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# The Effect of Organizational Learning on Improving Organizational Effectiveness: The Mediating Role of Operational Flexibility(*)

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# تأثير التعلم التنظيمي في تحسين الفعالية التنظيمية: الدور الوسيط للمرونة التشغيلية

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## الملخص

يُعدّ التعلم التنظيمي عاملاً حاسماً في تعزيز الفعالية التنظيمية في بيئات العمل الديناميكية وغير المستقرة، وله أهمية خاصة في قطاع الرعاية الصحية. على الرغم من وجود العديد من الأبحاث حول تأثير أبعاد التعلم التنظيمي على الفعالية التنظيمية، إلا أن الدراسات التجريبية التي تركز على المرونة التشغيلية في قطاع الرعاية الصحية، وخاصة في المستشفيات، لا تزال نادرة. تهدف هذه الدراسة إلى اقتراح نموذج يُظهر تأثير التعلم التنظيمي على الفعالية التنظيمية في قطاع الرعاية الصحية من خلال المرونة التشغيلية كمتغير وسيط. تم جمع بيانات الدراسة باستخدام استبيان من عينة مكونة من 341 مستجيبًا من جميع المستشفيات العامة في مدينة تعز باليمن. تم تحليل البيانات باستخدام نمذجة المعادلات الهيكلية الجزئية للمربعات الصغرى (SMART PLS 4). كشفت نتائج الدراسة أن للتعلم التنظيمي تأثيرًا إيجابيًا مباشرًا على الفعالية التنظيمية، كما أن هناك تأثيرًا وسيطًا جزئيًا للمرونة التشغيلية في العلاقة بين التعلم التنظيمي والفعالية التنظيمية، مما يبرز الدور الحاسم للمرونة التشغيلية كوسيط بينهما. تُقدم هذه الدراسة مساهمة جديدة في الأدبيات الأكاديمية من خلال تقديم نموذج نظري مبتكر يعزز فهم كيفية تأثير التعلم التنظيمي على الفعالية التنظيمية عبر المرونة التشغيلية. تُشجع النتائج على مزيد من البحث الأكاديمي في هذا المجال، كما تقدم رؤى عملية لصانعي القرار وواضعي السياسات في قطاع الرعاية الصحية. يمكن للمستشفيات ومؤسسات الرعاية الصحية في بيئات مماثلة الاستفادة من هذه النتائج لتطوير استراتيجيات تسهم في تحقيق أداء مستدام.

**الكلمات الرئيسية:** التعلم التنظيمي، الفعالية التنظيمية، المرونة التشغيلية.

# The Effect of Organizational Learning on Improving Organizational Effectiveness: The Mediating Role of Operational Flexibility

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## Abstract

Organizational learning (OL) is a crucial factor in enhancing organizational effectiveness in dynamic and unstable work environments, with particular significance in the healthcare sector. Despite the abundance of research on the influence of organizational learning on organizational effectiveness (OE), empirical studies focusing on operational flexibility (OF) in the healthcare sector, especially in hospitals, remain scarce. This study aims to propose a model that illustrates the impact of organizational learning on organizational effectiveness in the healthcare sector through operational flexibility as a mediating variable. Data were collected using a questionnaire from a sample of 341 respondents across all public hospitals in Taiz City, Yemen. The collected data were analyzed using Partial Least Squares Structural Equation Modeling (SMART PLS 4). The results of the study revealed that organizational learning has a direct positive effect on organizational effectiveness. Additionally, operational flexibility plays a partial mediating role in the relationship between organizational learning and organizational effectiveness, highlighting the crucial role of operational flexibility as a mediator. This study provides a novel contribution to the academic literature by presenting an innovative theoretical model that enhances the understanding of how organizational learning influences organizational effectiveness through operational flexibility. The findings encourage further academic research in this area and offer practical insights for decision-makers and policymakers in the healthcare sector. Hospitals and healthcare institutions in similar environments can benefit from these findings to develop strategies that contribute to achieving sustainable organizational effectiveness.

