

THE MODERATED-MEDIATED EFFECT OF REGULATORY FRAMEWORK AND INSTITUTIONAL CULTURE ON THE RELATIONSHIP BETWEEN TRANSFORMATIONAL LEADERSHIP AND ORGANIZATIONAL PERFORMANCE OF PRIVATE FAITH-BASED HIGHER LEARNING INSTITUTIONS IN KENYA

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ABSTRACT

This study evaluated the moderated-mediated effect of regulatory framework and institutional culture on the relationship between transformational leadership and organizational performance of private faith-based higher learning institutions in Kenya. Although transformational leadership, regulatory compliance, and institutional culture have each been studied as separate influences on organizational performance, their combined moderated-mediated effect – in which regulatory framework and institutional culture jointly condition and transmit the effect of leadership on performance – has received less empirical attention. Data were collected from 312 respondents (an 85.24% response rate) in private faith-based higher learning institutions and analyzed using hierarchical multiple regression. The hypothesis tested stated that there is no significant moderated-mediated effect of regulatory framework and institutional culture on the relationship between transformational leadership and organizational performance. Diagnostic tests confirmed the data satisfied the assumptions of homoscedasticity, independence of residuals, normality, and the absence of problematic multicollinearity. The first model, incorporating transformational leadership, regulatory framework, institutional culture, and their combined index, explained 76.8% of the variance in organizational performance ($R^2 = .768$, $F = 298.097$, $p < .001$), with all four predictors contributing significantly. Introducing the moderated-mediated index in a second model significantly improved the model, raising R^2 to .811 (F change = 82.804, $p < .001$). The null hypothesis was rejected, and the study concludes that regulatory framework and institutional culture jointly and significantly moderate and mediate the relationship between transformational leadership and organizational performance. The study recommends that private faith-based higher learning institutions align their internal culture with the demands of the regulatory environment, so that leadership, culture, and compliance work together to strengthen organizational performance.

Keywords: Transformational leadership; regulatory framework; institutional culture; moderated mediation; organizational performance; faith-based higher education; Kenya

1.0 INTRODUCTION

1.1 Background of the Study

Private faith-based higher learning institutions in Kenya operate within a regulatory environment set by national higher education authorities, while also being shaped internally by institutional cultures rooted in their sponsoring faith traditions. These two forces – external regulation and internal culture – do not operate in separate compartments of institutional life; rather, they intersect continuously as leaders attempt to translate their vision into organizational performance within a compliance-bound operating environment. Prior analyses have shown that transformational leadership, regulatory framework, and institutional culture are each significantly associated with organizational performance when considered individually. What remains less well understood is how these forces work together: whether regulatory framework moderates the effect of transformational leadership, whether institutional culture mediates it, and whether these two effects combine into a joint moderated-mediated pathway that shapes organizational performance more fully than any single mechanism alone.

The concept of moderated mediation is particularly well suited to this institutional setting. A moderated-mediation model recognizes that a mediating variable's ability to transmit the effect of an independent variable can itself depend on the level of a third, moderating variable. In the present context, this implies that the extent to which institutional culture channels the effect of transformational leadership onto organizational performance may itself depend on the regulatory environment within which that institutional culture operates – institutions operating under a more supportive or better-understood regulatory framework may be better positioned to convert cultural strength into performance gains than those navigating a more burdensome or ambiguous regulatory environment.

1.2 Statement of the Problem

Private faith-based higher learning institutions in Kenya must simultaneously satisfy the expectations of higher education regulators, the doctrinal commitments of their sponsoring bodies, and the performance expectations of students, staff, and other stakeholders. Leaders in this sector often assume that strong transformational leadership will, on its own, be sufficient to drive institutional performance, and that regulatory compliance and institutional culture are secondary, largely administrative concerns. Yet if regulatory framework and institutional culture in fact jointly moderate and mediate the leadership-performance relationship, then treating them as secondary concerns risks leaving a substantial share of achievable organizational performance unrealized.

Without empirical evidence establishing whether, and to what extent, regulatory framework and institutional culture combine to shape the leadership-performance relationship in this specific sector, institutional leaders and policymakers lack a clear basis for prioritizing investment across these three levers. This study was designed to address that gap by empirically testing the joint moderated-mediated effect of regulatory framework and institutional culture in private faith-based higher learning institutions in Kenya.

