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Ethical Leadership Effect on Organizational Citizenship Behaviour by Mediation of Consistency Culture in Ethiopia e-Health Services

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Abstract

The purpose of this study is to investigate the relationship between the Ethical Leadership (EL) and Organizational Citizenship Behaviour (OCB) with the mediation of Consistency Culture in Ethiopia's e-health services. The quantitative, cross-sectional design was used and data was gathered from 390 respondents from technology-enabled hospitals. The proposed relationships were tested using a structural equation modelling (SEM). The findings indicate that the effect of EL on OCB is positive and significant, as well as the consistency culture. Another important factor affecting employee behaviour is consistency culture, as it has a significant impact on OCB. In addition, mediation analysis indicates that the effect of EL on OCB is partially mediated by consistency culture, implying that the more likely the shared values, coordination and organizational alignment between them are, the more effective the leadership is. The study is based on SET which is supplemented by two theories of Social Learning and organizational culture (OC), providing explanations as to why EL creates positive employee outcomes. The results show that in order to successfully implement an e-health, in addition to a high level of technology, an OC and an EL are necessary as well.

Keywords: *Ethical Leadership, organizational citizenship behaviour, Consistency Culture, e-health services*

1. Introduction

In the current complex healthcare systems, ethical leadership (EL) has become an important topic on the global stage, especially as digital and e-health services have proliferated. EL is a philosophy that comes from organizational behaviour and ethical theory, and focuses on the values of integrity, fairness, accountability, and moral decision-making (Hosseini & Ferreira, 2023). These attributes are essential in healthcare settings to guarantee patient safety, confidentiality of data, and adherence to professional standards. Organizational Citizenship Behaviour (OCB) by Organ, on the other hand, are voluntary acts by employees to enhance the organization's effectiveness beyond their formal responsibilities (Swazan & Youn, 2023). Trust, psychological safety, and employee engagement are promoted by EL, which helps to encourage OCB. This is very linked with SDG 3 (Good Health and Well-being) and SDG 16 (Strong Institutions) since EL promotes good governance and delivery of quality healthcare services (Abid et al., 2023).

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Empirical research in recent years has demonstrated that EL positively affects OCB by means of, e.g., trust, ethical climate, and employee commitment. The globalization of e-health services, however, has brought new challenges – such as issues surrounding data privacy, problems of technology adaptation and differing organizational practices – to the fore. Low infrastructure, poor leadership practices and low employee coordination and motivation exacerbate these problems in Ethiopia and other developing countries (Jabo & Law, 2025). Although Ethiopia has witnessed the development of e-health projects, there are still some problems regarding organizational culture (OC), values and extra-function employee behaviour in healthcare institutions (Abera et al., 2025).

Previous studies have examined the direct link between EL and OCB, but there are many areas for further research. The vast majority of studies have ignored the mediating effect of consistency culture, defined as values, agreement and coordination within an organization. Furthermore, most of the existing research has been conducted in traditional healthcare environments and in developed countries, and little research has investigated the e-health environment in Africa (Fan et al., 2024; Leslie et al., 2024; Walle et al., 2023). To fill these gaps, this study proposes to explore the mediating function of consistency culture between EL and OCB in the health services sector of Ethiopia (e-health services sector).

This study makes a significant contribution to the theoretical integration of EL and OC perspectives and to the practical application of theory to policy and practice with leadership and hospitals aiming to improve ethical practices and organizational consistency. The research question is: "What is the mediating function of consistency culture between EL and OCB in the e-health services in Ethiopia?" This study is crucial for discerning the potential of EL to translate to better employee behaviour in context of a digitally transforming healthcare system.

2. Background of Study

This study's background lies in the growing significance of EL in today's health care systems, especially in the context of e-health provision. Hospitals function in very sensitive environments where ethical decision making, patient safety and data privacy are of utmost requirement. Helped by organizational behaviour and moral theory, EL is focused on function modelling, accountabilities, integrity and fairness (Maeckelberghe et al., 2023). Meanwhile, OCB is crucial to improving healthcare performance by means of voluntary employee behaviours like cooperation, sharing and support outside of job duties. With the shift to e-healthcare comes new complexities, however, which demand not only EL, but also robust OC for effective engagement of employees (Pohl et al., 2023).

