Source: SPSS-AMOS output, 2024

Based on the above SPSS-AMOS output the total effects of financial literacy (0.403) to financial inclusion are higher comparing to the remaining financial inclusion factors. Nevertheless, the total effects of financial inclusion (0.607) are also higher to MSE growth.

## 4.6 Discussion

As per the results of path analysis, except hypothesis four, which is accessibility has significant effect on financial inclusion all the hypotheses of the study, that is, H1, H2, H3, H5, H6, H7 and H8 are accepted. Financial inclusion has been found to be positively significantly affected by outreach, penetration, availability, technology, financial literacy, trust, and income. The conclusion is that financial inclusion is significantly affected by both supply-side and demand-side factors. However, the perceived advantages of use have a significant and substantial effect on financial inclusion.

As expected from the results, the degree of impact of independent variables on financial inclusion has varied to a certain degree. Results indicate that financial literacy had the maximum effect followed by availability on successful financial inclusion. This supports the findings of Lal (2017) who in their study found financial literacy and availability to be significant indicators of financial inclusion. The same goes with this study where the two factors namely availability and financial literacy have been identified as major determinants of financial inclusion. The policy makers should understand the demand of financial services throughout the regions and ensure proper availability and financial literacy of the same for better inclusion results. Financial

institutions should concentrate on reaching the various groups and meeting their financial needs. Moreover, outreach and penetration were found to be important factors in determining financial inclusion in this study.

Another important component of financial inclusion was found to be trust. However, trust has little effect on financial inclusion. This is encouraging since it demonstrates that trust is not as powerful an impact as it once would have been. Banks and other financial institutions should take a note of this. With the different microfinance programmes available, even low-income population avails financial services for their development. Developing consumer trust is still crucial in practically every industry today. This study demonstrates that the finance sector also strives to establish credibility. Hence, institutions should put strong efforts in developing a sense of trust in the population to bring them under the umbrella of financial inclusion.

Financial inclusion has been positively and significantly affected by the advantages of using financial services, according to previous research. Although there is a significant relationship between the benefits of usage and financial inclusion, this study shows that the benefits have a negative impact on financial inclusion. This was presumably caused by the suppression effect caused by the other eight latent components acting as independent variables. The outcomes of the test that was conducted on this option are outlined in the analysis. The effects of usage and financial inclusion were found to be positively and significantly correlated when the other eight independent factors were removed. This shows that under normal circumstances the more the person feels benefitted by the financial services, better are the chances of the individual always being a part of the financial system.

According to this study, financial inclusion was significantly affected by technology. According to earlier research, technology is also insignificant (Ramakrishna & Trivedi, 2018). However, with current trends in digitization and the shift to a cashless economy particularly following Ethiopia's demonetization process technology has begun to play a significant role in financial inclusion. But taking into account the advancement in telecommunication sector and availability of technologies like smartphones and internet at much cheaper prices than they used to be, even low-income category can easily afford these services. Given that the technology construct in the current study was based on services like online banking, bank and financial institutions help the consumers understand the use of online services to check their balance, transfer money online (which is a major function for the target demographic as many of them need to transfer money to their spouse, parents, children studying away from home, etc.; for household and personal expenses since a significant portion of them are migrant labors), among other functions. More and more people are relying on online services for day to day transactions and hence, technology has become an integral part of financial services. Proper use and adoption of technology could be the differentiating factor between achieving the required high level of financial inclusion or the unwanted 'total financial exclusion' (Kabakova & Plaksenkov, 2018).

To understand the relationship between financial inclusion and the contribution to MSE growth, this study further examined how financial inclusiveness supports the growth of micro and small enterprises in the sub-city. Financial inclusion eases payments to service providers,



access to ATM services, and switching from one bank to another. These services make the transaction very easy. The findings agree with Gabor and Brooks (2017), Dorfleitner and Roble (2018), and Eton, Mwosi, Edaku, Ogwel, and Obote (2018). The presence of multiple providers of financial services increases the flow of money in the economy and reaching it to the “unbanked” population (Damodaran, 2013). The findings justify the government’s action to promoting financial inclusion across all social and economic sectors in the country. However, participants indicate some difficulty in using some of these financial services. The fact that some of the MSE owners are not highly educated, they find it difficult to interact with some of these financial services.

The study found that financial inclusion plays a significant role in MSE growth. However, the role played appears high, which suggests an influence on other factors in the relationship. The findings support Ayyagari et al. (2016) who assert that MSEs are constrained financially and find it hard to access credit compared to large firms. Though they might have access to credit, they often fall short of such requirements like guarantors, collateral security, and business profile, which agree with Eton, Mwosi, Mutesigensi, and Ebong (2017). Most of the MSEs lack such information that financial providers need to assess their creditworthiness. While such process requirements save financial providers from losses and properly manage credit provision, MSEs view them as bureaucratic with tough regulations (Park & Mercado, 2015). Therefore, the argument that as much as financial services appear to be available to MSEs, the cost associated to acquiring and servicing them affects their financial performance (UNIDO, 2015). In addition, the platforms on which some of the financial services are provided are too technical for MSE owners to operate. The findings, however, disagree with GSMA (2017) who asserts that financial service providers allow for easy transfer of payments from MSEs to suppliers and service providers and reduce theft, financial crimes, and the risk of loss. Financial inclusion is likely to increase the level of investment, employment opportunity, and poverty reduction, which are the core functions of MSEs in the economy. Finally, the study established relationship between financial inclusion and MSE growth; however, the relationship was statistically significant.

## **5. Conclusion**

The aim of this study was to identify the main determinate of financial inclusion and its impact on the growth of Micro and Small Enterprises in Addis Ababa, selected wordas from Lemi kura Subcity. The researcher used eight factors with 51 financial inclusion and MSE growth items. It was found that eight of the factors were reliable for measuring financial inclusion and MSE growth, and all of the factors of gap measuring were reliable using Cronbach’s alpha ( $\alpha$ ). The researcher also sought to establish effects of outreach, penetration, availability, accessibility, technology, financial literacy and perceived benefit of usage on financial inclusion. The findings concluded that these factors strongly influenced financial inclusion of MSE operators. Furthermore financial inclusion also had a significant effect on MSE growth. In general financial inclusion, it needs an attention since poor saving behavior adversely affects wellbeing and by extension productivity at work place.

## 6 Recommendations

Based on the research findings, the researcher recommends that the Addis Ababa Job Opportunity Creation and Enterprise Development Bureau particularly for Yeka Sub City better to organize training programs for MSE operators aimed at closing any knowledge gaps regarding financial inclusion. The training should be complemented by promotion of a saving behavior, financial literacy, and expenditure practices. Such initiative would ensure that to improve the saving practice of the operators which would enhance their welfare and to make more productivity at places of work.

From the study findings, most respondents attribute their low savings rate on the high cost of leaving. This is a macro-economic factor that affects all sectors of the economy hence the government should develop initiatives that would not only ensure training on saving practice to its citizens but also seek to subsidize the high cost of leaving to create room for savings and investment. Such initiative would ensure sustained economic growth by creation of employment resulting from the investments.

The operator's should strive to up their saving skills by attending financial workshop seminars/training, reading financial journals or otherwise. This would equip the operators with necessary skills in formulating their personal financial plans that is premised on a sustainable expenditure, saving and investment plans aimed at long-term financial freedom.

## 7. Suggestions for Further Research

This study focused on to identify the main determinate of financial inclusion and its impact on the growth of Micro and Small Enterprises in Addis Ababa, selected wordas from Lemi kura Subcity. It is therefore recommended that similar researches should be replicated in other sub city so as to establish whether there is consistency on financial inclusion and MSE growth among respondents in the remaining sub city of Addis Ababa.

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## A study on the Influence of Leadership Approach on Organizational Performance in the Revenue Sector in Ethiopia

Tiruye Alemu Tirunch<sup>4</sup>

### Abstract

The overarching purpose of this study was to critically evaluate the impact of leadership styles on employee work engagement and organizational performance in the revenue sector. The findings revealed that leadership in the Ministry of Revenue (MoR) predominantly aligns with a transactional approach. While transformational leadership behaviors were observed under specific circumstances, they were not as prominent or consistently applied as transactional leadership practices. Moreover, the study found that transformational and transactional leadership styles significantly predict employee work engagement and organizational performance. The study further demonstrated that employee work engagement played not only a partial mediation role between leadership style and organizational performance but also uniquely contributed to explaining the change in organizational performance by itself. Among the two leadership styles, however, transformational leadership makes a relatively greater contribution in explaining the extent of employee work engagement and organizational performance at the MoR. This study thus recommends that the MoR should develop and apply transformational leadership skills in addition to some transactional leadership abilities to create a productive workplace, an engaged workforce that can function in a constantly changing economy, and generate enough revenue to support the nation's growth and development initiatives.

**Key words:** Leadership, transactional leadership, transformational leadership, employee engagement, organizational performance

### 1. Introduction

Effective leadership plays a significant role in the success of any organization as it directly impacts and predicts employees' work engagement, and in due course organizational performance (Peterson & Luthans, 2003; Benmira & Agboola, 2021). Despite the fact that there are different determinants, leadership takes the lion's share in the success or failure of an organization's performance. Leadership has drawn a lot of attention throughout the years and is more important than ever in the fast-paced, globally interconnected world of today (Benmira & Agboola, 2021). Leadership influences, guides, and helps employees, and other stakeholders to understand the direction and effective function that is likely to enhance their performance and

<sup>4</sup>PhD, Assistant professor at the Training Institute of the Ethiopian Civil Service University, email:

[Tiruyetirunch50@gmail.com](mailto:Tiruyetirunch50@gmail.com)

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accomplish organizational goals (Gupta et al., 2010; Northouse, 2019). The performance and effectiveness of an organization can be enhanced by the presence of good and effective leadership (Ahmad et al., 2013; Arham, 2014); while it is negatively impacted by ineffective leadership style (Aboyassin & Abood, 2013; Iqbal et al. 2015).

This study examined the leadership styles being employed in the revenue sector which is regarded as the backbone and a key development priority component for any government to generate public revenues which is an important resource to finance the socio-economic activities of the country. Since 1991, the tax administration underwent major reform to expand the tax base and reduce budget deficit to an acceptable amount. Moreover, the reform aimed to encourage trade and investment; increase government revenues to support social programs and alleviate poverty; strengthen the enforcement capacity and promote equity in the tax system (MoR, 1999). However, the revenue sector in Ethiopia is characterized by a low level of revenue collection, low taxpayer compliance due to lack of skilled manpower and competencies, high corruption, poor implementation, and performance monitoring and evaluation framework, poor customer handling, poor coordination, ineffective resource utilization. Taking into account these problems the government has gone through implementing serious tax reform initiatives since 1997 to expand the tax base and reduce the level of tax-induced distortions that are prompted by high rates (Amin, 2010; Fetiya & Meskerem, 2019:4).

Although there have been some improvements, up until these days the tax system in Ethiopia lacks a well-designed tax system and could not achieve the expected amount of revenue due to different reasons. A recent study highlighted that resistance from both employee and customers, lack of skilled manpower to implement the reform, lack of resources, lack of communication and coordination and absence of strategic approach (focus on routine activities) are contributing to the ineffectiveness of the sector (Fetiya & Meskerem, 2019:4-5)

Despite the series of reforms and increase in revenue, the performance of revenue collection and to GDP ratio (15-17%) has remained inadequate compared to the revenue generating capacity of the economy which is also below the average (23%) performances of sub-Saharan African countries (IMF, 2016). The performance of the revenue sector in Ethiopia has thus been unable to generate sufficient revenues to finance the socio-economic activities effort of the country. The preliminary analyses of the World Bank (2022) moreover projected that the financial breach for attaining the Sustainable Development Goals for developing countries is over \$2.5 trillion per year.

It is crystal clear that these problems are attributed to ineffective leadership and poor management in both instilling and implementing reform and changes that have an impact on organizational success. Solving these problems requires leaders who thoroughly understand them and who acquire an appropriate leadership skills (Liu et al., 2013; Trottier et al., 2008). Bearing in mind all these problems, the importance of adopting an appropriate leadership style in the revenue sector cannot be overemphasized since the administration and collection of the tax necessitates a strategic leadership approach (Li et al., 2017; Hou et al., 2020). Certainly, the competence, knowledge, skills, work engagement attitude, and organizational performance of the employees working in the revenue sector are equally important but determined by the effectiveness of the leadership (Wang et al., 2011; Jaiswal & Dhar, 2015).

