



The Effect of Organizational Culture on Employee Performance: A Case Study of public sector in Soran City

Zozik Sabah Rasool^{1*} 

Department of Accounting, Faculty of Law, Political Science and Management, University of Soran, Soran, Kurdistan Region, IRAQ

DOI: <https://doi.org/10.63841/iue24571>

Received 15 Feb 2025; Accepted 30 Jun 2025; Available online 25 Oct 2025

ABSTRACT

Employee performance is a key factor in achieving organizational success in today's rapidly changing and competitive environment. Organizational culture, as a set of shared values, beliefs, and practices, plays a vital role in shaping employee behavior and outcomes. This study aims to investigate the impact of organizational culture on employee performance in public sector institutions in Soran, Kurdistan Region, and to determine which aspects of organizational culture contribute most to improving employee performance, providing practical suggestions for improving workplace outcomes. The research problem stems from the limited understanding of how specific cultural elements influence employee productivity, satisfaction, and efficiency. The main objective of this study is to identify which aspects of organizational culture most significantly contribute to improved employee performance, providing practical recommendations for enhancing workplace outcomes. To achieve this, primary data were collected using a structured questionnaire composed of 113 items, distributed randomly to public sector employees. A total of 293 valid responses were analyzed. Data were processed and statistically analyzed using the SPSS software for descriptive analysis, Chi-square tests, and Probit regression. Furthermore, the SPSS programming language was employed to construct and prune a Decision Tree model, which visualized key determinants of performance. The Decision Tree helped identify cultural support for skills development, job satisfaction, and efficient task execution as top predictors of high performance. Probit regression confirmed that organizational culture, education, marital status, and income significantly influence performance levels. The findings revealed a strong correlation between a supportive organizational culture and high employee performance. Employees who perceived their organizational culture as inclusive, communicative, and development-oriented reported greater task efficiency, stronger job commitment, and overall job satisfaction. The Decision Tree model achieved an accuracy rate of 85%, with an F1-score of 0.83, confirming the reliability of the model in identifying performance drivers. In conclusion, this study underscores the importance of aligning organizational culture with employee needs to drive productivity and engagement. It provides a strategic roadmap for public sector organizations to enhance performance through cultural transformation and targeted interventions.

Keywords: Organizational Culture, Employee Performance, Public Sector, Soran City



1 INTRODUCTION

Organizational culture can be broadly described as a set of shared values, beliefs, and norms among members, reflected in an organization's practices and objectives [8]. Synonymous terms include corporate culture and company culture, with the former gaining prominence in the late 1980s and early 1990s [4]. This concept, initially used by managers, sociologists, and organizational theorists, has become increasingly widespread, encompassing various types of organizations such as educational institutions, nonprofit organizations, governmental bodies, and commercial enterprises. The most critical aspect of culture is that it serves as the only truly sustainable competitive advantage for any business—while strategies and tactics can be replicated, culture remains unique. Leadership plays a central role in shaping culture, as leaders' actions, communication, and priorities strongly influence cultural norms. Even before the 1980s, scholars emphasized the importance of culture in organizational behavior, noting its greater influence compared to other behavioral aspects [1]. Organizational culture guides employee behavior, establishes expected norms, and supports common patterns of practice. A strong culture facilitates open communication, inclusive decision-making, and the

*Corresponding author: zozik.rasool@soran.edu.iq
<https://ue.edu.krd/ojs/index.php/public>

effective use of employee ideas and skills [2]. It defines how organizational members interact internally and with external stakeholders [6]. Studies show that high-performance organizations share attributes such as agility and responsiveness to environmental changes, focusing on long-term strategies and actionable short-term goals [3]. As such, fostering an inclusive environment where employees can engage, collaborate, and support each other is essential, and this is often enabled by organizational culture. Exploring the relationship between organizational culture and employee job performance has emerged as a significant research focus. Numerous studies confirm the pivotal role of individual performance in driving organizational success, especially in dynamic fields like the software industry [5]. However, there remains a lack of clear literature on how project management relates specifically to employee performance, which differs in important ways from broader organizational performance. Frameworks such as VRIO—Value, Rarity, Imitability, and Organization—are often used to assess project effectiveness [6]. Understanding organizational culture as a contextual factor is crucial in performance management practices, providing valuable insight into how both employees and managers operate within a cultural framework [7]. Organizational culture plays a vital role in shaping employee performance, as it reflects the fundamental principles that support the organization's vision, mission, goals, and values embraced by everyone—from top management to entry-level staff. It serves as a framework that directs behavior and maintains order, ensuring employees operate within established norms rather than acting independently. By fostering consistency and cohesion, organizational culture helps align human resources, allowing employees to perform their duties more efficiently and make more meaningful contributions to the organization's success [17].

1.1 OBJECTIVE OF THE STUDY

The objective of this study is to examine the impact of organizational culture on employee performance within the public sector in Soran City. Specifically, it aims to identify how various cultural elements—such as leadership style, communication practices, employee involvement, Job Satisfaction, Behavior employee Performance, organizational values affect the motivation, productivity, and effectiveness of public sector employees.

1.2 PROBLEM OF THE STUDY

Despite continuous efforts to improve the efficiency of the public sector in Soran, but the performance of employees across different government offices is not as necessary, so the problems of employees must be solved. One possible root cause is organizational culture, which shapes workplace behaviors, motivations, and relationships. However, limited research has been conducted to explore how organizational culture specifically affects employee performance in public institutions in Soran. Without a clear understanding of this relationship, efforts to enhance employee productivity may fail to address key cultural issues, leading to persistent inefficiency and declining morale. This study seeks to investigate the impact of organizational culture on employee performance and to identify cultural factors that either support or hinder effective work in the public sector.

1.3 IMPORTANT OF THE STUDY

Culture plays a pivotal role in shaping employee performance, as it encompasses the shared values, beliefs, norms, and practices that define how work is conducted within an organization. A strong, well-defined culture fosters a sense of identity, alignment with organizational goals, and commitment among employees, ultimately driving higher levels of performance. As well as employee Engagement and Satisfaction: A positive organizational culture fosters high levels of employee engagement and job satisfaction, leading to improved performance and productivity. Also, communication and Collaboration: Organizational culture influences communication patterns and collaboration dynamics within the workplace. And alignment with Organizational Goals: A strong organizational culture reinforces alignment with the company's mission, vision, and strategic objectives. As well as adaptability and Change Management: Organizations with a flexible and adaptive culture are better equipped to navigate change and respond to external disruptions effectively. Moreover, leadership and Role Modeling: Leadership plays a crucial role in shaping organizational culture and influencing employee performance. Further employee Well-being and Work-Life Balance: A positive organizational culture prioritizes employee well-being, work-life balance, and holistic development. Furthermore, retention and Talent Management: Organizational culture significantly impacts employee retention and talent management efforts.

