


LEARNING CULTURE AND INNOVATIVE WORK BEHAVIOUR: DOES ATTITUDE TOWARD CHANGE MATTER?

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ARTICLE INFO	<u>ABSTRACT</u>
<p><b>Article history:</b></p> <p><b>Received</b> 20 February 2023</p> <p><b>Accepted</b> 18 May 2023</p>	<p><b>Purpose:</b> This empirical research aimed to analyze the mediating role of attitude toward change (ATC) on the relationship between the learning organization dimensions (LODs) and innovative work behaviour (IWB) among academics with the rank of professor in Malaysian public higher education institutions (HEIs).</p>
<p><b>Keywords:</b></p> <p>Academics; Attitude Toward Change; Higher Education Institutions; Innovative Work Behaviour; Learning Organisation; Malaysia.</p>	<p><b>Theoretical framework:</b> Organizational effectiveness, leading to sustainable goal development to happen swiftly, requires an attitude toward change (ATC) that leads to IWB among the institutional members who are undoubtedly already in a learning culture with supporting milieus.</p>
	<p><b>Design/methodology/approach:</b> 366 valid survey responses were collected using self-administered questionnaires delivered through the online survey with professors serving Malaysian public HEIs as target respondents. The study used Partial Least Square Structural Equation Modeling (PLS-SEM) for exploratory data analysis and hypothesis testing.</p>
	<p><b>Findings:</b> The results indicate that four LODs, systems connection, strategic leadership, continuous learning and dialogue and inquiry, significantly affect IWB in the presence of ATC as a mediator. On the other hand, ATC cannot mediate the outcome of IWB substantially, testing for the following exogenous variables: team level of learning, and two different dimensions of learning at the organization level, embedded system and empowerment.</p>
	<p><b>Research, Practical &amp; Social implications:</b> This study can be instructive for HEIs policymakers and those charged with institutional change and development. The study found that the HEIs' effort in creating dynamic continuous learning opportunities and endless action in creating a culture of enthusiasm for questioning, timely feedback, and research enhanced the IWB through the upshot of ATC. At the structural level, encouraging active participation and contributions to global intelligence and learning-oriented leadership marks the progress of the IWB. The capacity of the HEIs to integrate people and structures ultimately reaches healthier work behaviour necessary for the present needs of creative educational institutions. Practical implications and future research opportunities are in this empirical paper.</p>
	<p><b>Originality/value:</b> The study empirically supports the strength of measures used to gauge the LODs, ATC and IWB. The mediating effects of ATC are substantial, with solid research evidence to suggest it is essential to identify what influences employee attitudes to change to facilitate and optimize employee receptiveness to change and, therefore, the likely success of HEIs change.</p>
	<p>Doi: <a href="https://doi.org/10.26668/businessreview/2023.v8i5.1504">https://doi.org/10.26668/businessreview/2023.v8i5.1504</a></p>

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## CULTURA DE APRENDIZAGEM E COMPORTAMENTO INOVADOR NO TRABALHO: ATITUDE PERANTE A MUDANÇA IMPORTA?

### RESUMO

**Objetivo:** Esta pesquisa empírica teve como objetivo analisar o papel mediador da atitude em direção à mudança (ATC) na relação entre as dimensões da organização de aprendizagem (LODs) e o comportamento de trabalho inovador (IWB) entre acadêmicos com o posto de professor em instituições públicas de ensino superior da Malásia (Ele é).

**Referencial teórico:** A eficácia organizacional, levando ao rápido desenvolvimento de metas sustentáveis, requer uma atitude para a mudança (ATC) que leve ao IWB entre os membros institucionais que, sem dúvida, já estão em uma cultura de aprendizado com meios de apoio.

**Projeto/metodologia/abordagem:** 366 respostas válidas da pesquisa foram coletadas usando questionários autoaplicáveis entregues por meio da pesquisa on-line com professores que atendem IES públicas da Malásia como respondentes-alvo. O estudo utilizou Modelagem de Equações Estruturais de Mínimos Quadrados Parciais (PLS-SEM) para análise exploratória de dados e teste de hipóteses.

**Resultados:** Os resultados indicam que quatro LODs, conexão de sistemas, liderança estratégica, aprendizado contínuo e diálogo e investigação, afetam significativamente o IWB na presença do ATC como mediador. Por outro lado, o ATC não pode mediar substancialmente o resultado do IWB, testando as seguintes variáveis exógenas: nível de aprendizado da equipe e duas dimensões diferentes de aprendizado no nível da organização, sistema integrado e capacitação.