There are some practical examples worldwide which illustrate the difficulties of implementation of these ideas. In the United States, the use of EHRs enhanced efficiency but raised ethical issues concerning patient privacy, along with the amount of work, resulting in lower employee motivation and OCB. An absence of leadership and communication in NHS, UK in the midst of reform, undermined ethical climate and cooperation among employees (Veenstra et al., 2022). Likewise, e-health programs in India and Kenya have been hindered by a lack of training, resistance to change, leadership issues, and lack of interprofessional coordination among health professionals (Alqurashi, 2025). These examples show that there is much more to EL than just the delivery, which needs to be accompanied by a consistent OC, with values and practice.

The implementation of e-health services in Ethiopia has been designed to enhance access and efficiency in healthcare, but the sector suffers from several issues such as low level of capacity

in leadership, infrastructure, low empowerment of the employees and inconsistent organizational values (Mussa & Dagada, 2026). These issues make it difficult to develop OCB and effective service delivery. Furthermore, very few studies have investigated the interaction between EL and OCB in the e-health domain, through the lens of consistency culture. Thus, this study is a crucial stepping stone to understand that consistency culture through EL can improve the employee behaviour and healthcare outcome in Ethiopia.

3. Statement of Problem

The best scenario for the modern health care system, in the context of e-health services, is of a health care system that starts with a robust OC, which makes employees more active in OCB. Leaders in this type of system show integrity, fairness, transparency and accountability, building trust and shared values (Jio et al., 2025). This, in turn, encourages healthcare professionals to take proactive steps to their jobs, work together well, and participate in providing high quality patient care and efficient delivery of digital health services. A shared agreement, norms and a shared process of coordination and agreement is expected to constitute a critical lever for transforming EL into positive employee behaviour that ensures sustainable performance in healthcare and that aligns with the global development goals (Nyamboga, 2026).

There is limited empirical evidence, however, on the relationship between EL and OCB with conflicting and inconclusive results. The relationship between parent involvement and academic achievement is positive and strong, as reported by several studies, but others have indicated that the relationship is mediated or mediated by other context and organizational factors, including cultural, leadership, and trust. A few studies suggest that mediators exist between the two, such as ethical climate and organizational commitment, but research results are inconsistent and there is no consensus on the most important mediators. The inconsistency is a theoretical gap, since the current models do not sufficiently explain the relationship between EL and OCB, especially in more complex and dynamic systems such as e-health systems (Chen et al., 2022). Although it is theoretically relevant, the function of consistency culture has received little attention, and there is a lack of knowledge of how shared values and organization alignment affect employee behaviour.

Additionally, there are gaps in the literature with regard to the knowledge and context. The focus of most of the studies related to EL and OCB is in developed countries and in traditional organizational environments, which are not directly applicable to underdeveloped countries and e-healthcare environments (Guo et al., 2023). Empirical research about digitalisation in healthcare is limited, even in the context of Africa, especially Ethiopia, where digitalisation in healthcare is still going on. Certain issues of e-health services, such as technological adaptation, data governance and interdisciplinary coordination, demand a context-specific investigation (Aboye et al., 2024; Getachew et al., 2023). In the absence of such evidence, it is difficult to determine if current theories and findings can be extrapolated to the Ethiopian health care system, which has institutional structures, leadership practices and culture that are very different.

At a practical level, the health systems experience various problems, such as poor leadership capacity, poor OC, inadequate technological infrastructure, and low employee motivation in Ethiopia. All of this negatively affects the development of OCB and makes e-health initiatives less effective. In addition, there is a lack of uniformity on how to address ethical issues regarding data privacy, accountability and transparency, which adds to the challenge of leadership practices (Mussa & Dagada, 2026). This results in a lack of coordinated values and

common organizational understanding, leading to fragmentation and making it challenging to have an impact on employee behavior through EL.

The research aims to contribute to the above gaps is to investigate the mediating function of consistency culture between EL and OCB in e-health services sector in Ethiopia. The study combines EL theory and OC perspectives, offering a more comprehensive understanding of employees' behaviour in e-healthcare environments. It adds to theory as it provides a key linkage between leadership and behaviour, namely consistency culture, and to practice in the form of findings that can inform leadership practices and alignment of the organization. The results will help guide the creation of ethical governance models, leadership development initiatives, and cultural inclusion policies that will drive sustainable healthcare transformation. The study provides future research possibilities to study other mediators and moderators in similar contexts, such as technological readiness and employee trust. The ultimate goal of the study is to fill in gaps between theory and practice, as well as between theory and empirical evidence to give directions to boost the effectiveness of EL and employee engagement in the changing up of e-healthcare in Ethiopia.

