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ASSESSING THE IMPACT OF QUALITY ASSESSMENT POLICY TRAINING PROGRAMS ON THE FORMATION OF QUALITY CULTURE AT UNIVERSITIES IN THE ASEAN REGION

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ABSTRACT

In the context of ASEAN higher education facing mounting pressures from deep regional integration and rising quality expectations, program accreditation policy is regarded as one of the pivotal instruments for driving organizational transformation within higher education institutions. However, the relationship between program accreditation policy and quality culture—along with the mechanisms through which such policy shapes and reinforces quality culture—has yet to be comprehensively explained within the regional context. This study surveyed 683 experts from ten ASEAN countries to test a theoretical model examining the influence of five policy factors – (1) mandatory requirements and legal framework, (2) clarity and consistency, (3) contextual relevance, (4) frequency of standards revision, and (5) internationalization – on quality culture in universities, with the degree of accreditation internalization serving as a mediating variable. Confirmatory factor analysis and structural equation modeling (SEM) were employed to assess model reliability and to determine both direct and indirect effects. The findings reveal that the policy factors have both direct and indirect influence on quality culture through internalization, with the clarity of standards and the mediating role of internalization as decisive elements. This study contributes to elucidating the mechanisms underlying the construction of quality culture in ASEAN higher education and offers three key policy recommendations: (1) strengthen mechanisms for internalization in the implementation of program accreditation policy, (2) restructure the legal framework to ensure clarity, consistency, and continuous updating, and (3) develop adaptive accreditation mechanisms in line with the level of institutional autonomy and development stages of different types of higher education institutions.

KEYWORDS: Policy, Quality Assessment, Quality Culture, Higher Education, ASEAN.

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1. INTRODUCTION

Amidst the deepening regional integration, particularly following the establishment of the ASEAN Economic Community (AEC), higher education in ASEAN is undergoing a profound transformation aimed at mutual recognition of academic quality across member states. The development of quality assurance systems, epitomized by program accreditation, transcends mere technical management processes to become a transformative journey in cultivating an endogenous quality culture within higher education institutions (CEP Report, 2020).

Each ASEAN country has established distinct accreditation agencies, reflecting the diversity and specificity of their educational systems. However, disparities in the development levels of accreditation systems are not only technical gaps but also signify deeper challenges in forming and sustaining a cohesive quality culture across the region (Inside Higher Ed, n.d.; CEP Report, 2020).

Beyond technical and administrative dimensions, attention is increasingly shifting towards the cultural and spiritual dimension — the quality culture. This is not merely about compliance with external standards but a system of shared values, beliefs, and attitudes nurtured throughout the organization, serving as the lifeblood driving continuous and sustainable improvement (Pham, 2023). The mechanism of quality culture formation is understood as a complex convergence of leadership commitment, organizational capacity, proactive participation of staff and faculty, alongside a continuous feedback and adjustment system based on accreditation outcomes. Within this dynamic interplay, quality accreditation ceases to be an external audit tool and instead becomes an endogenous catalyst fostering quality culture development in each institution.

The impact of quality accreditation policy on quality culture is manifested through its regulatory role in shaping organizational behavior and fostering the internalization of quality management. When policies are constructed coherently, transparently, and closely aligned with the specificities and practical contexts of each nation, they lay the groundwork for higher education institutions to not merely fulfill accreditation requirements formally but to deeply comprehend, embrace, and proactively apply these standards as motivators for sustainable improvement and development.

In Vietnam, recent studies have highlighted that while engagement with the AUN-QA standards has redirected educational objectives toward outcome-based education, the transformation from technical compliance to cultivating an internal quality management culture remains modest (Pham Thi Huong & Nguyen Vu Phuong, 2023). Similarly, the noticeable gaps between accreditation and university rankings reflect a lack of integration between quality assurance efforts and the endogenous quality culture formation (Nguyen Huu Duc, Tran Mai Anh & Ta Thi Thu Hien, 2023). Moreover, in-depth analysis of program accreditation results during 2017–2023 (Bui Vu Anh & Dinh Thi Thu Trang, 2024) reveals a significant "misalignment" between formal evidences and substantive quality practices, implicitly indicating that quality culture has yet to thoroughly permeate academic life and institutional governance.

Therefore, for quality accreditation to truly become a soft power driving internal innovation within ASEAN universities, accreditation policies must be designed and implemented as a "genetic code" guiding improvement behaviors rather than merely as externally imposed administrative templates. Only then can quality culture continuously grow from the trust and proactive engagement of the institution itself, establishing a solid foundation for the sustainable development of higher education in the region.

This study contributes to the field of quality assurance in ASEAN higher education by conducting a large-scale, cross-national survey, thereby providing a more comprehensive picture compared to previous research which primarily focused on a single nation. Theoretically, this study integrates the Public Policy Life Cycle, Institutional Isomorphism, and Quality Culture to create a multi-dimensional analytical framework. The results not only identify the direct impact of accreditation policies but also elucidate the intermediate mechanism of internalization, which has been less explored in current research. This novel approach offers a deeper understanding of how pressure from external accreditation policies is transformed into sustainable quality culture values within universities.

2. THEORETICAL BASIS

2.1. Public Policy Circle Theory

The Public Policy Lifecycle Theory, as articulated by Howlett and Ramesh (2003), emphasizes that public policy operates as a cyclical process (Figure 1) comprising five stages: (1) agenda setting, (2) policy formulation, (3) implementation, (4) evaluation, and (5) policy adjustment. In this study, program accreditation in higher education can be regarded as a concrete manifestation of the implementation and evaluation stages within the public policy cycle in the

higher education sector.

What is particularly noteworthy is that accreditation is not merely an administrative instrument for maintaining minimum standards; it can serve as a policy catalyst, triggering a cascade of organizational learning processes, internal improvements, and – most importantly – the cultivation of a quality culture.

Figure 1: The Public Policy Cycle.