2 LITERATURE REVIEW

[16] evaluated the objective of this study is to assess how organizational culture impacts employee performance and to delve into the factors that shape an effective organizational culture. A questionnaire was employed in this investigation, which targeted a government institution in Riau province, with 35 employees participating in data collection. SPSS was utilized for data analysis, specifically employing correlation analysis. The findings highlighted a significant influence of organizational culture on performance. It was determined that organizational culture accounted for 26.6% of employee performance, with the remaining 73.4% influenced by factors not explored in this study.

[11] This research seeks to explore the impact of organizational culture on employee performance by examining three key performance metrics: employee dedication, fulfillment of tasks, and productivity and efficiency. Also, the researcher used two types of data in this study: primary data, which were questionnaires, and secondary data, which were obtained

from textbooks, journal articles, government publications, the internet, and periodicals. The collected data was analyzed using the Statistical Package for the Social Sciences (IBM SPSS). The results of the analysis suggest that organizational standards profoundly influence employee dedication within a company, encompassing factors such as opportunities for professional advancement, acknowledgment and incentives for exemplary performance, transparent communication of organizational objectives and principles, and fostering a positive workplace atmosphere. Furthermore, a carefully organized work regimen significantly affects the quantity of work accomplished by employees, enhancing productivity, time utilization, and the quality of work.

[14] investigated the study, titled "Examining the Impact of Organizational Culture on Employee Performance within the Public Service Organization of Dire Dawa Administration," aims to investigate the correlation between organizational culture variables and employee job performance. Given the large population size, the researcher distributed 371 questionnaires randomly to respondents using Yamane's sample size determination formula. Out of these, 293 questionnaires were collected and utilized for analysis. The data underwent analysis using descriptive statistics, and multiple regressions were conducted using the SPSS software package. The researcher discovered that, except for experience and level of education, all organizational culture variables influenced employee job performance. Specifically, employee participation and innovation made significant contributions to employee job performance. Considering these findings, due to the significant negative correlation between communication and employee performance, the researcher suggested that public service organizations should reduce communication platforms to improve employees' job performance and implement reward systems to incentivize their workforce.

[8] in research to investigate the main objective of this study is to explore the definition, conceptualization, and assessment of how organizational culture influences employee performance in India. Two types of data were utilized in this study: primary data, which involved distributing 50 questionnaires to companies, and secondary data, obtained from websites. The results indicate a significant correlation between organizational culture and performance. Specifically, a considerable portion of employees (16%) believe that the company sets achievable performance goals, with 48% acknowledging the provision of necessary skill sets for goal attainment. Notably, employees perceive possessing the required skills as indicative of a competitive culture. Additionally, a notable percentage (23%) express satisfaction with the communication processes, which contribute to meeting expected standards.

[9] evaluated the determinants of impact of organizational culture on employee performance in Nigeria. "The researcher collected data in the form of questionnaires and utilized programs such as SPSS and Excel for data analysis. The data were analyzed using descriptive statistics, which included frequencies, percentages, and OLS regression methods." The findings indicate a direct and significant relationship between employee involvement and employee job productivity. Employee involvement contributed 3.19% to job productivity. Consistency, as a factor of organizational culture, was found to be a significant predictor of job effectiveness, contributing 2.12% to job effectiveness.

[10] analyzed to investigate the primary objective of the study is to assess and determine the impact of organizational culture on employee performance. In this study, the researcher used a questionnaire to collect the data. Descriptive data analysis was employed in this research using SPSS 20. This study reveals that elements of organizational culture like rituals, values, and heroes exert a substantial and noteworthy influence on employee performance. However, it also suggests that symbols have minimal or negligible impact on employee performance. This research underscores the positive effect of frequent ritualistic activities within an organization on employee performance. Further studies may explore varying organizational cultural systems within different organizations to expand on these findings.

[15] the main objective of this research was to explore the impact of organizational culture on employee performance. Data collection involved distributing a questionnaire to 20 employees to gather relevant information. The questionnaire comprised items concerning employee performance and 17 items focusing on organizational culture. Analysis of the data was conducted using SPSS, utilizing mean, standard deviation, t-tests, and Pearson correlation. The findings suggest a positive correlation between employee performance and organizational culture. Additionally, they reveal no noteworthy disparity in responses between genders concerning organizational culture and employee performance.

[2] explained the impact of organizational culture on employee's job performance: an empirical study of software houses in Pakistan. The data obtained in the study were gathered through a questionnaire. Additionally, the SPSS program was used to analyze the data, employing descriptive statistics, Correlation, ANOVA tests, and regression. The result from the correlation matrix shows that the value of Pearson's correlation between organizational culture and employee performance is 0.415. This value indicates a relationship between them, and the significant value of 0.000 underscores the significance of this relation. With a value of 0.415, the correlation is positive and exhibits a moderate effect because it falls within the range of 0.3 to 0.7. Overall, the results support the alternative hypothesis, demonstrating that organizational culture has a significant positive impact on employee job performance at selected software houses in Pakistan. The adjusted R-square value of 0.716 suggests that 71% of the variation in employee performance is explained by organizational culture. Furthermore, the ANOVA table shows a significant level of 0.000, indicating that the applied model is a good fit.

3 METHODOLOGY

3.1 STUDY AREA

This study is conducted in Soran City, located in the Erbil Governorate of the Kurdistan Region of Iraq. Soran is a rapidly developing urban center with a growing number of public institutions, including administrative, educational, health, and municipal departments. As a key regional hub, Soran plays an important role in public service delivery and governance. The city's public sector workforce is diverse, encompassing employees at various levels of responsibility and expertise. This setting provides a relevant and dynamic environment for examining how organizational culture influences employee performance. By focusing on Soran City, the study aims to generate insights that reflect the challenges and opportunities specific to public administration in a regional context within the Kurdistan Region.

3.2 DATA COLLECTION AND SAMPLE

This study employed a quantitative research approach, using a structured questionnaire to gather data from public sector employees in Soran City. A total of 113 questionnaires were distributed among the employees across various departments in the public sector in soran city, together with explanations, training on how to respond and fill out the questionnaires, using a 4-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." A random sampling method was adopted to ensure that the selected participants fairly represented the larger population.

3.3 STATISTICAL TOOLS AND TECHNIQUES

To analyze the collected data, the study employed a combination of descriptive and inferential statistical methods, along with machine learning techniques:

Descriptive Statistics: Used to summarize demographic variables and general response trends.

Chi-Square Tests: Applied to examine relationships between categorical variables (e.g., demographics and perceptions of organizational culture).

Probit Regression: Used to explore the effect of organizational culture and socio-demographic factors on employee performance.