**Implicações de pesquisa, práticas e sociais:** Este estudo pode ser instrutivo para os formuladores de políticas de IES e para os responsáveis pela mudança e desenvolvimento institucional. O estudo constatou que o esforço das IES em criar oportunidades dinâmicas de aprendizado contínuo e ação sem fim na criação de uma cultura de entusiasmo por questionamentos, feedback oportuno e pesquisa melhorou o IWB por meio do resultado do ATC. No nível estrutural, encorajar a participação ativa e as contribuições à inteligência global e à liderança voltada para o aprendizado marca o progresso do IWB. A capacidade das IES de integrar pessoas e estruturas acaba por atingir comportamentos de trabalho mais saudáveis necessários às atuais necessidades das instituições educacionais criativas. Implicações práticas e futuras oportunidades de pesquisa estão neste artigo empírico.

**Originalidade/valor:** O estudo suporta empiricamente a força das medidas usadas para medir os LODs, ATC e IWB. Os efeitos mediadores do ATC são substanciais, com evidências sólidas de pesquisa sugerindo que é essencial identificar o que influencia as atitudes dos funcionários em relação à mudança para facilitar e otimizar a receptividade dos funcionários à mudança e, portanto, o provável sucesso da mudança nas IES.

**Palavras-chave:** Acadêmicos, Atitude em Relação à Mudança, Instituições de Ensino Superior, Comportamento Inovador no Trabalho, Organização de Aprendizagem, Malásia.

## CULTURA DE APRENDIZAJE Y COMPORTAMIENTO LABORAL INNOVADOR: ¿IMPORTA LA ACTITUD HACIA EL CAMBIO?

### RESUMEN

**Propósito:** Esta investigación empírica tuvo como objetivo analizar el papel mediador de la actitud hacia el cambio (ATC) en la relación entre las dimensiones de organización de aprendizaje (LOD) y el comportamiento de trabajo innovador (IWB) entre académicos con rango de profesor en instituciones públicas de educación superior de Malasia (Él es).

**Marco teórico:** La efectividad organizacional, que conduce a que el desarrollo de objetivos sostenibles suceda rápidamente, requiere una actitud hacia el cambio (ATC) que conduce a IWB entre los miembros institucionales que, sin duda, ya están en una cultura de aprendizaje con entornos de apoyo.

**Diseño/metodología/enfoque:** se recopilieron 366 respuestas válidas de la encuesta mediante cuestionarios autoadministrados entregados a través de la encuesta en línea con profesores que prestan servicios en instituciones de educación superior públicas de Malasia como encuestados objetivo. El estudio utilizó el modelo de ecuaciones estructurales de mínimos cuadrados parciales (PLS-SEM) para el análisis exploratorio de datos y la prueba de hipótesis.

**Hallazgos:** Los resultados indican que cuatro LOD, conexión de sistemas, liderazgo estratégico, aprendizaje continuo y diálogo e indagación, afectan significativamente a IWB en presencia de ATC como mediador. Por otro lado, ATC no puede mediar sustancialmente en el resultado de IWB, probando las siguientes variables exógenas: nivel de aprendizaje del equipo y dos dimensiones diferentes de aprendizaje a nivel de organización, sistema integrado y empoderamiento.

**Implicaciones de investigación, prácticas y sociales:** este estudio puede ser instructivo para los responsables de la formulación de políticas de las IES y para los encargados del cambio y desarrollo institucional. El estudio encontró que el esfuerzo de las IES en la creación de oportunidades dinámicas de aprendizaje continuo y acción sin fin en la creación de una cultura de entusiasmo por el cuestionamiento, la retroalimentación oportuna y la investigación mejoraron el IWB a través del resultado de ATC. A nivel estructural, fomentar la participación activa y las contribuciones a la inteligencia global y el liderazgo orientado al aprendizaje marca el progreso de la IWB. La capacidad de las IES para integrar personas y estructuras alcanza, en última instancia, comportamientos laborales más saludables necesarios para las necesidades actuales de las instituciones educativas creativas. Las implicaciones prácticas y las futuras oportunidades de investigación se encuentran en este artículo empírico.

**Originalidad/valor:** el estudio respalda empíricamente la solidez de las medidas utilizadas para medir los LOD, ATC e IWB. Los efectos mediadores de ATC son sustanciales, con evidencia de investigación sólida que sugiere que es esencial identificar qué influye en las actitudes de los empleados hacia el cambio para facilitar y optimizar la receptividad de los empleados al cambio y, por lo tanto, el éxito probable del cambio de HEI.

**Palabras clave:** Académicos, Actitud Hacia el Cambio, Instituciones de Educación Superior, Comportamiento Laboral Innovador, Organización de Aprendizaje, Malasia.