When the accreditation cycle is logically designed from clear input criteria and periodic feedback mechanisms to ongoing self-assessment and continuous improvement – the accreditation policy ceases to be a purely coercive measure and instead becomes a tool for organizational learning. Notably, the "transitional zones" between stages in the policy lifecycle constitute the soft junctures where the independent variable (accreditation policy) begins to influence the dependent variable (quality culture), through the engagement and evolving cognitive – behavioral transformations of key factors such as faculty members, administrators, and students.

In this study, the Public Policy Lifecycle Theory serves as an analytical framework to illuminate the cyclical and continuous nature of program accreditation quality assurance policies. This theory reveals that the policy process extends beyond mere formulation, encompassing iterative phases including ideation, implementation, feedback, and refinement. Consequently, program accreditation policies function not only as regulatory mechanisms but also as dynamic drivers fostering the emergence and maturation of quality culture within higher education institutions.

2.2. Institutional Isomorphism Theory

Institutional Isomorphism Theory, introduced by DiMaggio and Powell (1983), forms part of the neo-institutionalism framework and describes three types of pressures (Figure 2) that lead organizations to become increasingly similar: coercive (stemming from laws and policies), mimetic (arising from uncertainty and learning from successful organizations), and normative (derived from professional and occupational standards). In the ASEAN context, regional accreditation frameworks such as AUN-QA and AQAN function as "soft institutional standards," compelling universities to adapt if they wish to remain integrated within the flow of higher education internationalization.

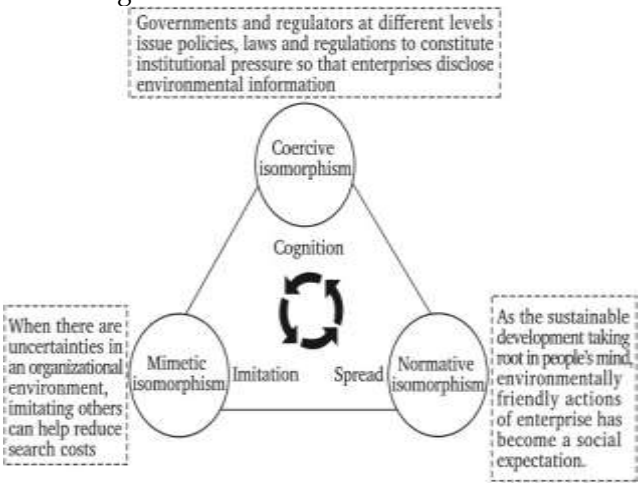

Figure 2: Forms Of Organizational Assimilation Pressure.

However, such isomorphism becomes truly meaningful only when higher education institutions not merely replicate structures but also internalize the spirit of continuous improvement. The gap between surface-level compliance and genuine internal transformation constitutes the "cultural depth" of quality – where an institution either merely "cosmetically decorates" quality or authentically cultivates a substantive quality culture. Accreditation thus operates both as an institutional pressure and as a litmus test for an organization's capacity for endogenous transformation.

This study employs Institutional Isomorphism theory to elucidate that despite differences in political regimes and socio-economic development levels among ASEAN countries, the adoption and implementation of program accreditation quality assurance policies exhibit consistent and systematic characteristics. Specifically, these countries inherit standards and accreditation processes from AUN-QA, while simultaneously adapting policies to align with their respective national contexts. This results in a discernible consensus in policy structures, reflecting a "unity in diversity" across higher education systems within the ASEAN region.

2.3. Quality Culture Theory

The theory of quality culture, developed by the European University Association (EUA), is grounded in the distinction between two principal components of quality in higher education: the structural

dimension of quality assurance (structural QA) and the cultural – psychological dimension. The structural QA dimension encompasses policies, standards, and procedures, whereas the cultural dimension comprises the beliefs, motivations, attitudes, and continuous improvement commitments of individuals within the organization.

According to AMEE Guide No. 147 (2022), accreditation mechanisms can foster a genuine "quality culture" only when they are fully internalized – that is, when they become an inherent part of each individual's mindset and behavior. Such a culture does not manifest in slogans or self-assessment reports, but is reflected in the habitual practices of feedback, learning, and continuous improvement. It constitutes an "invisible yet persistent current" that flows seamlessly from institutional leadership to students, from formal policy to the daily actions of the academic community.

This study applies the Quality Culture theory in higher education to identify a universal pattern in the formation and development of quality culture within higher education institutions across ASEAN countries. Quality culture is neither spontaneously generated nor easily extinguished; rather, it resembles an ongoing journey — one with a defined beginning but without a definitive end. This process reflects the sustained and deliberate efforts of each institution to cultivate and nurture a unique quality culture that embodies its distinctive characteristics and mission.

3. RESEARCH METHOD

3.1. Conceptual Framework of Research

In the context of higher education governance reform toward enhanced accountability and sustainable development, higher education accreditation policy has emerged as a policy lever to stimulate continuous improvement processes within educational institutions. The theoretical framework of this study is dialectically constructed on the integration of three foundational theories: the public policy lifecycle, institutional isomorphism, and quality culture in quality assurance.

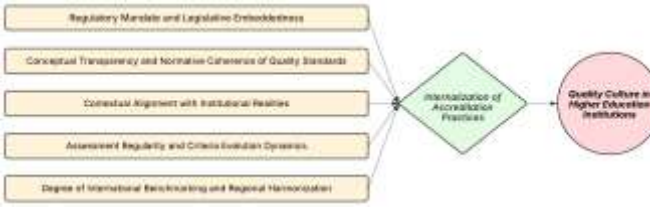

Figure 3. Research Model..

The impact of higher education accreditation policy is conceptualized as the initiating force for improvement, creating constraints as well as incentives for organizational restructuring within higher education institutions. According to the Public Policy Lifecycle Theory (Howlett et al., 2020), accreditation policies do not merely serve a normative role but evolve through successive stages – formulation, implementation, evaluation, and adjustment – thereby reshaping organizational behavior toward enhanced quality. Particularly in the ASEAN context, studies such as Nguyen Thi Hong Nhung and her colleagues (2023) in Vietnam have demonstrated that accreditation policies tend to prompt universities to restructure their governance systems, revise curricula, and strengthen faculty capacity – thus reflecting policy effectiveness from the system level down to the institutional level.