**Keywords:** Organizational Learning, Organizational effectiveness, Operational Flexibility.

## Background and Research Hypotheses

The modern business environment is characterized by increased dynamism, volatility, uncertainty, risk, complexity, and irregularity, posing significant challenges for organizations striving to maintain sustained effectiveness(Yu, Zhao, Liu, & Song, 2021). Traditional metrics of operational effectiveness are becoming less reliable due to escalating competition, market instability, and rapid technological advancements (Bhatia, 2021). Consequently, organizations must develop the capacity to adapt to these environmental shifts, adjust their strategies, and achieve their objectives(Eisenhardt, Furr, & Bingham, 2010). The ability to adapt spontaneously and effectively has become a key area of academic focus (Shi, Prajogo, Fan, & Oke, 2025)(Alolayyan, Ali, & Idris, 2012)(Chahal, Gupta, & Lonial, 2018)

Scholars argue that organizational learning (OL) plays a critical role in organizational adaptation (Yu et al., 2021). OL is a dynamic, ongoing process through which organizations acquire knowledge, improve capabilities, and adapt to environmental changes. It involves creating, sharing, and applying knowledge to enhance decision-making and performance (Santos-Vijande, López-Sánchez, & Trespalacios, 2012).

Organizational learning highlights the role of organizational members as active agents who respond to uncertainty and generate opportunities (Wei, Yi, & Guo, 2014). OL helps organizations better understand customer needs, innovate, and adjust to technological changes (Tan & Olaore, 2022). Additionally, a commitment to learning, a shared vision, and openness to new ideas further cultivate an environment conducive to creativity and innovation (Chahal et al., 2018). Similarly, operational flexibility (OF) is recognized as essential for organizational adaptation(Yu et al., 2021) OF refers to an organization's ability to adjust rapidly to significant, unpredictable environmental changes that affect its effectiveness (Hussein & Salman, 2022) (Alolayyan & Alyahya, 2023). Many researchers have explored operational flexibility from various perspectives. For example,(Yu et al., 2021) (Evenseth, Sydnes, & Gausdal, 2022) (Evenseth et al., 2022) examined the relationship between organizational learning and operational flexibility enterprises, finding that individual, group, and organizational learning significantly enhance operational flexibility. Tamayo. et al, (2016) investigated the impact of OL on OF through innovation as a mediating

variable and found that innovation mediate this relationship. (Scafuto, Ahrens, & Yun Cha, 2020) investigated the impact of human resource flexibility on organizational learning. Other studies have explored OF as an independent variable, finding that it improves organizational effectiveness (OE) (Budihardjo & Supriyadi, 2025). Operational flexibility has also been studied as a mediator and moderator in various contexts (Alolayyan et al., 2012; Stelmaszczyk & Pierscieniak, 2020). However much research has focused on the individual effects of OL and OE, the explicit role of operational flexibility as a mediator in the relationship between OL and OE remains underexplored. Additionally, much of the research has concentrated on the direct effects of OL or OF on OE, overlooking their interconnectedness and the mediating role of operational flexibility.

In this context, it can be argued that organizational learning enables operational flexibility, which in turn increases organizational effectiveness. Therefore, this study posits that OL, as a dynamic capability, enhances OE when combined with operational flexibility. By employing an integrated strategy encompassing OL, OF, and OE, we aim to explore how operational flexibility mediates the relationship between OL and OE in healthcare organizations in Yemen. This research will examine OL, OF, and OE in greater depth, considering organizational learning as a dynamic capability that helps businesses leverage their resources to deliver competitive advantages in unpredictable environments.

This gap in the literature presents an opportunity to investigate the role of operational flexibility within the broader framework of OL and OE. The study will explore whether operational flexibility acts as an intermediary that amplifies the impact of OL on OE. Moreover, while research on OL and OF has been prominent in developed economies, there is a lack of empirical studies focused on emerging markets, particularly in the Arab world and Yemen. Healthcare organizations in these regions face unique challenges, such as resource constraints, regulatory changes, and evolving healthcare needs. These challenges require flexible operational strategies and continuous organizational learning to ensure effective performance and adaptability. This study aims to contribute to the theoretical understanding of the relationship between OL, OF, and OE and provide practical insights for decision-making in the healthcare sector in Yemen and similar regions.