## INTRODUCTION

The adaptive culture within the higher education institutions (HEIs) is a must, not a choice, besides the other initiative in making the present education become an enabler to cater for the distinctive industrial competencies needs of the future. Being dormant or maintaining the status quo is a sign of poor preparation in connecting society with the external environment for survival. Culture is the glue that gathers internal stakeholders in HEIs, to think collectively and enhance an innovative mindset. HEIs operate in open systems; thus, a constant survey of the external environment helps increase innovations and ultimately fulfils the educational mandate. Each element of a learning organization must be in practice for this to happen. Many HEIs realize the principles of the learning organizations, but just merely acknowledging them without action is a big downfall for educational benevolence. Perhaps, it is not new to say that corporations have long proven the vitality of a learning culture in establishing creative and innovative performance outcomes that include positive, innovative work behaviour (IWB). HEIs, as a learning organization, have the capacity for unceasing learning and transformation to match the evolving industries and human civilizations (Coleman & Dickerson, 2017; Tran & Pham, 2019).

In Malaysia, the Ministry of Higher Education (MOHE) dictate the significant decisions in creating a higher education ecosystem with the finest HEIs to generate unrivalled thinkers and skilful human resources following their respective roles. HEIs are the doer of the educational change following the national educational priority. Despite the flexibility and empowerment provisions of the Malaysian HEIs in championing educational change efforts, the public HEIs academic staff's struggle is always there concerning many folds of change necessities and remains relevant in all areas. For these reasons, the government has allowed

highly diversified HEIs and education provision operations in Malaysia. There are presently 20 public universities receiving a significant amount of operating budget from the government, and thus they are unswervingly accountable to the MOHE. The Malaysian government, through the MOHE, cascade pressure on the HEIs to reorganize superior outcome-based education with the explicit aim of increasing sustainable provision of contemporary requirements for the global standing of Malaysian HEIs.

Change initiatives to happen swiftly require an attitude toward change (ATC) that leads to IWB among the institutional members who are undoubtedly already in a learning culture. Employees will probably have an adverse view of change initiatives due to frequent shortcomings and unsupportive organizations far from learning organization principles. Eventually, employees' ATC may continue to deteriorate, thus assuring the failure of modernization that requires good IWB. HEIs, known as learning organizations, are a form of organization and therefore need effort instead of organizational learning principles that focus on learning activities (Ortenblad, 2001). Durham et al. (1989) describe the ATC implies as encouraging feeling (affective), thinking (cognitive), and behavioural support for the change initiative. Disregarding the importance of academic members' full involvement and containment towards IWB also interrupts the change initiative by the HEIs and interconnected progress in the nation. Important to highlight here the note of Giroux (2002) two decades ago that corporate culture has destructive effects due to gloomy educational transformation. It signifies the role of HEIs in corporate innovation. Academics' perceptions of the current learning culture, ATC and IWB are timely to measure to mark the next level of action with the HEIs strategic plans. Adaptive educational systems in the HEIs rely on identifying and considering the needs and strengths of each internal stakeholder. The resistance to change will undoubtedly affect improvement and efficiency while marginalizing a balance in society. HEIs habitually attract highly qualified individuals with academic ranking and professional behavioural aspects. Sustaining academics' professional work motivations and retaining the best brain in accomplishing the present challenges is of priority to HEIs, but this endeavour is a big contest. To achieve this, HEIs must embrace a system that allows the breakthrough of the old managerial thinking and place mechanics that values human advancements with networks of relationships. These remind us of the fifth discipline, Senge's (1990) system of thinking, which emphasizes the organization's collective efforts, not working in silos to achieve meaningful performances.

Constantly evolving, adapting, unlearning, and relearning is the mechanism that allows for change that Senge (1990) described as the learning organization, and it remains germane

practice to date. Industrial revolutions are needed, and HEIs make the process cycle happen with the system's presence and resilience necessary to thrive in unstable situations (Dedahanov et al., 2017). Continuous debates on the concepts of learning organization show its strength in bringing the best out of the organizational efforts to involve their employees in constant learning initiatives. At the same time, it dramatically builds a positive attitude to change. Morriss-Olson (2016) has pointed out several barriers for HEIs to embrace change and innovation. Morriss-Olson lists the following obstacles to change: risk avoidance, zero-sum thinking, accreditation, tradition and culture, leadership, internal systems, recruitment processes, faculty (self-)governance, organizational silos and success-preserving the status quo. However, the learning organization and its action imperatives (Watkins & Marsick, 1993, 1996) have proven realistic in engaging corporations in a fully embodied learning culture. Watkins and Marsick (1993) point out that a learning organization learns continuously and transforms itself; learning is a continuous, strategically used process – integrated with and running parallel to work (p.8). These entail affective, behavioural and cognitive attitudes towards change and IWB. Thus, this framework serves as the foundation for the research reported in this paper. This study's main objective is to examine ATC's mediating role in the relationships between LODs and IWB among academics with the rank of professors in Malaysian public HEIs.