4. Theoretical Foundation

First, EL Theory serves as the basis to grasp how leaders can impact the behaviour of employees through their moral conduct. 1999, Brown, Treviño, and Harrison built on this theory by stating that leaders who behave ethically with fairness and integrity help to set an example for employees. By engaging in social learning, staff members watch and emulate positive leaders, resulting in trust, accountability and commitment in the workplace (Guo et al., 2023; Jin, 2022). Within the health sector, EL plays a significant function as workers must make ethically complex choices when caring for patients and managing information. The theory is directly related to the assumption that ethical leaders can create an ethical and supportive work environment that promotes OCB.

Second, Social Exchange Theory (SET) gives an explanation of the relationship mechanism by which EL affects the employee outcomes. Blau said that social exchange theory is about giving and taking: If a leader treats employees fairly and well, they will behave in a positive way. Employees' felt obligation to return extra-function behaviour such as OCB is raised by raising their felt obligation to return OCB when leaders behave ethically (Fang et al., 2023).If leaders behave in an ethical way, employees feel that they should also return some extra-function behaviours such as OCB. Within the e-healthcare environment, which has high demands on employees and requires constant change in the technology used, EL can enhance trust and mutual commitment and motivate employees to do more than their job is laid out to do.

Third, the theory of Organization Culture (Denison) is the explanation that explains the mediating function of consistency culture. Consistency culture is the unity, consensus, coordination and integration of an organization. This theory proposes that highly uniformed, well-developed cultures in an organisation lead to predictable environments where employees know what to expect of each other and make their behaviour consistent with their organisation's purpose (Ghumiem et al., 2023). EL plays a function in fostering such a culture by lending strength to the shared ethical norms and standards. A healthcare organization's consistency culture contributes to teamwork, communication, and services provided, all of which are crucial to the support of OCB.

Fourth, Social Learning Theory (SLT), which was presented by Bandura, also explains the influence of EL on behaviour. It is a theory that states that people learn acceptable behaviour

through modelling by credible function models. Ethical leaders set examples for their employees through their actions and decisions, which employees take into their own bodies and embody (Steenbergen et al., 2023). In healthcare settings, where ethical behaviour is constantly monitored, leaders who consistently exhibit ethical behaviour have the potential to influence employees' attitudes and self-initiated behaviour, such as OCB.

Of these theories, the lens being used for this study is the theory of SET. This is because it best accounts for the underlying mechanism, as it is important to understand how EL, consistency culture and OCB are related, in a way that involves reciprocal relationships. Great consistency culture fosters understanding and coordination among employees, which then leads to a social climate in which everyone is bound to act in a discretionary and positive way in response.

5. Empirical Literature Review

Ethical Leadership and OCB

EL is strongly associated with OCB, representing employees' extra-function behaviours. Research in a variety of fields including healthcare, education, and public institutions has been investigated and consistently found that there is a positive link between EL and OCB (Pohl et al., 2023). Ethical leaders engender trust, transparency and respect, which in turn encourages employees to respond with cooperative and helping behaviours (Guo et al., 2023; Jio et al., 2025). Based on social exchange and social learning theories, workers follow the moral models of their ethical leaders and bear the moral responsibility to perform beyond their job requirements (Hosseini & Ferreira, 2023). But there are differences in cultural and institutional contexts, especially in developing countries with limited evidence (Mseti et al., 2024).

H_1: EL is positively correlated and statistically significant to OCB.

Ethical Leadership and Consistency Culture

Consistency culture is the shared values, agreement and coordinated organizational systems that provide stability and integration (Imran, 2021). Empirical studies indicate that EL plays an important function in fostering such a culture through its function in strengthening moral norms, shaping behaviours and supporting fair decision making (Guo et al., 2023; Hyusein & Eyüpoğlu, 2022). Ethical leaders set function models for employees, helping to develop their knowledge of acceptable norms and to build value congruence in the organization. This brings harmony and harmony in yourself (Gloor et al., 2022). Though crucial, very few empirical studies have explicitly explored the connection between EL and consistency culture particularly in developing and low-resource countries (Shahab et al., 2021).

H_2: EL positively and significantly impacts consistency culture.

Consistency Culture and OCB

Fostering a strong consistency culture would contribute to the employees' sense of belonging, cooperation, and sharing responsibility, which would positively affect OCB (Fernandes et al., 2023). Empirical research has found that employee's sense of alignment with organizational values and systems can predict voluntary behaviours like helping others and supporting organizational objectives (Han & Fan, 2025). Consistency culture helps minimise the guesswork and enhances trust among employees, encouraging them to work beyond their job description (Schneider et al., 2025). Consistency culture and OCB, however, have not yet been

studied extensively in the context of developing countries (Fernandes et al., 2023; Gopalakrishnan & Abu, 2023).