## Research Questions and Hypotheses

This study aims to answer the following research questions:

**RQ$_1$:** What is the impact of organizational learning (OL) on organizational effectiveness (OE)?

**RQ$_2$:** How does organizational learning (OL) influence operational flexibility (OF)?

**RQ$_3$:** To what extent does operational flexibility (OF) influence organizational effectiveness (OE)?

**RQ$_4$:** How does operational flexibility (OF) mediate the relationship between organizational learning (OL) and organizational effectiveness (OE)?

The following hypotheses are proposed:

**H$_1$:** Organizational learning (OL) has a positive direct effect on organizational effectiveness (OE).

**H$_2$:** Organizational learning (OL) has a positive direct effect on operational flexibility (OF).

**H$_3$:** Operational flexibility (OF) mediates the relationship between organizational learning (OL) and organizational effectiveness (OE).

This research will test these hypotheses using data from healthcare organizations in Yemen. The findings will offer insights into how OL and OF interact to enhance OE, especially in resource-constrained and dynamic environments like the healthcare sector. By focusing on the mediating role of operational flexibility, the study aims to provide recommendations for improving organizational effectiveness in an increasingly complex and uncertain healthcare landscape.

## Methodology Measures

The current study methodology was designed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to explore the influence of Organizational Learning (OL) on Organizational Effectiveness (OE) through Operational Flexibility (OF) as a mediating variable. This technique is ideal for handling complicated models and examining the links between independent, dependent, and mediating variables. A descriptive-analytical design was followed in the study using a cross-sectional study to collect and analyze the data. This design allows for examining the relationships

between the studied variables (organizational learning, operational flexibility, and organizational effectiveness) at a specific point in time, contributing to understanding the impact of these variables on improving organizational effectiveness in hospitals .

Population and Sample: The investigation was done in 11 hospitals in Taiz City, Yemen. Participants were selected based on their active engagement in decision-making and leading procedures inside the hospitals, such as medical leaders, hospital management, resident physicians, specialists, and nursing supervisors. A total of 500 persons were asked to participate from a target population of 7,200. Of these, 350 persons answered, and 9 incomplete replies were eliminated, leaving 341 valid responses for analysis.

It includes data related to the study variables and consists of (56) items distributed over three axes: Axis One: It deals with data related to the independent variable (organizational learning) and consists of (21) items developed by (Levitt & March, 1988) (Pokharel & Choi, 2015). This variable was measured through three dimensions: Individual learning, group learning and organizational learning, where each dimension includes (7) items. The second axis deals with questions related to the intermediate variable (Operational Flexibility) and consists of (14) items developed by (Aaker & Mascarenhas, 1984; Baker & Sinkula, 1999; Hitt, Keats, & DeMarie, 1998; Jeong, Lee, Kim, Lee, & Kim, 2007; Tsai, 2014; Yang, 2007).The third axis: deals with questions related to the dependent variable (organizational effectiveness), which consists of (21) items. This variable was measured through three dimensions, where each dimension includes (7) items scale have been verified (Baker & Sinkula, 1999; Jeong et al., 2007; Sparrow & Cooper, 2014; Tsai, 2014; Yang, 2007). A 7-point Likert scale was used to quantify participants' replies, ranging from "Strongly Agree" to "Strongly Disagree." The questionnaire was evaluated by three professionals in healthcare management to guarantee the correctness of the questions and their suitability to the local context.

Statistical Analysis Techniques: The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), an advanced technique that allows testing complex relationships between independent,

dependent, and mediating variables. PLS-SEM enhances the power of the study due to its ability to handle complex models and examine direct and indirect effects between variables. Before analysis, means and standard deviations were calculated to assess the data distribution. Additionally, Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE) were calculated to verify the reliability of the measurement tools.

