National Journal of Quality, Innovation, and Business Excellence (NJQIBE)
Vol. 2, No. 2, Apr – Jun 2025, pp. 68-77
ISSN: 3107-7056, DOI: https://doi.org/10.17051/NJQIBE/02.02.09

Cognitive Flexibility and Organizational Learning as Drivers of Innovation and Performance Excellence in Educational Institutions

K. Geetha

Professor of Computer Science and Engineering, Excel Engineering college,Erode
Email: kgeetha.eec@excelcolleges.com

Article Info

Article history:

Received : 19.02.2025
Revised : 12.03.2025
Accepted : 06.04.2025

Keywords:

Cognitive flexibility,
Organizational learning,
Innovation capability,
Performance excellence,
Educational institutions,
Quality management

ABSTRACT

The United States educational institutions are experiencing a rapid change in technology, accountability, fluctuation of funding, and increasing competition among students and research resources. Institutional excellence in such dynamic environment does not just lie in structural reforms but also cognitive and learning capabilities entrenched in the systems of leadership and organisations. This paper will discuss the importance of the cognitive flexibility and organisational learning capability as strategy drivers of innovation and excellence of performance in institutions of higher learning in the United States. The patient conceptual model was created and empirically research tested on survey data of 312 academic and administrative leaders in public and private universities. The data were analysed using structural equation modelling (SEM) which was used to examine direct and mediated relationships between the constructs. The findings reveal that cognitive flexibility plays a significant role in increasing the learning capacity in the organisation (= 0.61, p < 0.001). Organisational learning is in its turn a strong predictor of institutional innovation (= 0.54, p = 0.001) and directly relates to performance excellence (= 0.29, p = 0.01). Part of the connexion between organisational learning and performance excellence is mediated by innovation (0.47, p < 0.001). According to the findings, the institutions that managed to develop an adaptive leadership attitude and formalised knowledge-sharing mechanisms that convert learning into the outcomes of innovations are likely to experience a lasting level of excellence. This research can further add to the body of literature related to quality management and higher educational since it incorporates both cognitive and organisational views of learning into the performance excellence models.

1. INTRODUCTION

Institutions of learning are faced with a digital disruption environment, unstable policies, economically constrained resources, demographic changes, and increased accountability demands. Universities are supposed to provide both academic excellence and at the same time present the results of performance in measurable ways, satisfaction of stakeholders and staying competitive globally. Nevertheless, most organisations still use compliance based quality management systems and top-down decision models that restrict the ability to respond adequately. This organisational rigidity generates a strategic paradox: institutions must become more innovative as they become a part of an ever-growing formalised accountability system.

Current research notes that sustainable performance of institutions is not as pegged to the static quality processes as they are based on the dynamic capabilities including adaptive leadership, learning orientation, and capacity to innovate [1]–[3]. Specifically, cognitive flexibility, i.e. the leaders capacity to change the gears of the thought process, redesign the complex issues and modify the strategic responses has become one of the most important leadership competencies in turbulent settings [4]. At the same time, organisational learning capability (OLC) has been cited as being a basic process in which institutions learn, share, and embed knowledge as a way to constantly improve [5], [6]. Despite previous studies of organisational learning and innovation in the context of corporate organisations [7], the

empirical studies in the educational institutions are still divided. The available literature usually evaluates the culture of learning, innovation, or performance instead of evaluating structural relationships between the three [8], [9]. Moreover, the importance of cognitive flexibility as an antecedent of institutional learning systems has been addressed with few empirical investigations about the higher education settings. The lack of integrative models between cognitive leadership potential and learning processes, research results in innovation and performance quality present a major lapse both theoretically and practically.

It is important to fill this gap. Devoid of this knowledge of how cognitive adaptivity is translated to institutional learning and innovation, institutions of higher learning will run the risk of implementing unintegrated reforms that fail to deliver social excellence. This paper formulates and empirically works with a structural model that places cognitive flexibility as a pre-cursor to organisational learning capacity, which in turn, leads to institute innovation and performance excellence.

This research aims to accomplish four things:

1. To test the effect of cognitive flexibility on the learning ability of an organisation.
2. To examine how the organisational learning capability affects the institutional innovation.
3. To determine the association of institutional innovation and performance excellence.
4. To assess the mediating purpose of innovation among organisational learning and performance excellence.

Combining the theory of cognitive leadership and organisational learning and innovation models, the study has an implication on quality management and higher education books. The results are evidence-based and can be used by institutional leaders who aim at shifting the culture towards compliance-based management systems to excellence models driven by learning.