Most of the studies on the revenue sector focused on factors affecting tax compliance behavior in different regions in Ethiopia (Frehiywot & Admasu, 2018; Tadesse & Goitom, 2014; Tilahun & Yidersal, 2014); and the impact of government spending on tax compliance (Amina & Sania, 2015; Tadesse & Goitom, 2014). These studies have recommended the need for revenue

officials to work in collaboration with the business community, to provide effective and efficient services to in place transparency and accountability and reduce corruption and create continuous follow-up, monitoring and evaluation system. Public administrators are also required to ensure a fair and equitable tax system among the poor and the wealthy, corporate and individual taxpayers, urban and rural locations, formal and informal sectors, labor and investment income. These activities need the adaptation of appropriate and strategic leadership.

Moreover, there is a paucity of studies that have looked into the impact of leadership style in the context of tax administration in particular in Ethiopia. The aim of this study was thus to critically assess the influence of the leadership style on employee engagement and organizational performance in the revenue sector, Ministry of Revenue (MoR) in Ethiopia. More precisely, the study aimed to examine employees' perception towards the leadership style of their supervisor in the Ministry of Revenue; examine the impact of the leadership styles of the supervisor on employees' work engagement and organizational performance; and analyse the mediating effect of employee engagement on the relationship between leadership style and organizational performance at the Ministry of Revenue.

## **2. Theoretical Background**

### **2.1 Contemporary Leadership Theories and Approaches**

Contemporary leadership theories emerged in the 1970s (Timothy & Piccolo, 2014). The transactional and transformational leadership styles are considered by some researchers to be particularly important in enhancing employees work engagement and achieving organizational goals (Sadia & Aman, 2018). Transactional leadership is a leadership approach that emphasize on satisfying the need of followers in the form of exchange or rewards following the accomplishment of the objectives and the expectations of leaders. Leaders recognize or reward followers when they achieve agreed-upon targets, while failure to meet expectations results in reprimands, all within the framework of the organization's existing structure and systems (Kabeyi, 2018; Odumeru & Ifeanyi, 2013). The transactional leadership has thus two dimensions: (i) contingent reward, which refers to the rewards provided to employees following their accomplishment and good performance, (ii) and management-by-exception, which is about taking actions to correct performance to the required standard (Bass, 1995). Based on these two assumptions a transactional leader focuses on establishing rewards and punishments, setting a clear chain of command monitoring employees whether they are obeying the order and commands of the leader to meet the expectations of the organization.

On the other hand, Transformational leadership theory puts emphasis on transforming followers, inspiring them, developing their capacity, encouraging innovation and creativity to enable them to effectively accomplish organization's goal and mission (Bass, 1995; Schaufeli & Bakker, 2010). Transformational leadership has four dimensions that a leader should follow: (I) Inspirational motivation: is considered as a leadership attribute that addresses employees' emotional attributes, infuses confidence in their abilities, communicates effectually, and provides practical feedback (Rafferty & Griffin, 2004; Jones & Rudd, 2008). Transformational leaders should inspire and motivate employees to demonstrate commitment, encourage them toward attaining the organization's goal, understand their employees' needs, and assist them in reaching their full potential (Fitzgerald & Schutte, 2010). (II) Idealized influence: It is the exemplary behavior of a leader that brings about respect, admiration, and trust in employees (Bass & Avolio, 1994). Idealized influence leaders have strong moral and ethical standards and can instill



a feeling of vision and goal which leads their employees to deeply respect their leader. (III) Intellectual stimulation: It is the behavioral dimension of leaders that enhances employees' confidence and encourages them to solve problems creatively on their own (Bass & Riggo, 2006). They support employees to be more adaptable, to be creative and innovative, to try new methods, and to use new technological ways in response to changing circumstances including challenging their own beliefs and values (Jones & Rudd, 2008). They are also driven to comprehend and promote their employees' fundamental knowledge and abilities to share new ideologies (Khan et al., 2020). (IV) Individualized consideration: this behavior denotes to the support of the leader for each follower through coaching, mentoring, and delegating duties based on each employee's competency gap and the supervision result of the performance (ibid). The leader thus recognizes individual differences among employees and pays special attention to employees' achievements and growth (Jones & Rudd, 2008). A transformative leader also uses delegation and challenges employees to grow by solving different problems (Northouse, 2019). Due to globalization, digitization, and the change in social transformation, the way companies operate has changed dramatically. This requires the revenue sector to comprehend that the status quo is no longer good enough and the need to transform and change the function of the sector through strategic leadership.

## **2.2 Employee Work Engagement**

Employee work engagement is the connection of organizational members' selves to their work roles how employees demonstrate and express themselves in exerting greater effort to achieve organizational objectives, and their belief in the organization and its missions and vision, and their attitudes toward work, the organization, and relationships (Kahn, 1990; Kirkpatrick, 2007). As suggested by Shaufeli (2002). Work engagement has three dimensions: vigor, engagement, and absorption. Vigor is characterized by showing high levels of energy and mental resilience at work and the disposition to make the most of effort in one's work and perseverance in the face of difficulty. Dedication refers to feelings of excitement, motivation, challenge, and pride; and absorption is considered as being completely focused on one's work and happily fascinated, with time passing rapidly, and having trouble separating oneself from the work (ibid). Engaged employees, as a result, feel robust at work, are happy and positive about the work they do, and are regularly absorbed in their work. This implies that work engagement involves not only employees' need to work but also their behavior and activities toward increasing their performance and increasing their productivity and achieving organizational objectives (Ellis & Sorensen, 2007). Many studies concluded that there is a significant positive relationship between transformational leadership style and employee work engagement (Ghadi, 2019; Hayati, Charkhabi, & Naami, 2018). On the other hand some studies concluded that transactional leadership style is a stronger predictor of employee work engagement attributes than transformational leadership style (Baloch, 2013) while others came up with the conclusion that both transformational and transactional leadership styles are related to and have positive impacts on employee engagement (Maharmeh, 2021; Solomon, 2016). Other studies examined different leadership styles and resonated that there is no one single and ideal leadership style that enhances employee work engagement in all situations (Gemedi & Lee, 2020; Schaufeli & Bakker, 2010). The literature moreover clearly indicates that there is a need for more study to explore how transactional and transformational leadership styles promote employee engagement which has a significant importance to the organizational performance. This study thus considers the extent

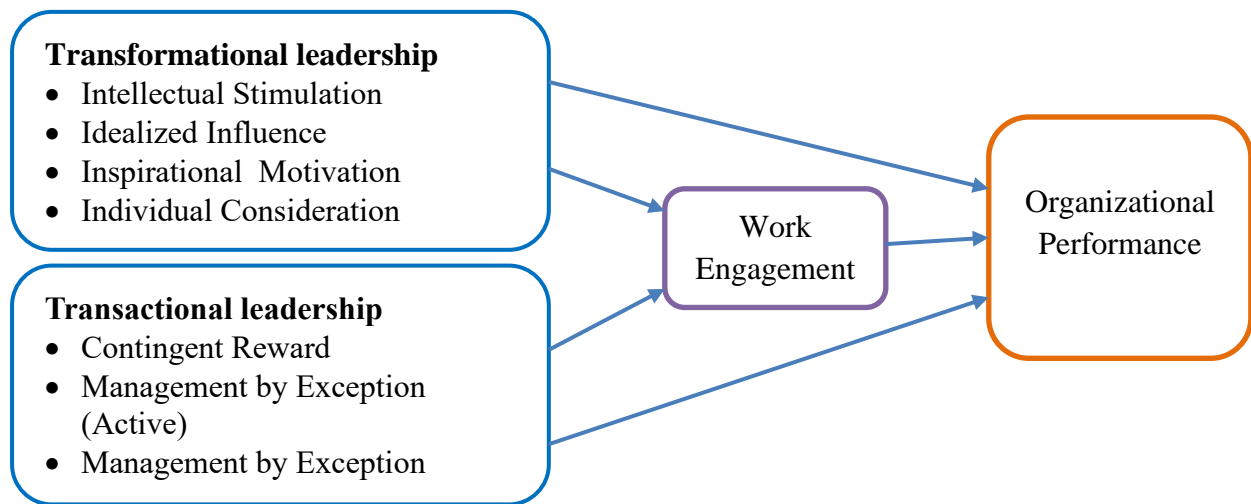
these leadership styles influence employee work engagement attributes such as, vigor, dedication, and absorption in the revenue sector in Ethiopia.

### **2.3 Leadership Approaches, Work Engagement and Organizational Performance**

It is widely acknowledged that leadership is a major factor that influences employee engagement and organizational performance. Leaders who employ effective leadership styles motivate and facilitate the achievement of their employees (Al-Khaled & Fenn, 2020; Bhargavi & Yaseen, 2016). What is required is a leadership that motivates and facilitates innovation and change and serves as a center of gravity to maintain internal focus and to let people and organizations grow and adapt. Transformational leaders encourage, inspire their followers to have a shared vision and strategically link them with the organization's goal and mission to perform in ways that create meaningful change (Anderson, 2018). These traits have motivational component to positively influence on employees' performance at work. Loang (2023) resonated that organizations should place a high priority on the development of transformational leadership skills in order to foster a productive workplace, raise employee satisfaction, and boost productivity. Moreover, transactional leadership enhances employee engagement through the reward and motivation provided by the organization will enhance employee engagement thereby increasing individual performance (Serhan, 2021). It is also argued that the reward and exchange relationship between leader and employee may positively motivate workers to exert higher levels of effort and performance (Ghadi, 2019). Both leadership theories are crucial in engaging employees inside the organization (Maharmeh, 2021; Solomon, 2016); though studies recommend that transformational leaders have a stronger impact on employee engagement (Schaufeli & Bakker, 2010; Serhan et al., 2021). Recent research in a variety of sectors moreover indicates that highly engaged workers are more likely to outperform expectations in their organizations and show that there is a link between work engagement and organizational performance (Al-Abrow et al. 2019; Maharmeh, 2021; Hayati et al., 2018). They found that work engagement was positively correlated with productivity, financial success, service delivery, and overall organizational performance. The researcher thus predicts that the dimensions of both transactional and transformational leadership enhance employee work engagement in the revenue sector to spend their time and energy and work engagement serves as a catalyst to foster organizational performance.

The exogenous/independent variables in this study were thus transformational and transactional leadership. Transformational leadership is explained in terms of the four components, Intellectual Stimulation, Idealized Influence, Inspirational Motivation, and Individual Consideration introduced by Bass (1995). Transactional leadership is examined by its three characteristics Contingent Reward, Active Management by Exception, and Passive Management by Exception. In this study employee work engagement was a mediating variable to understand the relationship between leadership style and organizational performance. The three main dimensions of work engagement, vigor, dedication and absorption were considered to measure the extent they triggered employees to exert extra effort that can increase their work engagement. Organizational performance was an endogenous/ dependent variable measured in terms of how well an organization is doing to achieve its goal, accomplish its mission, and satisfy its customer (Conțu, 2020).

## 2.4 Conceptual Framework



**Figure 2.1** Conceptual framework of the study

Based on the conceptual framework the researcher makes the following proposition:

- H<sub>1</sub> Transformational leadership positively predicts organizational performance.
- H<sub>2</sub> Transactional leadership positively predicts organizational performance.
- H<sub>3</sub> Transformational leadership positively predicts employee work engagement.
- H<sub>4</sub> Transactional leadership positively predicts employee work engagement.
- H<sub>5</sub> Employee work engagement positively predicts organizational performance.

## 3. Materials and Methods

The study applied a mixed research design to produce more evidence and to explore, describe, and interpret the data gathered from the questionnaire, interviews, and documents review. This enabled the researcher to contrast, complete, triangulate, and integrates the conclusions drawn from both quantitative and qualitative data. Thirdly, the combination of quantitative and qualitative data strengthens the validity of the evaluations, and produces compelling inferences about the study. Employees working at the MoR were the main sources of reliable information that contributed to the credibility of the findings to impact future practice of the leadership approach. The questionnaire was administered in person to 384 respondents to gather the perception of a large group of respondents who work in the Ministry of Revenue. Of the 384 respondents, 252 (66%) responded appropriately and returned the questionnaire. Interviews were conducted with 22 supervisors/leaders (Process Owners and Directors) drawn from the MoR to gather the perception of supervisors working at different level and complement and triangulate the questionnaire data. The study moreover thoroughly consulted official documents such as the strategic and annual plans and performance review reports.

