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Article

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Organizational culture and organizational performance: does job satisfaction mediate the relationship?

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ABSTRACT

In today's fast-paced business environment, several factors, including organizational culture, play a crucial role in determining organizational performance. However, the effect of these factors varies depending on the introduction of intervening variables in the model. The objective of the study, therefore, is to examine the effect of organizational culture on organizational performance when the two variables are mediated by job satisfaction. Researchers used a simple random sampling technique to collect data from 204 respondents found at the head office of the Cooperative Bank of Oromia in Ethiopia. The researchers used Structural Equation Modeling (SEM) to analyze the data and discovered a significant indirect effect of organizational culture on organizational performance. For the direct unaggregated effect analysis, the results also revealed that involvement and adaptability (from the cultural dimension) and relationships with supervisors, physical working conditions, and pay rate (from the job-related dimensions) have significant effects on the performance of the organization. Based on the findings, managers are suggested to consider the indirect effect of culture via job satisfaction while they make decisions.

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1. Introduction

In the current business environment, organizational managers consider organizational culture in their decisions as it has a major effect on performance (Indiya et al., 2018). Concerning empirical pieces of evidence, however, several researchers reported a mixed effect of organizational culture on performance (Liu et al., 2021). For example, Matkó and Takács (2017), and Sabri et al. (2013) reported a strong relationship between culture, job satisfaction, and performance. Yet, according to research conducted in Uganda by Aketch et al. (2017), the mission, from the dimensions of organizational culture, is the only important factor for organizational performance. Similarly, Nazir and Lone (2008) reported that the mission is the single organizational cultural attribute that affects performance. Despite the varied organizational cultural dimensions in various research, the effect of organizational culture on performance is different regardless of the dimensions (Berger et al., 2014; Indiya et al., 2018; Liu et al., 2021; Matkó & Takács, 2017). Similarly, a mixed result was reported on the effect of culture on job satisfaction (Lund, 2003). The study conducted by Chi et al. (2008) in Taiwan reported a significant effect of organizational culture and job satisfaction on performance in the case of nonprofit making organizations. Moreover, the study revealed the mediating effect of job satisfaction on transformational leadership and organizational culture; and transformational leadership and performance. However, nonprofit organization do not measure their performance in profit so further study considering performance from the BSC perspective is essential. In addition to the use of different dimensions to measure organizational culture, Job satisfaction, and organizational performance, prior studies seldom introduce mediating variables to examine whether they accelerate the effect

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of organizational culture on organizational performance (Aketch et al., 2017; Matkó & Takács, 2017). Essentially, while there is a significant amount of research exploring the connection between organizational culture and organizational performance, the role of job satisfaction as a mediator in this relationship has not been thoroughly examined. Studies also examined the different dimensions of organizational culture and how they affect organizational performance, finding that some dimensions are significant and others are not (Aketch et al., 2017; Liu et al., 2021; Lund, 2003; Nazir & Lone, 2008). This gap in the literature has practical implications for organizations because understanding specific dimensions of organization and introducing job satisfaction as a mediating variable can help them develop strategies to enhance job satisfaction and improve organizational performance. Therefore, further empirical evidence in the case of profit-making organizations specifically in banks is necessary to confirm this relationship.

Consequently, this study aims to fill this gap and contribute by analyzing the relationship between organizational culture and organizational performance when the two variables are mediated by job satisfaction. The specific objectives addressed, following the overall objective, are:

- To examine the effect of Organizational culture on organizational performance
- To study the effect of job satisfaction on organizational performance.
- To investigate the extent to which job satisfaction affects the relationship between organizational culture and organizational performance.
- To identify the overriding contributor of organizational performance from Denison's organizational culture dimensions

2. Review of literature

2.1. Organizational culture and its dimension

According to Robbins and Judge (2019), organizational culture has a common meaning, and there are differing perspectives on the evolution and development of Organizational culture. Organizational culture can be created by anyone, whether it is an individual or a group, and it can come from the bottom or top of the corporation (Denison & Neale, 1996). However, according to Kotter and Heskett (1992), the creation of an organizational culture follows a sequential pattern that begins with top management. This study seeks to measure the effect of organizational culture on bank performance, using job satisfaction as a mediating factor, without considering the origin of organizational culture. Thus, the literature review concentrates on the characteristics of organizational culture, rather than its history.

According to scholars, organizational culture is rarely measured or compared (Denison & Neale, 1996; Hatch, 1993). Despite the limitations of examining deeper levels of culture, scholars have devised systematic methods of evaluating organizational culture (Denison et al., 2006). 'Individualism/Collectivism, Masculinity/Femininity, Long/Short Term Orientation, Indulgence/Restraint, and Power Distance' are some of the listed cultural dimensions (Hofstede, 2011). Nonetheless, some claimed that the number of dimensions that are used to measure culture should be increased (Triandis, 2004), while others maintained that it should be kept low for epistemological reasons (Hofstede, 2010). Furthermore, Denison (1990) developed a culture model based on 4 cultural traits: involvement, consistency, adaptability, and mission. Denison et al. (2006) also used three component indexes, each with a five-point scale, to assess each of these traits. Researchers wanted to investigate the relationship between organizational performance and organizational culture using Denison's model because it is a well-validated and business-friendly method (Denison et al., 2006; Herzka & Turáková, 2010). Organization is an abstraction formed in an organizational situation understanding organizational culture and examining its effect on organizational performance is of paramount importance (Schein, 2004). Given the present corporate landscape, organizational leaders take organizational culture as a crucial element in their decision-making processes due to its significant effect on performance (Indiya et al., 2018). As witnessed in the work of Purwanto (2023), organizational culture is essential for employees to be innovative. In addition, Vargas-Halabi and Yagüe-Perales (2023) found the positive effect of some organizational culture dimensions on an organization's innovative performance. According to the findings, mission and adaptability have positive and significant effects on innovative performance while involvement has no effect at all. Despite the varied

effects of different dimensions on performance, it is still commendable that the effect of aggregated organizational culture is not yet well documented in the literature which attracted the attention of researchers to examine further in the case of financial institutions.

2.2. Job satisfaction

George and Jones (2012) define Job satisfaction as 'the combination of sentiments and beliefs that people have regarding their current employment'. Job satisfaction is a multifaceted and complex concept that explains different things to different people. Mullins (2005), for example, linked job satisfaction to a personal sense of achievement. However, George and Jones (2012) contended that people can have attitudes toward their jobs, such as 'the type of work they do, their coworkers, supervisors, or subordinates, and their pay rate'. The study conducted in Spain by Ruiz-Palomino et al. (2021) revealed that the negative impact of unethical supervision is mediated by personal growth satisfaction.