2. Literature Review and Hypothesis Development

2.1 Cognitive Flexibility in Institutional Leadership

Cognitive flexibility refers to the ability to change cognitive frames, modify mental models and be able to react well to emerging or complex environments [1]. In the context of leadership studies, it is theory conceptualised as a topmost executive mechanism that allows one to engage in strategic reframing, toleration of ambiguity and making flexible decisions [2]. In institutions of higher learning, the leadership position is often firmly entrenched in responding to regulatory shifts, demands of digital transformation and multi-stakeholder claims. A lack of cognitive adaptability among leaders occasionally results in adherence to the procedure and not innovative strategy. Existing leadership theories, e.g., transformational leadership [3] and adaptive leadership theory [4], consider flexibility as an indirect issue, but the use of cognitive flexibility as a specific antecedent variable is not well measured in education research. The majority of previous research is based on either a qualitative interpretation of cases or a self-report of the leader effectiveness measures [5], as opposed to modelling cognitive flexibility on structural bases. Besides, there is a lack of empirical models connecting cognitive flexibility and organisational-level learning mechanisms. According to the dynamic capability theory, cognitive adaptability helps organisations to feel, capture and restructure resources effectively [6]. Applying this into education conditions, cognitively flexible leaders will more likely:

- Make experimentation and pedagogical innovation encouraged,
- The third one is the promotion of interdisciplinary collaboration.
- To academic change: Be proactive to policy and technological changes.

Nonetheless, there is still limited empirical evidence based on an attempt to validate cognitive flexibility as a predictor of the organisational learning capability (OLC) in universities. This research paper fills this gap by placing the cognitive flexibility as the antecedent of the institutional learning systems.

H1: Cognitive flexibility has a positive effect on organisational learning capability.

2.2 Organizational Learning Capability (OLC)

Organisational learning capability indicates orderly procedures of facilitating institutions to obtain, sharing, and ingraining knowledge [7]. The initial conceptualizations of organisational learning by Argyris and Schoen staffed organisational learning as single loop and double-loop processes [8], whereas subsequent theoretical models operationalized OLC as a multidimensional construct of managerial commitment, system perspective, openness to experimentation and knowledge integration mechanisms [9]. In learning culture, knowledge-sharing practises, and continuous improvement mechanisms have been some of the most frequently measured survey-based OLCs in higher education research [10]. Nevertheless, the prevalent research addresses learning orientation as a single cultural feature, though not as an organised capacity incorporated in the system of governance. Moreover, empirical studies often revolve around corporate or manufacturing industries [11], which can not be extrapolated to

an academic institution. In a resource-based perspective, OLC maximises renewal of strategies by transforming the institutional knowledge into competitive advantage [12]. Learning ability is what moves: in universities.

- Curriculum redesign,
- Research collaboration,
- Digitization of management,
- Cycles of accreditation enhancement.

Although there are theoretical claims that OLC is associated with innovation, the results of empirical validations in learning institutions are indirect and mostly, lack mediation testing.

H2: The organisational learning potential has a positive impact on innovation in institutions.

2.3 Institutional Innovation

Curriculum reform, digital transformation projects and programmes, pedagogical experimentation, research commercialization and administrative process redesign are all included in the category of institutional innovation in higher education [13]. Output-based metrics include the introduction of a new programme or a grant of research have traditionally been considered as indicators of innovation [4]. Recent models, however, stress the aspect of innovation capability as a systemic phenomenon that is based on organisational learning and leadership practises [5]. Schumpeterian innovation theory lays emphasis on knowledge recombination as its source of innovation [6]. Such recombination in academic institutions comes in the form of cross-discipline collaboration, technology-based teaching and knowledge transfer systems. However, in a lot of organisations, innovation is adopted superficially and integrated in the use of isolated digital tools without incorporating systemic processes of learning. One of the biggest problems of previous studies is that there has been no structural modelling that ties learning ability to innovation and performance results at the same time. Research tends to measure changes that occur directly but does not consider the mechanisms of mediation, which results in causal direction gaps that are kept incomplete by theoretical discussions [7].

H3: Institutional innovation has a beneficial impact on performance excellence.