1.3 Objective of the Study

The objective of this study was to evaluate the moderated-mediated effect of regulatory policy and institutional culture on the relationship between transformational leadership and organizational performance of private faith-based higher learning institutions in Kenya. The hypothesis tested was that there is no significant moderated-mediated effect of regulatory

framework and institutional culture on the relationship between transformational leadership and organizational performance of private faith-based higher learning institutions in Kenya.

1.4 Significance of the Study

The findings of this study are expected to benefit several audiences. Institutional leaders stand to gain a clearer sense of how much of their institution's performance is shaped by the joint operation of regulatory compliance and institutional culture, rather than by leadership behavior alone, informing how they allocate scarce managerial attention. Governing boards and sponsors of faith-based institutions can use the findings to guide oversight priorities, ensuring that regulatory and cultural considerations receive appropriate weight alongside leadership evaluation. Higher education regulators may find the results useful in understanding how their regulatory frameworks interact with institutional culture to shape performance outcomes across the sector they oversee. Finally, the study contributes to the academic literature on moderated mediation in organizational leadership research, an analytical approach that remains comparatively underused in studies of higher education institutions in developing-country contexts.

1.5 Scope of the Study

The study was confined to private faith-based higher learning institutions in Kenya, drawing on data from 312 respondents, predominantly senior staff and administrators well placed to comment on questions of leadership, regulatory compliance, and institutional culture. The analysis focused specifically on the combined moderated-mediated effect of regulatory framework and institutional culture, building on separate analyses of the direct effect of transformational leadership, the standalone moderating effect of regulatory framework, and the standalone mediating effect of institutional culture, which were addressed as part of the broader parent study.

1.6 Definition of Key Terms

Table A. Definition of Key Terms

Term	Operational definition
Transformational leadership	A leadership approach characterized by idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation, aimed at inspiring followers toward a shared institutional vision.
Regulatory framework	The set of national laws, policies, and oversight mechanisms governing the operation of higher learning institutions in Kenya, and institutional structures for complying with them.
Institutional culture	The shared values, beliefs, assumptions, and practices that characterize a private faith-based higher learning institution and shape how staff interpret their roles and make decisions.
Organizational performance	The extent to which an institution achieves its academic, financial, and developmental objectives, including graduate outcomes, research output, and institutional growth.

Term	Operational definition
Moderated mediation	A statistical relationship in which the indirect (mediated) effect of an independent variable on a dependent variable through a mediator varies depending on the level of a moderating variable.

Note: The author developed these operational definitions to guide the interpretation of the constructs measured in this study.

2.0 LITERATURE REVIEW

2.1 Theoretical Review

This study is anchored on transformational leadership theory, originally advanced by Burns (1978) and later extended by Bass (1985) and Bass and Avolio (1994), which holds that leaders move followers beyond immediate self-interest through idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The tenets of idealized influence and inspirational motivation, in particular, are oriented towards the significance of values, mission, and purpose, which links conceptually to both the compliance orientation captured by regulatory framework and the values orientation captured by institutional culture.

The study also draws on the statistical and conceptual logic of moderated mediation developed by Preacher, Rucker, and Hayes (2007), who formalized methods for testing models in which an indirect effect through a mediator is itself conditional on a moderating variable. Applied to this study, this framework treats regulatory framework as a variable that can both directly moderate the transformational leadership-performance relationship, and interact with institutional culture in shaping the strength of the mediated pathway between leadership and performance. This dual role is what distinguishes a moderated-mediation model from a simple combination of separate moderation and mediation tests: the two mechanisms are modeled as operating jointly rather than in isolation.

Institutional theory, associated with the work of DiMaggio and Powell (1983), provides a complementary lens for understanding the role of regulatory framework specifically. Institutional theory holds that organizations operating within a shared regulatory or professional field tend to become more similar to one another over time – a process termed isomorphism – as they respond to common regulatory pressures, professional norms, and expectations of legitimacy. Applied to this study, institutional theory suggests that private faith-based higher learning institutions may adapt their internal culture, at least in part, in response to the demands of the regulatory framework governing the sector, providing a theoretical basis for expecting that regulatory framework and institutional culture are not independent forces but are likely to interact in shaping organizational outcomes.