H_3: The findings show that there is positive and significant relationship between consistency culture and OCB.

Consistency culture as a mediator

Empirical research in recent years shows the significance of mediating variables in the link between EL and OCB (Abuowda et al., 2024). One of the main pathways identified for EL to impact employee behaviour is consistency culture (Asif et al., 2023; Guo et al., 2023). Ethical leaders develop a value base, trust, and agreed upon practices that provide an atmosphere for OCB (Aloustani et al., 2020; Jio et al., 2025). Therefore, EL contributes indirectly to OCB via the establishment of a stable OC (Ete et al., 2021). However, there is a lack of empirical studies that have focused specifically on consistency culture as a mediator, creating a gap in the literature (Hanaysha et al., 2022). Thus, the consistency culture becomes a mediating factor (Abuowda et al., 2024; Dai et al., 2022; Servaes et al., 2022).

H4: Consistency culture positively mediates the relationship between EL and OCB.

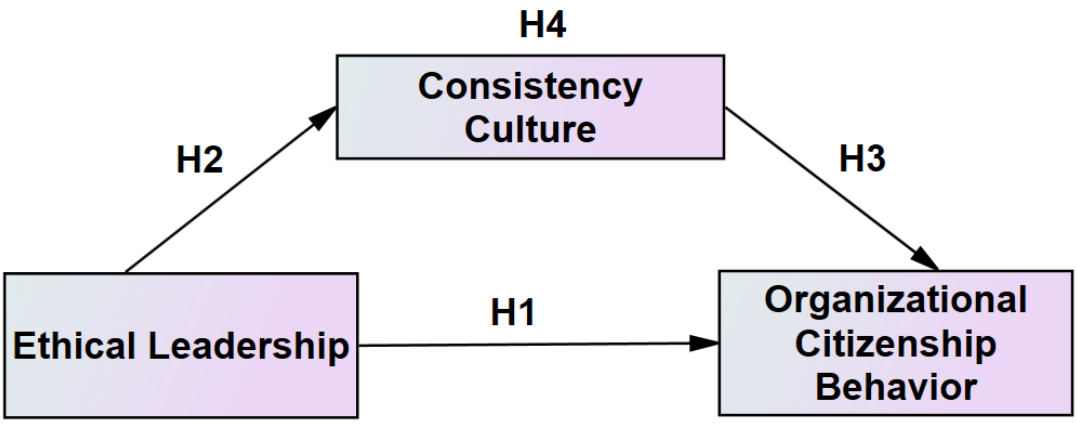

Figure 1. Conceptual framework

(Source: Author's own development)

6. Research Methodology

The study is quantitative, and has a cross-sectional research design, which is used to examine the relationship between EL, consistency culture and OCB. A deductive method is used to evaluate hypotheses that are stimulated and drawn from existing theories. The design is appropriate as it enables the researcher to statistically assess relationships among variables at a single point in time. For this purpose, the study also aims to achieve strong and extensive analysis, so it is necessary to use a technique of Structural Equation Modelling (SEM) for simultaneous analysis of both models' measurement and structural.

The target population are employees in technology-enabled and service-based organizations, especially those that are likely to interact with decision making systems like digital platforms and automated processes. A total sample of 390 was obtained, the required sample size for

SEM analysis and a sufficient level of statistical power for the analysis. The study uses a purposive sampling method of sampling, with the participants having experienced the organizational systems of which the study examines. This helps to make the results more relevant and accurate when they are presented in context, but it does not necessarily increase the generalizability.

Primary data were gathered using a structured questionnaire via a questionnaire that was both online and offline. A five-point Likert-scale was used in the design of the questionnaire. The participants were told of the purpose of the study and that their responses would be anonymous and confidential to reduce response bias and make it easier for them to respond honestly.

Adapted scales of previous validated studies were used to measure the constructs in this study. EL was measured by the items that were related to the fairness, integrity and ethical guidance. For consistency culture, indicators of shared values, agreement and coordination within the organization were used. The evaluation of OCB was based on employees' proactive behaviours that promote the fairness and ethical use. The scales have been slightly adapted to make them more suitable in the context but not to change the meaning of the original scales.