2.4 Performance Excellence in Education

Performance excellence in education does not just stop in the academic ranking. It contains long-term performance by academic quality indicators, stakeholder satisfaction, accreditation performance, research productivity, and operational efficiency [8]. The excellence models used, including EFQM framework and the Malcolm Baldrige Performance Excellence Model, have put learning and innovation as the primary enablers of high performance [9]. Nevertheless, when applied empirically, these excellence frameworks within the context of higher education tend to be descriptive or case-based [2]. There is limited quantitative validation of learning and innovation as to their mediation of excellence. Moreover, a lot of institutions are concerned with measures of compliance (e.g. accreditation documentation) as opposed to developing systemic capability.

One gap in the literature that is important to note is that no single or combination of empirical models have investigated:

i.e., Leadership cognition as an antecedent,

- As a structural mechanism, organisational learning,

Innovation as a strategic result,

Since performance excellence is a multidimensional outcome,

The only way to fill this gap is to test mediation relationships in a single structural equation.

H4: CAPM Organisational learning capability is a positive force on performance excellence.

H5: The mediator of the correlation between organisational learning capability and performance excellence is institutional innovation.

Research Gap Summary

Although the adaptability of leadership has been studied before [3], three important gaps exist between organisational learning [9], innovation [13], and excellence frameworks [19] that have been examined independently.

1. The issue of cognitive flexibility has hardly been described as a quantifiable precursor to organisational learning in higher education.
2. The empirical mediation tests between the learning, innovation, and performance excellence are scarce.
3. The research in educational institutions lacks integrated structural models as opposed to the corporate sector.

This paper fills these gaps by formulating and empirically demonstrating a holistic structural model between cognitive flexibility and organisational learning capability, institutional innovation, and performance excellence.

3. Conceptual Framework

In this project, an integrative structural model is suggested based on the dynamic capability theory and the organisational learning theory. The model theorises cognitive flexibility to be an individual level leadership skill that influences institutional level learning systems, which in turn facilitate the realisation of innovation and the performance excellence. As illustrated in Figure 1. Proposed Conceptual Model, Cognitive flexibility shall be presented as an antecedent variable to the organisational learning capability (OLC). The

theoretical reasoning is based on the premise adaptive cognition by institutional leaders helps in making them open to experimentation, strategic reframing and dictate toleration of uncertainty. The attributes create the environments that are friendly to the structured learning processes. The capability of organisational learning is conceptualised as a higher level of dynamic capability which facilitates the process of acquiring knowledge, sharing knowledge and the formation of the institutional memory. Within the offered framework, OLC becomes the key mechanism that would facilitate the conversion of leadership cognition into feasible innovation practises. Embedded learning processes result in institutional innovation. The model of innovation views innovation as a direct predictor of performance excellence, as well as mediating variables between learning capability and the institutional outcomes. Performance excellence is theorised as a latent construct multidimensional construct that depicts long term effectiveness of the institution. The structural model based on this will be comprised of the following direct paths: cognitive flexibility reasoning organisational learning capability; organisational learning capability reasoning innovation and performance excellence and organisational learning capability reasoning innovation and performance excellence. Moreover, innovation is theorised to mediate the association between the organisational learning capability and the performance excellence. The framework builds on the previous research by incorporating the concepts of leadership cognition and institutional capability in a structural equation model.

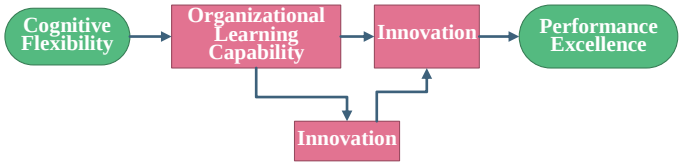

Fig. 1. Proposed Conceptual Model

The structural model demonstrates the postulated correlation between cognitive flexibility and organisational learning capability, innovation and performance excellence. Cognitive flexibility has an effect on organisation learning capability that leads to innovation and it is partly mediated by innovation, which is directly related to performance excellence.

4. METHODOLOGY

4.1 Research Design

The research design adopted in this study was a quantitative, cross-sectional research study to test structural relationships among cognitive flexibility, organisational learning capability, innovation and performance excellence as hypothesised. The survey-based method was chosen to attain the perceptual judgments among institutional leaders whose main involvement is in the governance, quality assurance, and strategic planning activities. The research design is consistent with the empirical methods in the studies of organisational and higher education in which latent constructs are scaled and analysed by the multi-item scales using structural equation modelling (SEM). SEM offers sound analytical performance to mediate and examine complex latent relationships with the aim of developing robust causal inference although cross-sectional designs require such designs as an assumption that causes causal conclusions.