Under the preceding assumption, Herzberg (1966) proposed that each employee has two sets of demands or requirements: motivational and hygienic elements. According to the study, motivator needs are tied to real work and how difficult it is, and they mostly consist of job autonomy and responsibility. Psychological and physical working environments, on the other hand, are related to hygiene needs, which essentially include physical working conditions, nature of supervision, quantity of remuneration, and job security. According to this view, 'satisfaction' and 'dissatisfaction' are two distinct things that employees may experience satisfaction and dissatisfaction at the same time. However, this theory arguably fails to receive research support and the study at hand emphasized those 'Hygiene' factors if they constitute a satisfaction element too (George & Jones, 2012).

Aside from defining job satisfaction, its measurement is one of the topics that require academics' attention. Robbins and Judge (2019) proposed two techniques for measuring job happiness. The first is the single global rating, in which employees are asked a single question to determine how satisfied they are with their employment, with options ranging from highly satisfied to very dissatisfied. The second method is the summation score method, which involves identifying key aspects of the job (known as job facets) such as the nature of the work, supervision, pay, promotion opportunities, coworker relationships, and so on, and rating these factors on a Likert scale of five from strongly disagree to strongly agree. By summing the ratings, the overall job satisfaction score is calculated. The approach proposed by Robbins and Judge (2019) is used for the current study.

2.3. Organizational performance

Performance measurement and analysis are critical for steering the company toward its strategic and operational goals, and numerous methodologies are utilized to assess organizational performance. According to Richard et al. (2009), corporate success is comprised of three aspects of company outcome: financial performance, product market performance, and shareholder return. Additionally, Kaplan and Norton (1992) developed the BSC as a tool for evaluating organizational performance, which balances both financial (traditional) and operational data (customer satisfaction, internal business processes, organizational innovations, and improvement efforts).

Several measurements of organizational performance exist, however, Stakeholders regard organizational performance as a competition (Kaplan & Norton, 1992; Richard et al., 2009). According to Lee et al. (2022), performance assesses the success and failure of all tasks, including productivity and profitability. Although organizational performance has become the most important issue for all businesses, whether for-profit or non-profit, understanding performance evaluation remains tough (Abu-Jarad et al., 2010).

The balanced scorecard (BSC) is a method that examines organizations from perspectives other than solely financial metrics to provide a full picture of corporate performance. The BSC performance measure, according to Kaplan (2009), maintains financial indicators as the ultimate end measure for firm success while supplementing them with metrics from three additional perspectives (customer, internal process, and learning and growth), and it is proposed as the drivers for building long-term shareholder value. As a result, employing the BSC model of performance measurement is acceptable because it incorporates all financial and non-financial variables.

2.4. Organizational culture and performance

Many studies have been undertaken to examine the relationship between organizational culture and performance (Aketch et al., 2017; Berger et al., 2014; Indiya et al., 2018). As a result, the relationship between Organizational culture and performance is pretty well understood. However, culture was not considered in an aggregated way that it was treated in terms of involvement, adaptability, consistency, and mission. For this reason, researchers preferred to examine the aggregated organizational culture effect on performance using SEM. Consequently, the first research hypothesis, that read 'Organizational culture has a significant effect on organizational performance' is formulated. Organizational culture is presumed to have a positive and significant effect on organizational performance. Therefore, the first hypothesis is;

H_1: Organizational culture has a significant effect on organizational performance

Yet, the indirect effect of organizational culture on organizational performance through job satisfaction is not extensively reported in the literature. Osman et al. (2023) studied the effect of clan, adhocracy, and market culture on performance and found a significant positive correlation, but hierarchical culture is claimed to have a negative relationship with performance. In their study conducted in China, Zhao et al. (2018) discovered that Organizational culture promotion had a negative relationship with business market value, a positive relationship with innovation output, and no significant relationship with firm financial performance. This indicates that, when multiple elements are considered, organizational culture has a mixed effect on organizational performance. Organizational culture, according to Park and Doo (2020), has an indirect effect on job satisfaction and company commitment. Yet, its indirect effect on organizational performance via job satisfaction is unknown. Using Denison's organizational culture as a model, Seidu et al. (2021) discovered the positive relationship between mission, involvement, and consistency with hotel performance. However, the study reported an insignificant effect of adaptability on the performance of the hotel. Another study discovered that engagement, adaptability, consistency, and mission affect Ecuador's service industry's financial performance (Tulcanaza-Prieto et al., 2021). Nonetheless, the study delimited the scope of performance only to non-financial performance. Nankya (2023) found a positive relationship between organizational culture and performance. As seen by the available literature, there is no agreement among researchers on the effect of cultural factors on performance and the indirect effect of culture is not extensively researched.

2.4.1. Job satisfaction and performance

Job satisfaction reflects how employees feel about their workplace and the organization for which they work. According to the study conducted by Onyebuchi et al. (2019), job satisfaction has a positive effect on the performance of the company. Job satisfaction is seen to have a favourable effect on business performance (Gholami, 2020; Nebojša et al., 2018). Temory (2023) has also conducted a study on 'the Effects of Job Satisfaction on Performance among Academicians Using Herzberg's Theory' and discovered that extrinsic job qualities are extremely important for improving organizational performance. Taking this empirical finding, researchers wanted to test if the result is similar to financial institutions as well. Therefore, researchers formulated the second hypothesis as;

H_2: Job satisfaction has a significant effect on organizational performance

2.4.2. Organizational culture and job satisfaction

The level of contentment that employees experience in their jobs is affected by numerous variables, one of which is organizational culture. Lund (2003) claimed that job satisfaction levels varied across an organization's cultural typology. Moreover, the study conducted by Nebojša et al. (2018) revealed that the level of job satisfaction experienced by employees is affected by the type of organizational culture present, with significant and systematic variations observed across different cultural dimensions. This indicates that organizational culture is indeed a contributing factor to job satisfaction. Therefore, researchers hypothesized that regardless of the type of organizational culture and dimensions, Organizational culture significantly affects job satisfaction. Thus, researchers formulated hypothesis three as;

H_3: Organizational culture has a significant effect on job satisfaction

2.4.3. Mediating effect of job satisfaction

Despite the availability of research that investigated the direct effect of culture on performance, its indirect effect through job satisfaction was not extensively researched. A study by Omira (2015) examined the extent to which job satisfaction affects the relationship between leadership style and organizational performance. The study revealed that satisfaction is not a mediator in the relationship between leadership style and performance. However, our exogenous variable is organizational culture and researchers argue that job satisfaction could accelerate the positive effect of organizational culture on performance that hints to managers to foster their organizations' culture in a way that supports Job satisfaction. Therefore, the fourth hypothesis is formulated;

H_4: Job satisfaction significantly mediates the effect of organizational culture on organizational performance.