## LITERATURE REVIEW

Similar to other industries, corporations or businesses, directives for change are constant (Igwe et al., 2019; Karasvirta & Teerikangas, 2022) for HEIs to meet external factors and demands. Focuses on continuous improvement and innovation in work require a sustainable commitment to learning and readiness toward change, obviously in the strategic plans of HEIs operating in the sphere that necessitates continuous change efforts (Beus et al., 2020). Almost a decade before, Rafferty et al. (2013) and Mathews and Linski (2016) alluded that a progressive ATC probably will remark on organizational performance; in the context of this paper, the focus is on IWB. The three-dimensional concept of ATC consists of cognitive (cognitions about change), affective (feelings about the difference), and behavioural (actions to be performed or performed) can also be treated as unidimensional together within any associated outcomes. Ghasemzadeh et al. (2019) contended that empirical research lacks linking innovative culture yield within learning organizations. The authors strongly propose more studies to reconfirm the previously claimed strengths of the learning organization. Liu et al. (2017) further expressed that the organization and management researchers show significant evidence of cultural change, innovative behaviour and multifaceted organizational performance

that perhaps needs to be continuously studied and reported to showcase the power of the dimensions associated with superior learning organizations (O'Brien et al., 2019).

Pradhan and Jena (2019) remind us that IWB among employees significantly influences organizational effectiveness, leading to sustainable goal development. Since employees are the most critical innovation stakeholders (Pukkeeree et al., 2020; Yan et al., 2018), it is germane to research deeply the antecedents of IWB mediated through readiness toward change. Similarly, Albrecht (2021) showed that corporate resources and adaptive culture enroot employee citizenship behaviour, which we presume may induce IWB in educational institutions. Learning culture and supporting milieus have consistently been associated with positive employee ATC (Albrecht et al., 2020; Orth & Volmer, 2017; Straatmann et al., 2016). ATC helps develop necessary skills, knowledge, and work behaviour through individual work experience. HEIs foster success through their innovation initiatives through employees whose competitive position is unwavering. The employees' efforts in creating, applying, and executing thoughts, processes, and procedures clustered under IWB can only be a source of performance triumph if employees are ready and willing to embrace the adaptive culture and consciously practice the features of learning organizations. The employees' feelings about the organizational culture in practice (Turgut & Sokmen, 2018) are likely to impact IWB (Shih & Susanto, 2017; Shin et al., 2016). Similarly, resistance to change occurs within an organization where the employees are not continuously ready for change, unlike the learning organization equipped with resources to face obstacles and tramp forward for success (Klaus et al., 2015; Shin et al., 2017).

Transitions in HEIs in the past decades have led to investigations of internal stakeholders' cultural change, attitude and behaviour, especially in the academic fraternity. IWB can be presumed to be an innovative culture, and it does not happen in silo work settings. The IWB construct - idea generation, promotion, and application (Janssen, 2003) occur at all levels of the organization (individual, team and organization) and aims to nurture a learning culture with its specific attributes that enhance innovative organizational behaviour (Ghasemzadeh et al., 2019; Watkins & Marsick, 1993, 1996). Acevedo and Diaz-Molina (2022) reaffirm a learning culture is rooted in innovative work principles. Yet, there is a deep need to understand the IWB practices in HEIs (Musenze & Mayende, 2022). Hence, the IWB is worthy of continual study.

Studies on the importance of ATC, its predictors and outcomes are available with many meaningful remarks (Pincus et al., 2017; Mula et al., 2017). The predictors tested in the present study are grounded in the learning organization concept, yet not new but feasible at all times (Ghayas & Khan, 2019; Pedler & Burgoyne, 2017; Vince, 2018). Suifan & Allouzi (2018)

showed that the learning culture enables organizational performance, and commitment to the organization plays a mediating role. Leaders who follow empowering leadership style can bring about the innovation capability of employees and react towards organizational goals that entail positive performance outcomes (Keshwan et al., 2022; Supriyanto et al., 2023). Indeed, a rich understanding of the HEIs members' aspirations towards change helps them organize to achieve the planned change (McCourt et al., 2017). It is essential to look at the strength of the learning organization dimensions in predicting ATC and IWB due to systemic learning culture practices in HEIs.

Learning culture exploration is an audit to form a culture optimized with action-oriented learning practices (Janezic, 2018; O'Brien et al., 2019; Oh, 2019; Pedler & Hsu, 2019). Further investigation into the implementation strategies would extend the competencies in engaging in an intelligent learning culture. The role of the ATC in the relationship between learning organization dimensions and IWB is equally vital to gauge at present. Empirical evidence gathered thru research can help business and non-business entities to optimally understand the factors that promote and make the most of the probability of thriving organizational culture, change efforts and innovative work behaviour. The findings suggest that HEIs are usually on the right track and embrace the learning organization culture. ATC was considered and researched in differentiated, specific to general concepts in previous studies.