2.2 Conceptual Framework

A moderated-mediation model recognizes that these two variables can play distinct roles simultaneously: regulatory framework can alter the strength of the relationship between transformational leadership and organizational performance (a moderating role), while institutional culture can help explain the mechanism by which that relationship occurs (a

mediating role). The overall interaction of transformational leadership and regulatory framework in predicting organizational performance reflects the mediation of a moderator effect, while the extent to which the mediated relationship differs across levels of regulatory framework reflects moderation of an indirect effect. In the conceptual model guiding this study, transformational leadership is the independent variable, organizational performance is the dependent variable, institutional culture is the mediating variable, and regulatory framework is the moderating variable, with their combination captured through a composite moderated-mediated index.

2.3 Contextual Overview of Private Faith-Based Higher Education in Kenya

Kenya's higher education sector has expanded considerably in recent decades, with private institutions – many of them faith-sponsored – playing an increasingly prominent role alongside public universities and colleges. These institutions operate under the oversight of national higher education regulatory authorities, which set requirements around accreditation, quality assurance, staffing, and reporting. At the same time, private faith-based institutions retain a distinct internal culture rooted in the doctrinal and moral commitments of their sponsoring religious bodies. This dual accountability – to regulatory authorities on one hand, and to sponsoring religious bodies on the other – creates fertile ground for the kind of moderated-mediated dynamic examined in this study, in which regulatory compliance and institutional culture jointly shape how leadership translates into performance.

2.4 Regulatory Framework as a Moderator

Regulatory framework is theorized to moderate the leadership-performance relationship by altering the conditions under which leadership behavior can be translated into performance outcomes. In a more predictable and well-understood regulatory environment, transformational leaders may find it easier to pursue ambitious institutional visions, since the boundaries of acceptable institutional action are clear and compliance costs are more predictable. Conversely, in a more burdensome, unclear, or rapidly changing regulatory environment, even highly transformational leaders may find their vision constrained by the need to divert institutional attention and resources toward regulatory compliance, potentially weakening the strength of the leadership-performance relationship. This suggests that the strength of regulatory framework's moderating effect is itself an empirical question, addressed directly in section 4 of this manuscript.

2.5 Institutional Culture as a Mediator within a Regulated Environment

Within a regulated sector such as higher education, institutional culture does not develop in a vacuum; it develops partly in response to, and partly independently of, the regulatory framework within which an institution operates. Where institutional culture and regulatory framework are well aligned – for instance, where an institution's values around accountability and continuous improvement happen to closely mirror the expectations embedded in national quality assurance standards – the mediating effect of institutional culture on the leadership-performance relationship may be reinforced rather than constrained by regulation. Where institutional culture and regulatory framework are in tension, the mediating pathway may instead be weakened, as staff attention and institutional energy are divided between culturally

driven priorities and externally imposed compliance requirements. This possibility is precisely what a moderated-mediation model is designed to test.

2.6 Summary and Research Gap

While the individual moderating role of regulatory framework and the individual mediating role of institutional culture have each received some attention in the broader leadership and organizational literature, few studies have examined how these two mechanisms combine within a single model, and fewer still have done so within the specific context of private, faith-based higher learning institutions operating under a national regulatory framework. This study addresses that gap by empirically testing a combined moderated-mediated effect within this specific institutional and national context.

3.0 METHODOLOGY

3.1 Research Design

The study adopted a quantitative, cross-sectional survey design, appropriate for testing hypothesized relationships among variables measured at a single point in time across a sample of institutions. This design allowed the study to collect standardized data from a relatively large number of respondents across multiple institutions, supporting the statistical testing of the moderated-mediation hypothesis through hierarchical regression analysis.

3.2 Target Population and Response Rate

The study targeted senior respondents in private faith-based higher learning institutions in Kenya, considered well placed to comment on questions of leadership, regulatory compliance, and institutional culture within their institutions. Of 366 questionnaires administered, 312 were returned and usable, giving a response rate of 85.24%, which is considered adequate for social science research (Steadman et al., 2019).

Table 1. Response Rate

Questionnaires	Frequency	Percentage
Returned	312	85.24%
Not returned	54	14.76%
Total	366	100%

3.3 Data Collection Instrument

Data were collected using a structured questionnaire administered across the sampled institutions. The questionnaire captured respondent demographic information alongside items measuring transformational leadership, regulatory framework, institutional culture, and organizational performance, using response formats suited to subsequent quantitative analysis.