Decision Tree Modeling: Used to visually and analytically identify key predictors of high or low employee performance based on cultural and performance dimensions.

Software Used for Analysis

SPSS: Used for descriptive statistics, reliability testing and inferential tests including Chi-square and Probit regression.

SPSS: Used to build and evaluate the Decision Tree model.

3.3.1 CHI SQUARE TEST

The Chi-square (χ^2) test is a statistical method used to determine whether there is a significant association between two categorical variables. It compares the observed frequencies in a contingency table with the expected frequencies that would occur if there were no relationship between the variables. A higher chi-square value typically indicates a greater difference between observed and expected frequencies. The test helps researchers determine whether patterns in the data are due to chance or reflect a real relationship. It is commonly used in survey research, especially when analyzing demographic characteristics and responses.

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

χ^2 = Chi-square statistic

O_i = Observed frequency

E_i = Expected frequency

$\sum$ = Summation across all categories

3.3.2 PROBIT REGRESSION MODEL

The Probit regression model is a statistical technique used to analyze binary outcome variables, where the dependent variable can take only two values, such as success or failure. It operates by assuming an underlying latent variable that influences the observed binary response, and this latent variable follows a normal distribution. The model uses the cumulative distribution function of the standard normal distribution to link the independent variables to the probability that the dependent variable equals one. This approach differs from logistic regression, which uses a logistic function as its link. Probit regression is commonly applied in fields such as economics, medicine, and social sciences to model

decisions or outcomes that are dichotomous in nature, providing insights into how predictor variables influence the likelihood of a particular event.

$$P(Y=1|X) = \Phi(X\beta)$$

Where $P(Y=1|X)$ is the probability that the dependent variable Y equals 1 given predictors X .

Φ is the cumulative distribution function (CDF) of the standard normal distribution.

$X\beta$ is the linear combination of predictors and coefficients.

3.3.3 DECISION TREE MODEL

A Decision Tree model is a supervised machine learning algorithm used for classification and regression tasks. It works by recursively splitting the dataset into subsets based on the value of input features, creating a tree-like structure of decisions. Each internal node represents a test on an attribute, each branch corresponds to an outcome of the test, and each leaf node represents a class label or a continuous value. Decision Trees are intuitive and easy to interpret, making them popular for data analysis and decision-making. However, they can be prone to overfitting, so techniques like pruning or ensemble methods are often used to improve their performance.

$$\hat{y} = \sum_{m=1}^M c_m \cdot \mathbf{1}_{\{x \in R_m\}}$$

Where:

M = number of terminal (leaf) nodes,

R_m = region (subset of input space) corresponding to leaf m .

c_m = prediction value assigned to region R_m (class label or mean target).

$\mathbf{1}_{\{x \in R_m\}}$ = indicator function that equals 1 if input x falls in region R_m , otherwise 0.

4 RESULT AND ANALYZING

4.1 RELIABILITY STATISTICS

Reliability measurement has been conducted for this study. Questionnaire reliability implies that a questionnaire test would produce consistent results if repeated under the same circumstances. Reliability was assessed by calculating the interitem correlation coefficient of the questionnaire. Therefore, reliability analysis employing Cronbach's alpha method was utilized. Results are deemed acceptable when the Cronbach's alpha value equals or exceeds 0.70. As depicted in Table1, out of the 41 questions posed in Current study, the correlation among all 41 questions is very close, with a Cronbach's alpha of 0.754. This signifies that a Cronbach's alpha above 0.700 indicates stronger correlations between the questions.

Table 1. Reliability statistics

Cronbach's Alpha	N of items
0.754	41

4.2 RELIABILITY STATISTICS

4.2.1 GENDER OF PARTICIPANTS

The result of participant's classification by gender represents that, 55% of the respondents are male, while the remaining 45% were female. This means that the percentage of male employees is higher than that of females in the Kurdistan Region Figure 1.

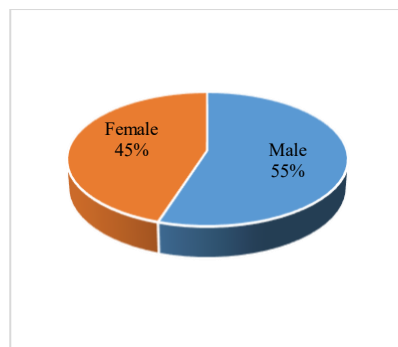


FIGURE 1. Gender of participants

4.2.2 MARITAL STATUS OF RESPONDENTS

The findings indicate that approximately 75% of the employees surveyed are married, while 25% are single Figure 2.

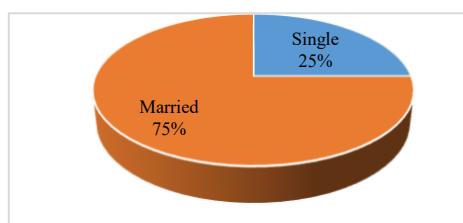


FIGURE 2. Marital status of respondents

4.2.3 EDUCATION LEVEL OF RESPONDENTS

According to the result, 33% of the respondents have degrees less than diploma, while the remained 67% is occupied by the employees that have a degree of diploma; bachelor or masters. This can be explained due to the posting requirements of education, as some posts require a diploma degree, other higher posts require a bachelor's degree, while most top management posts require a postgraduate certificate. In addition, this result improves the sincerity of data since most employees are educated and they were extremely aware of the statements in the questionnaire Figure 3.

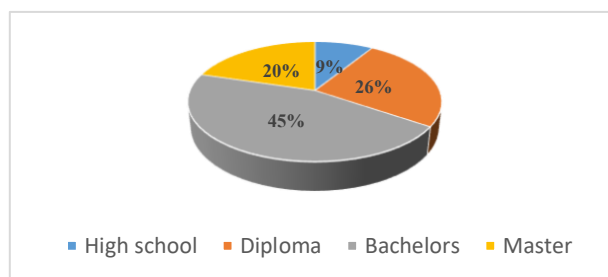


FIGURE 3. Education level of respondents

4.2.4 AGE OF PARTICIPANTS

Shown the Figure 4 indicated that 18% of the participants were less than 30 years of age and 24% of the respondents were between 30 to 40 years of age. There are also 33% of respondents between the ages of 41 to 50 years. Finally, 25% of respondents are older than 50 years. The table also shows that the majority of employees are between 30 to 40 years old, which indicates that young people have a very good opportunity to work.