## 4. Reliability and Validity

The reliability and validity of this study was ensured primarily through using multiple data sources and triangulation. Moreover, a standardized questionnaire was used to maintain the reliability of the tool; to ensure its objectivity, relevancy and applicability to the intended purpose. The Multifactor Leadership Questionnaire (MLQ) is a survey instrument mostly applied to assess employee's

perception towards their supervisor's leadership approach (Bass & Avolio, 1995; Dumdum, Lowe, Avolio, 2002). According to Bass & Avolio (1995) Multifactor Leadership Questionnaire (MLQ) Scale has good internal consistency, with a Cronbach alpha coefficient in the range of 0.86–0.91. Moreover, studies reported that Utrecht Work Engagement Scale (UWES-9) has the reliability of Cronbach's alpha ranging from 0.85 to 0.92 (Schaufeli et al., 2006; Schaufeli & Bakker, 2010)

As it is indicated in table 4.1, the Cronbach alpha coefficient of transactional leadership and transformation style in this study is .93 and .80 and the alpha coefficient of the measurement of employee work engagement and organizational performance is .88 and .76 respectively. The Cronbach alpha value of all the measurements is thus greater than .70 and this suggests that the extent the items that make up the scale consistently measuring the underlying constructs.

**Table 4.1** The Cronbach alpha value of all the measurements

No.	Description	Cronbach's Alpha	Items
1	Transactional Leadership	.934	22
2	Transformational Leadership	.807	13
3	Employee work engagement	.887	9
4	Organizational performance	.760	7

Source: SPSS output from survey data, 2023

Furthermore, adequate cases were observed and participants were given enough time to respond and return the questionnaire during the survey. All the interviews were conducted by the researcher to ensure consistency in the research process and of the subsequent data.

## 5. Results and Discussion

This section begins by introducing the demographic characteristics of the study participants and presented detailed results obtained from the empirical investigation regarding the leadership style employee engagement and organizational performance guided by the variables presented in the conceptual framework.

### 5.1 The Leadership Style in the Ministry of Revenue

This study was conceptually confined to measuring and dealing with the two contemporary leadership styles, transactional and transformational leadership. Transactional leadership style is measured by three dimensions: contingent reward, active management-by-exception and passive management by exception. Whereas, transformational leadership was measured in terms of the four dimensions namely, inspirational motivation, intellectual stimulation, and individual consideration and idealized attributes of the leadership in the MoR. Table 4.2 below demonstrates the perception of employees towards their supervisors' leadership style. The leadership scale scores had a range possibility of 1 to 5. A score of 1 implies that the style or trait was not used totally, and 5 was an attribute used frequently. A score of 1-2 indicates a style used not at all or never. A score of 2-3 represents style used once in a while to sometimes. The score between 3 and 4 indicates the style or traits were used fairly often whereas the score in between 4 and 5 represents the style or traits applied always.

**Table 4.2** The perception of employees on the leadership style of the supervisors at MoR

Transactional Leadership Style				Transformational Leadership Style			
Attributes	N	Mean	Std.D	Attributes	N	Mean	Std. D
Contingent Reward	252	3.21	.758	Inspirational Motivation	252	2.85	1.025
Management by Exception (Active)	252	3.64	.684	Intellectual Stimulation	252	2.77	.876
Management by Exception (Passive)	252	2.92	.644	Idealized Influence	252	2.82	.885
				Individual Consideration	252	2.69	.925
Weighted average and Std. D	252	3.30	.722	Weighted average and Std. D	252	2.78	.849

Source: SPSS output based on Survey data, 2023

As portrayed in Table 4.2, the average mean score of the dimension of management by exception (Active) 3.64 ranks first followed by contingent reward and management by exception (passive) with the mean score 3.21 and 2.92 respectively. Most of employees thus agreed that the leadership fairly often establish assessment standards before starting work to prevent errors or failures by workers, oversee, comment on and provide corrections for errors or failures while keeping track of all mistakes that may result punishment of those employees who do not achieve agreed objectives or if any violations or irregularities occur. Notwithstanding this rank, employees perceive that their supervisors fairly often informed them what to accomplish if they wanted to be recognized, and provide a reward when employees attain their goals. In addition, employees somewhat approved that their supervisors called attention to what employees can gain for their accomplishments while there is also a situation when leaders ignore waits for things go wrong problems and mainly show up after failing to attain goals and need to deal with more about the mistakes of subordinates rather than the results of the work done correctly.

Regarding the transformational leadership traits of the leadership at the MoR, the data evidenced that the average mean of the dimension of inspirational motivation (2.85) and idealized influence (2.82) is relatively high. Most of the respondents reported that the leadership sometimes inspire and motivate employees towards attaining the organization's goal, understand their employees' needs, and assist them in reaching their full potential. Moreover, the leadership has played somewhat an exemplary behavior that brings about respect, admiration, and trust in employees.

In terms of intellectual stimulation, the average mean score 2.77 indicates that the leadership sometimes re-examines critical assumptions to question whether they are appropriate, look at problems from many different angles and seeks differing perspectives when solving problems. Likewise, the Individual Consideration attributes of the leadership received the least mean score (2.69). Employees perceive that the leadership once in a while considers that employees have different interests, capacities, and aspirations and try to coach, to provide advice and paid less attention to fulfilling employees' needs while recognizing their aspirations and accomplishments. Overall, the average mean of the three dimension of transactional leadership style (contingent reward, management by exception active and passive) and the average mean of the four dimensions of transformation leadership style (inspirational motivation, intellectual stimulation, idealized influence, and individual consideration), is 3.30 and 2.78 respectively suggests that the leadership at the MoR tend to be transactional than transformational leaders. The St. D. of the transactional leadership (.722) and transformational leadership (.849) moreover implies the least variation among respondents within the group. The result hence indicated that employees

perceive that their supervisors did not follow pure transactional or transformational leadership style as they at times tend to be transformational leader in some circumstances.

Furthermore, the interviewees/leaders/supervisors were asked to explain their overall perception toward the leadership style in the MoR. Unanimously, all interviewees believe that both transactional and transformational leadership approach are implemented in the MoR. To state the views of some, one interviewee had this to say:

*Depending on the situation, both leadership styles can be implemented and integrated into the MoR's leadership experience. However, it is difficult to claim that the leadership is transformational. The leadership implements some of the traits of the transformational leader, such as creating vision, encouraging motivating and developing employees.*

Likewise, the other interviewee evokes: “One of the qualities of transformational leader is being visionary. The Ministry imparts a vision, tries to motivate and inspires employees to internalize the vision and emphasize professional development.” Most supervisors mentioned that leaders often plan together with their teams and acknowledge and reward their team members based on their performance. An interviewee stated the following:

*They often plan together and direct their subordinates to focus and align their objective with the organization, and provide recognition/ rewards when they attain their goals assuming that reward leads to improved performance. Employees are well aware of what to accomplish if they need to be acknowledged and rewarded for their work.*

Likewise, another interviewee in this regard asserted:

*The leaders in the MoR articulate a consistent shared vision with employees, designed a strategy and strategic goals that ensure the realization of the vision. They moreover direct employees to cascade the strategic goal of the Ministry and try to create alignment to enable them to contribute to the success of the organizational goal. However the effort of the leaders in motivating and inspiring employees towards that vision is not that much encouraging.*

Adding to this another interviewee reported:

*The leadership at different level interacts with their team member to create exciting yet achievable performance goals and initiatives for both the organization and their personal development and provides recognition to their accomplishment.*

The researcher in this regard probed a question how and in what method leaders motivate and inspire their employees and whether the leadership adopts a corrective measure punishment/penalizing method and attitude towards employees who failed/deviate to meet the expected outcomes. According to the interviewees, in the previous year there was a culture of acknowledging and rewarding the best performer in the Ministry. The reward and recognition was

designed assuming that reward leads to improved individual and group performance. Yet, most of the interviewees felt that this assumption did not work in the MoR as it is difficult to say the recognition brings about encouragement and inspiration among employees. One interviewee explained, “The problem we have in instilling a working performance appraisal system is reflected in the rewarding process. Moreover, the process lacks transparency and fairness and employees are not clear how and why best performers are chosen.”

Regarding the intellectual stimulation behavior of the leadership, most of the interviewee accentuated that the leadership has passed through implementing different reform tools to achieve its objective and accomplish its mission. Moreover, it has designed short term trainings and long-term education to enhance the competency of employees and thereby to stimulate employee’s creativity.

Nonetheless, most of the interviewee confirmed that the leadership attitude in seeking the opinion of employees and looking for new ways of doing and problem solving and improving employees’ creativity are at their infant stage and needs more improvement. They moreover emphasized that the leadership needs to develop the characteristic of individual consideration that enables them to treat each employee through understanding their special need and concern. In addition, leaders try to identify the capacities of their employees and consider to satisfying their capacity gaps and facilitate the individual employee development.

Regarding the idealized influence behaviors of the leadership, most of the interviewees believe that there are some supervisors who serve as a role model and try to lead by example by adhering and behaving consistently according to the purpose and values of the organization.

## **5.2 The Relationship between Leadership Style, Employee Work Engagement and Organizational Performance**

The leadership approach or style determines the level of employee work engagement and the success of an organization. A series of analyses was performed to investigate the relationships between leadership styles, work engagement and organizational performance. Preliminary to the investigation, basic assumptions of multivariate data analysis such as adequacy of sample size, normality, linearity, and multi-co-linearity were tested. The data showed approximately normal distributions.

### **5.2.1 Checking the Assumptions**

**Sample Size:** As recommended by Tabachnick and Fidell (2007,) this study considered a formula-  $N > 50 + 8m$  (where  $m$  = number of independent variables) for calculating sample size requirements. This study comprises seven independent variables and requires observing more than 106 cases where the current study considerably exceeds the criterion.

**Multicollinearity:** Multicollinearity indicates the relationship among the independent variables and it exists when the independent variables are highly correlated ( $r=.9$  and above). The bivariate correlation between each of the independent variables (transformational and transactional leadership) in this study is not too high ( $r= .3$ ) therefore all variables are retained. The tolerance and VIF of this study moreover indicates that the multicollinearity assumption is not violated. The tolerance value for each independent variable is .901 which is less than .10 and

the VIF (Variance inflation factor) is 1.110 is less than 5 which is the commonly used cut-off points for determining the presence of multicollinearity (see annex ).

**Normality and homoscedasticity** can be checked from the residuals scatterplots which are generated as part of the multiple regressions (Tabachnick and Fidell, 2007). This is checked by the value for Cook's Distance given towards the bottom of the Residuals Statistics table. According to Tabachnick and Fidell (2007), cases with values larger than 1 are a potential problem. In this study the Maximum value for Cook's Distance is .095 which indicates that there are no major problems. Moreover homoscedasticity is ensured as the residuals have constant variance at every level of the variable.

Prior to conducting a correlation and regression analysis, the scatter plot graph is generated to understand the nature of the relationship between the independent variable (transformational and transactional leadership style) and the dependent variable organizational performance. The distribution of score on the scatterplot indicated that the relationship between the variables is roughly linear and that the scores are evenly spread.

Three models are tested in this study. First, the influence of the transformational and transactional leadership on the organizational performance of the MoR is assessed. Then, the study examined the impact of these two leadership styles on employees work engagement. Finally, the impact of the two leadership styles as well as employees work engagement towards the organizational performance are assessed and reported.

The Pearson's product momentum correlation analysis is conducted to measure and describe the interdependence, strength, and direction of the relationship between leadership styles and employees work engagement and indicators of organizational performance.

**Table 5.1** Correlation among leadership style, employee work engagement and organizational performance

Scale	1	2	3	4
1. Transformational	-	.321**	.543**	.497**
2. Transactional		-	.487**	.457**
3. Work engagement			-	.496**
4. Organizational performance				-

\*\* .P<.001 (2-tailed)

Source: Source: SPSS output from survey data, 2023

As it is demonstrated in Table 5.1, the relationship (association) between leadership style, employee work engagement and organizational performance is investigated using Pearson product-moment correlation coefficient. The result indicates that there is a strong positive correlation between transformational leadership style and work engagement where  $r=.54$ ,  $n=252$ ,  $p<001$ . The correlation between transformational leadership and organizational performance also demonstrates strongest positive relationship with  $r=.50$ ,  $n=252$ ,  $P< 001$ . The study moreover reveals that there is moderate and positive correlation between transactional leadership and employee engagement  $r=.49$ ,  $n=252$ ,  $P< 001$  and transactional leadership and organizational performance with  $r=.45$ ,  $n=252$ ,  $P< 001$ . The more employees perceive that the leadership applies the transformational leadership behavior the more work engagement and performance they experience. As suggested by Cohen (1988) the correlation range in between  $r=.30$ -.49 is moderate where  $r=.50$ -1.00 is considered as strong/large. A correlation of  $r=.55$  (when squared) indicates 30.3%t shared variance ( $.55 \times .55 = .30.3$ ). The transformational leadership style thus



helps to explain 30.3% of the amount of variance in respondents' scores on the employee engagement and 25 % (.5×.5) of the variance in respondents score on the organizational performance.