Proposed Hypotheses: Based on the theoretical framework, the following hypotheses were formulated:

I. There is a statistically significant positive effect of Organizational Learning (OL) on Organizational Effectiveness (OE)
II. There is a statistically significant positive effect of Organizational Learning (OL) on Operational Flexibility (OF)
III. There is a statistically significant positive effect of Operational Flexibility (OF) on Organizational Effectiveness (OE)
IV. Operational Flexibility (OF) plays a mediating role between Organizational Learning (OL) and Organizational Effectiveness (OE).

## Description of the study sample

Of the 441 participants, 156 (35.5%) were men and, 285 (64.5%), female. At 55%, the age group "30 to less than 40 years" was the most common, followed by "40 to less than 50 years" at 23%. 57% of the participants had a diploma, 25% had a bachelor's degree, 12% had a master's degree, and 6% had a doctorate. Regarding work experience, 25.8% of participants had between five and ten years of experience, while 25% had between ten and fifteen years. In terms of job titles, 57% of the sample were technicians, 25% were doctors, and 17% were administrators. Furthermore, 33% of the participants work in private hospitals, while 67% of them are employed by the government.

**Table (1) Demographic profile.**

| Description of Samples | F | (%) |
|---|---|---|
| **Gender** | | |
| **M** | **156** | **45.70%** |
| **F** | **185** | **54.30%** |
| **Age** | | |
| **20-30** | **17** | **5.00%** |
| **30-40** | **187** | **55.00%** |
| **40-50** | **78** | **23.00%** |
| **>50** | **59** | **17.00%** |
| **Scientific qualification** | | |
| **Bachelor's** | **86** | **25%** |
| **Master's** | **42** | **12%** |
| **Doctorate** | **19** | **6%** |
| **Diploma and less** | **194** | **57%** |
| **Experience** | | |
| **Years 5<** | **16** | **5%** |
| **5 - 10** | **88** | **25.80%** |
| **10 - 15** | **86** | **25%** |
| **15-20** | **70** | **20%** |
| **20-25** | **50** | **15%** |
| **> 25** | **31** | **9%** |
| **Job title** | | |
| **Doctors** | **84** | **25%** |
| **Administrators** | **63** | **18%** |
| **staff from nurses and dental technicians** | **194** | **57%** |
| **Hospital type** | | |
| **Governmental** | **230** | **67%** |
| **Private** | **111** | **33%** |

## Results and data analysis

Data screening represents the first stage of the data analysis procedure. Initially, an assessment of missing values was conducted, and no missing data were found in the study. Next, boxplots were used to identify any outliers, revealing no extreme outliers. The distribution of the data was checked using kurtosis and skewness, both of which were within the acceptable range of ±2, indicating no issues with the data distribution (Collier, 2020). Tabakhnick & Fidell, (2007) multicollinearity was evaluated, and the correlations between variables were examined; none exceeded 0.85 (see Table 3), indicating that multicollinearity is not a concern. Finally, the Variance Inflation Factor (VIF) was assessed to detect any common method bias in the inner model. The VIF values were below the threshold, confirming that the model is free from common method bias, as suggested by Hair Jr et al., (2021) The research model was tested using Partial Least Squares Structural Equation Modeling (PLS-SEM) in Smart-PLS4, which involves two main steps: the evaluation of the measurement model and the structural model.

