Exploring the Influence of Organizational Culture on Dimensions of Organizational Learning at the University of the Bahamas: A Structural Equation Modeling Approach

Jason K. Styles
University of the Bahamas

Debra J. Dean
Regent University

This study examines the relationship between organizational culture (OC) and organizational learning (OL) at the University of The Bahamas (UB), contributing to international human resources development (HRD) research. Using Structural Equation Modeling (SEM), a sophisticated statistical technique, the research explores how different OC types (clan, adhocracy, market, and hierarchy) impact OL at various organizational levels. By focusing on a higher education institution (HEI) in a developing country, the study expands our understanding of OC's influence on OL beyond developed nations. This research is particularly noteworthy for its use of SEM in the Bahamas, highlighting its adaptability and effectiveness in HRD research, especially in international and culturally diverse contexts. The findings provide valuable insights into the interplay between OC and OL, offering practical recommendations for HEIs to foster continuous learning and improvement. Key contributions include filling a gap in the HRD literature by examining OC and OL within a Bahamian HEI, showcasing SEM's superior capability in handling complex interdependencies, and providing fresh perspectives and practical recommendations for developing effective learning environments in HEIs in developing countries. The study underscores the importance of adaptable and culturally sensitive analytical approaches in HRD, offering a robust framework for enhancing organizational learning within diverse global contexts.

Keywords: higher education institutions (HEI's), competing values framework (CVF), SmartPLS

LITERATURE REVIEW

The increasing globalization of higher education institutions (HEIs) has amplified the need for innovative approaches to understanding organizational culture (OC) and organizational learning (OL). This research employs Structural Equation Modeling (SEM) to investigate these variables at the University of The Bahamas (UB), contributing significantly to human resources development (HRD) by offering a nuanced analysis that can be applied to similar institutions globally. This review highlights the importance of OC and OL in HEIs, the novel application of SEM, and the international relevance of this study.

Organizational Learning in HEIs

HEIs face immense pressure to adapt and remain competitive in the global economy. Organizational learning (OL) is essential for these institutions to continuously assess and integrate new knowledge, ensuring they meet evolving societal demands (Easterby-Smith et al., 1999; Garavan et al., 2012). OL prevents the recurrence of critical issues by fostering new capabilities and unlearning outdated practices (Dasgupta & Gupta, 2009; Gilley et al., 2002). This continuous learning process is vital for HEIs to maintain their status as dynamic learning organizations and contribute to knowledge economies (Ponnuswamy, 2016).

Organizational Culture Influencing Organizational Learning in HEIs

Organizational culture (OC) plays a pivotal role in facilitating learning and adaptation within HEIs. Schein (1991; 2004) defines OC as the shared assumptions, beliefs, and values that bind an organization, profoundly influencing behavior and organizational effectiveness (Cameron & Quinn, 2011). Different OC types, such as clan, adhocracy, market, and hierarchy, impact OL differently. For instance, clan and adhocracy cultures, which emphasize collaboration and flexibility, are conducive to OL, while market and hierarchy cultures may impede it (Hafit et al., 2019; Murrell, 2019).

Understanding OC in HEIs is crucial for developing strategies that foster a conducive learning environment. The University of The Bahamas (UB) serves as a case study to illustrate how OC can influence OL in a developing country. UB's hierarchical structure operates within a heterarchy model, characterized by unranked elements and shifting power dynamics (Belmonte & Cerny, 2021; Crumley, 2007; Cumming, 2016). This complex cultural landscape provides valuable insights for leaders on navigating change and promoting OL.

Structural Equation Modeling in HRD Research

Structural Equation Modeling (SEM) offers a robust statistical technique that allows for the simultaneous examination of multiple relationships between variables, providing comprehensive insights into complex phenomena (Hair et al., 2014). In HRD research, SEM is particularly advantageous over traditional regression methods as it can identify both direct and indirect effects, enhancing the reliability and validity of the findings (Kline, 2015). This study's use of SEM represents a novel approach in examining the interplay between OC and OL, offering more precise and detailed analyses.