1. Mandatory nature and legal framework (coded IV_MF) represent coercive institutional pressures from governments or regulatory bodies, as emphasized by DiMaggio and Powell (1983), contributing to isomorphism within higher education systems. In Vietnam and ASEAN, recent studies confirm that the stronger the coercive force, the clearer the motivation for compliance and internalization of quality culture (Nguyen Thi Mai Huong et al., 2022).
2. Clarity and consistency of evaluation standards (coded IV_CC) act as normative guidelines that enable institutions to understand and adapt to quality expectations, minimizing ambiguity in self-assessment processes (OECD, 2021).
3. Applicability to institutional realities (coded IV_AP) ensures alignment between evaluation criteria and the operational context of universities – an essential factor for localizing and effectively applying external requirements (Tran Van Hieu, 2023).
4. Frequency of accreditation and criteria revision (coded IV_FR) reflects the dynamism of the quality assurance system, facilitating continuous improvement rather than one-off compliance. This mechanism has been shown to positively influence organizational improvement behaviors in studies conducted in South Korea and Malaysia (Lee & Lee, 2020).
5. Internationalization and reference to regional models (coded IV_IF), such as AUN-QA or AQAN, generate normative spillover effects while reinforcing comparability and mutual recognition within ASEAN – prompting universities not only to comply but also to raise

their own standards for deeper integration (Pham & Marginson, 2022).

At the same time, compliance pressures are strongly shaped by institutional forces. Institutional Isomorphism Theory (DiMaggio & Powell, 1983) explains that when higher education institutions face coercive pressures from the state, mimetic pressures from leading institutions, and normative pressures from professional networks, they tend to restructure in ways that align with institutional norms. However, recent research warns that if these changes are pursued solely to satisfy accreditation requirements without internalizing quality assurance values, the result may be a superficial culture – which have been pointed out in the works of Nguyen Van Phuc and his colleagues (2022), as well as Tran & Nguyen (2021). Therefore, the true effectiveness of policy is realized only when institutional pressures are transformed into intrinsic motivation, encouraging universities to pursue improvement for their own development rather than for the sake of accreditation (coded MV_IN).

The ultimate destination of this study's theoretical structure is the formation of an internal quality culture (coded DV_QC). As Harvey and Stensaker (2008) argue, quality culture is not a linear product of accreditation mechanisms but rather a complex phenomenon shaped by organizational-psychological factors such as beliefs, commitment, positive attitudes, and continuous improvement behaviors among members. The Quality Culture Theory underscores that only when members of an institution perceive the true value of quality assurance – beyond surface-level manifestations – can a sustainable quality culture take root. Recent findings from Vietnam applying the PDCA cycle indicate that continuous improvement processes help steer perceptions and behaviors toward improvement, thus driving transformation into an endogenous quality culture (Dinh Thai Do & Trevè, 2024). These findings suggest that improving quality culture requires the interplay between policy structures and active human engagement – an essential condition for accreditation to evolve into a culture of improvement rather than remain an administrative obligation.

In summary, the structure of the theoretical model is designed as a closed logical sequence: accreditation policy serves as the starting point, generating institutional drivers (both external and internal), which in turn influence improvement behaviors within organizations, ultimately leading to the formation of an internal quality culture. This model not only reflects the depth of contemporary theory in higher education quality assurance but also offers a systemic and transformative policy approach – one that aspires to cultivate self-improving, sustainably developing educational institutions.

3.2. Research Sample

As ASEAN countries operate higher education quality assurance systems with uneven degrees of development, the design of the research sample must not only ensure representativeness but also accurately reflect the complex interplay between policy and practice across different institutional levels. This study employs stratified purposive sampling, implemented on a quantitative sample of 683 respondents, aimed at engaging key stakeholder groups involved in the formulation, implementation, and localization of accreditation policies within higher education institutions.

Table 1: UNESCO Quality Accreditation Classification (2021).

Group	*Outstanding features of QA & QC*
Group I – High development inspection, sustainable quality culture	Have clear QA laws, QA is a licensing condition; have an endogenous culture, proactively innovate; strong integration into ASEAN-QA, AUN-QA.
Group II – Average inspection, moving from compliance to internalizing quality	QA has been legalized, but many establishments still follow formalities; quality culture is gradually developing, still dependent on external pressure (such as ranking, ODA projects).
Group III – Initial stage of building inspection system and weak quality culture	QA is still weak or newly formed; quality culture is still formal, mainly following international projects or coping.

Three main respondent groups were intentionally surveyed, corresponding to the three tiers of higher education quality governance:

1. Institutional administrators: including heads of departments responsible for training, quality assurance, scientific research, and internal accreditation. This group serves as the bridge between macro-level strategies and operational practice, reflecting the manner in which internal organization responds and adapts to external accreditation policies.
2. Quality assurance professionals: specialists charged with conducting self-assessment, preparing accreditation reports, gathering evidence, and monitoring improvements. They represent the core "administrative-

technical" operational layer, essential for sustaining the accreditation cycle and nurturing internal quality practices.

3. Faculty involved in accreditation activities: lecturers contributing to self-assessment reports, quality assurance committees, or serving as internal evaluators. Their dual role illustrates the intersection between academic practice and quality governance – an aspect that reflects the depth of quality culture within universities.

ASEAN countries are categorized into three groups (A, B, C) based on the characteristics of their QA systems and quality culture. This categorization serves as the primary stratification criterion in the sampling strategy, ensuring comprehensive coverage of the institutional QA archetypes in the region, as per UNESCO's 2021 accreditation status assessments (Table 1).

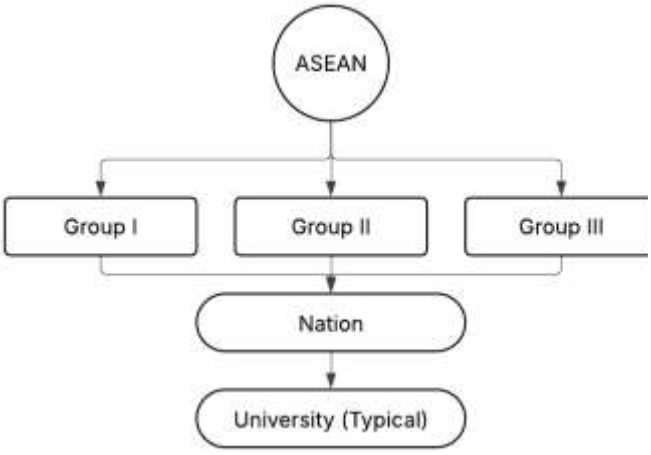

Figure 4: Stratified structure in research sampling.