## Evaluation of the Measurement Model

The examination of the measurement model (outer model) focuses on examining reliability as well as convergent and discriminant validity (Hair Jr et al., 2021). Reliability is tested using Cronbach's alpha and composite reliability (CR), both of which above the suggested threshold of 0.70, indicating the dependability of the constructs in the study. Specifically, the values of Cronbach's alpha and CR demonstrated good internal consistency among the assessment items. Next, the validity of the ideas was examined, with an emphasis on both convergent and discriminant validity. Convergent validity was examined using the Average Variance Extracted (AVE), with the threshold set at 0.50 or above, as recommended by (Fornell & Larcker, 1981). The estimated AVE values for all constructs were above the 0.50 threshold, showing acceptable convergent validity. Discriminant validity, which guarantees that each construct is unique from the others, was then evaluated. For this reason, the Fornell & Larcker, (1981) criteria was adopted, which requires that the square root of the AVE for each construct should be larger than the correlations between that construct and all other constructs. The results indicated that the square roots of the AVE for all

constructs were indeed larger than their respective correlations, demonstrating the presence of discriminant validity. Additionally, the Heterotrait-Monotrait (HTMT) ratio, as stated by (Henseler, Ringle, & Sarstedt, 2015), was utilized as a supplementary measure for discriminant validity. According to Henseler et al., (2015), discriminant validity is demonstrated if the HTMT ratio between any two constructs is below the threshold of 0.90. The study indicated that all HTMT ratios were below 0.90, further demonstrating discriminant validity. In conclusion, the measuring model satisfied all relevant requirements, exhibiting construct reliability, convergent validity, and discriminant validity. These results are described in Tables 2, 3, and 4, which show descriptive data, Cronbach's alpha, composite reliability, AVE, and the outcomes of the discriminant validity tests. Table 2. Descriptive statistics of items, construct reliability (Cronbach's alpha and composite reliability), and average variance extracted (AVE).

**Table (2) Reliability Analysis Results**

| V.B | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|---|---|---|---|---|
| GL | 0.925 | 0.926 | 0.940 | 0.691 |
| IL | 0.921 | 0.922 | 0.937 | 0.679 |
| SL | 0.930 | 0.932 | 0.944 | 0.705 |
| OL | 0.975 | 0.975 | 0.976 | 0.632 |
| OF | 0.976 | 0.976 | 0.978 | 0.759 |
| OE | 0.981 | 0.981 | 0.982 | 0.693 |

**GL: Group Learning, IL: Individual Learning, SL: System Learning, OL: Organizational learning, OF: Operational Flexibility, and OE: Organizational Effectiveness**

**Table (3) Fornell-Larcker Criterion**

| | GL | IL | OF | OE | OL | SL |
|---|---|---|---|---|---|---|
| GL | 0.831 | | | | | |
| IL | 0.864 | 0.824 | | | | |
| OF | 0.843 | 0.815 | 0.834 | | | |
| OE | 0.823 | 0.811 | 0.839 | 0.832 | | |
| OL | 0.874 | 0.828 | 0.849 | 0.824 | 0.795 | |
| SL | 0.821 | 0.819 | 0.841 | 0.892 | 0.859 | 0.840 |

**Table (4) Heterotrait-Monotrait Ratio (HTMT)**

| | GL | IL | OF | OE | OL | SL |
|---|---|---|---|---|---|---|
| **GL** | | | | | | |
| **IL** | **0.831** | | | | | |
| **OF** | **0.792** | **0.858** | | | | |
| **OE** | **0.867** | **0.852** | **0.859** | | | |
| **OL** | **0.897** | **0.871** | **0.870** | **0.842** | | |
| **SL** | **0.987** | **0.883** | **0.886** | **0.832** | **0.867** | |

Variable correlations are represented by the off-diagonal values, while the square root AVE is diagonal.

## Structural Model

To assess the structural model, a detailed examination of the evaluation model was undertaken to verify data quality and validity. The Smart-PLS software was applied to test the hypotheses and examine the structural links within the model, following the technique provided in (Sarstedt, Ringle, Smith, Reams, & Hair Jr, 2014). The examination focused on important measures, including the coefficient of determination ($R^2$), Path Coefficients (β value), T-statistic, impact size ($f^2$), and predictive relevance ($Q^2$). A bootstrap analysis was undertaken to assess the robustness of the results. $R^2$ levels are characterized as low (0.26), moderate (0.51), and high (0.76), with the $R^2$ value in this study falling within the moderate category. The $Q^2$ value analyzes the model's predictive relevance, where values larger than zero imply that the exogenous variables have predictive importance for the endogenous variables. The $Q^2$ values for Organizational Effectiveness, Organizational Learning, and Operational Flexibility were found to be 0.613, 0.59, and 0.691, respectively, demonstrating excellent predictive significance for these domains.