Conducting research in the Bahamas using SEM is significant for several reasons. First, it demonstrates the method's adaptability and effectiveness in an international, culturally diverse context. Second, it contributes to the understanding of HRD methods by providing empirical data from a non-U.S. setting, addressing a significant gap in the literature. Finally, it underscores the importance of using advanced statistical techniques in internationally-focused HRD research, promoting more rigorous and insightful analyses.

International Relevance and Contributions

This study makes several international contributions to the field of HRD. By examining OC and OL in a Bahamian HEI, it provides insights that can be applied to similar institutions in developing countries. The findings highlight the importance of culturally sensitive approaches to HRD, offering practical recommendations for fostering effective learning environments globally. Additionally, the use of SEM in this context illustrates how innovative quantitative methods can enhance the understanding of organizational dynamics in diverse settings.

In summary, this research underscores the critical role of OC in facilitating OL within HEIs and the innovative application of SEM in HRD research. By focusing on UB, the study offers valuable contributions to the global discourse on OC and OL, advancing the understanding of how HEIs can adapt and thrive in a rapidly changing world.

METHODS

Research Design

This study utilized a non-experimental, cross-sectional research design to examine the relationships between organizational culture (OC) and the dimensions of learning at the University of the Bahamas (UB). Structural Equation Modeling (SEM) was employed as the primary analytical technique to provide a baseline understanding of the university's current state and preferences for the future. By adopting this design, the research aimed to capture a snapshot of how different OC types influence learning dimensions at UB, offering valuable insights into the institution's organizational dynamics.

Population and Sampling

The study targeted University of the Bahamas employees, encompassing faculty, staff, and administration across various departments and hierarchical levels. A convenience sampling method was employed, with 350 survey instruments distributed via multiple channels, including WhatsApp, university email, hardcopy, Facebook, and LinkedIn. Ultimately, 154 completed surveys were collected, which satisfied the minimum sample size requirements for conducting robust statistical analysis using SEM.

Instruments

This study utilized two primary instruments: the Organizational Culture Assessment Inventory (OCAI) and the Dimensions of Learning Organization Questionnaire (DLOQ). The OCAI, developed by Cameron and Quinn, measures eight distinct cultural dimensions, capturing both current and preferred states of clan, adhocracy, market, and hierarchy cultures. Complementing the OCAI, the DLOQ, formulated by Watkins and Marsick (1993, 1996), assesses three facets of learning: individual learning, team/group learning, and organizational learning. This combination of instruments comprehensively evaluated OC's impact on learning at UB.