The study highlighted the importance of ATC on IWB. Systems theory is proven significant and remains solid and valid in studying learning culture and behavioural outcomes. There is a gap between theory and practice and a need to document a process for implementing the approach in different industries and national cultures. The present research results are the evidence for it. The research question guided the study: What is ATC's role in the relationship between LODs and IWB in Malaysian HEIs? Based on the rationale in the organization and management field literature, the hypothesis that ATC mediates the relationship between the LODs and IWB was significant to be tested.

## **DATA AND METHODOLOGY**

The present study adopted the model of Watkins and Marsick (1993) to frame and structure the learning organization contexts. Thus, it helps to capture the perceptions of HEIs academics with the rank of the professor regarding the learning culture practices at present and allows the HEIs to understand the gaps that impede them from being better learning organizations and reach innovative work. The DLOQ consists of seven dimensions: continuous learning (CL), inquiry and dialogue (DI) serve the individual learning level. Collaboration and

team learning (TL), one construct from three measurement items defined as learning at the team level. Finally, the other four dimensions serve the organization's level of learning: systems to capture learning (SC), empowerment (EM), systems connection (SC), and strategic leadership (SL).

The seven dimensions of the learning organization are measurable using the full version with 43 measurement items or the shorter version using the 21-item scale validated by Yang (2003), Yang et al. (2004) and Marsick and Watkins (2003). Since the shorter version of the DLOQ has proven construct validity and reliability, it remains a popular instrument among organizational development researchers (Kortsch & Kauffeld, 2019). Thus, it was selected and used as the research instrument. Each dimension was measured using three items. Besides, this study adopted Durham et al. (1989) affective, cognitive, and behavioural attitude toward change scale that consisted of 18 items. The outcome variable IWB was measured using the Janssen (2000) survey instrument, which comprised nine (9) items deemed the best for the present research. The IWB construct includes idea generation, promotion and application (Janssen, 2003). The authors seek permission and receive approval from all the instrument developers before use in this research. Although all the selected measurement tools proved reliable and valid and extensively used in studies, little research connects organizational learning dimensions, ATC and IWB within higher education. This paper provides an investigation report into the relationships between these three elements.

The respondents completed the survey by responding to statements on a five-point Likert scale ranging from 1 (disagree) to 5 (agree). Three hundred sixty-six valid survey responses were collected using self-administered questionnaires delivered through the online survey with professors serving Malaysian public HEIs as target respondents. The study used Partial Least Square Structural Equation Modeling (PLS-SEM) for exploratory data analysis and hypotheses testing.

## RESULTS AND DISCUSSION

The study found that skewness ( $\pm 1.96$ ) and kurtosis ( $\pm 7$ ) were within the generally accepted threshold value, its significance for parametric statistical tests and added advantages for the PLS-SEM. This nonparametric statistical technique does not necessitate normal distribution conditions. At the same time, model estimations possibly be derived with a small dataset. The researchers confirm that the dataset is free of Common Method Bias since the collinearity test result showed that variance inflation factor (VIF) values for all the LODs ranged from low (1.265) to high (3.035) and were less than the standard threshold value of 3.3



(Kock, 2017). Besides, the VIF scores below the cutoff threshold of 5 (Hair et al., 2017) indicate no multicollinearity issue between the constructs. These warrant that the data is adequate for further statistical analysis.

Internal consistency reliability (CR), convergent validity (outer loading), and AVE were assessed based on the rules of thumb suggested by Hair et al. (2017). The Cronbach's alpha and composite reliability scores (see Table 1) are higher than 0.70, indicating the reflective indicators reached the best construct reliability.

Table 1: Reliability and Convergent Validity Scores

Construct	Reliability		Convergent Validity
	Cronbach's Alpha (CA)	Composite Reliability (CR)	Average Variance Extracted (AVE)
Continuous Learning (CL)	0.868	0.919	0.791
Dialogue and inquiry (DI)	0.905	0.941	0.841
Team Learning (TL)	0.879	0.925	0.804
Embedded System (ES)	0.917	0.948	0.858
Empowerment (EM)	0.924	0.952	0.868
System Connections (SC)	0.894	0.934	0.825
Strategic Leadership (SL)	0.951	0.968	0.910
Innovative work behaviour (IWB)	0.948	0.955	0.705
Attitude towards change (ATC)	0.962	0.965	0.607

Source: Prepared by the authors (2023)