The process of data analysis was carried out in several stages, using SPSS and AMOS software. To determine the distribution of data first descriptive statistics were conducted and followed by normality test. Cronbach's alpha was computed for the reliability of the instrument. Then Factor Confirmatory Analysis (CFA) was performed to check the measurement model. The indirect effects of consistency culture were investigated by applying the bootstrapping technique (5,000 resamples) in order to establish the significance of indirect effects. Common method bias was dealt with using both procedural and statistical approaches. During the procedure, the anonymity and clear communication was done with the respondents. Harman's single factor test was performed statistically and the outcomes suggested that there was no single factor contributing to majority of the variance, which was an indication that the common method bias was not a significant problem.

A proper ethical approach was adopted throughout the study. All respondents gave informed consent and were voluntary participants. Participants' confidentiality and privacy were protected, and data collected were only used for academic research. The overall method guarantees an examination of the proposed nexus between EL, consistency culture with OCB to be rigorous, reliable and valid.

7. Results

The demographic profile of the respondents first assessed to get the characteristic of the respondents. As shown in Table 1, the age profile of the sample is characterized by a high proportion of young to middle-aged workers, with median ages ranging from 30 to 40 years. The majority of the respondents were in the middle age group of 20-40 years, indicating an active workforce that can adapt and respond to organizational processes and leadership influences. The relatively equal gender distribution goes for representativeness, and the high percentage of the respondents with bachelor's and master's degrees suggests that respondents may be able to understand and respond accurately to constructs like EL and OC. This increases the validity of findings in the broader context of similar professions and services.

Table 1: Demographic Profile

Variable	Category	Frequency	Percentage (%)
Gender	Male	228	58.5
	Female	162	41.5
Age	20–30 years	142	36.4
	31–40 years	158	40.5
	41–50 years	70	17.9
	Above 50	20	5.1
Education	Bachelor's	176	45.1
	Master's	168	43.1
	PhD	46	11.8
Experience	<5 years	132	33.8
	5–10 years	154	39.5
	>10 years	104	26.7

Source: *Survey, 2025*

Table 2: Descriptive Statistics and Normality

Construct	Mean	SD	Skewness	Kurtosis
EL	3.87	0.64	-0.42	0.31
Consistency Culture	3.79	0.68	-0.35	0.28
0CB	3.91	0.61	-0.47	0.36

Source: *Survey, 2025*

As indicated in the descriptive statistics reported in Table 2, the general perceptions of the respondents on EL, consistency culture and OCB are positive as the mean values are higher than 3.5. The skewness and kurtosis values are within the acceptable range, thus indicating that the data is normally distributed. This means that the data meet the assumptions of more advanced multivariate analysis, especially SEM and therefore subsequent statistical inferences are valid.

Table 3: Reliability and Convergent Validity

Construct	Items	Cronbach's Alpha	CR	AVE
EL	6	0.91	0.92	0.66
Consistency Culture	5	0.89	0.90	0.64
OCB	6	0.92	0.93	0.69

Source: *Survey, 2025*

Table 3 shows that the reliability and convergent validity are satisfactory, which indicates that all the constructs have high levels of internal consistency. Cronbach's alpha and Composite Reliability values are greater than .70 (the recommended cut-off), which shows that the items used to measure each construct are stable and consistent. Moreover, AVE scores higher than 0.50 indicate that there is a significant amount of variance in the measures of each construct. This is an indication of the reliability and validity of the constructs for further structural analysis.

Table 4: CFA Results

Construct	Item	Loading	Cronbach's α	CR	AVE	AVE²
EL	EL1	0.81	0.91	0.92	0.66	0.44
	EL2	0.84				
	EL3	0.86				
	EL4	0.79				
	EL5	0.83				
	EL6	0.85				
Consistency Culture	CC1	0.80	0.89	0.90	0.64	0.41
	CC2	0.82				
	CC3	0.85				
	CC4	0.78				
	CC5	0.81				
OCB	OCB1	0.84	0.92	0.93	0.69	0.48
	OCB2	0.87				
	OCB3	0.86				
	OCB4	0.82				
	OCB5	0.88				
	OCB6	0.85				

Source: *Survey, 2025*

The findings from the CFA indicated in Table 4 further support the validity of the measurement model. Except for one of the items in the observed scale (Table 1), all items have high factor loadings ranging from a minimum of 0.70. The high loadings on all the items are consistent indicating good consistency with the theoretical expectations. Moreover, AVE values indicate that the constructs have enough variance, which further enhances the convergent validity and robustness of the measurement system.