In summary, the literature review primarily concentrated on the effects of organizational culture on performance, organizational culture on job satisfaction, and job satisfaction on company performance. Yet, the review shows that there are numerous dimensions of company culture, and the effect differs depending on the type of cultural dimensions. The review also shows that the mediating effect of satisfaction between organizational culture and performance, which is the focus of this research, is not well established. As shown in the conceptual framework, this study considered Herzberg's two-factor theory because it examines the factors that have a direct relationship and effect on satisfaction. In addition, Denison's cultural model is included in this study since it creates a framework for an organizational culture that is more applicable to commercial organizations. Furthermore, the BSC model is taken into account in the study since it is a complete model of performance assessment that includes both financial and non-financial metrics. Taking the three constructs, researchers developed a conceptual framework with distinct roles of variables as exogenous, mediating, and endogenous, as seen in Figure 1.

3. Research methodology

Given the nature and purpose of the study, researchers used a quantitative research approach to investigate the relationships between variables under examination. For this, the target sample frame is employees of the Cooperative Bank of Ormia working at the head office. Because employees located

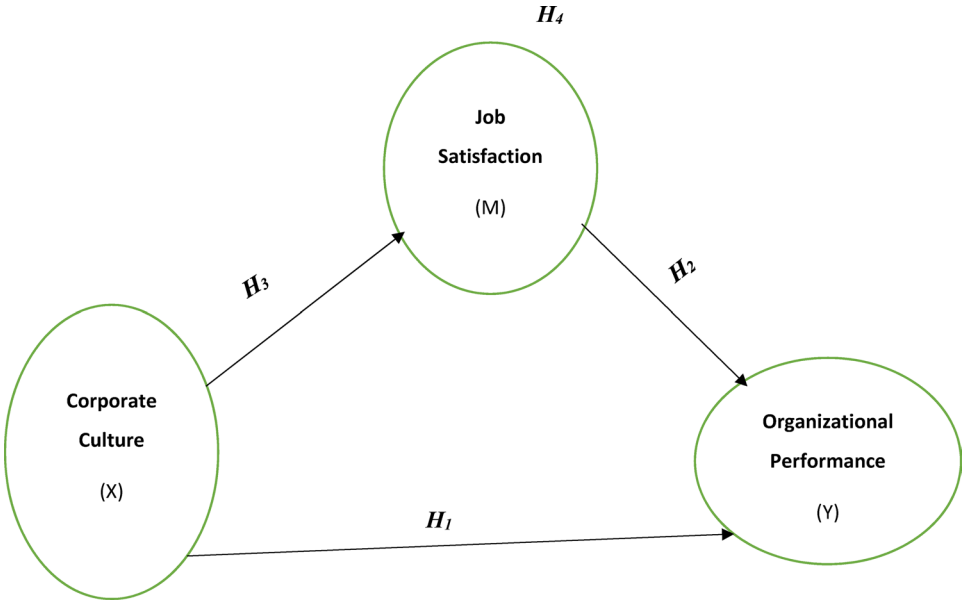

Figure 1. Conceptual model of research.

in branches may not fully understand the questions related to dimensions of organizational culture, BSC performance dimensions, and extrinsic and intrinsic dimensions of Job satisfaction, the sample was drawn from the Head Office. Workers in the head office are believed to have a better knowledge of their bank's Organizational culture and performance than those who work downstream because the head office is usually in charge of defining and shaping the bank's culture and monitoring performance. Moreover, respondents were working in the company for more than a year and no fresher is included. According to data from the bank's Human Capital Management Process Unit, the Head Office has 480 permanent eligible workers as of December 31, 2021. Because the study population is known and finite, researchers used Kothari's (2004) finite population sample size determination formula with a confidence level of 95% (corresponding to a Z value of 1.96), an error term of 5%, and a standard deviation of 0.5.

$$\text{Necessary Sample Size}\,(\text{n}) = \frac{(Z)2\,(N)(SD)2}{(N-1)(e)\,2+(Z)2\,(SD)2}$$

Where; **N**= Population Size **SD** = Standard Deviation of Population
e = Acceptable Margin of Error **Z**= Corresponding Z - value of Confidence Level
For the target population of 480, the minimum sample size is 214 calculated as follows.

$$\text{Necessary sample size}\,(\text{n}) = \frac{(1.96)2^{*}(480)(0.5)2}{(480-1)(0.05)2+(1.96)2\,(0.5)2}$$

$$\text{n} = \frac{3.8416^{*}480^{*}0.25}{(479^{*}0.0025)+(3.8416^{*}0.25)} = 213.4 \approx 214.$$

After determining the sample size, researchers collected primary data from the target population using simple random sampling. Items used to measure organizational culture were adapted from Denison et al. (2006). These attributes were chosen as they are also tested and applied in the case of commercial banks. Bramwel et al. (2023) conducted a study to examine the effect of Organizational culture on the performance of commercial banks in Kenya using Denison's cultural model that is still applicable in commercial banks. Moreover, the Denison et al. (2006) model is recommended because it includes all of the cultural characteristics that have the strongest link with company productivity. Items used to measure Job satisfaction were adapted from Warr et al. (1979) and Herzberg (1966), and researchers adapted items to measure organizational performance from a review of relevant literature, including Kaplan and Norton (1992). Therefore, the measurement used to catch the value uses dimensions of a Balanced Score Card (BSC) and comprises all four perspectives. Thus, the Kaplan and Norton BSC performance model is chosen as it provides a balanced display between financial and nonfinancial data. Furthermore, because job satisfaction is one of the most used conceptions, embracing the work of Warr et al. (1979) is noteworthy. According to the two-factor approach, job satisfaction contains both the motivational job component and the hygiene job element (Herzberg, 1966). Moreover, Halpern's (1966) two dimensions (work itself and potential for accomplishment) were used to measure employees' job satisfaction. Nevertheless, the current study focused on the extrinsic hygiene element, as suggested by George and Jones (2012), to investigate job satisfaction. Kahneman and Deaton (2010) conducted a study and discovered that a yearly income of USD 75,000 which is an extrinsic element can enhance job satisfaction demonstrating the importance of hygiene factors. According to the researchers and opponents of the two-factor theory, income, working circumstances, and relationships with superiors and subordinates are dimensions of job satisfaction. In this study, researchers selected 67 items that fall under various measured variables of organizational culture, job satisfaction, and organizational performance. To simplify the analysis, these items were organized into respective dimensions such as involvement, consistency, adaptability, and mission (for organizational culture); customer perspective, internal business process, learning and growth, and financial perspective (for organizational performance); and Physical working conditions, relationships with coworkers, relationships with supervisors, and pay rate (for job satisfaction). Table 1 shows these constructs and their respective measured variables, while the complete set of study items is appended to the research.