3.4 Diagnostic Tests

Diagnostic tests were conducted prior to hypothesis testing to confirm that the assumptions underlying ordinary least squares regression were satisfied. A Breusch-Pagan/Cook-Weisberg test indicated the absence of statistically significant heteroscedasticity ($\chi^2(1) = 442.01, p = .245$). A Durbin-Watson statistic of 2.100 fell within the generally accepted range of 1.5 to 2.5, indicating the absence of autocorrelation in the residuals. A Kolmogorov-Smirnov test showed significance values above .05 for transformational leadership, regulatory framework, institutional culture, and the moderated-mediated effect, supporting an assumption of normality. Collinearity diagnostics showed tolerance values of .360 to .498 and variance inflation factors of 2.009 to 2.774 across the four predictor variables, comfortably within the thresholds conventionally used to rule out problematic multicollinearity (tolerance > 0.10 and VIF < 10).

Table 1a. Multicollinearity Diagnostics

Predictor	Tolerance	VIF
x1 – Transformational leadership	.498	2.009
x2 – Regulatory framework	.360	2.774
x3 – Institutional culture	.420	2.383
x4 – Moderated-mediated index	.391	2.559

3.5 Analytical Model

The moderated-mediated effect was analyzed using the following model, which simultaneously captures the moderating role of regulatory framework and the mediating role of institutional culture:

$$P = \beta_0 + c'_1 TL + c'_2 RF + c'_3 TL \cdot RF + b_1 IC + b_2 RF \cdot IC + h \cdot TL \cdot IC + j \cdot TL \cdot RF \cdot IC + e \dots\dots\dots (1)$$

Where P = Organizational Performance; TL = Transformational Leadership; RF = Regulatory Framework; IC = Institutional Culture; β_0 = intercept; $c'_1, c'_2, c'_3, b_1, b_2, h, j$ = coefficients; and e = error term. The empirical test was operationalized through a two-model hierarchical regression: Model 1 regressed organizational performance on transformational leadership, regulatory framework, institutional culture, and a composite moderated-mediated index; Model 2 then examined the incremental effect of introducing the moderated-mediated index over and above the first three predictors.

3.6 Operationalization of Variables

Table 1b. Operationalization of Study Variables

Variable	Type	Operational measure
Transformational leadership (TL)	Independent	Composite index of idealized influence, individualized consideration, inspirational motivation, and intellectual stimulation (x1)

Variable	Type	Operational measure
Regulatory framework (RF)	Moderating	Composite index of respondent perceptions of regulatory compliance structures and processes (x2)
Institutional culture (IC)	Mediating	Composite index of shared values, norms, and practices reported by respondents (x3)
Moderated-mediated index	Interaction term	Composite index capturing the joint interaction of regulatory framework and institutional culture with transformational leadership (x4)
Organizational performance (P)	Dependent	Composite index of institutional performance indicators, including graduate outcomes, research output, and institutional growth (y)

3.7 Data Analysis Procedure

Quantitative data collected through the questionnaire were coded, cleaned, and analyzed using statistical software. Descriptive statistics were used to summarize the demographic profile of respondents. Pearson correlation analysis was used to examine associations between the study variables prior to regression analysis, consistent with the recommendation that correlation analysis should precede more in-depth inferential techniques such as regression (Latunde, 2017). Hierarchical multiple regression was then used to test the moderated-mediation hypothesis. All hypotheses were tested at the conventional 0.05 level of significance.

3.8 Ethical Considerations

The study observed standard ethical practices for social science research involving human respondents. Participation was voluntary, respondents were informed of the purpose of the study prior to completing the questionnaire, and responses were treated confidentially and reported only in aggregate form, such that no individual respondent or institution can be identified from the results presented in this manuscript.

4.0 RESULTS

4.1 Respondent Profile

Of the 312 respondents, 56% were male and 44% were female. In terms of educational attainment, 5% held an undergraduate degree, 58% a master's degree, and 37% a doctoral degree.