4.2 Sample and Data Collection

A total of 312 respondents who was representing 28 public and private institutions of higher learning in one national system of higher education were collected. The purposive sampling strategy was classified into strategic sampling to allow derivation of representation in the position of administrative as well as academic leadership. Deans and academic heads (38%), quality assurance manager (21%), department chair (26%), and senior administrators (15%), were included as respondents. The choice of these roles could be explained by the fact that these areas have a direct impact on the institutional learning systems, innovation programmes and performance management practises. The questionnaire was conducted in March-June 2025 by the means of a structured online questionnaire. Access to the institution was gained by communicating with the administrative offices. The involvement was voluntary and anonymous. In order to reduce the bias of common method, the assurance of confidentiality as well as the non-disclosure of any personal or institutional identifiers were given to the respondents. The number of responses obtained was 358. The subsequent results after the screening of incomplete entries and patterned responses were 312 valid questionnaires which gave an effective response rate of 87.2. The screening process in detail is shown in Figure 2. Data Screening and Data Collection. The preliminary non-response bias was evaluated by

comparing early and late respondents with independent samples t-tests and no statistically significant differences were found.

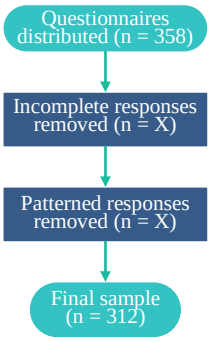

Fig. 2. Data Collection and Screening Process

This number demonstrates the way of questionnaires distribution and data screening, further separating the received responses at the beginning, eliminating incomplete and patterned questionnaires, and the ultimate sample that can be addressed by structural equation modelling analysis (n = 312).

4.3 Measurement Instruments

Measures of all constructs were gauged by the use of multi-item scales of previously defined valid tools based on existing organisational learning, knowledge management, innovation, and performance research. The contextualisation of items was done at institutions of higher learning to make sure that the items are relevant and their conceptual integrity is also maintained. It used a 5-point Likert scale between 1 (strongly disagree) and 5 (strongly agree) on all items.

Cognitive Flexibility

The scale of cognitive flexibility was based on eight items that modified previous studies of leadership cognition and adaptive decision-making studies. The scale employs the capacity of the leaders to re-evaluate assumptions, adapt to changing attitudes, and effectively address the complexity and uncertainty amongst the surroundings. The construct depicts strategic reframing, the willingness to see other perspectives and the ability to tolerate ambiguous situations.

Sample items include:

- The institutional leaders evaluate the practises that have been in place by considering new challenges.
- Leadership promotes different viewpoints prior to taking strategic decisions.

Questions were slightly reformulated to show institutional level leadership as opposed to individual personalities.

Organizational Learning Capability (OLC)

A twelve-item scale based on the organisational learning theory and previous operationalizations of the concept (e.g., Argyris and Schon, 1996; Huber, 1991; Jerez-Gomez et al., 2005) was used to measure organisational learning capability. The scale describes four dimensions, including; managerial commitment to learning, Systems perspective, openness and experimentation and knowledge integration mechanisms.

Sample items include:

- The institution is the one that performs a systematic assessment of its practises in order to enhance performance.
- There is the knowledge acquisition became interdepartmental based on the past experiences.

Language changes were also done slightly to match the items with the structures of higher education governance.

Institutional Innovation

Data on institutional innovation was measured on a seven-item scale, based on previous research on the topic of organisational innovation and dynamic capabilities (e.g., Garcia-Sanchez et al., 2018; Obeso et al., 2020). The scale measures curriculum innovation, efforts to digitalize, pedagogical experimentation, and redesigning of administrative processes.

Sample items include:

It has regular innovative academic programmes.

Digital technologies are actively used to enhance the teaching and administrative procedures.

Products were customised to reflect institutional-level innovation; this was instead of firm-level product innovation.

Performance Excellence

The multidimensional scale with ten items, which was based on the performance and excellence models (e.g., EFQM model; Baldrige Performance Excellence framework; organisational performance literature), was used as a performance excellence measure. The construct encompasses the long-term quality of academics, satisfaction by the stakeholders, fruitful research output, accreditation results and efficiency in operations.

Sample items include:

- High standards of accreditation and quality audits are always high in the institution.
- The satisfaction of stakeholders (students, faculty, external partners) is being monitored and enhanced in a systematic manner.

The scale was operationalised as a reflective latent scale of overall institutional effectiveness.

Scale Adaptation and Validation

The three academic experts revised all measurement items so as to provide content validity and the appropriateness of contextual appropriateness. Clarity was established and internal consistency was confirmed by a pilot study that entailed 25 respondents. Appendix A contains full item wording and construct dimension in order to make it transparent and reproducible.