### 5.2.2 The Leadership Style as a Predictor of Organizational Performance

The relationship between leadership style and organizational performance is assessed using linear multiple regression with 95% confidence interval. The coefficient of determination or R<sup>2</sup> in the regression analysis is used to measures what percentage of a change in the organizational performance can be explained by the change in the transformational and transactional leadership style. It also explains the level of the explanatory power and the extent of the prediction explained transformational and transactional leadership to the predicted dependent variable-organizational performance. As it is demonstrated in table 5.2 the result of the R<sup>2</sup> .338 indicates that 33.8. % of the variation in the organizational performance can be explained by the transformational and transactional leadership attributes of the leadership at the MoR. However, the remaining 66.2% is explained by other variables. The analysis showed a good model fits to the data (sample taken) for predicting how strong the influence on the leadership style towards organizational performance. More importantly the F-statistics corresponding P-value=.000<.05 showed that the significance level of the model to infer about the population.

**Table 5.2** Model fit to measure leadership style prediction on organizational performance

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.582	.338	.333	3.22707	.338	63.648	2	249	.000
a. Predictors: (Constant), Transformational, Transactional									
b. Dependent Variable: Organizational performance									

Source: SPSS output from survey data, 2023

### 5.2.3 Transformational leadership style as a predictor of organizational performance

Based on a standard linear regression analysis, as it is demonstrated in table 5.3, the Beta coefficient and the level of significance (B= .487, P<0.01) in the regression portrays that transformational leadership is has a positive statistically significant contribution to predict organizational performance.

**Table 5.3** Summary regression results of transformational leadership style on organizational performance

Model		Unstandardized Coefficients		Standardized Coefficients	R <sup>2</sup>	Adjusted R <sup>2</sup>	T	Sig.
		B	Std. Error	Beta				
1	(Constant)	14.732	.770				19.136	.000
	Transformational	.108	.012	.487	.237	.234	8.822	.000

a. Dependent Variable: Organizational performance

Source: SPSS output from survey data, 2023

The transformation leadership approach of the leaders uniquely contributes (48.7%) of in explaining organizational performance assuming the variance explained by another predictor is held constant. The result thus implies that transformational leadership positively predicts organizational performance and supports the first hypothesis (H1).

#### 5.2.4 Transactional Leadership Style as a Predictor of Organizational Performance

As it is implied in the standard linear regression analysis in table 5.4, the Beta coefficient and the level of significance, p-value ( $B = .457$ ,  $P < 0.01$ ) suggests transactional leadership makes a positive significant contribution to predict of organizational performance. It uniquely contribute (45.7%) to explaining the change in organizational performance when the variance explained by other variables in the model held constant. The result thus supports the second hypothesis (H2) stated- transactional leadership has a positive influence on organizational performance.

**Table 5.4 Summary regression results of transactional leadership style on organizational performance**

Model		Unstandardized Coefficients		Standardized Coefficients	$R^2$	Adjusted $R^2$	T	Sig.
		B	Std. Error	Beta				
1	(Constant)	9.197	1.498				6.139	.000
	Transactional	.281	.035	.457	.209	.206	8.133	.000

a. Dependent Variable: Organizational performance

Source: SPSS output from survey data, 2023

The standardized coefficient of both transformational and transactional leadership indicates that both leadership styles make statistically significant unique contribution to explaining the organizational performance, when the variance explained by all other variables in the model is controlled for. The Beta value for transactional leadership however (45.7%) is slightly lower.

#### 5.2.5 The Leadership Style as a Predicator of Employee Engagement

As it is displayed in Table 5.5, the coefficient of determination, the  $R^2$  in the statistical result implies 41.1% of the variation in employees' work engagement can be explained by the leadership styles at the MoR. The model thus fits for predicting how strong the influence of the leadership style towards organizational performance. However, the remaining 58.9% is explained by other variables.

**Table 5.5 Model fit to measure leadership style prediction on organizational performance**

Model	R	$R^2$	Adjusted $R^2$	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.641	.411	.406	5.38004	.411	86.781	2	249	.000
a. Predictors: (Constant), Transactional, Transformational									
b. Dependent Variable: Employee work engagement									

Source: SPSS output from survey data, 2023

### 5.2.6 Transformational leadership as a predicator of employee work engagement

The Beta coefficient and the corresponding level of significance p-value ( $B = .543$ ,  $P < 0.01$ ), demonstrates in Table 5.6, suggests that transformational leadership makes statistically significant contribution to explaining employees work engagement in the MoR. The transformational leadership approach of the leaders uniquely contributes (54.3%) to explaining employees' work engagement assuming the variance explained by other predictor are held constant. The result thus implies that transactional leadership positively predicts organizational performance and provided support to the third hypothesis (H3).

**Table 5.6 Summary regression results of transformational leadership style on employee work engagement**

Model		Unstandardized Coefficients		Standardized Coefficients	R Square	Adjusted R Square	T	Sig.
		B	Std. Error	Beta				
1	(Constant)	15.171	1.308		.295	.292	11.599	.000
	Transformational	.212	.021	.543			10.224	.000

a. Dependent variable: employee work engagement

Source: SPSS output from survey data, 2023

### 5.2.7 Transactional Leadership as a Predicator of Employee Work Engagement

As summarized in Table 5.7, the Beta coefficient and the level of significance, p-value ( $B = .497$ ,  $P < 0.01$ ) portrays that transactional leadership makes (49.7%) contribution to explaining the changes in employee work engagement. The finding thus provided support for the fourth hypothesis (H4) that predicts transformational leadership has a positive effect on employee work engagement.

**Table 5.7 Summary regression results of transactional leadership style on employee work engagement**

Model		Unstandardized Coefficients		Standardized Coefficients	$R^2$	Adjusted $R^2$	T	Sig.
		B	Std. Error	Beta				
1	(Constant)	4.870	2.583		.247	.244	1.886	.001
	Transactional	.539	.060	.497			9.054	.000

a. Dependent variable: employee work engagement

Source: SPSS output from survey data, 2023

The Beta coefficient in the regression analysis thus shows that transformational leadership makes the strongest unique contribution while transactional leadership explained a relatively least prediction. However, the sig value .000 depicts that the transformational and transactional leadership make a significant unique contribution to the prediction of employee work engagement.

### 5.2.8 Meditational role of employee work engagement between leadership style and organizational performance

As suggested by Baron and Kenny's (1986), testing the hypothesis related to the meditational role of work engagement in the link between leadership styles and organizational performance needs to check, first, whether the independent variables (leadership styles) are related to the mediator variable. Second, the mediator (work engagement) had to be related to the dependent variables (organizational performance). Third, a significant relationship between the independent variables and dependent variable should be reduced for partial mediation to operate when controlling for the mediator variable. As described earlier, the first two conditions were partly met in this study. Therefore, for the mediation test, the indicators of organizational performance are regressed over leadership styles sequentially while controlling for work engagement.

**Table 5.8 Model fit to measure mediation role of employee work engagement between leadership style and organizational performance**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	Sig. F Change	Durbin-Watson
1	.582	.338	.333	3.22707	.338	63.648	.000	
2	.603	.364	.356	3.16970	.026	10.095	.002	2.213
a. Predictors: (Constant), Transactional, Transformational								
b. Predictors: (Constant), Transactional, Transformational, Employee work engagement								
c. Dependent Variable: Organizational performance								

Source: SPSS output from survey data, 2023

As can be learned from the coefficient determination R<sup>2</sup> value when the mediation (employee work engagement) is included R<sup>2</sup> slightly changed from 33.8% to 36.4% and the R<sup>2</sup> change shows an increment by 2.6% where P value= .002<0.05. The change in the R<sup>2</sup> implies that there is a mediating effect and the model is useful to the data to analyze the mediation effect of employee work engagement in the link between leadership style and organizational performance.

**Table 5.9 Summary regression results of mediation role of employee work engagement between leadership style and organizational performance**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.337	1.399		5.245	.000
	Transformational	.084	.012	.379	6.969	.000
	Transactional	.206	.033	.335	6.162	.000
2	(Constant)	7.199	1.375		5.237	.000
	Transformational	.064	.013	.290	4.794	.000
	Transactional	.160	.036	.260	4.447	.000
	Employee work engagement	.119	.037	.210	3.177	.002

a. Dependent variable: organizational performance

Source: SPSS output from survey data, 2023

The result indicates that the employee work engagement has indirect positive effect in the link between leadership styles and organizational performance. The effect of transformational and transactional leadership style on organizational performance (37.9% and 33.5% respectively) has been significantly reduced to 29% and 26% following the inclusion of the mediator variable employee work engagement.

Moreover, the Beta coefficient and the level of significance, p-value ( $B = .210$ ,  $P < 0.05$ ) confirms that the employee engagement make a significant unique contribution to the prediction of the organizational performance. It uniquely contributes 21% to explaining the change in organizational performance when the variance explained by other variables in the model held constant. The fifth hypothesis (H5) is thus supported in this study.

## **6. Discussion**

The study imparted the relationships between leadership styles and organizational performance, and tested a mediation role of work engagement in the link between leadership styles and organizational performance in the MoR. The transformational and transactional leadership theories are employed to explain the effect of leadership style on employee work engagement and organizational performance. The study finds that the leadership at the MoR tended to be more transactional than transformational. Although they occasionally demonstrated transformational leadership behavior under certain conditions, their transactional behaviors were stronger than their transformational leadership attribute.

The study reveals that the MoR's leadership practices involve active management by exception. They frequently set assessment standards before beginning work, monitor, comment on, and correct errors or failures while keeping track of all mistakes that could lead to punishment for staff members who perform poorly, break the law, or engage in other misdeeds. They often provide employees guidance on what to do and how to get recognition and reward for their efforts and offer incentives when they meet their targets. Furthermore, it has been approved that the leadership adhere to passive management by exception practices and draw attention to the benefits that employees can receive for their accomplishments. However, there are also situations when they ignore or waits for things go wrong or wait for problems to arise and mainly show up after failing to deal with more about the mistakes of employees rather than the outcomes of the work performed effectively.

Albeit insufficiently, the MoR leadership makes an effort to exhibit transformational leadership behavior. They tried to clearly communicate a common vision with the workforce, collaborate on planning, and give instructions to staff members on how to cascade the strategic goal while maintaining alignment with the Ministry to support the achievement of the organizational goal. They encourage and inspire staff members to have a common goal and adhere to performance criteria set by the Ministry, and they help them realize this goal to the best of their abilities. They moreover engaged in building the capacity of employees through short-term and long-term education and trainings and challenge employees to try new methods, and to use new technological ways in response to changing circumstances through implementing different reform tools.

Studies however suggest that effective and successful leaders typically employ transformational leadership elements, followed by certain transactional leadership traits, with a minimal use of passive management by exception (Schwarz, 2017; Yang et al., 2020). Transformational leadership skills development should be a top goal for organizations like the MoR that operate in a world that is changing quickly in order to create a productive workplace,

increase employee satisfaction, and promote productivity (Ghadi, 2019; Long, 2023). Therefore, a hybrid yet a healthy balance of transactional and transformative leadership are considered as the ideal approach as both leadership styles perform in different contexts depending on the situation.

Regarding the direction and strength of the relationship, the study infer that both transformational and transactional leadership attributes are positively associated with the level of employees work engagement and organizational performance at the MoR. The transformational leadership ( $B = .487$ ,  $P < 0.01$ ) and transactional leadership ( $B = .457$ ,  $P < 0.01$ ) makes the statistically significant unique contribution to explaining the organizational performance although the Beta value for transactional leadership is slightly lower. This result infers employees at the MoR preferred leaders who focus on transformational leadership dimensions such as: intellectual stimulation, inspirational motivation idealized attributes, and individual consideration to enhance their work engagement and performance level. This might be because transformational leaders are typically very inspirational and will employ various methods to motivate, build the capacity of employees and consider their individual needs and concerns to ensure that organizational objectives are achieved. This finding is in line with Ohemeng (2018), who studied the leadership in the Ghana public sector and came up with the conclusion that transformational leaders align their employee's aspiration with the organizational achievement and this enable them to foster the commitment of their employees and to enhance their performance in their organization. In consistent with this Aboramadan, et al., (2020); Al-Khaled & Fenn (2020) moreover reported that the presence of leaders with transformational and transactional traits would allow for higher performance toward the attainment of organizational goals and objectives.