Table 2. Gender of Respondents

Gender	Frequency	Percentage
Male	175	56
Female	137	44

Gender	Frequency	Percentage
Total	312	100

Table 3. Educational Level of Respondents

Education Level	Frequency	Percentage
Undergraduate degree	16	5
Master's degree	181	58
Doctorate degree	115	37
Total	312	100

The relatively high proportion of respondents holding postgraduate qualifications (95%) suggests that the sample was well positioned, in terms of professional exposure and analytical capacity, to provide informed and reliable responses on questions spanning leadership, regulatory compliance, and institutional culture – three domains that require some seniority and institutional tenure to assess with confidence.

4.2 Descriptive Findings on Regulatory Framework

Descriptive analysis of items relating to regulatory framework showed that most respondents agreed or strongly agreed that their institution has an office implementing set regulatory policies (80.8% agree/strongly agree, mean = 4.10) and regularly publishes reports on regulatory policy reviews (85.5% agree/strongly agree, mean = 3.95). Respondents were more divided on whether staff are involved in regulatory impact assessment exercises, with 82.2% disagreeing (mean = 2.22), suggesting that while institutional-level regulatory compliance structures are generally perceived to be in place, staff-level participation in regulatory processes may be comparatively limited.

Table 4. Selected Descriptive Statistics – Regulatory Framework

Item	Mean	Std. Deviation
Institution has an office implementing regulatory policies	4.10	1.254
Institution regularly publishes regulatory policy review reports	3.95	1.061
I feel empowered in adhering to regulatory procedures	3.58	1.089
Staff are involved in regulatory impact assessment exercises	2.22	.797
Constant review of institutional performance vs. regulatory policies	3.85	.898

4.3 Correlation among Study Variables

Pearson correlation analysis showed strong, positive, and statistically significant associations between organizational performance and each of transformational leadership, regulatory framework, institutional culture, and the moderated-mediated effect. Organizational performance was most strongly correlated with institutional culture ($r = .826, p < .01$), followed by the moderated-mediated effect ($r = .773, p < .01$), regulatory framework ($r = .726, p < .01$), and transformational leadership ($r = .657, p < .01$). The moderating variable was also strongly correlated with transformational leadership ($r = .942, p < .01$), indicating a close conceptual and empirical link between leadership behavior and the regulatory-institutional context in which it operates.

Table 5. Correlation Results (selected variables)

Variable pair	Pearson r	Sig. (2-tailed)	N
Org. performance – Institutional culture (x3)	.826**	.000	312
Org. performance – Moderated-mediated effect (x4)	.773**	.000	312
Org. performance – Regulatory framework (x2)	.726**	.000	312
Org. performance – Transformational leadership (x1)	.657**	.000	312
Transformational leadership (x1) – Moderating variable	.942**	.000	312

** Correlation is significant at the 0.01 level (2-tailed).

4.4 Moderating Effect of Regulatory Framework

A preliminary regression of regulatory framework alone on organizational performance showed a strong, significant relationship ($R^2 = .527, F = 404.995, p < .001; \beta = .760, t = 20.124, p < .001$), confirming regulatory framework as a substantial influence in its own right before its role in the joint model was examined.

4.5 Regression Results for the Moderated-Mediated Effect

Table 6. Model 1 Summary – Transformational Leadership, Regulatory Framework, Institutional Culture and Moderated-Mediated Index Predicting Organizational Performance

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	.876 ^a	.768	.765	.3046

Table 7. ANOVA for Model 1

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	110.611	4	27.653	298.097	.000 ^b
Residual	33.488	308	.093		
Total	144.098	312			

Table 8. Coefficients for Model 1

Predictor	B	Std. Error	Beta	t	Sig.
(Constant)	.367	.120		3.053	.002
x1 – Transformational leadership	.073	.034	.077	2.149	.032
x2 – Regulatory framework	.439	.040	.459	10.850	.000
x3 – Institutional culture	.163	.041	.156	3.977	.000
x4 – Moderated-mediated index	.253	.035	.291	7.177	.000

The four-predictor model demonstrated a strong association with organizational performance, with an R^2 of .768, indicating that approximately 76.8% of the variance in organizational performance was explained jointly by transformational leadership, regulatory framework, institutional culture, and the moderated-mediated index ($F = 298.097$, $p < .001$). All four predictors contributed significantly: transformational leadership had a modest but significant positive effect ($\beta = .077$, $p = .032$); regulatory framework had the strongest standardized effect ($\beta = .459$, $p < .001$); institutional culture was also significant ($\beta = .156$, $p < .001$); and the moderated-mediated index made a significant positive contribution ($\beta = .291$, $p < .001$).