Table 1. Constructs and measured variables.

S. No	Measured Variables	Constructs	Source
1	Consistency	Corporate Culture	Denison et al. (2006)
2	Involvement		
3	Adaptability		
4	Mission		
1	Physical working condition	Job Satisfaction	Warr et al. (1979) and Herzberg (1966),
2	Relationship with coworkers		
3	Relationship with supervisors		
4	Rate of Pay		
1	Customer	Organizational Performance	Kaplan and Norton (1992)
2	Learning and Growth		
3	Internal Business		
4	Finance		

Source: Created by Authors.

Table 2. Items' Scale for latent variables.

	Items' Scale for:		
Likert Scale	Organizational Culture	Job Satisfaction	Organizational Performance
1	Strongly Disagree	Not satisfied	Very Little Extent
2	Disagree	Somewhat satisfied	Little Extent
3	Neutral	Satisfied	Some Extent
4	Agree	Very satisfied	Considerable Extent
5	Strongly Agree	Extremely satisfied	Very Good Extent

Source: Created by Authors.

For the instruments, dimensions that measure the respective latent variables are adopted from prior studies and further validation is made. Moreover, one of the modifications done in this study is adjusting the scale specific to each construct, as shown in Table 2'.

Several efforts, including consultations with specialists, were made to verify the instrument's validity, and no measurement concerns were raised. In addition to experts in the area, 15 questionnaires were distributed as a pilot test to ensure the instrument's clarity and no issues with clarity were identified. Despite the rule of thumb for a pilot sample size is at least 30, the instrument adapted is already validated and researchers preferred the pilot sample to be 15. According to Hertzog (2008) and Nieswiadomy (2002) a pilot sample size of 10 could even be sufficient. To measure the instrument's internal consistency, Cronbach's alpha test was employed. For this purpose, IBM SPSS and AMOS both versions 22 were utilized.

4. Results and discussion

A total of 214 questionnaires were distributed to the target group using a questionnaire drop-and-collect approach. From the distributed questionnaires, 204 were collected in good order and used for analysis.

4.1. Diagnosis test and model validity

To analyze the effect of independent variables on the dependent variable, Structural Equation Modeling (SEM) has been applied (Hair et al., 2010; Kaplan, 2007; Kline, 2011). Before running SEM, however, researchers did a common method bias test, outliers and influential test, multicollinearity test, and other required tests. Because researchers collected data for both dependent and independent variables from the same respondents at a time, a common method bias test using Harman's single factor score method was conducted. According to this method, common method bias does not affect the data when the total variance for the single factor is less than 50% (Djajadikerta et al., 2015). For the data at hand, researchers took all the items that measured latent variables and loaded them in a single factor. The result indicated that only 28.796% of the variance could be explained. Therefore, no common method bias was observed. To determine whether any influential outliers exist in the data, the researchers conducted a cook's distance analysis with SPSS, and in no case, a cook's distance of greater than one was observed (Walfish, 2006). Most of the cases were far less than a Cook's distance of 0.05000, indicating the nonexistence of influential outliers.

Moreover, the researchers observed convergent validity as evidenced by factor loading greater than 0.70 and Average Variance Extracted (AVE) greater than 0.50 for each dimension of latent variables. In addition to the convergent validity, researchers also presented Composite Reliability (CR). For the Confirmatory Factor Analysis (CFA), the convergent validity is satisfied with all AVE values greater than 0.50 and CR values greater than the AVE. For the SEM, the value of AVE should be greater than 0.50 (Hair et al., 2010; Hair et al., 2017). In addition, Syamsudin et al. (2022), presented their result using SEM analysis and agreed on the value of AVE to be greater than 0.50. For our data, the AVE values for job satisfaction, organizational culture, and organizational performance are greater than 0.50 as shown in Table 3.

To guarantee the use of factor analysis in the SEM, researchers ran the BTS and KMO tests and the results indicated data sufficiency. The KMO was 0.919, indicating that the sample size was adequate when compared to the cutoff value proposed by Meyers et al. (2016). Moreover, researchers applied Principal component analysis with a Varimax method of rotation (Armstrong & Soelberg, 1968). From the EFA, researchers considered three components as they are already identified in the literature and demonstrated in the conceptual framework. The AMOS Plugins for the model fit indicate that the model is acceptable as per the suggestion of Tabachnick et al. (2013), Hair et al. (2010), and Gaskin and Lim (2018). Thus, the AMOS Plugin result and respective thresholds of CMIN/DF, CFI, SRMR, RMSEA, Pclose, RMR, IFI, and GFI scores are presented in Table 4. The (Standardized) Root Mean Square Residual (RMR/SRMR) represents the square root of the difference between the residuals of the sample covariance matrix and the hypothesized model.

The researchers also tested major assumptions like normality, Multicollinearity, Linearity, and others; and the diagnosis result showed that none of the assumptions are violated. According to Hair et al. (2012), multicollinearity is measured by the Variance Inflation Factor (VIF) with a VIF value of less than 4 to report no multicollinearity concern. As shown in Table 5, the VIF result is less than the threshold of 4 and there is no multicollinearity problem.

In the study, R represents the regression model's predictive accuracy, which runs from 1.0 (perfect prediction) to 0.0 (no prediction) (Kothari, 2004). Furthermore, R^2 shows the percentage of total variation explained by the independent variables. Thus, the model summary indicates that the independent variables (organizational culture and job satisfaction) accounted for approximately 64% of the overall variance in the predicted variable (organizational performance).

Table 3. Factor Loading, AVE and CR.

Construct	Items	Factor Loading	AVE	CR
Organizational Culture	Adaptability	0.845	0.532	0.819
	Consistency	0.822		
	Involvement	0.805		
	Mission	0.749		
Job Satisfaction	Relationship with supervisor	0.819	.529	0.816
	Relationships with coworkers	0.775		
	Rate of pay	0.762		
	Physical working condition	0.749		
Organizational Performance	Customer perspective	0.894	0.647	0.879
	Internal Business process	0.885		
	Learning and growth	0.878		
	Financial Perspective	0.745		

Source: Created by Authors.

Table 4. Model fit Measure.