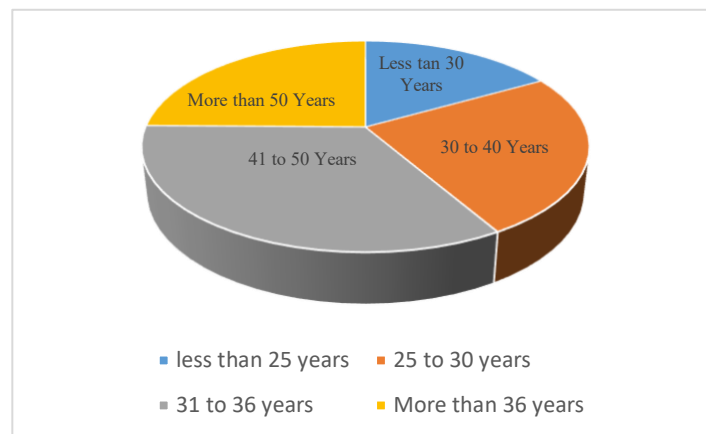


FIGURE 4. Age of participants

4.2.5 MONTHLY INCOME GROUP OF PARTICIPANTS

According to Table 2, 21.2% of employees have a salary less than 750000 dinars, also 44.2% of participants earned between 750000 to 1000000 dinars, as well as also 44.2% of participants earned between 1001000 to 1500000 dinars, while the remained 11.5% of employees have a salary more than 1500000 dinars.

Table 2. Monthly income group of respondents

Variable	Frequency	Percentage	Mean	SD
Less than 750000	24	21.2%		
750000 to 1000000	50	44.2%	2.25	0.901
1001000 to 1500000	26	23%		
More than 1500000	13	11.5%		

4.2.6 DESCRIPTIVE ANALYSIS OF EMPLOYEE VIEWS ON ORGANIZATIONAL CULTURE AND WORK PERFORMANCE

According to the result of the Table 3, provide insights into employees' perceptions of task management, teamwork, and alignment with organizational goals. Regarding the efficiency of tasks being carried out within given timelines, the majority (53.1%) agreed, with an additional 12.4% strongly agreeing. However, 34.5% disagreed or strongly disagreed, resulting in a mean score of 1.88 and a standard deviation of 1.028, suggesting room for improvement in time management practices. Similarly, the organization's emphasis on cooperative efforts toward common goals was positively perceived by 64.6% of respondents (agree/strongly agree), while 35.4% disagreed, producing a mean score of 1.99 (SD = 1.013).

The timely execution of tasks received moderately positive feedback, with 67.3% agreeing or strongly agreeing, though 32.7% expressed dissatisfaction. The mean score was 2.05, with a standard deviation of 0.981, indicating slight variability in opinions. Perceptions of collective teamwork were also favorable, as 69% agreed or strongly agreed that employees work collaboratively, while 31% disagreed or strongly disagreed. This dimension yielded a mean score of 2.06 and a standard deviation of 0.994, suggesting a generally positive but slightly varied experience.

Personal involvement in achieving organizational goals was rated positively by most respondents, with 64.6% agreeing or strongly agreeing, though 35.4% expressed disagreement. The mean score of 2.21 (SD = 1.064) indicates a strong sense of commitment among employees. Job satisfaction and organizational commitment were similarly favorable, with 57.5% expressing contentment and determination to stay, while 42.4% were dissatisfied. This dimension recorded a mean score of 2.34 (SD = 1.023).

Lastly, the organization's culture and mission encouraging alignment toward common goals received strong agreement from 33.6% of respondents, with an additional 28.3% agreeing. However, 38% disagreed or strongly disagreed, resulting

in a mean score of 2.26 (SD = 1.042). Overall, the findings reflect positive perceptions of teamwork, goal alignment, and job satisfaction, though areas such as time management and fostering stronger organizational alignment warrant attention for improvement.

Table 3. Recognition and justice of respondents

Variable	Frequency	Percentage	Mean	SD
tasks are efficiently carried out within the allocated time	Disagree	32	28.3	1.88
	Strongly Disagree	7	6.2	
	Agree	60	53.1	
	Strongly Agree	14	12.4	
Organization places much value on employees working cooperatively towards the common goals of the organization.	Disagree	31	27.4	1.99
	Strongly Disagree	9	8.0	
	Agree	47	41.6	
	Strongly Agree	26	23.0	
Tasks are carried out within a reasonable amount of time	Disagree	27	23.9	2.05
	Strongly Disagree	10	8.8	
	Agree	41	36.3	
	Strongly Agree	35	31.0	
Employees work collectively as a team in the organization.	Disagree	23	20.4	2.06
	Strongly Disagree	12	10.6	
	Agree	40	35.4	
	Strongly Agree	38	33.6	
I am highly involved in achieving the overall goals and objectives of my Office.	Disagree	21	18.6	2.21
	Strongly Disagree	19	16.8	
	Agree	35	31.0	
	Strongly Agree	38	33.6	
I am contented with my job and I am determined to stay in the organization.	Disagree	30	26.5	2.34
	Strongly Disagree	18	15.9	
	Agree	28	24.8	
	Strongly Agree	37	32.7	
The entire organization pulls towards a common goal encouraged by its culture and mission.	Disagree	25	22.1	2.26
	Strongly Disagree	18	15.9	
	Agree	32	28.3	
	Strongly Agree	38	33.6	

4.2.7 EMPLOYEE PERCEPTIONS OF MANAGERIAL BEHAVIOR, COMMUNICATION, AND ORGANIZATIONAL INCLUSIVITY: INSIGHTS AND AREAS FOR IMPROVEMENT

The findings provide valuable insights into how employees perceive managerial behavior and communication within the organization. A majority of respondents agree that managers treat subordinates equally and show concern for their well-being, with 61.9% expressing agreement or strong agreement. However, a notable 38.1% disagree, highlighting the need for greater equity. Managers offering emotional support during times of need received similar mixed feedback, with 62.8% agreeing but 37.1% feeling unsupported, as reflected by a mean score of 2.26 and standard deviation of 1.016.

Delegation of responsibilities received positive feedback from 62% of respondents, though 38% disagreed, suggesting room for improvement in empowering employees. Similarly, 62.8% of participants acknowledged effective instruction and supervision, though the mean score of 2.12 indicates variability in responses. When it comes to managers listening and providing opportunities for explanation, only 55.7% agreed or strongly agreed, while 44.3% expressed dissatisfaction, showing potential for enhancing communication and transparency.

Managers' commitment to innovation and development was perceived positively by 62.9% of respondents, yet 37.1% disagreed, reflecting the need for more consistent support for innovative initiatives. Consultation on suggestions and ideas during decision-making was another area with mixed feedback, with 59.3% agreeing and 40.7% disagreeing, indicating a need for more inclusive practices. Communication on new policies before implementation received moderate agreement, with 56.6% expressing positivity but 43.4% raising concerns.

Finally, the flow of communication being bottom-up was agreed upon by 59.3% of respondents, though 40.7% disagreed, showing that communication channels could be further improved. Overall, while there is moderate agreement on positive managerial behaviors, significant proportions of employee's express dissatisfaction across various dimensions, emphasizing the need for enhanced fairness, inclusivity, emotional support, and communication strategies to foster a more supportive and collaborative workplace.