Table 9. Hierarchical Model Summary for the Moderated-Mediated Effect

Model	R	R Square	Adjusted R Square	Std. Error	R ² Change	F Change	df1	df2	Sig. F Change
1	.876 ^a	.768	.765	.3046	.768	298.097	4	361	.000
2	.901 ^b	.811	.808	.2750	.043	82.804	1	360	.000

In Model 1, transformational leadership, regulatory framework, institutional culture and the moderated-mediated index together explained 76.8% of the variance in organizational performance. In Model 2, which added the interaction/moderated-mediated term over and above the base predictors, R^2 rose to .811, an increase of 4.3 percentage points, with a highly significant F change (82.804, $p < .001$), and the standard error of the estimate fell from .3046 to .2750, indicating a more precise model. This significant improvement in fit upon introducing the joint regulatory framework-institutional culture term indicates that the two variables do not

operate in isolation but combine to significantly alter and help explain the strength of the relationship between transformational leadership and organizational performance.

On this basis, the null hypothesis that there is no significant moderated-mediated effect of regulatory framework and institutional culture on the relationship between transformational leadership and organizational performance was rejected.

4.6 Summary of Hypothesis Testing

Table 10. Summary of Hypothesis Testing

Hypothesis	Test statistic	Decision
H0: There is no significant moderated-mediated effect of regulatory framework and institutional culture on the relationship between transformational leadership and organizational performance.	F change = 82.804, p < .001	Rejected

The rejection of the null hypothesis provides statistical evidence, at the 0.05 significance level, that regulatory framework and institutional culture jointly shape the strength of the relationship between transformational leadership and organizational performance among the sampled private faith-based higher learning institutions.

4.7 Robustness of the Findings

Several features of the analysis support the robustness of these findings. First, the diagnostic tests reported in section 3.4 confirmed that the regression assumptions of homoscedasticity, independence of residuals, normality, and absence of problematic multicollinearity were satisfied, reducing the likelihood that the observed effects are statistical artifacts of violated assumptions. Second, the improvement in model fit upon introducing the moderated-mediated index was accompanied by a corresponding reduction in the standard error of the estimate, from .3046 to .2750, indicating that the additional predictive power came with greater, not lesser, precision. Third, the pattern of results was consistent with the separate, single-predictor analyses of regulatory framework and institutional culture reported elsewhere in the broader parent study, in which each variable was independently shown to be significantly associated with organizational performance – lending convergent support to the combined moderated-mediated model reported here.

5.0 DISCUSSION

5.1 Interpretation of Findings

The findings indicate that regulatory framework and institutional culture do not merely operate as separate, additive influences on organizational performance; rather, their combination significantly enhances the model's ability to explain how transformational leadership translates into organizational performance. Regulatory framework emerged as the single strongest standardized predictor in the four-predictor model ($\beta = .459$), ahead of institutional culture ($\beta = .156$) and transformational leadership itself ($\beta = .077$), suggesting that in this regulated sector,

compliance with regulatory requirements plays an especially prominent role in shaping how leadership behavior is converted into performance outcomes. At the same time, the very strong correlation between transformational leadership and the moderating variable ($r = .942$) suggests that leaders who are more transformational also tend to operate within, and perhaps help shape, more favorable regulatory and cultural conditions.

These results are consistent with the conceptual expectation that idealized influence and inspirational motivation, being oriented towards values, mission, and purpose (Bass & Avolio, 1994), interact with both the compliance-oriented regulatory framework and the values-oriented institutional culture, producing a joint moderated-mediated effect that exceeds what either mechanism would produce on its own.

5.2 Theoretical Implications

These findings extend both institutional theory and transformational leadership theory by demonstrating, within a single empirical model, that regulatory framework and institutional culture do not operate as independent influences on organizational performance but interact to jointly shape the strength of the leadership-performance relationship. This is consistent with DiMaggio and Powell's (1983) account of institutional isomorphism, which suggests that organizations operating within a shared regulatory field tend to adapt their internal structures and, by extension, their culture, in response to regulatory pressure – a dynamic that this study's moderated-mediation results are consistent with, though the cross-sectional design cannot fully disentangle the direction of this adaptation.