Measure	Estimate	Threshold	Interpretation
CMIN	113.791	--	--
DF	51	--	--
CMIN/DF	2.231	Between 1 and 3	Excellent
CFI	0.948	>0.95	Acceptable
SRMR	0.058	<0.08	Excellent
RMSEA	0.078	<0.06	Acceptable
PClose	0.010	>0.05	Acceptable
RMR	0.040	<0.080	Excellent
IFI	0.949	>0.90	Acceptable
GFI	0.909	>0.90	Acceptable

Source: Created by Authors.

Table 5. Multicollinearity Test[a].

Model		Collinearity Statistics	
		Tolerance	VIF
1	Involvement	0.533	1.876
	Consistency	0.526	1.902
	Adaptability	0.454	2.200
	Mission	0.558	1.794
	Rate of Pay	0.623	1.606
	Physical working Condition	0.561	1.782
	Relationship with Coworkers	0.497	2.014
	Relation with supervisor	0.434	2.305

[a]Dependent Variable: Organizational Performance.
Source: Created by Authors.

Table 6. Regression coefficients[a].

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig
1	(Constant)	0.181	0.233		0.776	0.439
	Involvement	**0.318**	**0.068**	**0.275**	**4.700**	**0.000**
	Consistency	0.003	0.074	0.002	0.039	0.969
	Adaptability	**0.324**	**0.064**	**0.319**	**5.039**	**0.000**
	Mission	0.039	0.054	0.041	0.713	0.477
	Rate of Pay	**0.063**	**0.032**	**0.107**	**1.971**	**0.050**
	Physical working Condition	**0.088**	**0.036**	**0.140**	**2.453**	**0.015**
	Relationship with Coworkers	0.030	0.036	0.050	0.821	0.412
	Relation with supervisor	**0.081**	**0.039**	**0.133**	**2.051**	**0.042**

[a]Dependent Variable: Organizational Performance.
Source: Created by Authors.

4.2. Direct effect analysis

The researchers employed multiple regression and SEM methods to examine the relationship between independent and dependent variables. When a model contains a single dependent variable, regression analysis is the most widely used method for answering prediction-related research questions (Kothari, 2004). In this study, researchers applied regression analysis to envisage the relationship between the bank's performance and all dimensions of the latent independent variables (four organizational culture dimensions and four Job satisfaction aspects) and to see if these dimensions could predict the dependent variable (Blumberg et al., 2014). To investigate the effect of these independent factors on performance, researchers aggregated all the BSC perspectives used to designate organizational performance and the Statistical Package for Social Science (SPSS) was employed.

As presented in Table 6, researchers ran a regression analysis for eight independent variables and observed that the effects of five variables (involvement, adaptability, rate of pay, physical working condition, and relationship with supervisors) on the dependent variable (organizational performance) are significant. This concurs with part of the study by Seidu et al. (2021) and Tulcanaza-Prieto et al. (2021) related to involvement. However, the effect of consistency, mission, and relationship with a coworker on performance is not statistically significant and it partially endorses the finding that claimed insignificant effect of adaptability (Seidu et al., 2021). Involvement is found to be a significant contributor to the performance and it refutes the finding by Seidu et al. (2021) which invites further study. The findings demonstrated that there is a mixed effect of cultural dimensions (swing between dimensions) and job-related factors on performance, which calls for other researchers to conduct further studies in the area.

Furthermore, the result suggests that these five factors (two from organizational culture and three from job satisfaction) have a meaningful effect on how well an organization performs. If the company creates an organizational culture that appreciates employees to actively involved in the organization's affairs, they develop a sense of ownership and help the organization to perform better. Besides, the significant effect of adaptability on organizational performance shows that the tendency of organizations to adapt to changing circumstances is essential for performance to be enhanced. Thus, organizations are better in their adaptability and involvement dimensions. The implications of the significant positive

Table 7. Direct and indirect effect analysis.

			Standardized Estimate	Unstandardized estimate	S.E.	C.R.	P
Job Satisfaction	<---	Organizational Culture	0.799	1.187	0.161	7.390	0.001
Firm Performance	<---	Organizational Culture	−0.032	−0.055	0.217	−0.252	0.801
Firm Performance	<---	Job Satisfaction	0.905	1.037	0.184	5.629	0.001
Organizational Culture – Job Satisfaction – Performance			0.723	1.231			0.001

Source: Created by Authors.

effects of the rate of pay, physical working conditions, and relation with supervisor (they are all hygiene factors) tell that hygiene factors are significant to improve the performance of organizations where managers of the organization should work.

Using SEM, researchers examined the overall direct effect of the Organizational culture on job satisfaction and the performance of the bank. As indicated in Table 7, the standardized coefficient of organizational culture on job satisfaction is 0.799, indicating that organizational culture has a partial effect on job satisfaction. The sign indicates that job satisfaction would be increased by 0.799 for every unit increase in aggregated Organizational culture. Thus, the bank can work on its culture to satisfy its employees. Furthermore, the partial effect of culture on performance (direct effect), while other path factors remained constant, is represented by the coefficient of organizational culture on organizational performance, which is -0.032. The direct effect of organizational culture on performance is insignificance and it agrees with the research conducted by Zhao et al. (2018). However, the finding refutes Nankya's (2023) research that claimed a positive relationship between organizational culture and performance. The finding implies that the bank is better off working on the indirect effect (through increasing satisfaction) to enhance its performance as the direct effect of culture is not significant. Likewise, the coefficient of job satisfaction on organizational performance is 0.905 indicating the partial effect of satisfaction on performance, holding other path variables constant. The estimated positive sign indicates that for every unit improvement in job satisfaction, performance would improve by 0.905. This finding is consistent with Onyebuchi et al. (2019), Gholami (2020), Nebojša et al. (2018), and Temory (2023).

Thus, the finding highlights the importance of creating a positive organizational culture that nurtures job satisfaction as a means to enhance overall performance. Organizations that prioritize creating a culture that aligns with employees' values, fosters a supportive and inclusive work environment, and promotes job satisfaction are likely to reap the benefits of improved performance.

4.3. Mediation effect analysis

A given variable is considered to operate as a mediator if it alters the relationship between the exogenous and endogenous variables (Baron & Kenny, 1986; Zhao et al., 2010). The relationship between organizational culture and organizational performance, mediated by job satisfaction, was explored in the study, as demonstrated in Figure 2 and Table 7. To examine the effect, a confidence interval approach is considered (Creedon & Hayes, 2015; Preacher & Hayes, 2004; Zhao et al., 2010).