Table 5: Discriminant Validity (Fornell-Larcker Criterion)

Construct	EL	CC	OCB
EL	**0.81**		
Consistency Culture	0.74	**0.80**	
OCB	0.65	0.67	**0.83**

Source: *Survey, 2025*

Table 5 shows that there is a discriminant validity assessment of each construct, which is empirically distinct. Any of the constructs in this study had a square root value that was higher than the inter-construct correlations, indicating that EL, consistency culture and OCB are separate conceptual domains. This helps avoid issues of multicollinearity, as well as for inflated relationships in the structural model caused by constructs being similar.

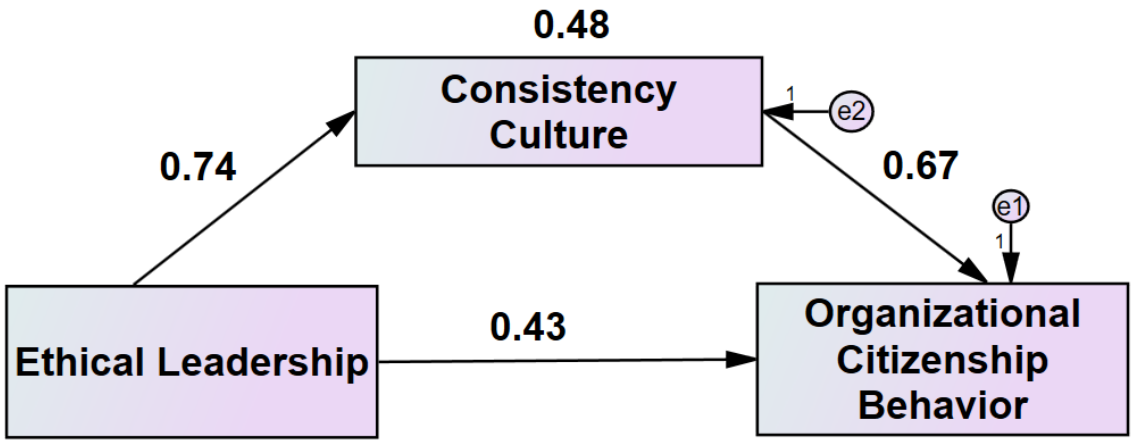

Figure 2. Structure equation model

Table 6: Model Fit Indices

Category	Fit Index	Recommended Threshold	Model Value	Decision
Parsimonious Fit	χ^2/df	< 3.00	2.41	Good Fit
Incremental Fit	CFI	≥ 0.90	0.95	Excellent Fit
	TLI	≥ 0.90	0.94	Good Fit
Absolute Fit	RMSEA	≤ 0.08	0.061	Good Fit
	SRMR	≤ 0.08	0.048	Excellent Fit

Source: *Survey, 2025*

The fit indices obtained in the figure 2 with Table 6 show that the model fits well with the data obtained. The χ^2/df value is within range indicating a good level of parsimony of the model. The incremental fit indices are above recommended levels, showing good comparative fit, RMSEA values are below recommended levels, indicating that there are not many approximation errors or residuals, and SRMR values are below recommended levels indicating that the approximation is adequate. All these indices together validate the theoretical model as both statistically and practically valid.

Table 7: Structural Path Model Coefficients

Hypothesis	Path	B	t-value	p-value	Result
H1	EL → OCB	0.43	6.87	***	Supported
H2	EL → CC	0.74	11.92	***	Supported
H3	CC → OCB	0.67	10.45	***	Supported

Source: *Survey, 2025*

Table 7 reports the structural relationships that are well supported by empirical evidence and support the hypotheses. However, OCB is significantly influenced by EL, thus, leaders who have the characteristics of fairness, integrity, and ethical behaviour have a direct effect in the form of motivation to employees to perform extra-function behaviour. Also, consistency culture is found to have a strong positive relationship with EL, meaning that consistency culture is an important and integral part of the leadership. This is because consistency culture has a significant impact on OCB, which further emphasizes the function of consistency culture in promoting positive employee behaviour in the organization.

Table 8: Mediation Bootstrapping Analysis

Effect Type	Path	β	Boot SE	95% CI	Result
Direct	EL → OCB	0.43	0.06	[0.31, 0.54]	Significant
Indirect	EL → CC → OCB	0.50	0.05	[0.39, 0.61]	Significant
Total Effect	EL → OCB	0.93	—	—	Partial Mediation

Source: *Survey, 2025*

Table 8 shows that the mediation model shows that consistency culture partially explains the link between EL and OCB. The important indirect effect suggests that the impact of EL on OCB not only goes directly from EL to OCB but it also goes indirectly through the development of a cohesive and value-driven OC. Partial mediation indicates that EL has a direct effect on employee behaviour, but that it has a significant indirect effect when the consistency culture is high. This highlights the need for organisations to combine EL with cultural development strategies and practitioners to ensure the maximum positive behavioural outcomes.