**Table (5) Path coefficient results**

| No | Hypotheses | Path Coefficients | S.D | T Stat | P | R2 | F2 | SRMR | $Q^2$ | Decision |
|---|---|---|---|---|---|---|---|---|---|---|
| **1** | **OL -> OE** | **0.622** | **0.077** | **8.07** | **0.000** | **0.89** | **0.103** | **0.058** | **0.613** | **Supported** |
| **2** | **OL -> OF** | **0.949** | **0.007** | **134.2** | **0.000** | | **0. 908** | | | **Supported** |
| **3** | **OL -> OF->OE** | **0.334** | **0.075** | **4.430** | **0.000** | | **0.358** | | | **Supported** |

**OL: Organizational learning, OF: Operational Flexibility, and OE: Organizational Effectiveness**

The $f2$ value measures the impact of each exogenous latent construct on the endogenous latent construct. This statistic allows researchers to evaluate how well the structural model explains the variance in the selected endogenous variables. According to Cohen (1988), $f2$ values are categorized as large (0.35), medium (0.15), and small (0.02) effect sizes for the predictor variables. In this study, Table 5 presents medium effect sizes for the relationships OL → OE, and large effect sizes for OL → OF, and OL→ OF → OE, with $f2$ values of 0.103, 0.908, and 0.358, respectively. These values were deemed acceptable and satisfying. Additionally, path coefficient analysis was undertaken to test the hypothesized correlations. A bootstrap technique was undertaken to analyze the relevance of the pathways, as described by (Hair Jr et al., 2021) The findings from this study contain numerical values for the beta coefficients, standard errors, t-values, and p-values, which were analyzed using a two-tailed t-test. As demonstrated in Table 5 and Figure 1, the data revealed that organizational learning positively and substantially influences operational flexibility (β = 0.949, t = 134.2, P = 0.00). It also has a direct and very significant influence on organizational effectiveness (β = 0.622, t = 4.430, P = 0.00), validating the hypothesis. Furthermore, the research demonstrated that Operational Flexibility plays a substantial mediating role in the link between organizational learning and organizational effectiveness, with a significant impact (β = 0.334, t = 8.72, P = 0.00), thus validating the proposed hypothesis.