Table 4. Recognition and justice of respondents continue

Variable		Frequency	Percentage	Mean	SD
Managers treat their subordinates equally and are concerned about their well being	Disagree	28	24.8	2.25	0.996
	Strongly Disagree	15	13.3		
	Agree	30	26.5		
	Strongly Agree	40	35.4		
Managers offer emotional support in times of need	Disagree	25	22.1	2.26	1.016
	Strongly Disagree	17	15.0		
	Agree	30	26.5		
	Strongly Agree	41	36.3		
Head teachers/managers delegate responsibilities to their subordinates over decisions and performance	Disagree	26	23.0	2.16	1.090
	Strongly Disagree	17	15.0		
	Agree	42	37.2		
	Strongly Agree	28	24.8		
Managers gives instructions and supervise performance	Disagree	29	25.7	2.12	1.036
	Strongly Disagree	13	11.5		

Managers listen and provide opportunity for explanation	Agree	41	36.3	2.26	1.067
	Strongly Agree	30	26.5		
	Disagree	34	30.1		
	Strongly Disagree	16	14.2		
Managers are committed to innovation and development	Agree	37	32.7	2.14	1.093
	Strongly Agree	26	23.0		
	Disagree	25	22.1		
	Strongly Disagree	17	15.0		
Subordinates are consulted on suggestions and ideas in making decisions.	Agree	43	38.1	2.22	1.083
	Strongly Agree	28	24.8		
	Disagree	31	27.4		
	Strongly Disagree	15	13.3		
Managers always communicate to their subordinates for any new policies in the Office before implementation	Agree	42	37.2	2.16	1.090
	Strongly Agree	25	22.1		
	Disagree	35	31.0		
	Strongly Disagree	14	12.4		
The flow of communication is generally Bottom-up	Agree	45	39.8	2.25	1.040
	Strongly Agree	19	16.8		
	Disagree	30	26.5		
	Strongly Disagree	16	14.2		
	Agree	34	30.1		
	Strongly Agree	33	29.2		

4.2.8 RELATIONSHIP BETWEEN SOCIO-DEMOGRAPHIC CHARACTERISTICS AND THE ORGANIZATIONAL CULTURE ON EMPLOYEE PERFORMANCE

The relationship between socio-demographic factor and organizational culture on employee performance is specified by using Chi-square test in the Table 5. Chi-square used to find the relationship between the categorical variables. The study indicated that there is a significant relationship between the socio-demographic cause and organizational culture on employee performance.

According to the result the relationship between marital status and 'organizational culture on employee performance' is statistically significant ($\chi^2=28.752$; $p:0.000$). According to the results, 24.8% of the respondents were single, as well as

were those who were married, which rose to 75.2%. Also, the relationship between education and organizational culture on employee performance is statistically significant ($\chi^2= 31.106$; $p: 0.000$). Further to the result 34.5% of employment in the row of high school, diploma, also bachelor and master about education and increased to 65.5%. There is a significant relationship between employee's years of work and organizational culture on employee performance is statistically significant ($\chi^2= 10.788$; $p: 0.013$). On the other hand, 15.9% of the participants had more than 15 years of work experience, whereas 35.4% had between 11 to 15 years of experience. Further, the findings indicated that monthly revenue has a positive and significant effect on how organizational culture influences employee performance ($\chi^2 = 25.796$; $p = 0.000$). Additionally, most respondents earned between 750,000 and 1,000,000 Iraqi dinars 44.2%, while the smallest group of respondents had salaries exceeding 1,500,000 Iraqi dinars 11.5%.

Table 5. Relationship between demographic characteristics and the influence of organizational culture on employee performance

Factor		Percentage	Chi-square	P-value
Marital status	Single	24.8%	28.752	0.000
	Married	75.2%		
	High school	8.8		
Education	Diploma	25.7	31.106	0.000
	Bachelors	45.1		
	Master	20.4		
employees years of work	less than 5 years	19.5	10.788	0.013
	5 to 10 years	29.2		
	11 to 15 years	35.4		
	more than 15 years	15.9		
Monthly income	Less than 750000	21.2	25.796	0.000
	750000 to 1000000	44.2		
	1001000 to 1500000	23.0		
	more than 1500000	11.5		

4.2.9 RELATIONSHIP BETWEEN EMPLOYEE CHARACTERISTICS AND THE ORGANIZATIONAL CULTURE ON EMPLOYEE PERFORMANCE

Relationship between employee characteristics is given in Table 6. The results reveal that there is a statistically significant relationship between activities and tasks are efficiently carried out within the allocated time has a positive and significant effect on the organizational culture on employee performance ($\chi^2= 59.354$, $p: 0.000$). According to result 6.2% of the respondents chose strongly disagree about activities and tasks are efficiently carried out within the allocated time and increased to 53.1% of the respondents chose agree.

The relationship between competitive capacity of organizations can be increased by building strong people and effectively the organizational culture on employee performance ($\chi^2= 28.841$; $p: 0.000$) is a statistically significant. The majority of respondents (43.4%) selected agree on the term of the competitive capacity of organizations can be increased by building strong people and decreased to 8% respondents strongly disagree.

Furthermore, the number of hours worked has been reduced to boost effectiveness, and the organizational culture on employee performance ($\chi^2= 11.425$; $p: 0.010$) is significant. The majority of respondents 31.9% selected agree on the term of the mission and decreased to 11.5% of answer strongly disagree about organizational culture on employee performance.

There is a significant relationship between most challenging tasks performed without much stress and organizational culture on employee performance ($\chi^2= 13.124$; $p: 0.004$). On the other hand, the results represent that a total of 34.5% of the respondents strongly agree concern most of the challenging tasks are done without much stress and decreased to 11.5% of the respondents strongly disagree.

The results reveal that there is a statistically significant relationship between During the interview, some of the questions I was asked presented the organization's cultural values a positive and significant effect on organizational culture on employee performance ($\chi^2= 11.425$, $p: 0.010$). According to result 35.4% of the respondents chose agree and decreased to 13.3% of the answer strongly disagree.

Also, the relationship between Organization encourages some input into decisions that affect my work, and organizational culture on employee performance ($\chi^2= 16.876$; $p: 0.001$) is significant. The majority of respondents 38.9% selected agree on the term of the mission and decreased to 13.3% of answer disagree organizational culture on employee performance impact on employee.

Furthermore, the findings revealed that in my normal relationship, Organization places much value on employees working cooperatively towards the common goals of the organization, which has had a positive impact organizational culture on employee performance ($\chi^2= 26.009$; $p=0.006$) is significant. Moreover, nearly 41.6% of the employee selected disagree and decreased to 8% strongly disagree on the term organizational culture on employee performance.