To determine direct, indirect, and total effects, researchers produced a causal model as shown in Figure 2. From the figure, the researcher calculated the indirect effect of organizational culture on organizational performance via job satisfaction (the path from organizational culture to organizational performance through job satisfaction) 0.72 (0.8*0.9). The direct effect of organizational culture on organizational performance is again -0.03 as shown in Figure 2. Taking the direct and indirect effects of organizational culture, the total effect is 0.69; calculated by adding the direct and indirect effects (0.72+ -0.03). Though it is insignificant, the result is absurd that the total effect is less than the indirect effect due to the existence of competing direct effects (Zhao et al., 2010). Therefore, the bank should not expect its organizational culture to bring performance improvement without satisfying employees. Organizational culture can positively contribute to organizational performance only through employees' job satisfaction.

In addition to the path analysis, researchers produced a table to discuss the mediating effect. Using the two-sided bias-corrected bootstrap method, the standardized confidence interval ranged

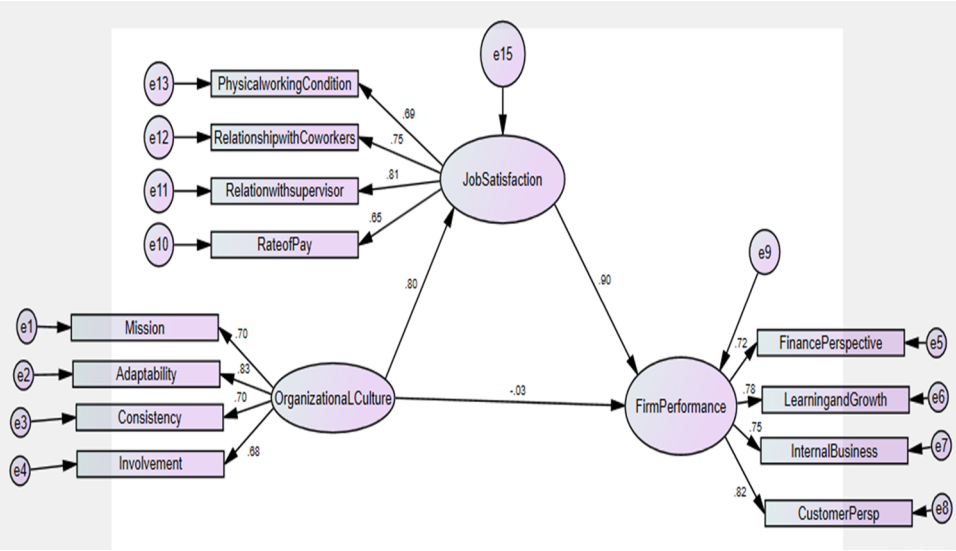

Figure 2. Causal Model.

Table 8. Summary of the hypotheses test.

S. No	Research Hypothesis	Tests used	Test Statistics value
1	Hypothesis 1: Organizational culture has a significant effect on organizational performance	t-Test	C.R = −0.252 P = 0.801 **Rejected**
2	Hypothesis 2: Job satisfaction has a significant effect on organizational performance	t-Test	C.R = 5.629 P < 0.001 **Accepted**
3	Hypothesis 3: Organizational culture has a significant effect on job satisfaction	t-Test	C.R = 7.390 P < 0.001 **Accepted**
4	Hypothesis 4: Job satisfaction significantly mediates the effect of organizational culture on organizational performance	Percentile bootstrap confidence interval	Lower value = 0.525 Upper value = 1.00 P-value < 0.001 **Accepted**

Source: Created by Authors.

from 0.525 to 1.00. Moreover, the unstandardized lower and upper confidence interval for the indirect effect are 0.872 and 1.753 respectively. The Organizational culture has a strong indirect effect on performance, with a coefficient of 0.723. This means that a higher level of organizational culture leads to a proportional increase in organizational performance by 0.723 standard deviations, through an intervening variable. Because zero lies outside of the lower and upper intervals, the mediated effect of job satisfaction on the relationship between Organizational culture and organizational performance significantly deviates from zero. That is, job satisfaction significantly mediates the relationship between organizational culture and organizational performance. In summary, the significant mediating effect of job satisfaction underscores the importance of organizational culture in shaping job satisfaction (indirect effect) and; consequently organizational performance. The mediating effect of job satisfaction on the relationship between organizational culture and bank performance is not well documented in prior literature and further research is required to triangulate the result.

Researchers also tested hypotheses formulated earlier based on the analysis made and the summary, along with the test statistics, is presented in Table 8. The hypotheses test result revealed that the aggregate of Denison's organizational culture has no significant direct effect on the bank's performance and the effect is only indirect. If organizational culture is required to have a positive effect on organizational performance, the bank is better off working on job satisfaction as the indirect effect of organizational culture through job satisfaction is found to be meaningful.

5. Conclusion and implications

Despite the usage of different dimensions for organizational culture, job satisfaction, and organizational performance, prior studies do not introduce job satisfaction as a mediating variable to examine whether it accelerates the effect of organizational culture on organizational performance. Thus, this study extends the empirical finding that documents the mediating effect of job satisfaction which is missing in prior studies. In addition, the regression analysis revealed that involvement and adaptability from organizational cultural dimensions are significant factors that influence the performance of organizations which was reported in a mixed manner in the previous research. Besides, pay rate, physical working conditions, and relationship with supervisors are essential factors that could indicate how extrinsic factors of a job determine the performance of the organization. Accordingly, policymakers should work on establishing good relationships between superiors and subordinates so that satisfied subordinates can positively contribute to the performance of the organization.

The SEM result also revealed that the direct effect of organizational culture on performance is not significant and that organizational culture has only an indirect effect on the performance of the organization.

The practical implication of the finding is that the bank is better off working on the extrinsic job satisfaction factors to enhance its performance. Thus, the finding highlights the importance of creating a positive organizational culture that nurtures job satisfaction as a means to enhance organizational performance. Organizations that prioritize creating a culture that aligns with employees' values, fosters a supportive and inclusive work environment, and promotes job satisfaction are likely to reap the benefits of improved performance. The practical implication of the study is that organizational culture can accelerate organizational performance only through job satisfaction Therefore, Managers are suggested to improve the Physical working conditions, smooth out relationships between workers and supervisors, and negotiate the pay rate with employees so that their satisfied employees can enhance organizational performance.

The theoretical contribution of the study is that: (a) This finding deepens our understanding of the complex relationships between organizational culture, job satisfaction, and performance. It highlights that the impact of organizational culture on performance is not direct but operates through the mediating mechanism of job satisfaction. This underscores the intricate dynamics within organizations and emphasizes the importance of considering indirect effects when analyzing organizational phenomena. (b) The study adds nuance to our understanding of how organizational culture influences performance, moving beyond simplistic direct effects models to incorporate the mediating role of job satisfaction. This can lead to the development of more comprehensive theoretical models that better capture the multifaceted nature of organizational dynamics.