8. Discussion

This study has shown that all the proposed hypotheses have been supported by the findings and correspond to the theories. The results indicate that there is significant positive effect for H_1 (EL to OCB) ($\beta = 0.43$, $p < 0.001$) as shown in Table 7. Therefore, if a leader acts in an ethical manner, employees are more likely to do extra function behaviours like helping other employees and supporting the organization. This is backed up by SET – an understanding that employees will give back in the form of positive behaviours, when they feel they are being dealt fairly and ethically. It is also reinforced by SLT in which staff learn and model the correct way to behave. For H_2 (EL to Consistency Culture), the results reveal that there is a strong positive correlation ($\beta = 0.74$, $P < 0.001$). This indicates that ethical leaders are important in establishing joint values, consensus and coordination among members of the organization. OC Theory holds that leaders create culture by fostering ethical practices and standards. This is particularly relevant in an e-health context where coordination and values clarity are required.

The findings also reveal that for H_3 (Consistency Culture to OCB), there is a significant positive effect ($\beta = 0.67$, $p < 0.001$). This will help to ensure that employees are more likely to demonstrate positive behaviours outside of their functions when operating within a strong and consistent culture. A cohesive culture helps eliminate confusion, fosters trust and teamwork that leads to increased OCB. This will help both OC Theory and SET. Table 8 shows that the consistency culture partially mediates the relationship between EL and OCB for H_4 (Mediation Effect), and the results are confirmed. The indirect effect ($\beta = 0.50$) is significant together with the direct effect, that is, the effect is mediated by culture. This demonstrates that leaders need to also develop a robust OC. This relationship is also true of the model in figure 2. Overall, the results indicated that EL has a direct effect on employee behaviour, and that the effect was greater when paired with an OC that was consistent.

9. Conclusion

The present study investigated the impact of EL on OCB and the mediating effect of consistency culture in the Ethiopia's e-health services. Results indicate that EL has a direct and indirect positive impact on OCB. Those leaders who set a good example of fairness, integrity and accountability ensure that staff feel empowered to continue to do more than do what they

were hired to do and enable them to make positive contributions to the performance of the organisation. The findings also indicate that EL has a significant impact in fostering consistency culture as a system of values, coordination and agreement in the organization. Likewise, consistency culture plays a substantial function in the development of OCB as it shows that a consistent and congruent organisation will foster internal willingness and commitment to participate in cooperative and voluntary actions. As revealed by the mediation analysis, consistency culture is a partial mediator between EL and OCB, which further signifies the significance of consistency culture as a key mechanism through which EL becomes OCB. In theory, this study adds by combining SET, SLT and OC Theory, but primarily using SET as an explanation. It builds upon existing literature by showing the significance of consistency culture in the discussion of how EL impacts employee outcomes, especially in a developing country and e-health context. From a practical perspective, the results indicate that organizations, particularly those in the health care field, should include EL practices as well as boost OC. Leadership development and ethics training, along with cultural alignment initiatives, are important areas of focus for policymakers and managers to enhance employee engagement and service quality. To conclude, the study points out that EL is not a panacea alone, but works best in conjunction with a powerful and consistent OC, which in turn leads to better OCB and better organizational outcomes.

10. Implications of the study

The results of this study underscore the implications for the development and management of e-health services, especially in developing countries, such as Ethiopia. First, the requirement of EL implies that in digital health contexts, healthcare managers must strongly consider ethical decision-making, transparency and accountability. The use of sensitive patient information and automated processes in E-health systems raises ethical concerns related to data misuse, privacy breaches, and decision-making biases. By fostering trust and responsible use of digital technologies among healthcare professionals, ethical leadership can enhance the quality of services offered and promote patient safety.

Second, a high level of consistency culture in EL brings up the requirement of coordinating the practices and defining the values and guidelines of e-health systems. In the many e-health contexts, ambiguities about functions and the lack of coordination may create inefficiencies and delay acceptance of technology. Leaders can use a consistent OC to ensure employees' behaviour matches the organization's objectives, facilitate communication between employees, and ensure that the system is integrated with other departments. Third, the positive impact of consistency culture on OCB suggests that hospitals should strive to foster a positive and cooperative work culture. Cooperation, information exchange, and mutual aid are crucial in the context of e-health services to ensure efficient operation of the digital platforms and provide good-quality healthcare. When a culture is strong, employees will push beyond their job description to help other employees learn new technologies and to make service delivery run smoothly.