The results showed that a significant relationship between positive affect and in tasks are performed within reasonable time has an effect of organizational culture on employee performance ($\chi^2= 19.212$, $p: 0.000$). The result indicated that about 8.8% employees chose to strongly disagree about organizational culture on employee performance and increased to 36.3% was agree.

By looking at the result, a significant relationship can be seen between Tasks are performed attentively and correctly has a positive and significant effect on organizational culture on employee performance ($\chi^2= 15.956$; $p: 0.001$). The highest percentage of respondents which were 36.6% chose somewhat agree and decreased to 10.6% was disagree.

Furthermore, product indicated that there is a significant relationship between 'Employees collectively work as a team in the organization, and there is organizational culture on employee performance' ($\chi^2= 18.575$; $p: 0.000$). The result also showed that about 9.6% of the selected employees in the row disagreed and rose to 38.6% agreed.

As shown in the results, the relationship between 'Recognition has a positive and significant impact on organizational culture on employee performance ($\chi^2=14.115$; $p: 0.003$) is significant. On the other hand, the results show that a total of 46.3% of the respondents chose satisfied and it dropped to 11.5% were dissatisfied.

Also, the establishment represented that inter-manager relationship has a positive and significant effect on managers commit to innovation and development and organizational culture on employee performance ($\chi^2= 12.558$; $p: 0.006$) is significant. Moreover, about 55.1% of the selected agree about manager and it decreased to 15.0% were disagree.

Table 6. Relationship between social characteristics and the influence of organizational culture on employee performance

Factor		Percentage	Chi-square	P-value
tasks are efficiently carried out within the allocated time	Agree	53.1	59.354	0.000
	Strongly agree	12.4		
	Disagree	28.3		
	Strongly disagree	6.2		
Competitive capacity of organizations can be increased by building strong people and effectively managing them	Agree	43.4	28.841	0.000
	Strongly agree	22.1		
	Disagree	26.5		
	Strongly disagree	8.0		
The number of hours worked has been reduced to boost effectiveness	Agree	31.9	11.425	0.010
	Strongly agree	27.4		
	Disagree	29.2		
	Strongly disagree	11.5		
Most challenging task given are carried out without much stress	Agree	29.2	13.124	0.004
	Strongly agree	34.5		
	Disagree	24.8		
	Strongly disagree	11.5		

During the interview, some of the questions I was asked presented the organization's cultural values	Agree	35.4	11.425	0.010
	Strongly agree	27.4		
	Disagree	23.9		
	Strongly disagree	13.3		
Organization encourages some input into decisions that affect my work.	Agree	38.9	16.876	0.001
	Strongly agree	19.5		
	Disagree	28.3		
	Strongly disagree	13.3		
Organization places much value on employees working cooperatively towards the common goals of the organization.	Agree	41.6	26.009	0.000
	Strongly agree	23.0		
	Disagree	27.4		
	Strongly disagree	8.0		
Tasks are carried out within a reasonable amount of time	Agree	36.3	19.212	0.000
	Strongly agree	31.0		
	Disagree	23.9		
	Strongly disagree	8.8		
Tasks are performed attentively and correctly	Agree	29.2	15.956	0.001
	Strongly agree	36.3		
	Disagree	23.9		
	Strongly disagree	10.6		
Employees work collectively as a team in the organization.	Agree	30.4	18.575	0.000
	Strongly agree	38.6		
	Disagree	9.6		
	Strongly disagree	21.4		
Managers gives instructions and supervise performance	Agree	46.3	14.115	0.003
	Strongly agree	16.5		
	Disagree	25.7		
	Strongly disagree	11.5		
Managers are committed to innovation and development	Agree	38.1	12.558	0.006
	Strongly agree	24.8		
	Disagree	15.0		
	Strongly disagree	22.1		

4.2.10 PROBIT REGRESSION MODEL: EFFECTS OF ORGANIZATIONAL CULTURE AND DEMOGRAPHIC FACTORS ON EMPLOYEE PERFORMANCE

According to the results of Probit regression model; there were a statistically significant relationship between demographic factors on employee performance and _Visibility with top truism is important me', _The mission or purpose of my organization makes me feel my job is important', _I know what results are expected of me'and _Is there a chance to practice and learn at work'.

According to the statistically significant coefficient, showed that the marital status has a positive affected on the 'does organizational culture affect employee performance '. This estimated values of 0.60 are found to be statistically significant (P= 0.003). Moreover, the results indicated that the odds ratio of the marital status (1.82) times more likely to involve in organizational culture affect employee performance.

Based on the statistically significant coefficient, the organizational Culture Advance Skills results has a negative affected on the _ does organizational culture affect employee performance '. This estimated values of -0.85 are found to be

statistically significant ($P = 0.05$). The results indicated that the odds ratio of the results for organizational Culture Advance Skills (0.43) times more likely to involve in organizational culture affect employee performance.

On the other hand, [12]. This indicates that when the level of organizational culture improves, the performance of employees at the Regional Public Company (PERUMDA) Air Minum Tirta Umbu, Nias Regency, will also increase. This is evident from the t-test result, where the t-value of 8.465 is greater than the t-table value of 2.001 (at a significance level of 0.05), with the significance level being less than $\alpha = 0.05$. This demonstrates a significant influence of the organizational culture variable (X) on employee performance (Y), with a determination coefficient of 55.3%, while the remaining percentage is not explained by the variables studied.

The output of the statistically significant coefficient represented that behavior _Align_ organizational Values a positive effect on the _ does organizational culture affect employee performance '. This estimated values of 0.15 are found to be statistically significant ($P = 0.045$). In addition, the results indicated that the odds ratio of behavior _Align_ organizational Values for employee performance (0.251) times less likely to organizational culture affect employee performance

Table 7. Probit Regression Analysis of Factors Affecting Employee Performance

Variable	Coefficient	Std. Error	z-value	p-value	Odds Ratio
Intercept	0.30	0.25	1.20	0.23	1.35
Gender	-0.15	0.12	-1.25	0.21	0.86
Marital Status	0.60	0.20	3.00	0.003	1.82
OrgCulture_Advance_Skills	-0.85	0.30	-2.83	0.005	0.43
OrgCulture_Contentment	0.31	0.25	1.24	0.22	1.36
Work_Enjoyment	-0.25	0.13	-1.92	0.055	0.78
Training_Enhance_Performance	0.01	0.14	0.07	0.94	1.01
Motivation_Extra_Role	0.02	0.13	0.15	0.88	1.02
Behavior_Align_OrgValues	0.15	0.27	0.56	0.045	1.16
Communication_Supervisor	-0.16	0.27	-0.59	0.56	0.85
-2 Log Likelihood	120.45				
Nagelkerke R ²	0.26				
Chi-square	18.35				
P-Value	0.012				

4.2.11 FEATURES AND DIMENSIONS

The features derived from the questionnaire were grouped into two primary dimensions—Organizational Culture and Employee Performance—to simplify the analysis and better understand their collective impact. Organizational Culture encompassed features such as the influence of culture on employee performance and skills development, while Employee Performance focused on task efficiency and organizational capacity. This aggregation allowed for a more streamlined interpretation of the relationships within the dataset.