6. Limitations and recommendations for future research

Although the study has both theoretical and practical implications, its findings are limited to the specific bank in the Ethiopian context where the research was conducted. To enhance the generalizability of the results, future research should aim to replicate the study in different industries, organizational sizes, and cultural settings. This would allow for a better understanding of the relationships between organizational culture, job satisfaction, and organizational performance in a variety of contexts. Future researchers could also investigate potential moderators that may affect the strength or direction of these relationships. Moreover, future researchers could also examine if job satisfaction is preceded by personal growth satisfaction that ultimately could enhance the job satisfaction of employees.

Likewise, comparative studies across different cultural contexts could provide valuable insights for organizations operating in diverse cultural environments. By understanding how the mediating effect of job satisfaction on the relationship between organizational culture and organizational performance varies across cultures, organizations can better adapt their strategies to fit the unique cultural context in which they operate. Overall, by addressing these limitations and pursuing these future research directions, scholars can further advance their understanding of the complex interplay among organizational culture, job satisfaction, and organizational performance in various contexts.

Authors contributions

Amare Abawa contributed to the design, analysis and writing of the manuscript. In addition, Huruma Obse collected the data made some literature reviews and participated in the analysis. All authors agreed to be accountable for all aspects of the work.

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Data availability statement

Data and materials supporting this work can be accessed by request

References

Abu-Jarad, Y. I., Yusof, N., & Nikbin, D. (2010). A review paper on organizational culture and organizational performance. *International journal of business and social science*, *1*(3), 1–16.

Aketch, E., Basheka, B. C., & Bagire, V. (2017). Organizational culture and performance of SMES in Uganda: A case study of hotel sector. *International Journal of Technology and Management*, *2*(1), 15–25.

Armstrong, S. J., & Soelberg, P. (1968). On the interpretation of factor analysis. *Psychological Bulletin*, *70*(5), 361–364. https://doi.org/10.1037/h0026434

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173

Berger, L., Bergman, M. M., Bergman, Z., Leisinger, K., & Ojo, E. (2014). The Influence of Context and Culture on Corporate Responsibility Expectations in South Africa. *Journal of International Business Ethics*, *7*(2), 3–21.

Blumberg, B., Cooper, D., & Schindler, S. (2014). *EBOOK: Business Research Methods*. McGraw Hill.

Bramwel, M. S., Ben, O., & Wanjere, D. (2023). Effect of Corporate Culture on the Performance of the Kenya Commercial Bank. *African Journal of Empirical Research*, *4*(2), 88–109. https://doi.org/10.51867/ajernet.4.2.34

Chi, H. K., Yeh, H. R., & Yu, C. H. (2008). The effects of transformation leadership, organizational culture job satisfaction on the organizational performance in the non-profit organizations. *The Journal of Global Business Management*, *4*(1), 129–137.

Creedon, P. S., & Hayes, A. F. (2015). *Small sample mediation analysis: how far can we push the bootstrap?* [Paper presentation]. Annual Conference of the Association for Psychological Science, New York.

Denison, D. (1990). *Corporate Culture and Organization*. Wiley.

Denison, D. R., & Neale, W. (1996). *Denison organizational culture survey: Facilitator Guide*. Denison Consulting, LLC.

Denison, D., Janovics, J., Young, J., & Cho, J. H. (2006). Diagnosing organizational cultures: validating a model and method. *Documento de trabajo*. Denison Consulting Group. 1–39.

Djajadikerta, H. G., Roni, S. M., & Trireksani, T. (2015). Dysfunctional information system behaviors are not all created the same: Challenges to the generalizability of security-based research. *Information & Management*, *52*(8), 1012–1024. https://doi.org/10.1016/j.im.2015.07.008

Gaskin, J., & Lim, J. (2018). *Model Fit Measures, AMOS Plugin*. Retrieved December 3, 2018, from Statwiki.kolobkreations.com: http://Statwiki.kolobkreations.com/index.php?title=Main_Page

George, J. M., & Jones, G. R. (2012). *Understanding and Managing Organizational Behavior* (5th ed.). Pearson/Prentice Hall.

Gholami, E. (2020). The effect of job satisfaction on organizational performance. *Journal of Advertising and Sales Management*, *1*(1), 178–200.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. R. (2010). *Multivariate Data Analysis*. Prentice Hall.

Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modelling in strategic management research: a review of past practices and recommendations for future applications. *Long Range Planning*, *45*(5-6), 320–340. https://doi.org/10.1016/j.lrp.2012.09.008

Hair, J., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which. *International Journal of Multivariate Data Analysis*, *1*(2), 107–123. https://doi.org/10.1504/IJMDA.2017.087624

Halpern, G. (1966). Relative contributions of motivator and hygiene factors to overall job satisfaction. *The Journal of Applied Psychology*, *50*(3), 198–200. https://doi.org/10.1037/h0023421

Lee, K. L., Azmi, N. A. N., Hanaysha, J. R., Alzoubi, H. M., & Alshurideh, M. T. (2022). The effect of the digital supply chain on organizational performance: An empirical study in Malaysia manufacturing industry. *Uncertain Supply Chain Management*, *10*(2), 495–510. https://doi.org/10.5267/j.uscm.2021.12.002

Hatch, M. J. (1993). The dynamics of organizational culture. *The Academy of Management Review*, *18*(4), 657–693. https://doi.org/10.2307/258594

Hertzog, M. A. (2008). Considerations in determining sample size for pilot studies. *Research in Nursing & Health*, *31*(2), 180–191. https://doi.org/10.1002/nur.20247

Herzberg, F. (1966). *Work and the nature of man*. World Pub. Co.

Herzka, P., & Turáková, A. (2010). The applying denison model for the analysis of corporate culture. *Scientific conference: Business, management and education*.

Hofstede, G. (2010). The GLOBE debate: Back to relevance. *Journal of International Business Studies*, *41*(8), 1339–1346. https://doi.org/10.1057/jibs.2010.31

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, *2*(1), 2307–0919. https://doi.org/10.9707/2307-0919.1014

Indiya, G. D., Obura, J., & Mise, J. K. (2018). Effect of Organization Culture on Organization Performance on Public Universities in Kenya. *European Scientific Journal, ESJ*, *14*(19), 15–35. https://doi.org/10.19044/esj.2018.v14n19p15

Kahneman, D., & Deaton, A. (2010). High income improves the evaluation of life but not emotional well-being. *PNAS*, *107*(38), 16489–16493. https://doi.org/10.1073/pnas.1011492107

Kaplan, D. (2007). *Structural Equation Modeling*. Sage. https://doi.org/10.4135/9781412950589

Kaplan, R. S. (2009). Conceptual foundations of the balanced scorecard. In *Handbooks of management accounting research* (Vol. 3, pp. 1253–1269). Elsevier.