The findings also demonstrate the empirical value of moderated-mediation modeling, as formalized by Preacher, Rucker, and Hayes (2007), in organizational leadership research: treating regulatory framework and institutional culture as though they operated independently, as separate moderation and mediation tests would imply, would have understated the extent to which they jointly shape organizational performance in this sector, since the combined moderated-mediated index made a significant, distinct contribution to the model over and above the individual predictors.

Taken together with transformational leadership theory's emphasis on values, mission, and purpose (Bass & Avolio, 1994), these results suggest a more integrated theoretical account of performance in regulated, values-driven institutions: leadership shapes both the regulatory posture and the cultural fabric of an institution, and it is the joint, mutually reinforcing operation of these two forces – rather than either in isolation – that most fully explains variation in organizational performance across the sampled institutions.

5.3 Practical Implications

For leaders of faith-based institutions, these findings suggest that regulatory compliance should not be treated as a peripheral administrative function disconnected from institutional culture and leadership strategy. Instead, institutions may benefit from deliberately aligning their internal culture-building efforts with the demands of the regulatory framework – for example, by embedding regulatory compliance values into staff orientation and institutional communication in the same way that other core institutional values are embedded, rather than

treating compliance as a separate, purely administrative concern handled by a dedicated compliance office in isolation from broader institutional culture-building efforts.

More concretely, an institution seeking to act on these findings might begin by mapping the areas of overlap and tension between its existing institutional culture and the requirements of the national regulatory framework, using this mapping to identify where regulatory compliance can be reinforced through cultural channels – such as staff sensitization forums, described in section 4.2 above – rather than through compliance mechanisms alone.

Institutions might also consider assigning joint responsibility for regulatory compliance and culture-building to the same senior office or committee, rather than housing them in entirely separate administrative units, so that the interdependence between the two – demonstrated statistically in this study – is reflected in how the institution is actually organized and managed on a day-to-day basis. Such structural alignment could help ensure that gains in regulatory compliance are reinforced by, rather than achieved at the expense of, the institution's broader cultural coherence.

5.4 Comparison with Conceptual Expectations

The empirical pattern observed here is broadly consistent with the conceptual model set out in section 2.2, in which regulatory framework and institutional culture were positioned as jointly shaping the leadership-performance relationship through complementary moderating and mediating roles. The relatively larger standardized effect of regulatory framework compared to institutional culture in the combined model suggests that, in this specific regulated sector, the moderating role of regulatory framework may be somewhat more influential in practice than the mediating role of institutional culture, though both were statistically significant and the moderated-mediated index itself made a further significant contribution beyond either individual effect.

5.5 Limitations of the Study

As with any cross-sectional survey-based study, the findings reported here reflect associations observed at a single point in time, and causal claims about the direction of the moderated-mediated pathway should be made with appropriate caution. The composite moderated-mediated index used in this study, while statistically significant, aggregates several distinct interaction effects into a single measure, which limits the ability to disentangle which specific combination of regulatory and cultural conditions is most influential. Future studies could usefully decompose this index into its constituent interaction terms.

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The study concludes that regulatory framework and institutional culture jointly and significantly moderate and mediate the relationship between transformational leadership and organizational performance of private faith-based higher learning institutions in Kenya. Regulatory framework had the strongest individual effect on organizational performance among the four predictors examined, while the addition of the combined moderated-mediated

term significantly improved the explanatory power of the model. The null hypothesis was rejected.

Taken as a whole, these results position organizational performance in private faith-based higher learning institutions not as the product of transformational leadership acting in isolation, but as an outcome that emerges from the interplay between leadership, the regulatory environment in which an institution is embedded, and the institutional culture that leadership helps to shape. This integrated view has direct implications for how institutional resources, managerial attention, and governance structures are organized in pursuit of improved organizational performance.

6.2 Recommendations for Policy and Practice

The study recommends that boards and leaders of private faith-based higher learning institutions treat regulatory compliance and institutional culture as complementary levers rather than separate concerns, deliberately aligning internal culture-building efforts with the requirements of the national regulatory framework, so that transformational leadership is reinforced rather than constrained by the regulatory environment.