This stratification aligns with the institutional layering analytical framework outlined by Mahoney & Thelen (2010), which indicates that quality change does not occur simultaneously across all levels but accumulates through inter-layer interactions: accreditation policy exerts top-down pressure, while quality practices and culture reconstitute policy from the bottom up.

Thus, the sample design is far more than a technical effort to ensure diversity – it embodies an analytical structure that mirrors the mechanism through which accreditation policy institutionalizes quality culture. Each sampling tier represents a lens into the degree of internalization of policy – from superficial compliance to the construction of quality values as an intrinsic part of organizational identity.

3.3. Scale Structure and Reliability

This study employed a structured questionnaire designed to operationalize three principal constructs in the theoretical framework: (1) the impact of higher education quality assurance (QA) policy (independent variables), (2) the degree of internalization of QA within the organization (mediating variable), and (3) the quality culture within universities (dependent variable). All questionnaire items were measured on a five-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree").

The survey sample consisted of 683 respondents drawn from higher education institutions (HEIs) across all 10 ASEAN member states, comprehensively covering the three stratified groups representing different levels of QA system maturity and quality culture development. The country-level distribution of respondents (Figure 5) reflects both representativeness and relative balance: Vietnam (n = 86), Thailand (n = 80), Singapore (n = 73), Lao PDR (n = 71), Malaysia (n = 70), Indonesia (n = 68), Cambodia (n = 65), the Philippines (n = 59), Myanmar (n = 56), and Brunei Darussalam (n = 55). This stratification enables the sample to capture distinct institutional characteristics associated with varying levels of QA system development and quality culture internalization, thus providing a comprehensive and comparative regional picture.

Figure 5. Preliminary Statistics Of The Study Sample.

All respondents had direct professional experience in QA and accreditation, ensuring the ability to provide informed and objective assessments of the constructs under study. Specifically: 176 had served as external evaluation panelists; 152 had authored self-evaluation reports; 182 were members of internal QA committees or units; and 173 had been directly involved in evidence collection and preparation for accreditation. This profile confirms that the sample not only spans the breadth of the ASEAN higher education landscape but also embodies a depth of practical expertise – an essential condition for understanding and measuring the processes of QA internalization and quality culture formation.

The reliability of all measurement scales was examined using Cronbach's Alpha, revealing very high internal consistency across all constructs. The independent variables included: Mandatory framework and legal requirements (IV_MF, α = 0.934), Clarity and consistency of evaluation standards (IV_CC, α = 0.932), Applicability to institutional practice (IV_AP, α = 0.933), Frequency of accreditation and criteria updates (IV_FR, α = 0.913), and Implementation support resources (IV_IF, α = 0.925) – all exceeding the minimum 0.70 threshold recommended by Nunnally and Bernstein (1994).

Table 2: Results Of Scale Reliability Test.

Factor	*N**	*Corrected Item – Total Correlation*	*Cronbach's Alpha*
IV_MF	9	0.737 – 0.767	0.934
IV_CC	9	0.721 – 0.772	0.932
IV_AP	9	0.718 – 0.766	0.933
IV_FR	9	0.682 – 0.725	0.913
IV_IF	9	0.693 – 0.745	0.925
MV_IN	12	0.829 – 0.876	0.974
DV_QC	12	0.544 – 0.893	0.968
**Number of observed variables in the factor*			

The mediating variable – Degree of internalization of QA policy (MV_IN) – achieved a Cronbach's Alpha of 0.974, while the dependent variable – Quality culture (DV_QC) – recorded 0.968, reflecting exceptionally high reliability across the entire scale. Furthermore, corrected item–total correlations for all observed variables ranged from 0.544 to 0.893, confirming that each item contributed meaningfully to the structure of its respective construct (Hair et al., 2019).

4. RESEARCH RESULT

4.1. Confirmatory factor structure analysis (CFA).

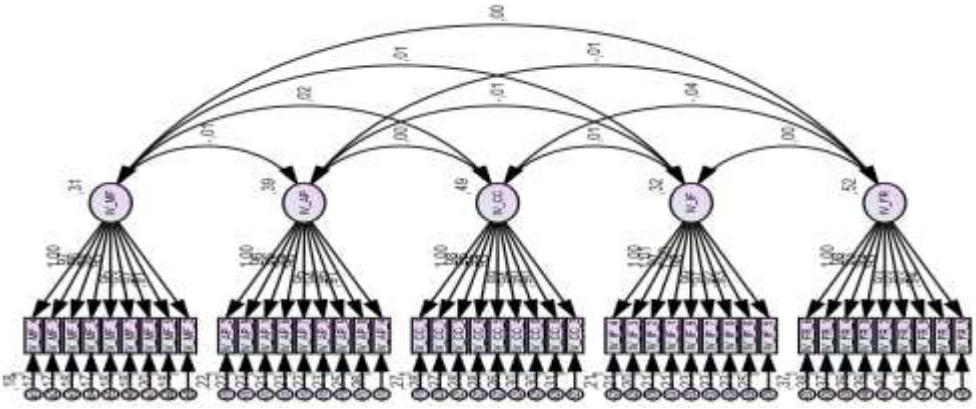

Figure 6. Factor structure analysis model

The results from the confirmatory factor analysis (CFA) indicate that the measurement model exhibits an excellent fit with the survey data (Table 3). The chi-square statistic (CMIN) is 1040.640 with 935 degrees of freedom, and while the p-value of 0.009 signals a statistically significant difference between the observed and estimated covariance matrices, such significance is common in large samples and does not diminish the analysis's validity (Kline, 2016). More critically, the chi-square-to-degrees-of-freedom ratio (CMIN/DF) is 1.113 – beneath the threshold of 2.0 – demonstrating a very high model fit (Byrne, 2010).