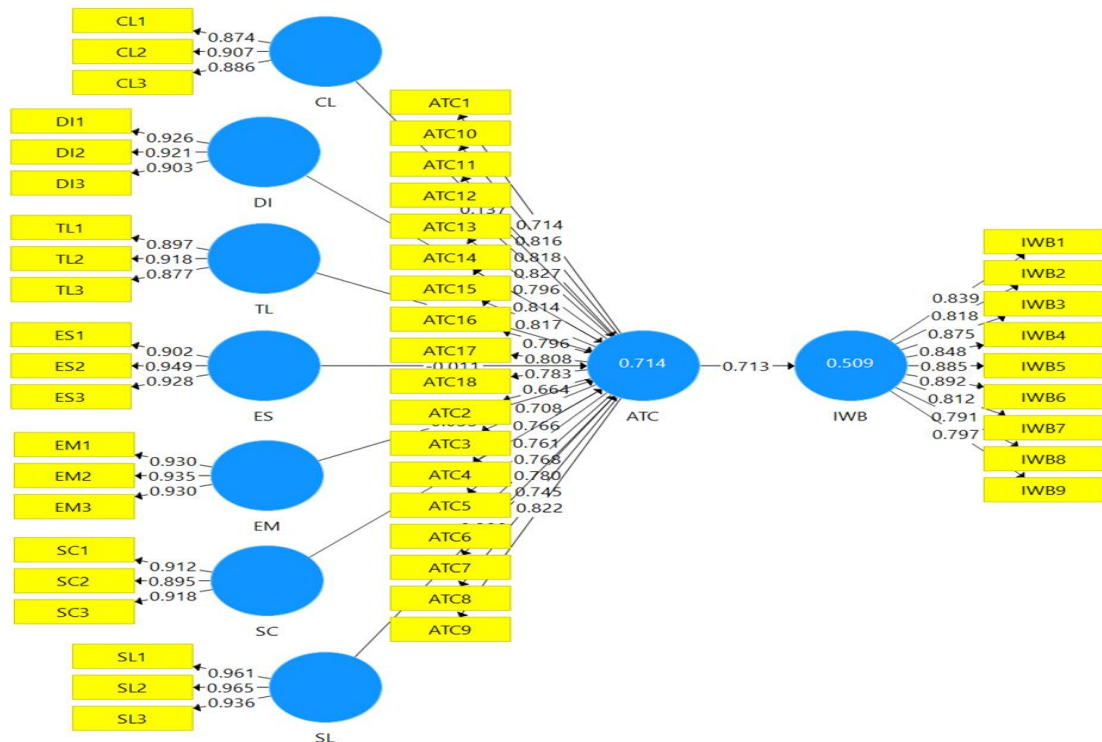
The factor loadings (see Figure 1) were within the acceptable values (no items forced to delete), and the average variance extracted (AVE) test for convergent validity also showed values higher than 0.50 (see Table 1). Thus, the measurement reached convergent reliability. Similarly, Heterotrait–Monotrait Ratio (HTMT) showed values less than 0.90 (Table 2 ). The measurement model met all the criteria for a good fit and is apposite for hypotheses testing.

Table 2: Discriminant Validity of the Constructs

Construct	Heterotrait–Monotrait Ratio (HTMT)							
	CL	DI	TL	ES	EM	SC	SL	ATC
Continuous Learning (CL)								
Dialogue and inquiry (DI)	0.554							
Team Learning (TL)	0.811	0.656						
Embedded System (ES)	0.784	0.573	0.846					
Empowerment (EM)	0.620	0.839	0.664	0.614				
System Connections (SC)	0.226	0.401	0.246	0.185	0.329			
Strategic Leadership (SL)	0.443	0.475	0.413	0.422	0.470	0.426		
Innovative work behaviour (IWB)	0.294	0.441	0.280	0.238	0.386	0.722	0.720	0.747
Attitude towards change (ATC)								

Source: Prepared by the authors (2023)