Table B. Summary of Recommendations by Stakeholder

Stakeholder	Recommendation
Institutional leaders	Integrate regulatory compliance considerations into institutional culture-building initiatives rather than treating compliance as a separate administrative function.
Governing boards and sponsors	Monitor both regulatory compliance status and institutional culture indicators as joint drivers of institutional performance.
Higher education regulators	Consider how regulatory frameworks interact with institutional culture across the sector when designing compliance requirements.
Researchers	Disaggregate the moderated-mediated index into its component interaction terms to identify which specific regulatory-cultural combinations most strengthen the leadership-performance relationship.

6.3 Implications for Institutional Governance

For governing boards, the joint significance of regulatory framework and institutional culture carries a specific governance implication: performance oversight structured around leadership evaluation alone, without corresponding attention to regulatory compliance status and institutional culture, risks overlooking the two channels through which this study's evidence suggests leadership is most strongly converted into performance. Boards may benefit from incorporating both regulatory compliance indicators and culture-related indicators – such as staff perceptions of values alignment and clarity of regulatory expectations – into their routine institutional oversight processes, alongside conventional financial and academic performance metrics. This dual-indicator approach would more closely mirror the joint moderated-mediated

mechanism identified in this study than a governance framework that treats leadership, compliance, and culture as three unrelated oversight domains.

6.4 Implications for Sector Regulators and Sponsors

Beyond institutional-level recommendations, the findings carry implications for higher education regulators and institutional sponsors operating at a sector level. For regulators, the strength of regulatory framework's standardized effect on organizational performance ($\beta = .459$) suggests that regulatory clarity and predictability may have performance benefits for the institutions they oversee that extend well beyond simple compliance, potentially warranting closer attention to how regulatory requirements are communicated and implemented across the sector, not merely to whether they are met. For sponsoring religious bodies, the strong correlation between transformational leadership and institutional culture ($r = .857$ in the parent mediation model) suggests that leadership appointment and development decisions have consequences that extend into the cultural fabric of the institutions they oversee, reinforcing the importance of leadership selection processes that explicitly weigh candidates' capacity to build, and not merely direct, institutional culture.

6.5 Suggestions for Further Research

Future research could disaggregate the moderated-mediated index used here into its component interaction terms to establish more precisely which combination of regulatory and cultural conditions most strengthens the leadership-performance relationship. Comparative studies across institutions operating under different regulatory sub-frameworks, or across faith-based and secular institutions, could also help establish the boundary conditions of the moderated-mediated effect identified in this study. Longitudinal designs would further allow researchers to examine how the moderated-mediated relationship evolves as regulatory frameworks and institutional cultures change over time.

Appendix A: Illustrative Survey Items by Construct

Table C. Illustrative Regulatory Framework and Moderated-Mediated Items

Item
The institution has an office that implements set regulatory policies.
The institution regularly publishes reports on regulatory policy reviews.
There are many overlapping regulatory policies that hinder the overall success of the institution.
Our institutional culture does not conflict with the regulatory policies.
Political control hinders performance of the institution.
The stakeholders understand the policies set.

Note: Transformational leadership items covered the four established sub-dimensions of idealized influence, inspirational motivation, individualized consideration, and intellectual

stimulation; institutional culture items covered shared values, communication norms, and alignment between stated mission and everyday institutional practice.

Appendix B: Glossary of Statistical Terms Used in This Manuscript

Table D. Glossary of Statistical Terms

Term	Meaning
R Square (R^2)	The proportion of variance in the dependent variable (organizational performance) explained by the predictor variable(s) in a regression model.
Adjusted R Square	A version of R^2 adjusted for the number of predictors in the model, providing a more conservative estimate of explanatory power.
Beta (β)	The standardized regression coefficient, indicating the strength and direction of a predictor's effect on the dependent variable, in standard-deviation units.
F Change	A test statistic indicating whether the improvement in R^2 between two hierarchical regression models is statistically significant.
p-value (Sig.)	The probability of observing the given result, or one more extreme, if the null hypothesis were true; values below .05 are conventionally treated as statistically significant.
Tolerance / VIF	Diagnostic statistics used to detect multicollinearity among predictor variables; low tolerance or high VIF values indicate that predictors are highly correlated with one another.
Moderated mediation	A statistical model in which the strength of an indirect (mediated) effect varies depending on the level of a moderating variable.

Note: Definitions provided for reader reference; standard usage in applied regression analysis (Field, 2013).

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