Table 3: Results Of Model Fit Analysis (CFA).

Indicator	*Value*
CMIN	1040.640
DF	935
P	0.009
CMIN/DF	1.113
GFI	0.938
TLI	0.994
CFI	0.994
RMSEA	0.013
PCLOSE	1.000
Modification Indices – Covariances	4.009 – 12.741

Other fit indices surpass the recommended benchmarks: GFI = 0.938, TLI = 0.994, and CFI = 0.994, all exceeding the 0.90 standard (Hu & Bentler, 1999), evidencing outstanding alignment between the theoretical model and empirical data. Particularly, RMSEA = 0.013 (< 0.05) with PCLOSE = 1.000 further affirm the model's absolute fit quality, effectively precluding concerns about conceptual omission or model mis-specification.

Additionally, modification indices ranged from 4.009 to 12.741, all within acceptable limits and not indicating any severe misfit requiring correction. This supports that the measurement model is well-specified, coherently reflecting the conceptual structure of the constructs under study (Hair et al., 2019).

Reliability and validity assessments further reinforce the measurement model's robustness and construct distinctiveness (Figure 7). Composite Reliability (CR) values for the factors – Research Funding Support (IV_MF), Administrative Support (IV_AP), Research Infrastructure (IV_CC), Research Skills Training (IV_IF), and Research Orientation (IV_FR) – range between 0.913 and 0.934, surpassing the recommended threshold of .70, and demonstrating strong internal consistency (Hair et al., 2019).

Convergent validity is supported by Average Variance Extracted (AVE) values ranging from 0.540 to 0.610, all above the 0.50 minimum (Fornell & Larcker, 1981), indicating each factor explains more than 50% of the variance in its indicators. Discriminant validity is upheld since Maximum Shared Variance (MSV) values are lower than AVE and MaxR(H) values exceed AVE for all constructs, demonstrating conceptual independence among constructs.

Inter-factor correlations range from −0.073 to 0.781, with the highest correlation (0.781 between IV_MF and IV_AP) remaining below the multicollinearity threshold of 0.85 (Kline, 2016). Moreover, the Heterotrait–Monotrait (HTMT) ratio values all fall below 0.85, further confirming discriminant validity (Henseler, Ringle, & Sarstedt, 2015).

	CR	AVE	MSV	MaxR(H)	IV_MF	IV_AP	IV_CC	IV_IF	IV_FR
IV_MF	0,934	0,610	0,002	0,934	**0,781**				
IV_AP	0,933	0,606	0,002	0,933	-0,042	**0,779**			
IV_CC	0,932	0,605	0,005	0,933	0,039	-0,008	**0,778**		
IV_IF	0,925	0,578	0,002	0,925	0,046	-0,035	0,037	**0,760**	
IV_FR	0,913	0,540	0,005	0,914	0,005	-0,027	-0,073†	-0,007	**0,735**

	IV_MF	IV_AP	IV_CC	IV_IF	IV_FR
IV_MF					
IV_AP	0,042				
IV_CC	0,041	0,008			
IV_IF	0,046	0,035	0,036		
IV_FR	0,005	0,028	0,071	0,008	

Figure 7. Results Of Reliability And Validity Analysis.

In summary, the measurement model achieves high reliability and validity, establishing a solid foundation for subsequent structural equation modeling (SEM) to test the hypothesized relationships among constructs in the theoretical framework.

4.2. Structural Equation Modeling (SEM)

The results of the overall model fit test for the structural equation model (SEM) indicated that the model achieved an excellent fit with the empirical data (Table 4). First, the Chi-Square index (CMIN = 2736.876; df = 2244; p < 0.001) was statistically significant; however, according to Hair and his colleagues (2019), this index is easily affected by large sample sizes and should not be the sole criterion for assessing model fit. Instead, a combination of other indices is necessary to provide a more comprehensive evaluation.

The CMIN/DF value was 1.220 (< 2), indicating good model fit (Marsh & Hocevar, 1985). In addition, other indices such as GFI = 0.900, TLI = 0.986, and CFI = 0.987 all exceeded the threshold of 0.90, with TLI and CFI approaching the perfect value of 1.0, reflecting a high degree of compatibility between the theoretical model and the actual data (Bentler, 1990; Hu & Bentler, 1999).