Figure 1: Path Analysis Diagram



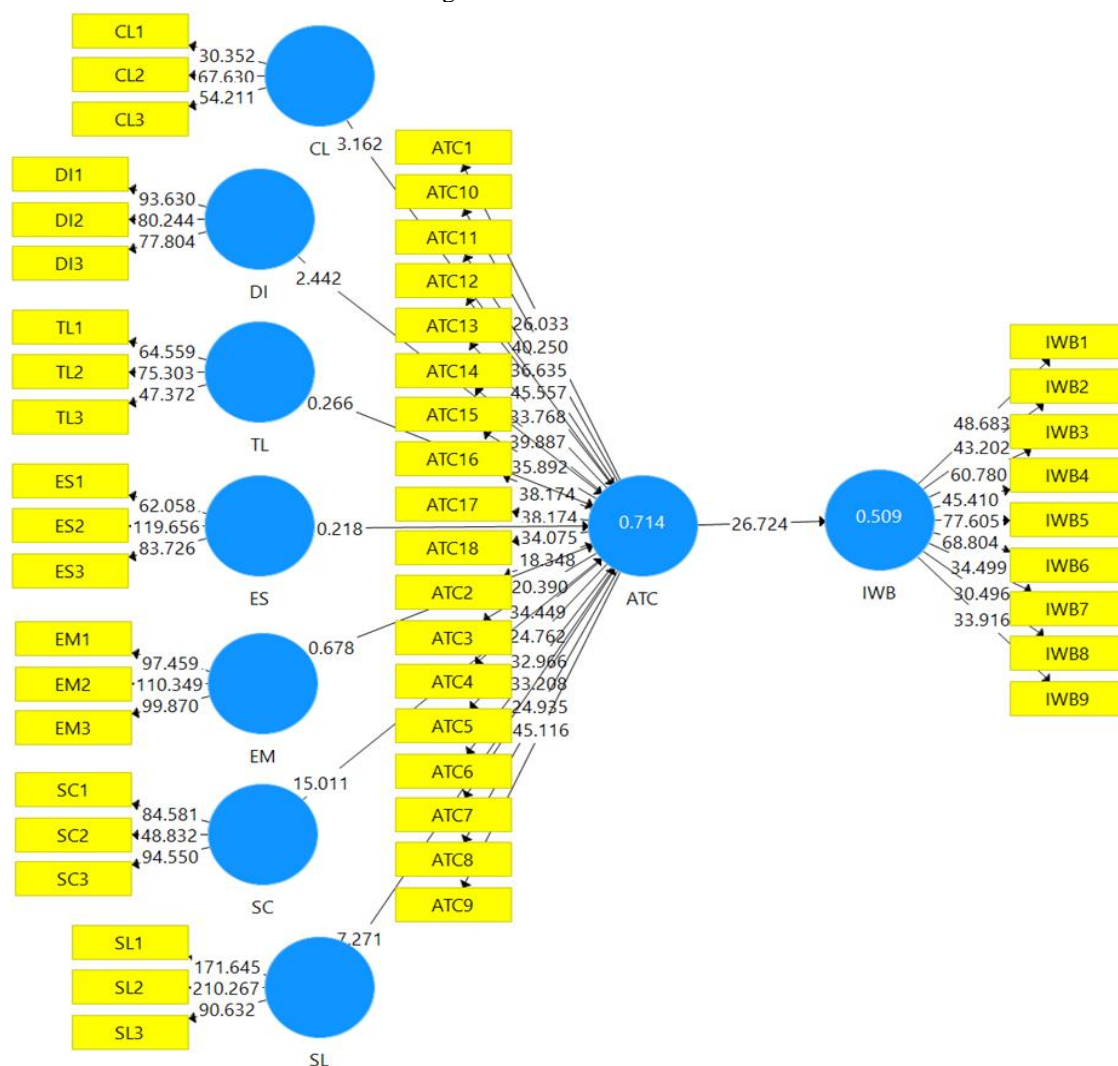
Hair et al. (2013) suggested that R square values of 0.75, 0.50, or 0.25 for endogenous latent variables as substantial, moderate or weak. Table 3 shows that LODs explained 71.4% ( $R^2 = 0.714$ ) variance in ATC. On the other hand, ATC explained a 50.9% ( $R^2 = 0.509$ ) variance in IWB. F-Square values were observed as in Table 3 to show the extent of the changes in R-Square values when the constructs (LODs and ATC) are about to eliminate from the models in the test. The systems connection and strategic leadership show no effects on ATC compared to the other five dimensions. Besides, ATC offers no impact on IWB if removed from the model. The f-square value is the effect size ( $\geq 0.02$  is small;  $\geq 0.15$  is medium;  $\geq 0.35$  is large) (Cohen, 1988) that guided the decisions. To find the Q-square values, the authors have performed the blindfolding technique using SmartPLS. The Q-square values of LODs-ATC and ATC-IWB were above zero, indicating that the models have good predictive relevance.

Table 3: Model fit test

Construct	f-square	R-square	Q-square
Continuous Learning (CL)	0.154 (large)	LODs-ATC= 0.714 (Moderate)	LODs-ATC= 0.339 (Good predictive relevance)
Dialogue and inquiry (DI)	0.280 (large)		
Team Learning (TL)	0.962 (large)		
Embedded System (ES)	0.968 (large)		
Empowerment (EM)	0.824 (large)		
System Connections (SC)	0.000 (no effect)		
Strategic Leadership (SL)	0.000 (no effect)	ATC-IWB= 0.509 (Moderate)	ATC-IWB= 0.357 (Good predictive relevance)
Attitude towards change (ATC)	0.000 (No effect)		

Source: Prepared by the authors (2023)