Furthermore, the study exhibited that the transformational leadership ( $B = .543$ ,  $P < 0.01$ ) and transactional leadership ( $B = .497$ ,  $P < 0.01$ ) exhibited statistically significant and strongest contribution to the prediction of employee work engagement. As it can be understood from the figure, among the two leadership styles however, the transformational leadership makes high contribution in explaining the extent of employee work engagement. This may be related to the MoR's transformational leaders' inspiring and motivating qualities, which allow employees to feel vigor, dedicated and feel powerful and capable even when working intensely.

However, research in this area has yielded conflicting results. Baloch (2013) concludes that transformational leadership is not as effective in predicting the characteristics of employee work engagement as transactional leadership. Similar findings were made by Albrecht et al. (2018) and Ghadi (2019) who found that transactional leadership improves employee engagement through the exchange relationship between leader and employee as well as through the organization's motivation and rewards, which in turn raise individual performance. Other studies on the other hand resonated that there isn't a single and ideal leadership approach that raises employee work engagement in all situations (Colbert, 2015). Nonetheless, the majority of studies consistent to the present study concluded that both transformational and transactional leadership styles are crucial for fostering employee work engagement (Ghadi, 2019; Hayati, Charkhabi, & Naami, 2018; Maharmeh, 2021; Schwarz, 2017; Yang et al., 2020).

The study furthermore portrays that transformational and transaction leadership styles have a positive relationship with organizational performance, and that this positive relationship is owing to the mediating variable, employee work engagement. Employee work engagement has played a partial mediation role between leadership style and organizational performance. The study reveals that following the inclusion of the mediator variable employee work engagement, the

effect of transformational leadership (37.9%) and transactional leadership style (33.5%) on organizational performance significantly reduced to 29% and 26% respectively. The Beta coefficient and P-value ( $B = .210$ ,  $P < 0.05$ ) moreover confirms employee engagement uniquely contributes to explaining the change in organizational performance when the variance explained by other variables in the model held constant. In line with this finding, the previous empirical researches conclude that work engagement serves as a significant prevailing mechanism between transformational leadership and work-related outcomes (Lai et al., 2020; Aboramadan, et al., 2020). Moreover, recent academic research across a range of sectors suggests that there is a connection between work engagement and organizational performance and that highly engaged employees are more likely to exceed expectations in their organizations (Al-Abrow et al. 2019; Maharmeh, 2021; Hayati et al., 2018). This entails that the leadership should provide emphasis to encourage employees work engagement to directly influence organizational performance.

## **7. Conclusion and Implication of the Study**

This study elucidates the relationship between leadership styles, employee work engagement and organizational performance. The study reveals that the leadership styles have a significant impact on organizational outcomes. The study moreover infers that employee work engagement partially mediates the influence of leadership styles on organizational performance. The study furthermore finds that the MoR's leadership tended to be more transactional than transformative. Although they occasionally demonstrated transformational leadership behavior under certain conditions, it was not as strong as it could be in comparison to their transactional behaviors.

The study reveals that both transformational and transactional leadership attributes exhibited statistically significant and strongest contribution to the prediction of employee work engagement and organizational performance. Additionally, it portrays that employee work engagement has played not only a partial mediation role between leadership style and organizational performance, yet it also uniquely contributes to explaining the change in organizational performance by itself. However, of the two leadership styles, transformational leadership contributes comparatively more to the explanation of the level of employee work engagement and organizational performance. This finding suggests that workers at the MoR choose leaders who emphasize transformational leadership aspects to improve their level of performance and job engagement. This could have to do with the inspirational and motivational traits of the MoR's transformational leaders, which enable staff members to feel inspired by their job, proud of their accomplishments, and strong and capable even when putting in long hours. Given that both transactional and transformative leadership styles function differently depending on the circumstance, this study suggests a hybrid strategy that achieves a good balance between them. The MoR should thus place a strong emphasis on developing transformational leadership skills and employ transformational leadership elements in addition to certain transactional leadership traits, to create a productive workplace, an engaged employ that could function in an ever-changing economy and generate sufficient revenues to finance the socio-economic activities and the development efforts of the country.

## **8. Theoretical and Practical Implications**

This study contributes to the advancement of leadership theory by highlighting the notion that effective leadership influences both worker engagement and organizational performance. Moreover, the study advances our understanding of the degree to which transactional and transformational leadership styles impact employee work engagement and organizational

performance. Additionally, it provides empirical evidence that helps to establish the theoretical groundwork for future advancement in leadership research. Furthermore, the study has practical contribution in enabling leaders of the MoR to realize the value of cultivating transformational leadership styles to empower, inspire and motivate employees to achieve the best out of them. Besides, this study imparts the leaders at all levels in MoR to create leadership development initiatives that enhance transformational leadership competencies. These initiatives can equip managers with the ability they need to successfully support their staff members which will eventually leading to higher work engagement and performance.

## 9. Recommendations for Future Studies

The majority of research focuses on cross-sectional analysis. Future researchers should concentrate on a longitudinal approach to gain a deeper understanding of the long-term impacts of various leadership styles and to comprehend the causal relationships between employee work engagement and organizational performance. It is also indispensable to examine the moderators that may influence the relationship between leadership styles and organizational performance which may include employee trust, work ethics, organizational behavior, and others.

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# The Influence of Ethical Leadership on Teachers' Professional Commitment: The Mediating Role of Organizational Culture in Public Universities in Addis Ababa

Zewdie Zakie Koyira<sup>5</sup>

## Abstract

This study investigated the impact of ethical leadership on teachers' professional commitment, specifically examining the mediating role of organizational culture within public universities in Addis Ababa. Employing a descriptive research design with a deductive approach, data was collected from 384 teachers across four universities using proportionate random sampling. A 95-item standardized questionnaire assessed teachers' professional commitment (TPC), ethical leadership (EL), and organizational culture (OC). Statistical analysis, including descriptive and inferential methods, was conducted using Jamovi software. The results confirmed all direct hypotheses and validated organizational culture's mediating role between ethical leadership and teachers' professional commitment. Significant positive effects were found for ethical leadership on both teachers' professional commitment and organizational culture, as well as for organizational culture on teachers' professional commitment. These findings underscore the necessity for universities to address demographic factors and enhance work conditions to bolster teacher commitment. University leaders are urged to prioritize ethical standards and cultivate a positive organizational culture. This research highlights the pivotal role of ethical leadership and organizational culture in educational settings, providing valuable insights for leaders, policymakers, program designers, and researchers. It contributes to organizational management literature by illustrating how teachers' professional commitment can be fostered through these elements. Further longitudinal studies are recommended to deepen understanding of these relationships.

**Key words:** Ethical-leadership, organizational culture, professional-commitment, teachers

## 1. Introduction

Ethical leadership is defined as promoting appropriate conduct through effective communication and demonstrating proper behavior via personal actions and relationships (Puyo, 2022). Numerous studies have demonstrated that ethical leadership promotes an ethical culture by setting an example at the top and middle of a company, fostering an atmosphere where employees feel free to voice issues, boosting morale and productivity; and encouraging the utilization of ethical resources (Agha et al., 2017). According to Dust et al. (2018), ethical

<sup>5</sup>PhD, Assistant professor in Public Management at the Training Institute of the Ethiopian Civil Service University, email: [zakiezawude@gmail.com](mailto:zakiezawude@gmail.com)

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leadership is essential for inspiring staff members to develop better work habits and focus their energies on improving their businesses' performance.

In the same line of inquiry, a study result by Su et al. (2022) confirmed that ethical leadership in an organization is deemed a vital element for establishing appropriate organizational culture and setting appropriate motivation strategies such as compensation, reward, and recognition. In another study, Lee et al. (2021) showed that, in any organizational context, leadership greatly encourages people to impart their knowledge to their peers. The scholarly literature documented that it is ethical leadership that plays a critical role in motivating employees to exhibit higher dedication and commitment and demonstrate a higher level of professionalism (Enaifoghe et al., 2023).

Regarding ethical leaders, Mitonga-Monga et al. (2023) asserted that ethical leaders are those who uplift, encourage, and cultivate an ethical culture that improves employees' psychological health and well-being. Leaders who uphold ethical standards have a significant impact on how their employees live and work (Moore et al., 2018). Following the same pattern of thought, Ashfaq and Abid (2021) illustrated the invaluable roles of ethical leaders in establishing organizational culture, motivating employees, and boosting employee commitment. In this regard, a study result by Lazim et al. (2020) suggested that ethical leaders have a significant impact on improving employee morale and productivity because they encourage their followers to share and spread their knowledge. Wu and Lee's (2020) study found a strong relationship between an individual's dedication to their job and the culture of their organization. This suggests that moral leadership and the capacity of leaders to counsel, coordinate, inspire, and enable their followers significantly influence teachers' professional commitment, which is mediated by the organizational culture of public universities. According to several studies conducted in various settings, workers who have received support from moral leaders place a higher value on and are therefore more committed to their profession. In the field of education, moral leaders are seen as trailblazers who can inspire people to pursue and remain in the teaching profession, as well as inspire educators to show greater dedication to the profession, students, and school; these leaders also allow educators to collaborate more effectively and participate more in research and community projects (Ashfaq & Abid, 2021).

*Statement of the problem:* Public universities in Ethiopia, particularly in Addis Ababa, face challenges related to high teacher turnover intentions and low levels of teacher motivation and professional commitment (Andarge, 2017; Influence et al., 2020). While existing research suggests that factors such as poor remuneration contribute to this issue, there is a significant gap in understanding the role of ethical leadership and organizational culture in influencing teacher commitment within this context (Kebede, 2022). Therefore, this study addresses the problem of limited knowledge regarding how ethical leadership, both directly and indirectly through organizational culture, influences teachers' professional commitment in public universities in Addis Ababa. The purpose of this study was to examine the influence of ethical leadership on teachers' professional commitment, focusing on the mediating role of organizational culture in public universities in Addis Ababa.

The objective of this study is to investigate the direct and indirect effects of ethical leadership on teachers' professional commitment in public universities in Addis Ababa, specifically examining the mediating role of organizational culture. Specific objectives are: 1) to examine the direct effect of ethical leadership on teachers' professional commitment in public universities of Addis Ababa; 2) to investigate the direct effect of ethical leadership on organizational culture in public universities of Addis Ababa; 3) to assess the direct effect of organizational culture on teachers' professional commitment in public universities of Addis Ababa; and 4) to determine the mediating role of organizational culture in the relationship between ethical leadership and teachers' professional commitment in public universities of Addis Ababa.

## **2. Theoretical Background**

This section provides the theoretical background for the core constructs of the study: ethical leadership, OC, and TPC. The study's theoretical framework is based on Kalshoven et al. (2011)'s multifaceted definition of ethical leadership. It is a normative model frequently used for ethical leadership (Brown et al., 2005). According to their definition, ethical leadership consists of proper behavior that is demonstrated in interpersonal relationships and one's actions. Such conduct is also transmitted to the followers through decision-making, reinforcement, and communication. The goal of this definition is to instill normative ethical qualities in oneself and one's followers (Shakeel et al., 2019). Kalshoven et al. (2011) identified seven characteristics of ethical leader behavior: fairness, power sharing, role clarification, people orientation, integrity, ethical advice, and concern for sustainability. These dimensions were based on a variety of studies.

### **2.1 Ethical Leadership**

According to Assiri (2018), ethical leadership is defined as "the promotion of normatively appropriate conduct to followers through two-way communication, reinforcement, and decision making, as well as the demonstration of normatively appropriate behavior through individual actions and interpersonal relationships." It is still essential in the public sector to achieve good governance and sustainable socioeconomic development (Enaifoghe et al., 2023). When ethical leaders develop their followers into leaders who put the organization's needs ahead of their own, they improve awareness of what is essential, right, good, and prominent. A leader's moral character, which includes their honesty, integrity, and dependability, and their conduct, might be considered the moral person component of ethical leadership. Ethical leadership has a potential impact to be linked with social learning theory which is a novel and major theoretical basis that clarifies the impression of ethical leadership style (Ali, 2021). Ethical leadership predicts important follower outcomes including satisfaction with the leader, perceived leader effectiveness, willingness to exert extra effort on the job, and willingness to report problems to management (Toor et al., 2009). Ethical leaders have the right to reward and punish their followers based on shared common goals and ethics (Piccolo et al., 2010). According to social learning theory, which is related to the ethical leadership principle, people pick up appropriate

behaviors from the people around them and choose to stick with those that are rewarded rather than engaging in negative behaviors (Babalola et al., 2018).