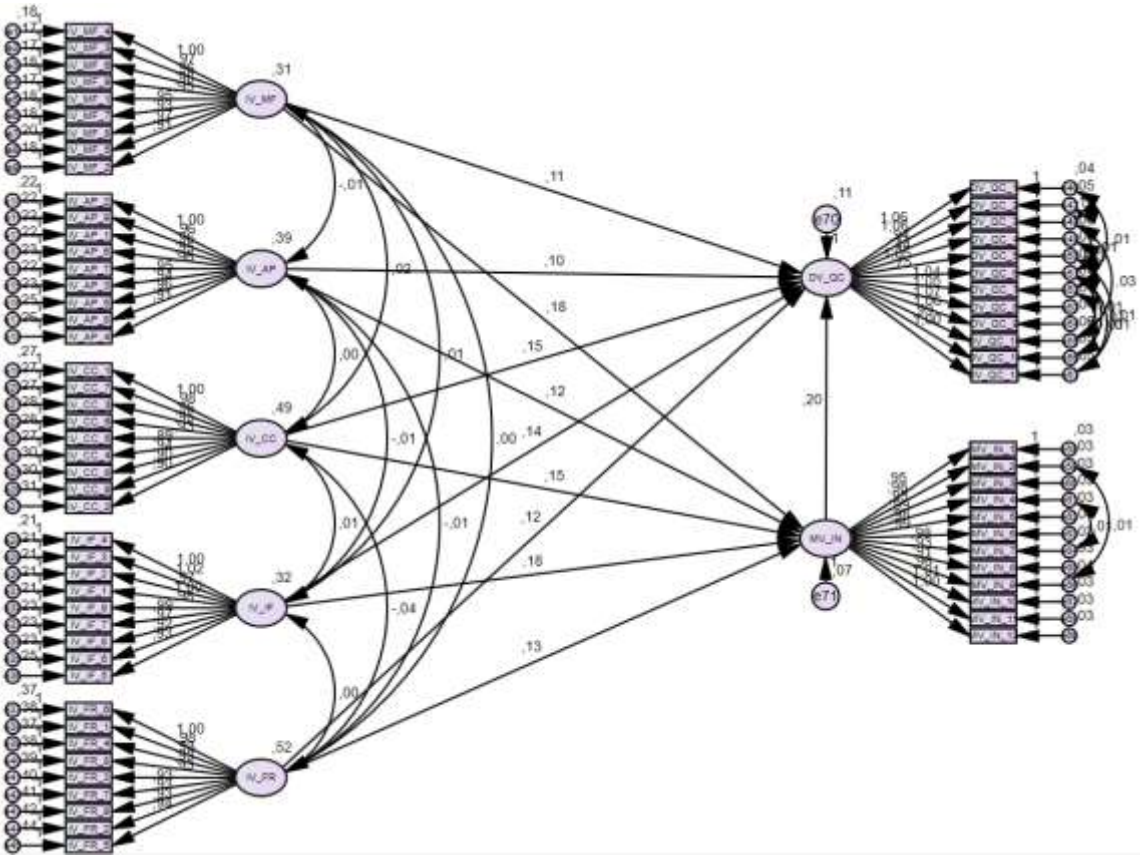

Figure 8. Linear Structural Model

Notably, the RMSEA value of 0.018 (< 0.05) suggested minimal approximation error, and PCLOSE = 1.000 indicated a very low likelihood of random estimation error, further reinforcing the model's outstanding fit (Browne & Cudeck, 1993).

Table 4: Results Of Model Fit Analysis (SEM).

Indicator	*Value*
CMIN	2736.876
DF	2244
P	0.000
CMIN/DF	1.220
GFI	0.900
TLI	0.986
CFI	0.987
RMSEA	0.018
PCLOSE	1.000

To optimize SEM model fit, the study employed Modification Indices (M.I) to identify potential correlated error terms that, if connected, could improve the model (as shown in Table 4). Following the recommendations of Byrne (2016) and Kline (2016), error term correlations with M.I ≥ 20 can be adjusted if supported by theoretical and measurement content rationale.

Table 5: Results Of The Error-Correlation Intervention With Oversized Covariance.

Covariances	*M.I*	*Par Change*
e64 ⇔ e61	27.576	0.007
e66 ⇔ e59	42.655	0.009
e48 ⇔ e47	21.009	0.014
e51 ⇔ e48	29.354	-0.018
e51 ⇔ e49	148.444	0.035
e52 ⇔ e46	24.254	0.009
e55 ⇔ e48	73.829	0.028
e55 ⇔ e51	40.118	-0.016
e56 ⇔ e51	25.375	0.012
e56 ⇔ e52	22.500	-0.009
e57 ⇔ e50	24.772	0.010
e57 ⇔ e51	23.012	0.01

Specifically, error term pairs such as e51 ⇔ e49 (M.I = 148.444), e55 ⇔ e48 (M.I = 73.829), e66 ⇔ e59 (M.I = 42.655), e51 ⇔ e48 (M.I = 29.354), and e64 ⇔ e61 (M.I = 27.576) were connected bidirectionally because they belonged to the same latent construct's measurement items, reflecting either content similarity or internal relationships among behavioral indicators. These adjustments followed the principle of preserving theoretical soundness while reducing measurement redundancy within the model.

Overall, the SEM model developed in this study demonstrated superior fit, providing a reliable basis for analyzing causal relationships between theoretical variables.

The standardized regression analysis results within the SEM model provided clear statistical evidence that all independent variables representing accreditation policy positively and significantly influenced the degree of accreditation internalization within the organization, which in turn directly or indirectly affected the quality culture of universities (Table 6).

Specifically, among the five policy factors, Clarity and consistency of evaluation standards (IV_CC) was the strongest predictor for both MV_IN (β = 0.311) and DV_QC (β = 0.259), suggesting that transparent, comprehensible, and consistent standard frameworks form the foundation for organizations not only to adopt but also to proactively internalize accreditation requirements into their operations. Next, Internationalization and regional model referencing (IV_IF) (β = 0.299 to MV_IN; β = 0.199 to DV_QC), Mandatory nature and legal framework (IV_MF) (β = 0.300 to MV_IN; β = 0.150 to DV_QC), and Frequency of accreditation and criterion updates (IV_FR) (β = 0.290 to MV_IN; β = 0.211 to DV_QC) also showed significant positive effects. These findings imply that accreditation policies—when combining institutional pressure, regional integration, and continuous updating—create favorable conditions for organizations to internally adapt toward quality enhancement. Practical applicability (IV_AP) had lower coefficients but remained statistically significant (β = 0.233 to MV_IN; β = 0.150 to DV_QC), confirming the conditioning role of real-world context in transforming accreditation requirements into concrete improvement actions.

Importantly, the degree of accreditation internalization (MV_IN) positively influenced quality culture (DV_QC) with a standardized coefficient of β = 0.167 (p < 0.001), indicating MV_IN's substantial mediating role in translating policy factors into beliefs, commitments, and sustainable quality-oriented behaviors. This fully aligns with the mediation hypothesis in the research model and with academic arguments established in works such as Harvey & Stensaker (2008), which contend that quality culture can only truly emerge when organizations themselves apply and internalize improvement principles, rather than merely complying superficially with external requirements.

Table 6: Results Of Causal Relationship Analysis.

Factor	*Estimate*		*Std. Estimate*		*C.R*		*p-value*	
	MV_IN	*DV_QC*	*MV_IN*	*DV_QC*	*MV_IN*	*DV_QC*	*MV_IN*	*DV_QC*

IV_FR	0.133	0.119	0.290	0.211	8.456	5.555	0.000	0.000
IV_IF	0.176	0.144	0.299	0.199	8.788	5.278	0.000	0.000
IV_CC	0.147	0.150	0.311	0.259	9.172	6.770	0.000	0.000
IV_AP	0.124	0.098	0.233	0.150	7.050	4.137	0.000	0.000
IV_MF	0.180	0.110	0.300	0.150	8.895	4.023	0.000	0.000
MV_IN		0.205		0.167		3.708		0.000

The direct and indirect effects testing within the SEM model further strengthened the argument that the impact of quality assurance policy is not simply externally imposed but is amplified through internalization mechanisms within the organization, ultimately leading to the creation and development of sustainable quality culture in ASEAN universities.