Kaplan, R. S., & Norton, D. P. (1992). The balance scorecard-measures that drive performance. *Harvard Business Review*, *70*(1), 71–79.

Kline, R. B. (2011). *Principles and Practice of Structural Equation Modeling* (3rd ed.). Guilford.

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.

Kotter, P. J., & Heskett, J. L. (1992). *Corporate Culture and Performance*. Free Press.

Liu, G., Tsui, E., & Kianto, A. (2021). Knowledge-friendly organisational culture and performance: A meta-analysis. *Journal of Business Research*, *134*(1), 738–753. https://doi.org/10.1016/j.jbusres.2021.05.048

Lund, D. B. (2003). Organizational culture and job satisfaction. *Journal of Business & Industrial Marketing*, *18*(3), 219–236. https://doi.org/10.1108/0885862031047313

Matkó, A., & Takács, T. (2017). Examination of the relationship between organizational culture and performance. *International Review of Applied Sciences and Engineering*, *8*(1), 99–105. https://doi.org/10.1556/1848.2017.8.1.14

Meyers, L. S., Gamst, G., & Guarino, A. J. (2016). *Applied Multivariate Research: Design and Interpretation* (3rd ed.). Sage Publishing.

Mullins, J. L. (2005). *Management and organizational behavior* (7th ed.). Pearson Education Limited.

Nankya, H. B. (2023). *Organizational culture, absenteeism and employee performance of Equity Bank Katwe Branch Kampala* [Doctoral dissertation]. Makerere University.

Nazir, N. A., & Lone, M. A. (2008). Validation of Denison's Model of Organisational Culture and Effectiveness in the Indian Context. *Vision: The Journal of Business Perspective*, *12*(1), 49–58. https://doi.org/10.1177/097226290801200107

Nebojša, J., Gordana, N., & Vladimir, V. (2018). The influence of organizational culture on job satisfaction. *Economic Annals*, *63*(219), 83–114.

Nieswiadomy, R. M. (2002). *Foundations of Nursing Research* (4th ed.). Pearson Education.

Omira, O. D. (2015). *The effect of leadership styles and organizational culture on organizational performance of the public sector in Saudi Arabia*. University Utara.

Onyebuchi, O., Lucky, O., & Okechukwu, O. (2019). Impact of employees' job satisfaction on organizational performance. *academic Journal of Current Research*, *6*(12), 6–12.

Osman, M. A., Liu, Y., & Wang, Z. (2023). Influence of organizational culture on construction firms' performance: The mediating roles of innovation and marketing capabilities. *Buildings*, *13*(2), 308. https://doi.org/10.3390/buildings13020308

Park, S., & Doo, Y. M. (2020). The effect of organizational culture and HR practices on female managers' commitment and job satisfaction. *European Journal of Training and Development*, *44*(2/3), 105–120. https://doi.org/10.1108/EJTD-03-2019-0045

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers : a Journal of the Psychonomic Society, Inc*, *36*(4), 717–731. https://doi.org/10.3758/bf03206553

Purwanto, A. (2023). The Influence of Organizational Culture on Teacher Innovation Capability and Tacit Knowledge: A CB-SEM AMOS Analysis. *Journal of Industrial Engineering & Management Research*, *4*(2), 35–41.

Richard, P. J., Devinney, T. M., Yip, S. G., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, *35*(3), 718–804. https://doi.org/10.1177/0149206308330560

Robbins, S. P., & Judge, T. A. (2019). *Organizational Behavior* (18 ed.). Pearson.

Ruiz-Palomino, P., Martínez-Cañas, R., & Bañón-Gomis, A. (2021). Is unethical leadership a negative for Employees' personal growth and intention to stay? The buffering role of responsibility climate. *European Management Review*, *18*(4), 535–549. https://doi.org/10.1111/emre.12461

Sabri, P. S., Ilyas, M., & Amjad, Z. (2013). The impact of organizational culture on the commitment of Teachers in the Private Sector of Higher Education. *Pakistan Journal of Social and Clinical Psychology*, *11*(2), 69–76.

Schein, E. H. (2004). *Organizational Culture and Leadership* (3rd ed.). Jossey-Bass.

Seidu, S., Mensah, O. A., Issau, K., & Amoah-Mensah, A. (2021). Does organisational culture determine performance differentials in the hospitality industry? Evidence from the hotel industry. *Journal of Hospitality and Tourism Insights*, *5*(3), 535–552. *ahead-of-print*(ahead-of-print). https://doi.org/10.1108/JHTI-11-2020-0208

Syamsudin, N., Eliyana, A., Nurdin, N., Sudrajat, A., Giyanto, B., Emur, A. P., & Zahar, M. (2022). Are job satisfaction and role breadth self-efficacy the links to proactive work behavior? *Heliyon*, *8*(1), e08710. https://doi.org/10.1016/j.heliyon.2021.e08710

Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2013). *Using multivariate statistics* (Vol. 6). Pearson.

Temory, M. D. (2023). The investigation of effects of job satisfaction on performance among academicians using Herzberg's theory. *European Journal of Logistics, Purchasing and Supply Chain Management*, *11*(1), 26–42. https://doi.org/10.37745/ejlpscm.2013/vol11n12642

Triandis, H. C. (2004). The many dimensions of culture. *Academy of Management Perspectives*, *18*(1), 88–93. https://doi.org/10.5465/ame.2004.12689599

Tulcanaza-Prieto, B. A., Aguilar-Rodríguez, I. E., & Artieda, C. (2021). Organizational Culture and Corporate Performance in the Ecuadorian Environment. *Administrative Sciences*, *11*(4), 132– 140. https://doi.org/10.3390/admsci11040132

Vargas-Halabi, T., & Yagüe-Perales, R. M. (2023). Organizational culture and innovation: exploring the "black box." *European Journal of Management and Business Economics*, Ahead-of-print. https://doi.org/10.1108/EJMBE-07-2021-0203

Walfish, S. (2006). A review of statistical outlier methods. *Pharmaceutical Technology*, *30*(11), 82.

Warr, P., Cook, J., & Wall, T. (1979). Scales for the measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*, *52*(2), 129–148. https://doi.org/10.1111/j.2044-8325.1979.tb00448.x

Zhao, H., Teng, H., & Wu, Q. (2018). The effect of corporate culture on firm performance: Evidence from China. *China Journal of Accounting Research*, *11*(1), 1–19. https://doi.org/10.1016/j.cjar.2018.01.003

Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis. *Journal of Consumer Research*, *37*(2), 197–206. https://doi.org/10.1086/651257