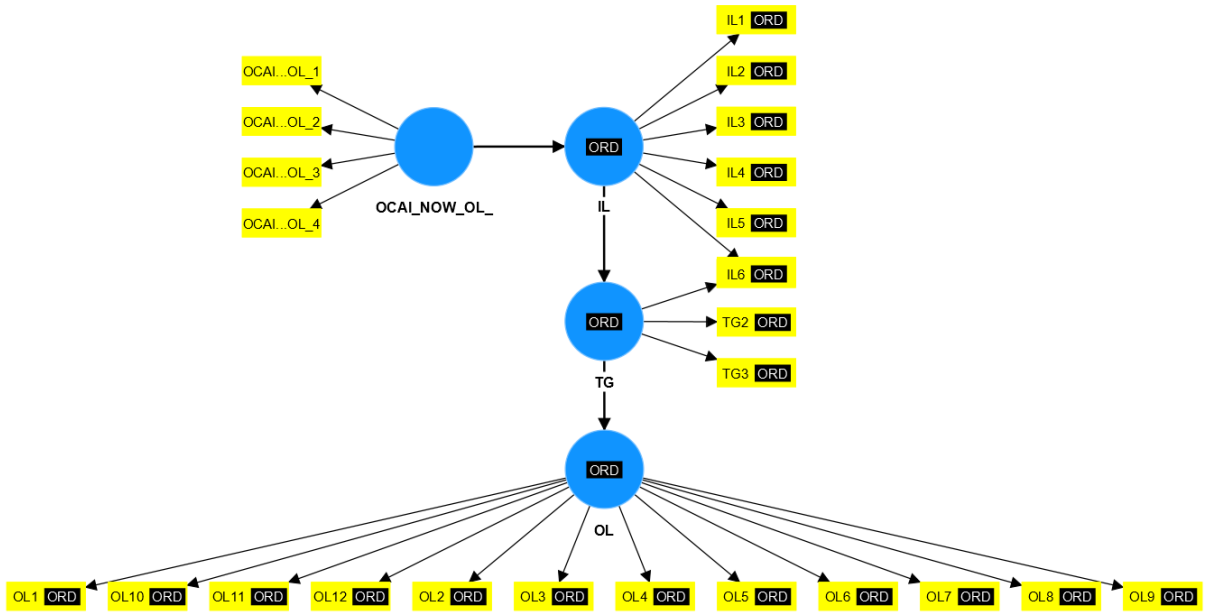
Data Collection

Data were collected through a survey distributed to UB employees using various communication platforms to ensure wide reach and participation. Participants' responses were numerically coded to facilitate subsequent analysis. This data collection method enabled the researchers to gather quantitative data efficiently from a diverse group of employees, ensuring that the findings would reflect the broader organizational environment at UB.

Statistical Analysis

The study employed Structural Equation Modeling (SEM) using SmartPLS to analyze the relationships between organizational culture types and learning dimensions, as shown in Figure 1. SEM was chosen for its ability to simultaneously examine multiple relationships and account for measurement errors, providing a more precise and comprehensive analysis. Control variables such as gender, tenure, and work capacity were included to assess their potential effects on the dependent variables, enhancing the robustness of the findings.

FIGURE 1
SMARTPLS MODEL



Hypotheses

Several hypotheses were formulated to explore the impact of different organizational culture types on individual and team learning. For instance, it was hypothesized that an adhocracy culture would positively correlate with individual learning, while clan, hierarchy, and market cultures were expected to have varying degrees of negative correlations with individual learning. These hypotheses guided the SEM analysis, helping to uncover specific cultural influences on learning within UB.

Limitations

The study acknowledges several limitations that could affect the interpretation and generalizability of the findings. The cross-sectional design limits the ability to make causal inferences, as data were collected at a single point in time. Additionally, potential biases could arise from self-reported data, and the specific context of UB and the Bahamas may limit the external validity of the results. Despite these limitations, the study provides valuable insights into the interplay between organizational culture and learning in a higher education setting.

FINDINGS

The study investigated the influence of organizational culture types—clan, adhocracy, market, and hierarchy—on the dimensions of learning at the University of The Bahamas (UB). The analysis utilized structural equation modeling with SmartPLS to assess the relationships between these variables. The results revealed that all four types of organizational culture had significant relationships with organizational learning. Specifically, the clan culture, which emphasizes a friendly working environment and mentorship, showed a strong positive correlation with organizational learning. This finding suggests that fostering a supportive and collaborative atmosphere can significantly enhance learning within the institution.

Adhocracy culture, characterized by innovation and flexibility, also positively correlated with organizational learning, although the relationship was less strong compared to clan culture. This indicates that while innovation is essential, it must be balanced with other cultural aspects to promote learning effectively. Market culture, which focuses on competition and achieving concrete results, had a mixed

impact. While it positively influenced learning in some dimensions, it also posed challenges, potentially due to the high-pressure environment it creates. Hierarchy culture, with its structured and formalized procedures, surprisingly showed a positive correlation with organizational learning. This may be due to the clear guidelines and stability it provides, which can facilitate a focused learning process.

The study's findings suggest that a balanced approach incorporating elements from various cultural types can foster a more comprehensive learning environment. The regression analysis indicated that clan culture was the most significant predictor of organizational learning, followed by hierarchy, adhocracy, and market cultures. These insights highlight the importance of a supportive and well-structured environment in promoting effective learning in higher education institutions. The results are consistent with the hypotheses, affirming that organizational culture plays a critical role in shaping the learning dynamics at UB.