Among the five policy factors analyzed (Table 7), Clarity and consistency of evaluation standards (IV_CC) again demonstrated a dominant role, with the largest total impact on quality culture (Total Impact = 0.363), comprising a direct effect of 0.259 and an indirect effect through accreditation internalization of 0.052 (0.311 × 0.167). This confirms that clarity and consistency in accreditation standards not only guide institutional actions but also stimulate self-regulatory capacity, thereby fostering quality-oriented behaviors and beliefs.

Table 7: Results Of Direct And Indirect Impact Effects.

Factor	*Direct to DV_QC*	*Indirect via MV_IN*	*Total Impact**
IV_FR	0.211	0.290 × 0.167 = 0.048	0.338
IV_IF	0.199	0.299 × 0.167 = 0.050	0.349
IV_CC	0.259	0.311 × 0.167 = 0.052	0.363
IV_AP	0.150	0.233 × 0.167 = 0.039	0.272
IV_MF	0.150	0.300 × 0.167 = 0.050	0.350
**Total Impact = Direct Impact + Indirect Impact*			

Next, Internationalization and regional model referencing (IV_IF) and Mandatory nature and legal framework (IV_MF) had comparable total impacts (0.349 and 0.350), each with indirect effects of 0.050. While these factors originate from institutional pressures and globalization contexts, their transformation into cultural values results from a deep internalization process within each higher education institution.

Frequency of accreditation and criterion updates (IV_FR) had a total impact of 0.338, with an indirect portion of 0.048, suggesting that the frequency of interventions and continuous updates in policy can help adjust organizational behavior toward adaptability and ongoing improvement—but only when institutions genuinely transform these requirements into internal motivation.

Lastly, although Practical applicability (IV_AP) had a lower total impact (0.272), its indirect portion (0.039) still showed that when accreditation policy is adapted to practical operational conditions, organizations more readily internalize it, thereby forming a foundation for quality culture.

All relationships were highly statistically significant ($p < 0.001$), reinforcing the argument that quality culture is not an immediate product of policy but the outcome of an organizational internalization process, in which policy becomes effective only when accompanied by internal acceptance, understanding, and commitment to improvement.

Table 8: Results Of Indirect Impact Effect Test.

Path	*Lower Bound (BC)*	*Upper Bound (BC)*	*p-value*	*Conclusion*
DC_QC ← MV_IN ← IV_FR	0.014	0.043	0.001	Significant
DC_QC ← MV_IN ← IV_IF	0.018	0.058	0.001	Significant
DC_QC ← MV_IN ← IV_CC	0.015	0.048	0.001	Significant
DC_QC ← MV_IN ← IV_AP	0.013	0.042	0.001	Significant
DC_QC ← MV_IN ← IV_MF	0.019	0.060	0.001	Significant

To test the mediating role of accreditation internalization (MV_IN) in the model, the study employed bias-corrected bootstrapping with 5,000 resamples and a 95% confidence level. The results showed that all indirect effects were statistically significant ($p = 0.001$), with confidence intervals excluding zero—confirming that MV_IN plays a substantial mediating role between policy factors and quality culture (DV_QC) (Table 8).

Specifically, the indirect effects from frequency of accreditation (IV_FR), internationalization (IV_IF), clarity of standards (IV_CC), practical applicability (IV_AP), and legal framework (IV_MF) to quality culture all passed through MV_IN, with confidence interval ranges from 0.013 to 0.060. This reflects the idea that policy is only truly effective when it is internalized—meaning when external requirements

are transformed into internal beliefs and behaviors.

Taken together, these results reinforce the central thesis that policy truly reaches the deeper layers of quality only when it is internalized—when it is "absorbed" and "restructured" by the institution's cognition, beliefs, and behaviors. In other words, between policy and culture lies an intermediate space where knowledge is internalized, obligations are transformed into convictions, and improvement becomes an identity—exactly as Harvey & Stensaker (2008) described in their explanation of how quality culture is constructed in the higher education environment.

5. FINDINGS AND DISCUSSIONS

The quality assurance policy for academic programs within higher education systems, when designed coherently and implemented consistently, serves not only as an external quality control mechanism but also as a critical catalyst for fostering an endogenous quality culture within higher education institutions. However, this transformative process does not occur automatically; it necessitates "policy internalization" — a process wherein institutions deeply understand, accept, and actively convert policies into intrinsic drivers for continuous improvement. This perspective aligns with the argument by Pham Thi Huong and Nguyen Vu Phuong (2023), who posit that the transition from the ASEAN quality framework (AUN-QA) to an outcomes-based education (OBE) model in Vietnam only becomes effective when accompanied by institutional adaptation and substantive implementation capacity rather than mere formal compliance.

Amidst the intensified educational integration in the ASEAN region, countries such as Thailand, Malaysia, and Indonesia have witnessed similar transformations. Research by Yamin Ahmad and Ismail Fauzi (2022) in Malaysia demonstrates that AUN-QA functions not only as a quality assurance tool but also as a "mechanism for building an improvement culture" when flexibly adapted to national and institutional contexts. Similarly, Apichai Wongsri and his colleagues (2021) in Thailand emphasize that the effectiveness of national QA policies hinges on whether they are embraced by the academic community as part of their academic identity — reflecting a deeply endogenous institutional approach. This resonates with recommendations from Vietnamese scholars like Huynh Van Son and his colleagues (2024), who argue that substantive change in QA can only occur if policies are thoroughly understood, consensually accepted, and voluntarily enacted by faculty, students, and administrators.