On the other hand, according to ethical leadership theory, leaders can decide on reward and punishment that leads to joining the leader's behavior from employees (Ali, 2021). It offers a hypothetical foundation to express the view that leaders who have ethics could successfully encourage supporter pro-social behavior, for example, knowledge-sharing manners (Su et al., 2022).

## **2.2 Organizational Culture**

Organizational culture is defined as the identity that distinguishes one organization from another. To put it another way, an organization's appearance, operational procedures, priorities, and relationships with its customers, shareholders, and employees are all characterized by its organizational culture. According to Sashkin and Rosenbach (2013), there are five components that can be used to describe the nature of organizational culture: customer orientation, goal achievement, teamwork organization, managing change, and building a strong culture. These components can be used to describe any organization's culture. They both reflect and are impacted by organizational culture. As Sashkin and Rosenbach (2013) confirmed, these characteristics show how effective an organization is.

Prior researches indicated that employee performance is significantly impacted by corporate culture (Fidyah & Setiawati, 2020; Putriana et al., 2015; Rozanna et al., 2019). This indicates that enhancing employee performance is greatly influenced by company culture. Similarly, another research has demonstrated that a strong corporate culture greatly improves high performance (Kim & Jung, 2022). Managing change, coordination, teamwork, goal achievement, customer orientation, and creating a strong culture are all components of organizational culture, according to Sashkin and Rosenbach (1990). This study was founded on the idea that Sashkin and Rosenbach (1990) developed.

## **2.3 Teachers' Professional Commitment**

In the context of education, professional commitment is described as the affective response to one's career that forms a psychological bond with the individual. It is an enthusiasm for the work that goes into teaching, or for a particular facet of teaching (Crosswell, 2006). It is an investment of time outside of contact hours with students as a responsibility to impart knowledge, attitudes, values, and beliefs and takes responsibility for passing on a core set of skills, understandings, and values (Yu et al., 2021). Professional commitment is the willingness to engage with the school and the school community. It is a belief that teachers have a professional responsibility that reaches beyond the four walls of the classroom and perhaps even extends beyond the boundary of the school (Crosswell & Elliott, 2004).

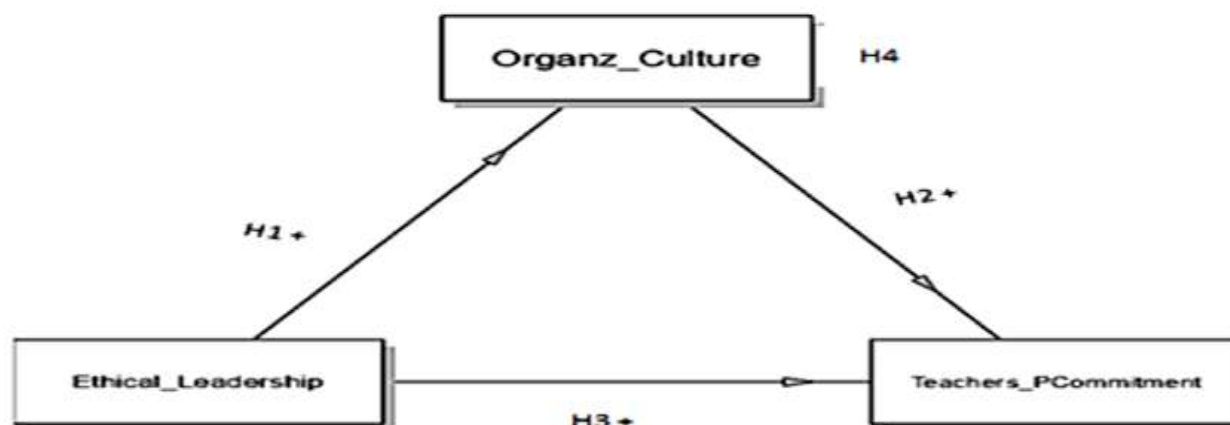
It is true that citizens build the nation, teachers shape citizens, and teacher educators create teachers. According to Biseth et al. (2022) the degree of dedication, commitment, and commitment determines the future of society. Instructors are not just necessary for passing along

information and cultural norms; they are also necessary for bringing about change. According to Frelin (2010), the degree of instructors' professional participation with the organization has a significant impact on the quality of instruction. It is the desire of a teacher to refresh, hone, and improve his or her professional skills as well as gain knowledge and insight into various facets of the field, including cooperation, excitement, accuracy, and favorable attitudes towards coworkers (Kimutai, 2021). Teachers play important roles in educating the future members of society through their work and quality education cannot be achieved without their dedication and commitment (Report, 2022). Teachers play a critical role in preparing a new generation of young people to shape our future and lead our societies to meet global challenges and needs in today's ever-changing globe (Idris et al., 2012). Teachers who demonstrate high levels of professional commitment work harder, feel more a part of their institutions, and are more motivated to fulfill the goals of teaching than those who do not, claim Byun and Jeon (2022). Professional teachers should get along with students, parents, and other people involved in the teaching profession. They must therefore demonstrate a strong commitment to their line of work, to students, to society, and moral principles.

In this study, teacher commitment is conceptualized as being multi-dimensional (Yang et al., 2019). Mahajan and Kauts (2022, p 9590), list five aspects of teachers' commitment: commitment to the profession, commitment to society, commitment to students, commitment to basic human values, and commitment to attaining excellence.

## 2.4 Hypotheses Development and Research Model

This section covers the study's conceptual framework and hypotheses. It offers explanations of the connections among the study's core constructs as well as its hypotheses. This study's primary focus is on the mediating function of OC in the connection between TPC and ethical leadership. The proposed study model is depicted in Figure 2.1, which highlights three key constructs: organizational culture, professional dedication of instructors, and ethical leadership.



**Figure 2.1** Conceptual Framework of the study

Source: Author's conceptualization based on Hayes PROCESS Model, 2018



### **2.4.1 Ethical Leadership and Teachers' Professional Commitment**

The ethical leadership model suggests that ethical leaders are role models for their workers since they can learn by paying attention to their leader and imitating their values and attitudes to inculcate in them an expected behavior (Ko et al., 2018). As a result, a leader can influence subordinates and encourage positive behavior. This demonstrates how an ethical leader may establish a rapport with their team members and inspire a sense of loyalty in them (Crosswell, 2006). According to the social learning approach, ethical leaders have an impact on their followers by serving as role models (Veveře, 2014), treating followers fairly (Brown et al., 2005) and acting with honesty and integrity (Treviño et al., 2000). Drawing upon social exchange theory, attributes of ethical leaders such as communication, reinforcement, and decision-making would drive subordinates' satisfaction, which in turn increases commitment (Brown et al., 2005). Empirically in previous research works, ethical leadership is positively linked to organizational performance (M. Kim & Thapa, 2018). Ethical leaders show interest in their employees, pay attention to their concerns, and share responsibility and power with them (Frisch & Huppenbauer, 2014). Ethical behavior is vital in the field of education because an ethically rich educational system assists in maintaining peace, justice, and freedom in society at large (Bhattarai, 2015). Educational leaders who have a strong ethical foundation will be more likely to exhibit higher levels of professionalism, which will quickly move schools closer to development. These higher levels of professionalism may include a stronger dedication to their students, increased collaboration with colleagues, a greater engagement with the teaching task, and a demonstration of greater expertise (Brown & Ferrill, 2009). When educational leaders' professional philosophies are founded on moral principles, they will be more likely to exhibit greater professionalism, which will quickly move schools toward development. According to Tschannen-Moran & Gareis (2015), this professionalism will manifest itself in a teacher's improved involvement with the teaching task, collaboration with colleagues, and devotion to their pupils as well as their show of higher knowledge. Hypothesis 1 below is formulated based on the above supporting literature.

*H<sub>1</sub> Ethical leadership significantly and positively predicts teachers' professional commitment.*

### **2.4.2 Ethical leadership and organizational culture**

Previous research shows that transformational leadership and the organization's transformational culture are favorably and significantly correlated with ethical leadership. According to this study, organizational culture encompasses unwritten norms of behavior and conduct as well as the underlying assumptions, beliefs, values, attitudes, and expectations that all members of an organization share (Ouma, 2017). According to earlier research, morally normative behavior is frequently displayed by ethical leaders (Piccolo et al., 2010). They also frequently foster an environment that grants high degrees of autonomy, which encourages followers to act creatively at work (Kalshoven et al., 2013). Current research hypothesizes that in an effort to support TPC initiatives; ethical leadership can promote an ethical culture within the organization.

*H2: Ethical leadership significantly and positively predicts organizational culture.*

### **2.4.3 Organizational culture and teachers' professional commitment**

Research indicates that a firmly formed organizational culture influences an organization's work environment and boosts teachers' morale. The results of the studies demonstrated a strong correlation between organizational commitment and some aspects of organizational culture. As a result, instructors will be more committed to one another as the organizational culture grows (Firuzjaeyan et al., 2015; Kimutai, 2022; Ratnasari et al., 2020). The study's findings indicate that organizational culture can positively impact factors such as performance (Nier, 2009), commitment (Rashid et al., 2003) job burnout, satisfaction (Riley, 2018), and workers' ethical behavior (Nwugwo, 2001). This finding suggests that enhancing organizational commitment will benefit from the adoption of a strong organizational culture. Organizational culture can be regarded as a set of fundamental values, standards, and beliefs that are created, developed, and shared by all members of the organization and are essential to achieving organizational objectives. In addition to defining an organization's distinctiveness, organizational culture also represents the organizational personality.

*H3 Organizational culture has a positive and significant effect on teachers' professional commitment.*

## **3. Materials and Methods**

This section outlines the study's methodology, including the research participants and approach, sample and data collection procedures, measures of the study constructs, and data analysis techniques.

### **3.1 Target Population, Sample Size, and Sampling Design**

For this study, teachers who are currently working at Ethiopian Civil Service University, Addis Ababa University, Addis Ababa Science and Technology University, and Kotebe Metropolitan University were considered as the target population. According to the data obtained from university websites 2024, the total population is equal to 3738. Taking into account this target population, the sample size was calculated using Consuelo and Sevilla's (2007) sample size determination formula:  $n = (N/1 + Ne^2)$  where 'n' represents sample size, 'N' denotes the size of the population, and 'e' represents the margin error, which is 5%. Accordingly, the calculated sample size was 361 adding 10% of the total sample size. Hence, the sample size for this study was 397. Regarding sampling technique, both stratified and simple random sampling techniques were employed to select sample units from the population. This allows taking samples proportional and representative to each university, as indicated in Table 3.1.

**Table 3.1** Study population and Sample size

University	Population size	Proportionate sampling	Sample size
ECSU	319	10.3%	33
Kotebie	450	10.3%	47
Addis Ababa University	2408	10.3%	254
ASTU	561	10.3%	50
Total	3738	10.3%	384

Source: Author's computation, 2024

### 3.2 Data Collection Procedures

In this study, a multi-stage sampling technique was employed. First, the researcher selected all public universities in Addis Ababa city purposively. This is because only four public universities were available at the time of this study. Second, the researcher took the list of colleges and departments from each university and then assigned the sample size to each department in their respective universities.

**Table 3.2** Respondents' profile

Sex	Educ. Level	Teaching experience	Counts	% of Total	Cumulative %
Male	BA/BSc	Below 2 years	1	0.3 %	0.3 %
		Between 2 and 5 years	2	0.5 %	0.8 %
		5.1-10 years	6	1.6 %	2.3 %
		Above 10 years	2	0.5 %	2.9 %
	MA/MSc	Below 2 years	14	3.6 %	6.5 %
		Between 2 and 5 years	34	8.9 %	15.4 %
		5.1-10 years	29	7.6 %	22.9 %
		Above 10 years	97	25.3 %	48.2 %
	PhD	Below 2 years	8	2.1 %	50.3 %
		Between 2 and 5 years	25	6.5 %	56.8 %
		5.1-10 years	22	5.7 %	62.5 %
		Above 10 years	50	13.0 %	75.5 %
Female	BA/BSc	Below 2 years	0	0.0 %	75.5 %
		Between 2 and 5 years	0	0.0 %	75.5 %
		5.1-10 years	0	0.0 %	75.5 %
		Above 10 years	1	0.3 %	75.8 %
	MA/MSc	Below 2 years	4	1.0 %	76.8 %
		Between 2 and 5 years	14	3.6 %	80.5 %
		5.1-10 years	15	3.9 %	84.4 %
		Above 10 years	42	10.9 %	95.3 %
	PhD	Below 2 years	0	0.0 %	95.3 %
		Between 2 and 5 years	4	1.0 %	96.4 %
		5.1-10 years	6	1.6 %	97.9 %
		Above 10 years	8	2.1 %	100.0 %

Source: Author's computation using Jamovi 2.3, 2024

Then, questionnaires were distributed to each department and individual respondents were addressed using an availability sampling method. For this study, 397 questionnaires were distributed; and 384 respondents duly completed and returned. After checking data quality, 384 completed questionnaires were used for analysis and this represents the usable response rate of 96.7%. The survey was administered face to face method while teachers were going about their daily classes. This created high access to meet the respondents and achieve a very high response rate.