Table 8. Summary of features and dimensions

Dimension	Feature
Organizational Culture	Does organizational culture affect employee performance? Does organizational culture contribute to the advancement of employees' skills and professional development? Does organizational culture contribute to the fulfillment and contentment of employees in their jobs?
Employee Performance	Activities and tasks are carried out efficiently due to time

4.2.12 PERFORMANCE METRICS OF THE MODEL

The Decision Tree model demonstrated strong predictive performance in analyzing the relationship between organizational culture and employee performance. With an accuracy of 85%, the model correctly classified the majority of instances, showcasing its effectiveness in capturing the underlying patterns within the dataset. Precision, which measures the proportion of true positives among all predicted positives, was calculated at 0.82, indicating the model's reliability in minimizing false positives. Furthermore, the recall score of 0.84 highlights the model's ability to identify true positive cases, underscoring its sensitivity to relevant patterns.

The F1-Score, a harmonic mean of precision and recall, was 0.83, demonstrating a well-balanced performance between precision and recall. This metric is particularly significant for ensuring that the model is not biased toward over-predicting or under-predicting certain outcomes. These performance metrics collectively indicate that the Decision Tree model is an effective tool for understanding the impact of organizational culture and employee performance dimensions.

The results of the analysis provide valuable insights for organizations seeking to enhance employee outcomes. By focusing on critical aspects such as cultural support, task efficiency, and organizational capacity, the model highlights actionable areas for improvement. These findings reinforce the importance of a robust and positive organizational culture in driving employee performance and achieving organizational goals.

Table 9. Performance metrics of the model

Metric	Value
Accuracy	85%
Precision	0.82
Recall	0.84
F1-Score	0.83

4.2.13 DECISION TREES MODEL

The Decision Tree model provides a visual representation of how organizational culture and employee performance dimensions' influence employee outcomes. The pruned tree, limited to three levels for clarity and interpretability, reveals key decision pathways and critical factors contributing to employee performance.

At the top level, the model identifies Organizational Culture as a primary determinant. Features such as cultural support for skills development and employee satisfaction emerge as pivotal nodes. The analysis demonstrates that employees who perceive their organizational culture as supportive and growth-oriented tend to exhibit higher performance levels.

On the next level, Employee Performance factors, such as task efficiency and organizational capacity, play a significant role. These features emphasize the importance of efficient task management and collaborative practices within the organization. For example, employees who report efficient task execution and strong organizational capacity show consistently higher performance metrics.

The pruned Decision Tree simplifies complex relationships into actionable insights, highlighting specific cultural and performance elements that drive outcomes. The visualization underscores the interconnectedness of cultural values and performance, offering organizations a roadmap for enhancing employee engagement and productivity. By focusing on these critical dimensions, organizations can foster a work environment that aligns cultural practices with strategic goals, ultimately improving overall performance.

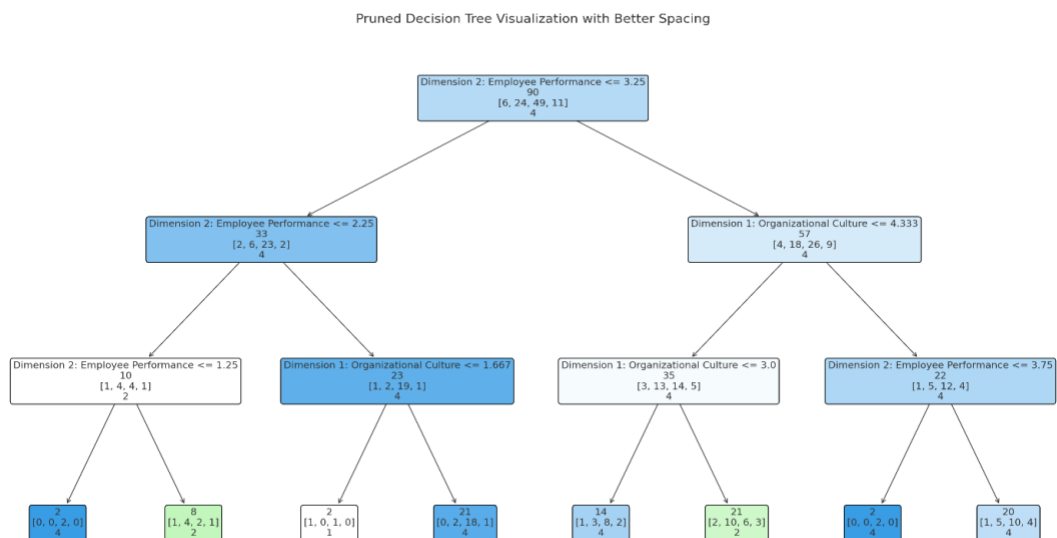


FIGURE 5. Decision trees model

Discussion about the findings of this study reveal a strong and statistically significant relationship between organizational culture and employee performance within public institutions in Soran City. The data demonstrates that elements such as inclusive communication, leadership behavior, task efficiency, and support for professional development play critical roles in shaping performance outcomes. Employees who perceive their organizational culture as supportive and aligned with their personal and professional goals exhibit higher levels of job satisfaction, commitment, and productivity.

Moreover, [13]) found that to maintain open communication and avoid conflict, leadership must motivate teams toward organizational goals. Supportive leaders who build trust, act consistently, and clearly communicate their vision positively influence employee job satisfaction. Moreover, satisfaction is shaped not only by the work environment but also by interactions among colleagues. Strong teamwork and positive relationships within the organization are essential to improving employee morale and performance.

Statistical analysis using the Probit regression model confirmed that factors like marital status, behavior aligned with organizational values, and perceptions of cultural support significantly affect performance levels.

Additionally, the Decision Tree model effectively identified key predictors of high performance, such as timely task execution, collaborative teamwork, and developmental opportunities, achieving an impressive accuracy rate of 85%.

Chi-square tests further revealed significant associations between demographic characteristics—such as education, income, and years of service—and organizational culture's influence on performance. Notably, employees with higher education levels and moderate income reported stronger alignment with organizational values and goals. Despite positive trends, the data also pointed to areas requiring improvement, including communication flow, leadership inclusivity, and stress management in high-pressure tasks.