Consequently, it can be asserted that quality assurance of academic programs, when transcending mere formal compliance, can become a form of soft power driving universities' intrinsic innovation capacities. This process requires that QA policies not only be formally transparent but also contextually relevant, aligned with regional standards, and sufficiently reliable to serve as a reference framework for continuous enhancement. Ultimately, quality culture does not emerge from inspection alone but grows through belief and proactive improvement. Therefore, program quality assurance should be conceptualized as a "genetic code" regulating improvement behaviors, rather than an externally imposed "administrative template."

5.1. Policy Recommendations

Recommendation 1: Enhancing Policy Internalization in the Implementation of Program Quality Assurance

The quality assurance policy for academic programs within higher education systems across ASEAN countries should be designed to foster institutional internal capacity. This means moving beyond mere compliance towards cultivating understanding, acceptance, and proactive development of a quality culture. Rather than imposing a rigid uniform standard, policies should offer flexibility to allow institutions to adapt according to their specific characteristics and internal strategies. A pertinent example comes from Malaysia, where the Malaysian Qualifications Agency (MQA) has delegated self-assessment and internal quality assurance authority to certain universities (Malaysian Qualifications Agency, n.d.), enabling them to develop more robust and distinguished internal quality assurance systems. Notably, Universiti Putra Malaysia has been recognized for self-accreditation rights since 2010, contributing significantly to sustainable quality culture within the institution (University of Putra Malaysia, n.d.).

Recommendation 2: Restructuring the Legal Framework to Ensure Clarity, Consistency, and Continuous Updating of Program Quality Assurance Policies

An effective quality assurance framework must not only be stable but also regularly updated to respond to changes within the education system. Vietnam should prioritize establishing coordinated, transparent, and long-term legal mechanisms, along with a cyclical process of evaluation – updating –

feedback, to adjust quality standards in alignment with international trends and national realities. Thailand serves as a notable example, routinely revising its quality assurance standards and maintaining continuous dialogue channels between regulatory agencies and educational institutions (Office for National Education Standards and Quality Assessment [ONESQA], 2020).

Recommendation 3: Establishing Adaptive Quality Assurance Mechanisms According to Institutional Autonomy Levels and Development Stages of Different University Types

Amid Vietnam's significant transition toward university autonomy, a one-size-fits-all quality assurance policy risks being overly simplistic and failing to accurately reflect the quality operations of institutions with diverse contexts. Instead, it is necessary to develop tiered quality assurance models, adjusting standards and procedures based on the level of autonomy, academic disciplines, and developmental stages of each university. This recommendation aligns with the orientation established in the amended Higher Education Law of 2018 and recent decrees on university autonomy but requires explicit articulation within quality assurance policies to maximize reform effectiveness.

5.2. Limitations Of The Study

While this study offers meaningful insights into the influence of quality accreditation policy on the development of quality culture within higher education institutions, certain limitations warrant acknowledgment. First, the assessment of the degree to which policy and quality culture are internalized relies predominantly on self-reported data, which may be susceptible to biases arising from social desirability or respondents' conformity tendencies. Second, the present research adopts a primarily descriptive and quantitative approach, lacking the depth of qualitative inquiry necessary to illuminate the underlying mechanisms of internalization and to identify potential mediating organizational factors that may shape the transformation of policy into an embedded institutional culture. An additional limitation lies in the absence of qualitative triangulation methods such as in-depth interviews or case studies to complement the survey data. This omission was largely due to constraints of time, resources, and the cross-national scope of the sample, which posed significant challenges to implementing qualitative approaches in a consistent manner. Nevertheless, addressing these gaps in future research by incorporating qualitative evidence alongside large-scale quantitative data would contribute to a more nuanced and comprehensive understanding of accreditation and quality culture within the regional higher education context.

5.3. Best Practices

To practically apply quality accreditation policies that foster a genuine quality culture, it is essential to move beyond procedural training toward interactive and practice-oriented learning that strengthens policy internalization. Quality assurance should not depend solely on external evaluation standards but be embedded in training activities aligned with each institution's specific context and mission. When managers, faculty, and staff collectively participate in developing and implementing QA frameworks, policy application becomes more flexible, relevant, and effective. Concrete ASEAN experiences illustrate this: in Malaysia, the Malaysian Qualifications Agency (MQA) has granted self-accreditation rights to universities such as Universiti Putra Malaysia, enabling stronger internal systems and sustainable quality culture; in Thailand, ONESQA reforms have emphasized regular revision of standards and continuous dialogue with universities, fostering adaptability and institutional ownership. More broadly, as ASEAN universities shift from a compliance culture to one of continuous improvement, sustaining post-training support, building communities of practice, and creating forums for experience sharing remain crucial to embedding and maintaining a robust quality culture.

5.4. Research Agenda

To deepen the understanding of the impact of accreditation policies, future research could focus on conducting qualitative research on internalization mechanisms, utilizing in-depth interviews and case studies to clarify how policies are "absorbed" and "restructured" into organizational cognition, beliefs, and behaviors. Concurrently, it is necessary to identify mediating organizational factors such as management structure, internal culture, and leadership commitment, which influence the policy-to-quality culture transformation process. Further in-depth qualitative studies are needed to explore how staff, learners, and instructors perceive, understand, and transform training content into practical work. Additionally, comparative studies among ASEAN countries or between different types of institutions within the region would help elucidate the influence of institutional and cultural contexts on policy internalization. Longitudinal studies are also essential to assess the sustainability of the changes brought about. Finally, developing indicators to

assess the maturity of quality culture within institutions could be a useful tool for continuous monitoring and improvement during organizational transformation.

5.5. Educational Implications

The research findings indicate that, for quality assessment policies to truly be effective, quality assurance education must be viewed not merely as an administrative requirement, but as an integral part of a comprehensive human resource development strategy for universities. Integrating content on quality culture, continuous improvement mindset, and quality assurance practices into training programs for faculty, administrators, and students will contribute to transforming perceptions about the role of quality assessment in higher education. Furthermore, it is necessary to establish ethical standards and professional responsibilities in policy implementation, intrinsically linked to the specific context of each nation and type of educational institution. Fostering reflective capacity and proactive engagement in quality assurance will help shift from a model of "doing for inspection" to "doing for sustainable development."

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