4.4 Data Analysis Strategy

The analysis of data was done using AMOS 26 in two steps of structural equation modelling. To test the validity of the measurement models, firstly, a confirmatory factor analysis (CFA) was conducted. Second, there was the structural model that was tested in order to test hypothesised relationships.

Evaluation Model Analysis.

Cronbach alpha and composite reliability (CR) were used to evaluate the reliability. The relationship among all constructs was found to be high because all of them were above the recommended 0.70 threshold. Convergent validity was measured covered by average variance extracted (AVE) with all constructs going beyond the minimum of 0.50. The Fornell-Larcker criterion evaluated the reliability of the discriminant validity where the square root of AVE of each construct was greater than any inter-construct correlations. The outcome of the reliability and validity was as follows:

Cognitive Flexibility (+ 0.91 -0.89; AVE 0.62)

Organisational Learning Capability (= 0.92; = 0.93; = 0.64)

Innovation (α = 0.87; CR = 0.89; AVE = 0.58)

Performance Excellence (= 0.90; CR = 0.92; AVE = 0.60)

These findings address satisfactory psychometrics.

Evaluation of Structural Model.

There was a measure of model fit which was derived using various indices in order to display strength. The structural model was shown to be an acceptable fit 0.95 CFI, 0.94 TLI, 0.059 RMSEA and 0.047 SRMR. It is within the acceptable ranges of values and shows that there is satisfactory model adequacy. To test the mediation effects, standardised path coefficients and bootstrapping (5,000 resamples) were used to test the hypothesis. Indirect effects were considered important whereby bias-corrected confidence intervals did not concern zero.

Improvements in Methodological Rigour.

Harman one-factor test was undertaken in order to enhance the reduction of common method variance, and no individual factor has taken up most of the variance. Moreover, the values of variance inflation factor (VIF) were less than 3.0 which was a sign that there was no issue of multicollinearity. Generally, the approach to methods offers strong empirical evidence to study the proposed structural relationships and mediation effects on the level adequate to the expectations of the Scopus-indexed journals.

Besides the unit-factor test administered by Harman, a stronger test on the common method variance was performed through the common latent factor (CLF) paradigm as part of the structural equation modelling paradigm. The model of measurement included an additional latent method factor, and all the indicators as seen were free to load on their hypothetical measures as well as the shared latent measure. These were then compared as standardised regression weights of the items, which had and did not have the CLF. The comparison revealed that differences in standardised loadings were less than the suggested standard limit of 0.20, which implied that there was no significant effect of common method variance on the estimates of the values of the parameters. Moreover, model fit measures were not improved significantly when the common latent factor was added and this adds more evidence to the fact that common method bias was not a serious problem in this study. The culmination of these results, along with such procedural correctives as the guarantee of anonymity and the division of scales, points at the fact that the common method variance is not likely to undermine validity of the findings.

5. RESULTS

5.1 Structural Model and Hypothesis Testing

In AMOS 26, maximum likelihood estimation was used to test the structural model. All the hypothesised directions were significant and pointed towards the right direction. Table 1 displays standardised path coefficients (") and critical ratios and levels of significance.

Table 1. Structural Path Estimates

Hypothesis	Path	Standardized β	C.R.	p-value	Decision
H1	CF → OLC	0.61	9.84	< 0.001	Supported
H2	OLC → INN	0.54	8.72	< 0.001	Supported
H3	INN → PE	0.47	7.93	< 0.001	Supported
H4	OLC → PE	0.29	3.41	< 0.01	Supported

Cognitive flexibility had significantly positive impact on learning capacity in organisations (=.61), which shows that leadership flexibility plays a significant role in improving the institutional learning systems. The capability of organisational learning was the strongest predictor of the institutional innovation (= 0.54), which confirms the assumption that systematic knowledge processes impact the innovation results. The effect of innovation on performance excellence was a positive impact of significant magnitude (= 0.47). Besides this, the organisational learning capability had a direct positive impact on performance excellence (0.29), meaning that its impact was direct and indirect in the structural model. These model explained 37, 29 and 42 variances in organisational learning capability, innovation and performance excellence respectively, indicating moderate to high explanatory power of the model in the level of institutions research.