Figure 2: Structural Model



Path coefficients among the latent variables of the structural models in Table 3 (also refer to Figure 2) lead to decisions for the study’s hypothesis. ATC plays a mediating role in the relationships between four LODs and IWB. The four paths with the specific exogenous variables that were significant are as follows: systems connection (SC) ( $\beta = 0.373$ ,  $t = 12.448$ ,  $p < 0.001$ ), strategic leadership (SL) ( $\beta = 0.207$ ,  $t = 6.749$ ,  $p < 0.001$ ), continuous learning (CL) ( $\beta = 0.097$ ,  $t = 3.091$ ,  $p < 0.002$ ) and dialogue and inquiry (DI) ( $\beta = 0.097$ ,  $t = 2.380$ ,  $p < 0.018$ ). On the other hand, one dimension at the team level of learning (TL), and two different dimensions of learning at the organization level, embedded system (ES) and empowerment (EM), were not able to contribute significantly towards IWB in the presence of ATC. However, this study proves that the role of ATC is still substantial in influencing the progress of IWBs among HEIs. As a result, HEIs’ innovation practices and educational quality attainment are possible under changing circumstances. HEIs’ concern about sustaining an advanced learning

culture is familiar through the research outcomes. Due to advancements in the industrial revolutions, breaking the status quo has become necessary; thus, the academic fraternity is the supporting milieu for success.

Table 4: Indirect path coefficients and test of hypothesis

Hypothesis	Paths	Beta	T-value	P-value	Decision
ATC mediate the relationship between LODs and IWB	CL -> ATC->IWB	0.097	3.091	0.002	Accept
	DI -> ATC->IWB	0.097	2.38	0.018	Accept
	TL -> ATC->IWB	0.01	0.271	0.787	Reject
	ES -> ATC->IWB	-0.008	0.243	0.808	Reject
	EM -> ATC->IWB	0.023	0.687	0.492	Reject
	SC -> ATC->IWB	0.373	12.448	0.000	Accept
	SL -> ATC->IWB	0.207	6.749	0.000	Accept

Source: Prepared by the authors (2023)

The current study's findings mainly gain support from studies primarily in fields other than education (Acevedo & Diaz-Molina, 2022; Ghasemzadeh et al., 2019; Mula et al., 2017; Musenze & Mayende, 2022; Pincus et al., 2017). Views from the literature support the present study if organizations, including HEIs, continuously embrace a strong learning culture to reach innovation and IWB in a condition that equal attention is sure to moulding attitude towards change. Everyone lives in an open system, able to observe, gather and analyze sufficient information and predict the current and future requirements; thus, a rise for a more contemporary education from the HEIs is likely. The present study shows that the HEIs are ready to face the challenges through modification in attitude and behaviour concentrated on innovation. For any size of HEIs maintaining excellent standards through innovative work while simultaneously sustaining the learning culture and keeping track of the ATC helps provide education of the utmost quality. IWB requires a complex interplay of factors associated with a learning culture that can diagnose the internal and external environment. The present study demonstrates this complexity in several ways that can be instructive for HEIs policymakers and those charged with institutional change and development. Perhaps the mediating effects of ATC are substantial, with solid research evidence to suggest it is essential to identify what influences employee attitudes to change to facilitate and optimize employee receptiveness to change and, therefore, the likely success of HEIs change.

## CONCLUSION

The study found that ATC can mediate two of the individual levels of learning concerning Watkins and Marsick's (1993) model, continuous learning and dialogue and inquiry, together with systems connection and strategic leadership dimensions (learning at the

organizational level), on the relationship between LODs and IWB. The professors who have provided input for this study collectively see that the HEIs' effort in creating dynamic continuous learning opportunities and endless action in creating a culture of enthusiasm for questioning, timely feedback, and research enhanced the IWB through the upshot of ATC. At the structural level, encouraging active participation and contributions to global intelligence and learning-oriented leadership marks the progress of the IWB. It implies that learning at the organizational level is significant, following the individual (people) level as proposed in the action imperatives of the learning organization model. The capacity of the HEIs to integrate people and structures ultimately reaches healthier work behaviour necessary for the present needs of creative educational institutions.

Besides, the study has significant implications for HEIs and policymakers; it supports the strength of the shorter version of the DLOQ in measuring the individual dimensions of the learning organization. Watkins and Marsick's (1993, 1996) action imperative learning organization framework is worth including and reaching by scholars and practitioners in human resource development. It is pertinent to the field of higher education to investigate further the hurdles within the HEIs from the viewpoint of many other respondents besides the professors, as in this study results. The ATC has acted as a catalyst for IWB and to overcome the difficulties brought by the revolutionary crisis. The HEIs leaders must encourage the workforce, engage in upskilling activities and pay serious attention to everyone's ideas. Employees who feel supported in their profession are more likely to provide better IWB and remain focused on the institutional goal. Hence, HEIs leaders should excite their academic fraternity to overcome uncertainty and pledge wholeheartedly to professional and personal growth. This study identified some of the base challenges for HEIs leaders in the coming years.

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