Fourth, mediation effect means that within a strong culture, EL is more effective. Therefore, aside from training leaders in ethics, policy makers and healthcare administrators should also make investments in OC development programs, including value-based training, team building exercises, and standardizing procedures for e-healthcare operations. Last, these results indicate that an integrated approach of ethical governance, leadership development and cultural alignment is needed to enhance e-health services. This approach empowers hospitals to

significantly improve employee engagement, promote ethical technology interaction, and contribute to better healthcare results in the evolving digital landscape.

11. Recommendations

The results of this study strongly indicate that the implementation of EL in the context of consistency culture in the hospitals plays a crucial function in determining the future of e-health in Ethiopia. First, given the critical function of EL both in consistency culture and OCB, the future e-health systems success will depend heavily on ethical and responsible leadership practices. Leaders will have to ensure the transparency, fairness, and accountability of handling patient data and digital systems, as e-healthcare continues to grow. This will help to establish trust and commitment of employees and patients to e-health care services, which is necessary for the acceptance and sustainability of e-health services.

Second, the study makes it clear that consistency culture is crucial to a successful implementation of e-health. Coordination, values and organizational practices that are strong are needed for the future e-health systems in Ethiopia. If there is no culture in place, digital health programmes can experience low levels of collaboration, technology adoption challenges, and inefficiencies. Hence, health organizations need to enhance their internal alignment around digital transformation. Thirdly, it was found that consistency culture was highly related to OCB, suggesting the future of the e-health will rely heavily on the attitude of the employees to go beyond their jobs. In e-healthcare settings, workers must adjust to fresh technologies, assist others, and help to enhance the system. A strong OC will foster such behaviours, which will facilitate smooth implementation and operation of the e-health systems.

Fourth, the mediation results specify that EL is more effective with a robust culture. Fourthly, the results of the mediation demonstrate that EL is enhanced by a robust culture. This indicates that the development of leaders and the transformation of culture need to be added to the future e-health strategies, beside the focus on technology. Ethical decision making, team work and values of the organization should be taught through training programs. Lastly, the study recommends that to realize e-health in Ethiopia, a combined effort of ethical governance, leadership and cultural uniformity is needed. Together, these elements can help e-health systems be more efficient, more effective in providing health care services and more engaged with employees. In general, this study suggests that e-health in Ethiopia has a future beyond just technology, it is also organizational, with the leadership and culture at the centre.

List of Abbreviations

AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CR	Composite Reliability
EHR	Electronic Health Records
EL	Ethical Leadership
OCB	Organizational Citizenship Behavior
OC	Organizational Culture
RMSEA	Root Mean Square Error of Approximation
SDG	Sustainable Development Goals
SEM	Structural Equation Modeling

SET	Social Exchange Theory
SLT	Social Learning Theory
SRMR	Standardized Root Mean Square Residual
SPSS	Statistical Package for Social Sciences
TLI	Tucker-Lewis Index

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Author's Contributions

Wako Jio contributed to the conceptualization and research design, conducted the literature review and developed the theoretical framework, coordinated and supervised data collection, and drafted the initial manuscript. Dr. Zerihun Kinde Alemu developed the research methodology, designed and validated the questionnaire, performed data analysis using SPSS and AMOS software, interpreted the statistical results, and reviewed and edited the methodology and results sections. Shashi Kant refined the theoretical framework, provided oversight for SEM modeling and mediation analysis, offered critical review and intellectual input, edited the manuscript, and handled correspondence and submission management. All authors contributed equally to the final manuscript and approved the submitted version.

Statements and Declarations

Consent to participate

Informed consent was obtained from all individual participants included in this study. Before participation, all respondents were informed about the purpose of the research, the voluntary nature of their involvement, and their right to withdraw at any time without penalty. Participants were assured of complete anonymity and confidentiality of their responses. Written informed consent was obtained from all participants prior to data collection. The study was conducted in accordance with ethical standards and approved by the relevant institutional review boards.

Consent for Publication

The authors confirm that this manuscript is original work, has not been published elsewhere, and is not under consideration by any other journal. All authors have reviewed and approved the final version and consent to its publication. The study contains no identifiable personal data, as all responses are aggregated and anonymized. Participants were informed that research findings would be published in academic journals with their identities protected. Upon

acceptance, the authors transfer publication rights to the journal while retaining the right to use the material for academic purposes.

Declaration of Conflicting Interests

The authors declare no conflict of interest regarding the study, authorship, and publication of this article.

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The data that support the findings of this study are available from the corresponding author upon reasonable request.

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