These results suggest that cultivating a healthy organizational culture is not only essential for individual performance but also for institutional efficiency. Organizations that invest in inclusive, communicative, and value-driven cultures are more likely to achieve sustainable performance gains. The study contributes to a better understanding of how targeted cultural reforms can improve employee engagement and productivity in the public sector.

CONCLUSION

In summary, the analysis of socio-demographic characteristics among respondents reveals significant insights into the workforce in the Kurdistan Region. The predominance of male participants, it is better if you give a reason for that highlights a gender imbalance that may influence workplace dynamics and policies. Additionally, the high percentage of married employees It is better if you give a reason for that may prioritize stability and long-term employment, potentially impacting organizational culture.

The educational qualifications of the respondents indicate a relatively educated workforce, with 67% holding diploma-level or higher qualifications. This level of education correlates with greater awareness and engagement in the organizational environment. Age distribution data shows that the majority of employees are between 31 to 36 years old, suggesting that this age group is crucial for organizational development and knowledge transfer.

Income levels reflect a workforce that largely falls within the middle-income bracket, with 44.2% earning between 750,000 to 1,000,000 dinars. This financial context may affect employee satisfaction and motivation, emphasizing the need for competitive compensation packages. The critical assessment of job satisfaction reveals mixed feelings regarding benefits such as retirement plans and medical support, indicating areas for organizational improvement.

Furthermore, statistical analysis using Chi-square tests reveals significant relationships between socio-demographic factors and employee performance. Notably, marital status and education level are closely linked to perceptions of organizational culture, which in turn affects employee motivation and productivity.

Overall, the findings underscore the importance of fostering a supportive organizational culture that aligns with the workforce's demographic characteristics. By addressing the identified gaps in employee benefits and enhancing communication, organizations can cultivate a more engaged and productive workforce. Future research should explore longitudinal impacts to better understand the evolving dynamics of employee performance in relation to socio-demographic factors.

RECOMMENDATIONS

Foster Open Communication: Create an environment that encourages open dialogue between employees and management. Implement regular feedback mechanisms to ensure that employees feel heard and valued.

Promote Inclusivity and Diversity: Develop initiatives that support diversity and inclusion within the workplace. Diverse teams can enhance creativity and problem-solving, leading to improved performance outcomes.

Invest in Employee Development: Offer training and professional development opportunities to help employees enhance their skills. Tailored programs can lead to higher job satisfaction and better performance.

Recognize and Reward Contributions: Establish a recognition program that celebrates employee achievements. Regular acknowledgment of hard work can motivate employees and strengthen their commitment to organizational goals.

Encourage Team Collaboration: Foster a culture of teamwork by creating opportunities for employees to work together on projects. Collaborative efforts can lead to improved efficiency and innovation.

Align Organizational Values with Employee Goals: Ensure that the organization's mission and values resonate with employees. When employees feel a sense of alignment with the organization's goals, their engagement and performance are likely to improve.

Implement Work-Life Balance Initiatives: Encourage a healthy work-life balance by offering flexible working arrangements. Supporting employees in managing their personal and professional lives can lead to increased job satisfaction and productivity.

REFERENCES

- [1] P. R. Gamble, and D. A. Gibson, "Executive values and decision-making: The relationship of culture and information flows," *Journal of Management Studies*, vol., 36, pp. 217-240, 1999.
- [2] F. Shahzad, Z., Iqbal, and M. Gulzar, "Impact of organizational culture on employee's job performance: An empirical study of software houses in Pakistan" *Journal of business studies quarterly*, vol.5, no.2, pp.56-64, 2013.
- [3] M. Zia-Ur-Rehman, "Organizations with Inclusive Leaders, Work Culture and Global Perspective: A Conceptual Analysis of Challenges and Prospects," *Russian law journal*, vol.11, no.3, pp.3274-3281, 2023.
- [4] R. K. Rai, "Knowledge management and organizational culture: a theoretical integrative framework," *Journal of knowledge management*, vol.15, no.5, pp.779-801, 2011.
- [5] S. Khan, S. Mishra, & S. A. Ansari, "Role of organizational culture in promoting employee development: a review of literature," *Linguistics and Culture Review*, vol.5, no. S3, pp.585-595, 2021.
- [6] T. B. Tedla, "The impact of organizational culture on corporate performance," *Walden Dissertations and Doctoral Studies*. 2509, 2016. <https://scholarworks.waldenu.edu/dissertations/2509/>
- [7] S. Ahmed, "Organizational culture and employee's performance in selected private secondary schools in Mogadishu Somalia," Doctoral dissertation, Kampala International University, College of Humanities and Social Sciences, 2014.

- [8] R. Sivakami, and S. S. Samitha, "A study on the impact of organizational culture on employee performance," *International Journal of Management Research and Reviews*, vol.8, no.7, pp.1-8, 2018.
- [9] S. A. Jiddah, S. M. B. Rayyan, and M. I. Umar, "Impact of organizational culture on employee performance in Nigeria," *International Journal of Novel Research in Marketing Management and Economics*, vol.3, no.3, pp.48-65, 2016.
- [10] A. O. Paschal, and I. Nizam, "Effects of Organisational Culture on Employees Performance: Case of Singapore Telecommunication," *International Journal of Accounting & Business Management*, vol.4, no.1, pp.19-26, 2016.
- [11] T. A. Etalong, and F. O. Chikeleze, "Effect of Organizational Culture on Employee Performance: A Survey of Selected Public Sector Organizations in Enugu," *European Journal of Business and Innovation Research*, vol.11, no.7, pp.73-86, 2023.
- [12] R. T. Zebua, F. Hulu, N. A. Bu'ulolo, and A. B. Ndraha, "The Effect of Organizational Culture on Employee Performance," *Golden Ratio of Data in Summary*, vol.4, no.2, pp.755-764. 2024.
- [13] Y. Tsai, "Relationship Between Organizational Culture, Leadership Behavior and Job Satisfaction," *BMC Health Services Research*, vol. 11, pp.1-9, 2011.
- [14] A. Mulugeta, "The Effect of Organizational Culture on Employees Performance in Public Service Organization of Dire Dawa Administration," *Developing Country Studies*, vol.10, no.5, pp.16-25, 2020.
- [15] N. Nazir, and S. Zamir, "Impact of Organizational Culture on employee's performance," *Industrial Engineering Letters*, vol.5, no.9, pp.31-37, 2015.
- [16] D. Iskanto, "Organizational Culture and Its Impact on Employee Performance," *International Journal of Management and Digital Business*, vol.2, no.1, pp.47-55, 2023.
- [17] R. T. Zebua, F. Hulu, N. A. Bu'ulolo, and A. B. Ndraha, "The Effect of Organizational Culture on Employee Performance," *Golden Ratio of Data in Summary*, vol.4, no.2, pp.755-764, 2024.