The study sample was predominantly male (75.5%) compared to female (24.5%), indicating a male-dominant representation. Nonetheless, data was collected from both genders, ensuring diverse perspectives. The educational qualifications of participants were high, with 32.0% holding a PhD, 64.8% holding a Master's degree, and 3.1% holding a BA/BSC degree. In terms of teaching experience, over half of the respondents (52.1%) had more than 10 years of experience, while 20.3% had 5 to 10 years, and 27.6% had less than 5 years, suggesting a well-experienced cohort capable of providing reliable insights. Regarding marital status, the vast majority (90.8%) were married, with a smaller proportion (9.2%) being single, ensuring inclusion of responses from individuals with varied marital backgrounds.

### **3.4 Measures**

#### **3.4.1 Ethical Leadership**

For the measure of ethical behavior, an ethical leadership scale with seven dimensions (20 items) validated by (Gollagari et al., 2022a) was used. Teachers rated their immediate leader's ethical behavior on a six-point Likert scale ranging from strongly disagree (1) to strongly agree (6). Thus, a higher score implies stronger agreement.

#### **3.4.2 Teachers' Professional Commitment**

For the collection of data about teachers' professionalism, this study adopted to use teachers' professional commitment scale with five dimensions (45 items) developed by Kaur et al (2011). Like with ethical leadership, teachers rated their perceived commitment level on a six-point Likert scale ranging from strongly disagree (1) to strongly agree (6).

#### **3.4.3 Organizational Culture**

For organizational culture:- The organizational culture scale (30 items) developed by Sashkin and Rosenbach (2013) was used. Teachers scored the two constructs using a six-point Likert scale, with 1 denoting "strongly disagree" and 6 denoting "strongly agree." A composite variable was created for each construct by taking the mean of the corresponding Likert items. The researcher used the composite variable as an interval scale, as advised by Averin et al. (2017) and Norman (2010).

### 3.5 Methods of Data Analysis

The study used SPSS V.23 and Jamovi 2.3 as tools for both descriptive and inferential statistical analyses. Before quantitative analysis, the data were classified and tabulated to enter into SPSS software. This study used different ways of data analysis. First, exploratory and confirmatory analyses were performed for the constructs to establish validity and reliability. Second, the study adopted a mediation analysis using Jamovi software 2.3.

## 4. Results and Discussions

This section presents the findings of the study, after conducting various analyses using three constructs in the study.

### 4.1 Factor Analysis, Validity, and Reliability Tests

#### 4.1.1 Principal component analysis

Table 4.1 shows the results of principal factor analyses for three constructs namely EL, TPC, and OC. Acceptable values for a sample-size test were obtained by the test, with KMOs greater than 0.5 (Hair et al., 2019). A single component for EL with its 33 items explains 73.7% of the variability, with a KMO of 0.973,  $p < 0.001$ , and a Cronbach's alpha of 0.989. For OC, 25 items explain 63.2% of the variability with a KMO of 0.963,  $p < 0.001$ , and a Cronbach's alpha of 0.976. The TPC factor explains 73.7% of the variability in its 27 items, with a KMO of 0.973,  $p < 0.001$ , and a Cronbach's alpha of 0.976.

**Table 4.1** KMO, Sphericity, and Cronbach's Alpha

Constructs	No. Items	Explained variation	KMO	Sphericity Test		Cronbach A
				X <sup>2</sup>	P	CA
Ethical Leader(EL)	33	73.3%	0.973	18345	<.001	0.989
Organizational Culture(OC)	25	63.2%	0.963	9536	<.001	0.976
Teachers' Professional Commit(TPC)	27	73.7%	0.973	11409	<.001	0.976

Source: Author's computation, 2024

#### 4.1.2 Validity and reliability test

A confirmatory analysis was done to find out how well the measured variables represent the constructs. A validity test was conducted to determine the validity of an instrument for measuring a certain variable. Table 4.1 shows the results of validity and reliability tests. Convergent and discriminant validity tests were the two phases used to evaluate the validity of the instrument used in this study. The average variance extracted (AVE) value and the factor-loading value for each indicator were used to perform a convergent validity test. The "varmax" rotation for the three main constructs—EL, OC, and TPC—was carried out in this procedure. Five EL items, five OC items, and eighteen TPC items were eliminated from the analysis of this

exam. Factor loadings less than 0.70 have a bearing on this. All instruments for each construct are deemed valid based on the validity test findings of the remaining items, as each has a loading factor value greater than 0.7. For the three major constructs, loading values for most of the indicators exceed 0.7 showing that the constructs are distinct from each other (Hair, 2011). The AVE has also been examined by the researcher to confirm the convergent validity. It is a measure of variation captured by a concept relative to the amount of variance brought about by measurement error, according to Fornell and Larcker (1981), and it should ideally be more than 0.50. In this study, the three AVEs fall between 0.624 and 0.839. When a construct's square root of the AVE is greater than its correlation with every other construct in the study, discriminant validity is proven, per Fornell and Larcker's (1981) criteria. Table 4.1 shows that the corresponding component correlations (off-diagonal values) are lower than the square roots of the AVEs (diagonal values under correlations, bold & italics). Therefore, there is no problem with discriminant validity. Reliability testing in this study was conducted using Cronbach's Alpha (CA) and composite reliability (CR) scores. Table 4.2 displays the findings of the instrument reliability tests for each of the study's constructs.

As the table indicates, all valid instruments for each construct have CA and CR values above 0.7. In this study, all of the CA values for constructs are above 0.9, indicating a high degree of internal consistency in the responses (Wong, 2013). Thus, it can be said that all of these instruments are reliable in measuring each construct (Bernardi, 1994). Hence, construct reliability is established.

The inter-correlations among the constructs such as between EL and TPC ( $r=0.586$ ,  $p<0.001$ ); and between OC and TPC ( $r=0.459$ ,  $p<0.05$ ) are positive and statistically significant; and these reflect the expectations of the study. A positive and significant relationship between EL and OC ( $r=0.529$ ,  $p<0.001$ ) lends support to the indication that mediation exists.

**Table 4.2** Reliability measures, AVE, and Correlations

Constructs	No. Items	CA	CR	AVE	Correlations		
					EL	OC	TPC
Ethical Leader (EL)	33	0.989	0.986	0.839	<b><i>0.916</i></b>		
Organizational Culture (OC)	25	0.976	0.976	0.624	0.529**	<b><i>0.790</i></b>	
Teachers' Professional Commit (TPC)	27	0.976	0.981	0.651	0.586**	0.459*	<b><i>0.807</i></b>

Source Author's computation, 2024

## 4.2 Model Fit

Using Jamovi software, the researcher conducted confirmatory factor analysis (CFA) to determine the model fit of each of the three constructs. Table 4.3 shows the CFA results of the three constructs used for this study. The study results indicated that CMIN/DF is less than three for each of the three constructs. The researcher also looked at other fit indices, such as the Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Root-mean Square Error of Approximation (RMSEA), and Standardized Root Mean Square Residual (SRMR). According to

previous research (Bentler & Bonett, 1980; Bollen, 1989), the ideal values for CFI and TLI should be above 0.90 and 0.95, respectively.

According to Browne and Cudeck (1992) the RMSEA value should be equal to or less than 0.08. For each of the three constructions, our results show that the RMSEA value falls between 0.04 and 0.05. If SRMR is less than 0.05, a satisfactory fit is suggested (Hu & Bentler, 1999; Kline, 2011). Because it is not influenced by sample size, SRMR is also a superior index (Chen, 2007) SRMR is less than 0.05 for each of the study's three components.

**Table 4.3** CFA model fit results

Statistics	Recommended value	EL	OC	TPC
CMIN/DIF	≤3.00	230/80=2.87	219/76=2.7	224/80=2.8
P-value	>0.05	< .001	< .001	< .001
CFI	≥0.90	0.899	0.948	0.958
TLI	≥0.95	0.937	0.946	0.948
RMSEA	≤0.08	0.04	0.03	0.05
SRMR	≤0.05	0.037	0.038	0.022

Source: Author's computation, 2024

### 4.3 Descriptive Statistics

Table 4.4 shows the mean, SD, and percentage of respondents for the three constructs under study. The purpose of the calculation of the mean was to find the average opinion of the respondents concerning the variables of interest on a Likert scale (Harpe, 2015). The high mean values of all the constructs (above 3.5) indicate that the respondents respond favorably. In this study, 3.5 indicate the average score of a 6-point Likert scale. In other words, it is possible to say that the higher the mean score, the more that respondents agreed with and vice-versa. To ascertain the average deviation of the replies from the mean and, consequently, the consensus levels among the respondents about a particular metric on a Likert scale, the standard deviation was computed (Ernst & Teichert, 1998). The standard deviation (SD) values also show how much the responses varied from one another; the larger the SD figure, the more variance there was in the responses. Since all of the SD values are less than 1.00, it can be concluded that there was little variation in the replies from the mean values. Regarding the proportion of respondents, those who rated below and above the mean value for OC are equal. The proportion of respondents below the mean value is 50.5% for EL while it is 50.2% for TPC. This shows that above half of the respondents rated below the mean values for both constructs.

**Table 4.4** Mean and proportion of respondents (N=384)

Constructs	Statistics		% of respondents	
	Mean	SD	Below Mean	Above Mean
Ethical Leadership	4.58	0.642	50.5	49.5
Organizational Culture	4.56	0.782	50.0	50.0
Teachers' Professional Commitment	4.54	0.661	50.8	49.2

Source: Author's computation, 2024

#### 4.4. Hypotheses Testing

##### 4.4.1 Hypothesis one

The study's first hypothesis posited that ethical leadership positively contributes to organizational culture within the selected public universities. The model summary and coefficients in Table 4.5 demonstrate a statistically significant relationship between ethical leadership (EL) and organizational culture (OC), with a p-value less than 0.001 ( $p < 0.001$ ). This significance level is well below the 0.05 threshold, confirming a strong connection between the two variables. The  $R^2$  value of 0.3769 indicates that 37.7% of the variance in organizational culture is explained by ethical leadership in the model. The constant value of 1.4060 suggests that if ethical leadership were absent, organizational culture would still hold a baseline value of 1.4060. Furthermore, the positive coefficient of 0.6989 for ethical leadership demonstrates a direct relationship with organizational culture. Specifically, each unit increase in ethical leadership corresponds to a 0.6989 unit increase in organizational culture. In summary, the results confirm a positive and significant association between ethical leadership and organizational culture (Coef = 0.6989,  $p < 0.001$ ), with ethical leadership uniquely explaining 37.7% of the variation in organizational culture. Consequently, Hypothesis 1 is supported.

**Table 4.5** Model summaries and coefficient of EL

Model	R	R-sq	MAP	F	df1	df2	p
<b>summary</b>	0.6139	0.3769	0.3509	231.0757	1.0000	382.0000	0.0000
	Effects	Coef	SE	t	p	LLCI	ULI
<b>Coefficients</b>	constant	1.4060	0.2129	6.6051	0.0000	0.9875	1.8245
	EL-> OC	0.6986	0.0460	15.2012	0.0000	0.6082	0.7890

Source Author's computation, 2024

##### 4.4.2 Hypothesis two

Hypothesis two claims that OC predicts TPC positively and significantly. Table 4.6 shows the results of the mediation analysis performed using EL as independent, OC as mediator, and TPC as outcome constructs in the model. The results show that OC is significantly and positively associated with TPC (Coef=0.2358,  $p < 0.001$ ) OC along with EL jointly explains 44.7% of the change in TPC.