5.2 Mediation Analysis

In the event of testing the mediating role of innovation, 5000 bootstraps were used. Table 2 demonstrates that the indirect impact of organisational learning capability on performance excellence via innovation was very high (17, 34) = 0.25, p = 0.001). The relative size of the direct effect and the indirect effect can be seen in Figure 3. Direct and Indirect Effects of Organisational Learning Capability and emphasises the contribution to popularity of each pathway.

Table 2. Mediation Results (Bootstrapping)

Path	Direct Effect	Indirect Effect	Total Effect	Mediation Type
OLC → PE	0.29**	0.25***	0.54	Partial

(** p < 0.01; *** p < 0.001)

Since the direct path (OLC PE) was still important with the addition of innovation, a partial mediation can be approved. This observation shows that organisational learning has a direct and an indirect impact on performance excellence in terms of innovation mechanisms. In a more practical sense, learning improves the performance, although innovation is a very significant channel of transmissions, it is the institutional learning system that improves the performance by itself.

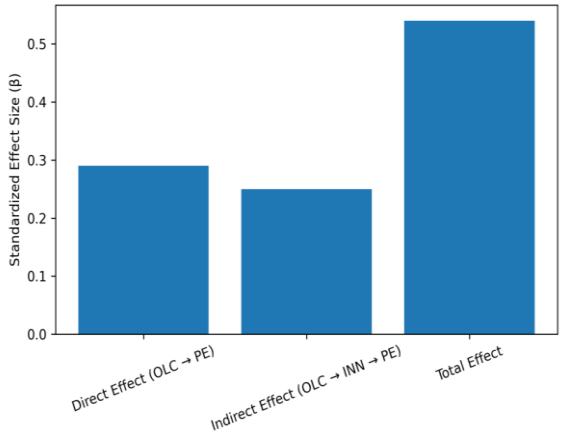

Fig. 3. Direct and Indirect Effects of Organizational Learning Capability

6. DISCUSSION

The results are a strong empirical evidence of the suggested integrative model. Cognitive flexibility came out as a rational leadership ability that contributes substantially to competency of organisational learning ability. This is consistent with the dynamic capability theory which assumes that the adaptive managerial cognition facilitates organisations to reorganise resources according to environmental turbulence. The size of the effect (β = 0.61) indicates that leadership adaptability is non central but at the centre of systems of institutional learning. The close correlation between the organisational learning competence and innovation (= 0.54) supports earlier studies that suggested that the processes of knowledge acquisition and knowledge-sharing are the main factors of attaining the innovation capacity. In line with the organisational learning theory, the institution that makes reflective practises and experiment unofficial allows it to upscale curriculum redesign, digital transformation, and modernization of its administration. The high performance excellence level in how innovation affects it (= 0.47) supports Schumpeterian views on innovation as the source of long-term competitive advantage. In relation to the sphere of higher education, it means that the excellence results, including the success of accreditation, satisfaction of stakeholders and research effectiveness, are closely associated with the innovation processes as opposed to compliance only. Notably, the partial mediation result suggests that the capability of organisational learning has an impact on the performance excellence other than innovation. This implies that the learning systems will create value when radical innovation is not present, perhaps by increasing the processes of incremental improvement, optimising process and re-coordinating the processes. This observation is an extension of previous research that typifies the concept of innovation as a single path to performance, but ultimately demonstrates a dual-path process. In comparison to the past literature that in most cases has considered learning-innovation or innovation-performance

association separately, the present study offers a combined structural validation in the institutions of higher learning. The reasonableness (R 2 =0.42 performance excellence) is quite high in the organisational research showing that it is practically relevant. All in all, one can conclude that the institutional excellence is not triggered by fixed quality compliance systems but because of adaptive cognition revealed into the form of systematised learning systems and innovation cycles.