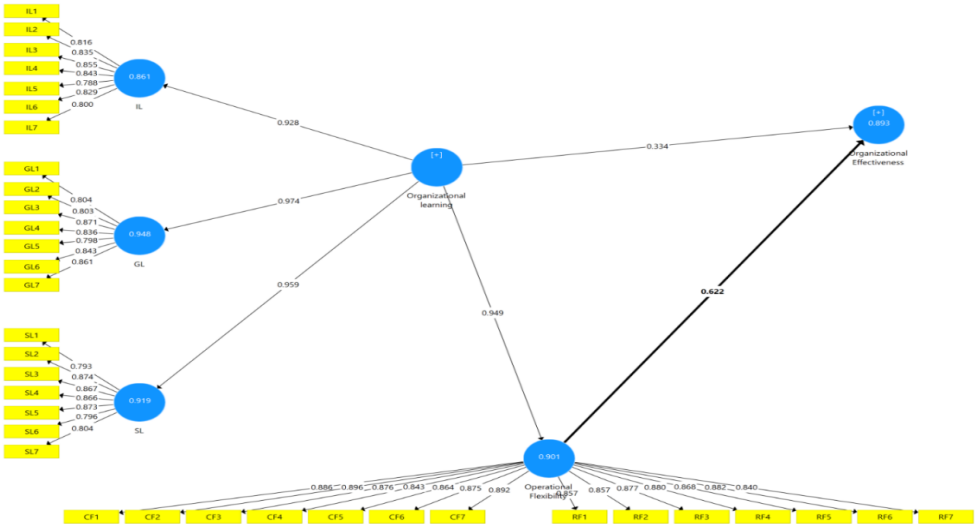


**Figure (1) Structural Model Output**

## Discussion

The primary aim of this study was to evaluate the direct impact of organizational learning on organizational effectiveness, and its effect on Operational Flexibility, as well as the indirect influence of organizational learning on organizational effectiveness through Operational Flexibility as a mediating variable, within the context of the health sector in Yemen. The outcomes of this study demonstrate that organizational learning not only directly improves organizational effectiveness but also has a substantial impact on operational flexibility. Specifically, the coefficients for these effect whas 0.622 for organizational learning's influence on organizational effectiveness, and 0.94 for its effect on operational flexibility, both attaining statistical significance at the 0.05 level. The results complement prior studies that found a positive effect for organizational learning on organizational effectiveness (Budihardjo & Supriyadi, 2025; Evenseth et al., 2022; Tan & Olaore, 2022; Yu et al., 2021).

Similarly, the favorable effect of organizational learning on operational flexibility corresponds with earlier research (Wei et al., 2014) Tamayo. et al, (2016). A noteworthy characteristic of this study is the investigation of operational flexibility as a mediating factor, with the impact coefficient reaching 0.33 at a significance level of 0.01. This study enhances the links between the variables and highlights the role of operational flexibility as a significant mediator in the relationship between organizational learning and organizational effectiveness.

The study supports the proposed model by demonstrating that Operational Flexibility mediates the relationship between organizational learning and organizational effectiveness. With a significant effect coefficient ($\beta = 0.33$, $t = 4.43$, $P = 0.00$), this finding supports Hypothesis 1 (H1). Additionally, organizational learning was shown to directly impact organizational effectiveness ($\beta = 0.622$, $t = 8.07$, $P = 0.00$), which supports Hypothesis 2 (H2). Furthermore, organizational learning was found to have a direct and significant effect on operational flexibility ($\beta = 0.94$, $t = 134.2$, $P = 0.00$), supporting Hypothesis 3 (H3). The results presented in Table 5 and Figure 1 provide further validation for the study's hypotheses. The structural model was thoroughly analyzed using the measurement model to ensure data quality and reliability. To test the hypotheses and assess the

structural model's pathways, Smart-PLS was employed, following the approach outlined by Hair et al. (2011). Key metrics such as the coefficient of determination ($R^2$), path coefficients (β), T-statistics, effect size ($f^2$), and predictive relevance ($Q^2$) were evaluated. A bootstrapping analysis was also conducted to assess the robustness of the results. The $R^2$ values observed in the study were high, indicating that the model explains a significant amount of variance in the endogenous variables. The $Q^2$ values further support the predictive relevance of the model, with values greater than zero demonstrating the model's external validity.

## Conclusion

This study provides valuable insights into the relationships between organizational learning, operational flexibility, and organizational effectiveness within the healthcare sector in Yemen. The findings confirm that organizational learning has a direct positive impact on both operational flexibility and organizational effectiveness. Additionally, the study highlights the critical mediating role of operational flexibility in linking organizational learning to organizational effectiveness. By demonstrating that operational flexibility significantly mediates the relationship between organizational learning and organizational effectiveness, the research underscores the importance of fostering flexibility within organizations to enhance their overall performance. The results also contribute to the growing body of literature supporting the positive effects of organizational learning on key organizational outcomes. The use of Smart-PLS for analyzing the structural model provided robust evidence of the hypothesized relationships, with key metrics such as $R^2$, path coefficients, and predictive relevance further validating the model's strength. The findings emphasize the importance of developing a learning-oriented organizational culture and the need for operational flexibility to achieve sustained organizational effectiveness. In conclusion, this study not only confirms the importance of organizational learning and operational flexibility but also offers practical implications for healthcare organizations in Yemen and similar contexts, guiding them toward strategies that enhance organizational effectiveness through continuous learning and flexibility.

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