**Table 4.6** Model summaries and coefficient of OC

Model	R	R-sq	MAP	F	df1	df2	p
<b>summary</b>	0.6687	0.4471	0.2456	154.0779	2.0000	381.0000	0.0000
	Effect	Coef	SE	t	p	LLCI	ULI
<b>Coefficients</b>	constant	1.4972	0.2038	7.3469	0.0000	1.0965	1.8978
	OC -> TPC	0.2358	0.0428	5.5076	0.0000	0.1516	0.3200

Source Author's computation, 2024



### 4.4.3 Hypothesis three

Hypothesis three states that EL significantly and positively predicts TPC. Table 4.7 shows the direct effect of EL on TPC in the presence of mediator, OC in the model. The results show that EL is significantly and positively associated with TPC (Coef=0.0492,  $p < 0.001$ ).

**Table 4.7 Direct effect of EL on TPC**

Effect	SE	t	p	LLCI	ULI	c'_cs
0.4762	0.0487	9.7757	0.0000	0.3804	0.5720	0.4718

Source Author's computation, 2024

### 4.4.4 Hypothesis four

Hypothesis four states that OC mediates the relationship between EL and TPC. Table 4.8 shows the indirect effect of EL on TPC in the presence of mediator, OC in the model. The table also indicates the relationship that flows from an independent construct, EL to a mediator, OC, and then an outcome TPC. This indirect effect is significant as zero does not fall between BootLLCI (0.0316) and BootULCI 90.1950).

**Table 4.8 Indirect effect(s) of EL on TPC**

Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
EL-> OC-> TPC	0.1647	0.0493	0.0695	0.2637

Source Author's computation, 2024

### 4.4.5 Summary of the analysis

Table 4.9 consists of the mediation estimates while Table 4.10 consists of the individual path estimates. The relationship between these results is displayed in the Label column. There is a mediation effect, as evidenced by the mediation estimates, which also demonstrate that the indirect effect differs significantly from zero. The percentage of the total effect that is attributed to the indirect effect is indicated in the % Mediation column, which may also be used to calculate the mediation effect size. The researcher examined the route estimates to determine the precise nature of the mediation effect: in this study, ethical leadership enhances organizational culture, and enhanced organizational effect raises teachers' professional dedication in public universities. As shown in Table 4.9, the indirect effect illustrates the relationship between Ethical Leadership (EL) and Teachers' Professional Commitment (TPC) mediated by Organizational Culture (OC). The mediation estimate of 0.165 is the product of two coefficients: 'a' (0.699), representing the effect of EL on OC, and 'b' (0.236), representing the effect of OC on TPC, as detailed in Table 4.10. The indirect effect divided by the total effect ( $0.165 / 0.641$ ) yields the percentage of mediation, which is 25.7%, suggesting a moderate degree of mediation. Furthermore, the confidence interval confirms that this mediation effect is significantly different from zero. The direct effect, which represents the relationship between EL and TPC when OC is present, shows a coefficient of 0.476 and a p-value less than 0.001 ( $p < 0.001$ ). This indicates that EL remains a

significant and positive predictor of TPC even with the mediator present. The percentage of the direct effect, which is the ratio of the direct effect to the total effect, is 74.3%. The total effect encompasses both the direct effect of EL on TPC and the indirect effect of EL on TPC through the mediator, OC.

**Table 4.9** Mediation estimates

95% CI								
Effect	Label	Estimate	SE	Lower	Upper	Z	p	% Mediation
<b>Indirect</b>	a×b	0.165	0.0495	0.0677	0.262	3.33	<.001	25.7
<b>Direct</b>	c	0.476	0.0778	0.3278	0.631	6.12	<.001	74.3
<b>Total Effect</b>	c+ a×b	0.641	0.0512	0.5328	0.741	12.51	<.001	100.0

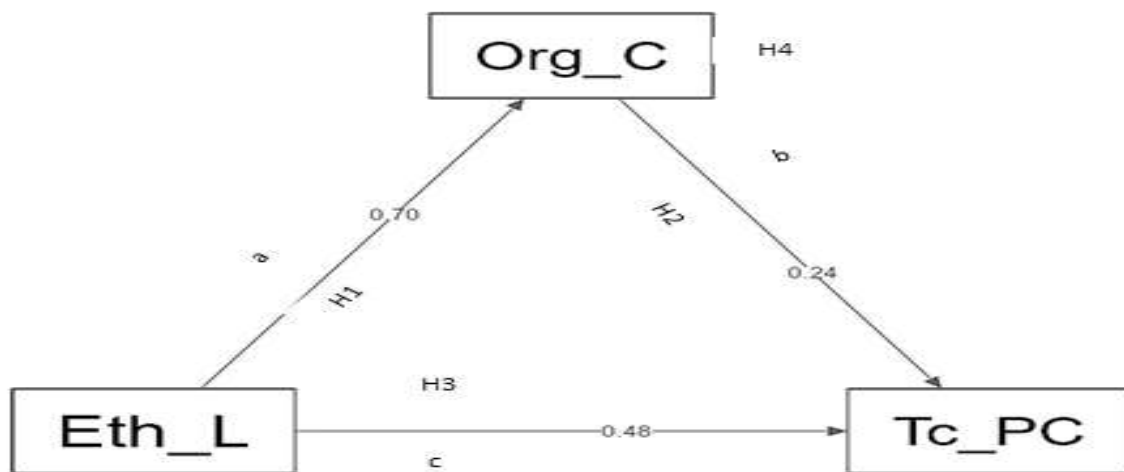
Source Author's computation, 2024

**Table 4.10** Path estimates

95% CI								
Path	Label	Estimate	SE	Lower	Upper	Z	p	
Ethical Leadership→Organ. Culture	a	0.699	0.0564	0.5851	0.802	12.39	<.001	
Organ. Culture→Teachers PCommitment	b	0.236	0.0720	0.0940	0.381	3.27	0.001	
Ethical Leadership→Teachers_PCommitment	c	0.476	0.0778	0.3278	0.631	6.12	<.001	

Source Author's computation, 2024

**Figures 4.1** provide a visual representation of the various pathways of the mediation model.



**Figure 4.1** Mediation Model

## 5. Discussions

The purpose of this study was to examine the linkage between ethical leadership and TPC. As hypothesized, ethical leadership has a positive and significant relationship with TPC. This finding indicates that ethical leadership in universities has a great role in explaining TPC, which is an antecedent for professional commitment. Fundamentally, an ethical leader through her/his personal actions and interpersonal relationships, specifically using communication, reinforcement, and decision-making makings plays a critical role in motivating employees to exhibit higher dedication and commitment and demonstrate a higher level of professionalism (Enaifoghe et al., 2023). Ethical leaders have a significant impact on how their employees live their professional lives (Moore et al., 2018). A study result by Lazim et al. (2020) suggested that individuals who are supported by ethical leaders are more likely to promote and share their expertise with others, and those ethical leaders play a critical role in enhancing staff morale and increasing productivity. Leaders who uphold ethical standards are thought to be able to inspire people to become and remain teachers, as well as to show greater dedication to the profession, students, and school. They also make it possible for teachers to collaborate more with one another and to participate more in research and community service (Ashfaq & Abid, 2021).

The present study also found that OC is positively and significantly related to TPC. In this respect, the finding suggests that a well-established organizational culture affects the work atmosphere in an organization and increases the morale of teachers. This clarifies that having a positive organizational culture is equally necessary to achieve effective teacher performance. A teacher that performs well will be able to work cooperatively, be honest, disciplined, and show professionalism in the teaching and learning process. They will also be able to bond well with their students. Their work habits would involve undertaking tasks that go above and beyond their usual obligations (Harwell, 2003). They would demonstrate work behaviors that entail tasks beyond their regular duties and responsibilities. Ashfaq and Abid (2021) illustrated the invaluable roles of ethical leaders in establishing organizational culture, motivating employees, and boosting employee commitment. This implies that organizational effectiveness and success are directly linked to ethical leadership and also linked to leaders' ability to advise, organize, motivate, and empower their followers (Saeed et al., 2022). Ethical leadership predicts important follower outcomes including satisfaction with the leader, perceived leader effectiveness, willingness to exert extra effort on the job, and willingness to report problems to management (Piccolo et al., 2010).

A key finding of this research highlights the mediating influence of organizational culture (OC) on the relationship between ethical leadership (EL) and teachers' professional commitment (TPC) within Ethiopian public universities. The study reveals that OC acts as a partial mediator, accounting for 25.7% of the total effect of EL on TPC. Specifically, the introduction of OC into the mediation model resulted in a decrease of the EL effect on TPC from 0.641 to 0.476, a significant reduction ( $p < 0.001$ ). This finding underscores the importance of considering OC as a mediating variable in this relationship. This level of mediation aligns with guidelines suggesting that a proportion between 20% and 80% signifies partial mediation. Furthermore, OC

is identified as a complementary partial mediator, as both the direct and indirect effects of EL on TPC are positive, which aligns with established literature indicating that complementary mediation occurs when both effects share the same sign. As Han et al. (2023) suggested, complementary partial mediation indicates that there could be another potential mediator with the same sign as the existing mediator “hidden” in the direct effect.

As far as the researcher's knowledge is concerned, this study is one of few attempts to identify the mediating role of OC in the relationship between ethical leadership in the university and teachers' professional commitment. It is in agreement with the study by Yusuf (2020) who confirmed a substantial correlation between a person's commitment to their profession and organizational culture.

Thus, this study contributes to existing efforts toward the identification of the mechanisms through which ethical leadership exerts its influences on work outcomes such as TPC, an issue which demands due attention regarding leaders who base their professional orientation on strong ethics are more likely to exhibit a higher level of professionalism, which quickly moves schools toward development. This includes a greater commitment to their students, increased collaboration with colleagues, increased engagement with the teaching task, and a demonstration of greater expertise. According to Brown and Ferrill (2009), this entails a stronger dedication to their students, more cooperation with peers, a greater level of involvement in the teaching task, and an indication of increased expertise. The study results are in agreement with Bhattarai (2015) who proved that in the sphere of education, ethical behavior is essential because an ethically rich educational system contributes to the preservation of freedom, justice, and peace in society at large. In the same line of inquiry, Tschannen-Moran and Gareis (2015) confirmed that when educational leaders' professional philosophies are founded on moral principles, they will be more likely to exhibit greater professionalism, which will quickly move schools toward development.

## 6. Conclusions

This study confirms a significant positive relationship between ethical leadership and teachers' professional commitment in public universities in Addis Ababa. It establishes that ethical leadership plays a crucial role in fostering teacher dedication and professionalism through effective communication, reinforcement, and decision-making. Furthermore, the study demonstrates that a positive organizational culture significantly impacts teachers' professional commitment by creating a supportive work environment and boosting morale. Most notably, the research identifies organizational culture as a significant partial and complementary mediator in the relationship between ethical leadership and teachers' professional commitment, accounting for 25.7% of the total effect. This highlights the importance of cultivating a positive organizational culture to enhance teacher commitment. The findings contribute to the existing literature by empirically demonstrating the mediating role of organizational culture in this context and emphasizing the importance of ethical leadership for educational development and societal well-being.

## 7. Recommendations

Based on the findings, the following recommendations are made:

- *Enhance Ethical Leadership Training:* Universities should implement training programs for leaders to strengthen their ethical leadership skills. This will help create a more supportive and ethical work environment, leading to increased teacher commitment.
- *Foster Positive Organizational Culture:* University administrations should focus on developing and maintaining a positive organizational culture that values collaboration, honesty, and professionalism. This can be achieved through clear communication, recognition of teachers' efforts, and fostering a sense of community.
- *Address Demographic Factors and Work Conditions:* Universities should investigate and address demographic factors and improve work conditions to enhance teacher satisfaction and commitment. This may include addressing issues related to workload, resources, and professional development opportunities.
- *Recognize and Support Ethical Leaders:* University leaders who demonstrate strong ethical behavior should be recognized and supported. Their practices can serve as models for others and contribute to a positive organizational culture.
- *Implement Policies to Strengthen Teacher Commitment:* Universities should develop and implement policies that promote teacher commitment, such as mentorship programs, career development plans, and opportunities for professional growth.
- *Conduct Longitudinal Studies:* Future research should employ longitudinal designs to further explore the dynamic relationship between ethical leadership, organizational culture, and teachers' professional commitment over time. This will provide a deeper understanding of the long-term effects of these factors.
- *Promote Ethical Behavior in Education:* Educational institutions should emphasize the importance of ethical behavior at all levels, as it contributes to the preservation of freedom, justice, and peace in society.

## Disclosure statement

I, the author, declare that there is no known financial conflict of interest or personal relationships that could have influenced the work reported in this paper.

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