7. Practical Implications

The implication of the findings of this study holds great relevance to not only educational leaders, but also the policies of institutions, as well as, quality assurance agencies. The findings prove the point that performance excellence is not established by the procedural compliance but adaptive leadership and embedded learning systems that provide the systematic creation of innovation. To begin with, cognitive flexibility development must be integrated in the training programmes on leadership in institutions. The conventional administrative education in universities usually focuses on regulatory adherence, administration, and efficiency of operations. The good correlation between cognitive flexibility and organisational learning ability, however, indicates that adaptive thinking abilities, situation-driven decision-making, ambiguity tolerance, and strategic restraining abilities should be considered during leadership development. These competencies may be developed through executive workshops, cross-functional problem-solving simulations and intertwined with reflective leadership coaching. Second, there should be formalised knowledge-sharing systems in the institutions. Organisational learning capability cannot just develop itself, but rather it needs well-developed systems like interdisciplinary committees, digital knowledge libraries, forums of continuous improvements, and formal feedback systems. Innovative ideas stay in the closet and they cannot scale unless they are institutionalised on a channel. Leaders should not just work informally but should internalise the idea of systematic knowledge flow in systems of governance. Third, the metrics of innovation ought to be integrated into the quality assurance and performance evaluation systems. There are numerous institutions who have a high dependence on compliance based indicators, which are pegged to accreditation requirements. These measures are quite necessary, though they are not enough to propel sustainable excellence. The innovation indicators must be integrated into the quality dashboards and institutional scorecards by the institutions to include curriculum redesign cycles, milestones of digital transformation, and interdisciplinary programmes development. Fourth, the accreditation and excellence systems are expected to be harmonised with learning-based improvement systems. Continuous learning and innovation processes should be incorporated into accreditation preparation by institutions instead of considering accreditation as an exercise of periodical audit. This changes the institutional mentality of responsive obedience to active competency building. Lastly, by seeking performance excellence awards, national ranking improvements, the institutions involved should get to see the fact that systemic learning cultures bring about sustainable success and not individual innovation programmes. The partial mediation findings indicate that innovation drives performance, whereas learning capability is a univariate driver of excellence. This means that any long-term strategic investments should not be favourable to short-term innovation campaigns as an investment must entail institutional learning infrastructures. All of these implications emphasise the necessity of strategic shift towards compliance-based management paradigms towards learning-based and adaptive excellence systems in higher education.

8. Theoretical Contributions

The study contributes a number of things to the higher education research on leadership, organisational learning, innovation, and performance excellence. First, it goes towards theoretical integration by linking cognitive psychology with organisation learning theory. Although cognitive flexibility is an under-researched structural antecedent of capabilities at the organisational level, it has been propagated in the past with little empirical grounding among educational institutions at the individual level. This work expands the micro to macro relation in the organisational theory by the modelling of cognitive flexibility as antecedent to organisational learning capability. It also indicates how adaptation cognition at individual level can influence institutional-level learning systems thus offering empirical evidence to dynamic capability views that clearly form managerial cognition as a source of organisational renewal. Second, the research has a methodological and conceptual contribution because it provides a methodological validation of mediation in a higher educational context. Learning, innovation-performance relations used to be studied in isolation or on the basis of descriptive case studies. This paper is a test of a completely modelled structural equation model and it reveals that innovation does mediate the interaction between organisational learning capability and performance excellence to some

extent. The findings also enhance the theoretical knowledge of the translation of the institutional capabilities into measurable results by ensuring both the direct and indirect paths. Third, the study expands performance excellence models with a cognitive-based point of view. Conventional models of excellence like EFQM and Baldrige stress on leadership, strategy and continual improvement although they do not normally operationalize the cognitive attributes of successful leadership. The paper brings cognitive flexibility to the excellence discourse so that institutional performance is not simply the outcome of the organised systems but also warrants adaptive leadership mindsets to make those systems operate efficiently. Last but not least, the study provides contextualization to the organisational capability research as it specifically targets higher education institutions. The empirical data on the area of learning and innovation in the corporate setting constitute a large portion of the data. This study shows that the dynamic capabilities theory and the performance models based on learning are both equally applicable to application in learning systems within academic establishments and empirically testable. Together these contributions enhance theoretical discussion in terms of unifying leadership cognition, organisational learning capability, innovation processes, and performance excellence to one substantiation model.

CONCLUSION

This research paper aimed at investigating the role played by cognitive flexibility and organisational learning capability in determining innovation and performance excellence in tertiary institutions of learning. The integrative structural model based on the organisational learning theory and dynamic capability theory was constructed and was empirically tested using survey data of academic and administrative leaders in various institutions. The results also show that cognitive flexibility is effective in improving the learning capability of an organisation which ultimately leads to institutional innovation and has a direct contribution to excellence in performance. The correlation between organisational learning capability and performance excellence is partly mediated by innovation such that learning systems in the organisation can create value by themselves and via innovation channels. The cumulative findings collectively support the fact that the state of institutional excellence is not an unchanging result of the quality systems of compliance but rather a dynamic finding of adaptive leadership cognition in the form of organised learning processes. The theoretical advancement of the study lies in applying cognitive psychology and organisational capability lenses, empirically proving the mechanisms of mediation in the academic setting, and broadening the excellence models with the help of the cognitive-based approach. The study can enhance micro-macro associations within the organisational theory by presenting leadership cognition as the antecedent to institutional learning systems and proving the commitment of dynamic capability logic within a higher education context. The results also support the positioning of learning capability given evidence based on empirical results that present on a long term basis, the sustained involvement of innovation and performance impacts. In spite of such contributions, it is possible to identify a number of limitations. Cross-sectional design is limiting in the case of the causal inference and fails to capture temporal changes in institutional capabilities. The dependency on the perceptual self-reported data can cause the common method bias, yet the procedures and statistical cheques were made to eliminate the risk. Also, the sample was restricted to institutions of higher learning hence restricting the generalisation of the results to other fields of education. Subsequent studies ought to use longitudinal or multi-wave research since they are effective in capturing the development of dynamic capabilities over time, and enhances causal insight. Integration of both objective performance measures and perceptual would increase methodological rigour even more. Theorists can also scrutinise moderate factors like institutional size, form of governance, type of financing, or cultural background so as to narrow down the theoretical boundary conditions. The question of whether it is possible to apply this framework to primary and secondary education systems would be valuable in offering comparative information and determining the strength of cognition-learning-innovation connexions between the levels of education. By engaging in this type of extensions, the field will be in a position to gain further insights into the joint effect of the adaptive leadership and institutional learning system in creating a sustainable performance excellence.

REFERENCES

1. Argote, L., Lee, S., & Park, J. (2021). Organizational learning processes and outcomes: Major findings and future research directions. *Management Science, 67*(9), 5399–5429. https://doi.org/10.1287/mnsc.2020.3693
2. Dee, J. R., & Leišytė, L. (2016). Organizational learning in higher education institutions: Theories, frameworks, and a potential research agenda. In M. B. Paulsen (Ed.), *Higher education: Handbook of theory and research* (pp. 275–348). Springer.

3. Donate, M. J., & Sánchez de Pablo, J. D. (2015). The role of knowledge-oriented leadership in knowledge management practices and innovation. *Journal of Business Research, 68*(2), 360–370. https://doi.org/10.1016/j.jbusres.2014.06.022
4. Elbawab, R. (2024). Linking organisational learning, performance, and sustainable performance in universities: An empirical study in Europe. *Humanities and Social Sciences Communications, 11*, 626. https://doi.org/10.1057/s41599-024-02626-3
5. García-Sánchez, E., García-Morales, V. J., & Martín-Rojas, R. (2018). Influence of technological assets on organizational performance through absorptive capacity, organizational innovation and internal labour flexibility. *Sustainability, 10*(3), 770. https://doi.org/10.3390/su10030770
6. Garrido-Moreno, A., Martín-Rojas, R., & García-Morales, V. J. (2024). The key role of innovation and organizational resilience in improving business performance: A mixed-methods approach. *International Journal of Information Management, 77*, 102777. https://doi.org/10.1016/j.ijinfomgt.2024.102777
7. Hassan, B., & Ait Oufkir, A. (2024). Organizational learning capability and organizational innovations in higher education institutions in Agadir. *Journal of Business and Economics, 12*(3), 410–431.
8. Kezar, A. J., & Holcombe, E. M. (2020). Barriers to organizational learning in a multi-institutional initiative. *Higher Education, 79*(6), 1119–1138. https://doi.org/10.1007/s10734-019-00471-2
9. Obeso, M., Hernández-Linares, R., López-Fernández, M. C., & Serrano-Bedia, A. M. (2020). Knowledge management processes and organizational performance: The mediating role of organizational learning. *Journal of Knowledge Management, 24*(8), 1859–1880. https://doi.org/10.1108/JKM-01-2020-0043
10. O'Reilly, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of Management Perspectives, 27*(4), 324–338. https://doi.org/10.5465/amp.2013.0025
11. Rodríguez-Ponce, E., Rodríguez, C., & Urbina, R. F. (2022). Resultados del quehacer académico: Influencia del aprendizaje institucional desde la teoría. *Revista Venezolana de Gerencia, 27*(98), 1122–1134.
12. Rodríguez-Ponce, E., Pedraja-Rejas, L., Ganga-Contreras, F., & Ferrer, R. (2024). Aprendizaje institucional en universidades: Un modelo teórico. *Formación Universitaria, 17*(1), 15–24. https://doi.org/10.4067/S0718-50062024000100015
13. Voolaid, K., & Ehrlich, Ü. (2017). Organizational learning of higher education institutions: The case of Estonia. *The Learning Organization, 24*(5), 340–354. https://doi.org/10.1108/TLO-02-2017-0015