The study underscores the need for higher education institutions, especially in developing countries, to carefully consider their organizational culture to enhance learning outcomes. By integrating the strengths of different cultural types, institutions can create a more conducive environment for learning and innovation. These findings contribute to the broader literature on organizational culture and learning, offering practical implications for policymakers and administrators aiming to improve educational practices and outcomes in higher education.

Reliability

The reliability of the instruments used in this study was evaluated to ensure the consistency of the measurements. The study employed the Organizational Culture Assessment Inventory (OCAI) and the Dimensions of Learning Organization Questionnaire (DLOQ). Reliability analysis was performed using Cronbach's coefficient alpha to determine the internal consistency of the scales, as shown in Table 1. Generally, a Cronbach's coefficient alpha greater than 0.70 is considered acceptable, indicating that the scale items have relatively high internal consistency.

TABLE 1
COEEFICIENT ALPHA

Subscale	*a*
Clan Now (OCAI)	0.71
Clan Pref (OCAI)	0.77
Adhocracy Now (OCAI)	0.73
Adhocracy Pref (OCAI)	0.55
Market Now (OCAI)	0.53
Market Pref (OCAI)	0.55
Hierarchy Now (OCAI)	0.75
Hierarchy Pref (OCAI)	0.77
Individualized Learning (DLOQ)	0.82
Team Group Learning (DLOQ)	0.77
Organizational Learning (DLOQ)	0.92

For the DLOQ comprising 21 items producing three dimensions, Cronbach's coefficient alpha was found to be above the acceptable threshold. Specifically, Individual Learning had an alpha of 0.80, Team Group Learning had 0.77, and Organizational Learning had 0.91. These values suggest that the DLOQ reliably measures the dimensions it intends to assess, demonstrating strong internal consistency across the dimensions evaluated.

In contrast, the OCAI, which consists of 24 items across six dimensions, showed varying levels of reliability. The Cronbach's coefficient alpha for the "Now" dimensions were as follows: Clan–Collaborate (0.75), Market–Compete (0.74), Hierarchy–Control (0.51), and Adhocracy–Create (0.76). For the "Preferred" dimensions, the values were Clan–Collaborate (0.77), Market–Compete (0.54), Hierarchy–

Control (0.53), and Adhocracy–Create (0.80). While some dimensions, such as Clan–Collaborate and Adhocracy–Create, demonstrated acceptable reliability, others, particularly the Hierarchy–Control dimension, fell below the 0.70 threshold, indicating lower reliability in those areas.

Data Analysis

The data analysis for this study was conducted using Structural Equation Modeling (SEM) via SmartPLS. SEM is an innovative and robust statistical technique that allows for the simultaneous analysis of multiple relationships between observed and latent variables. This method is particularly advantageous for HRD research, especially in developing countries, as it provides a comprehensive framework for testing complex models that involve multiple predictors and outcomes.

In this study, SEM was employed to examine the intricate relationships between different types of organizational culture (clan, adhocracy, market, and hierarchy) and the dimensions of learning (individual, team/group, and organizational learning) at the University of the Bahamas (UB). One of the unique aspects of using SEM is its ability to account for measurement errors and to test the validity and reliability of the constructs used in the study. By defining latent constructs and associating them with their respective indicators, SEM ensures a more accurate and nuanced understanding of the data.

The choice of SmartPLS for SEM analysis is noteworthy because it supports Partial Least Squares (PLS) path modeling, which is particularly suitable for exploratory research and situations where the data does not meet the stringent assumptions required by covariance-based SEM methods. PLS-SEM is less restrictive regarding sample size and data distribution, making it an ideal tool for research conducted in developing countries where data collection can be challenging.

In this study, SmartPLS enabled the researchers to test a complex model that included multiple exogenous and endogenous variables, thereby providing deeper insights into how different organizational culture types influence learning outcomes. The model's fit and the significance of the path coefficients were assessed to determine the strength and direction of these relationships. The findings revealed significant correlations between the organizational culture types and the dimensions of learning, highlighting the importance of a supportive and well-structured organizational environment in enhancing learning.

SEM in this context is particularly innovative because it allows for the simultaneous testing of multiple hypotheses and the exploration of indirect effects, which are often overlooked in simpler analytical methods. This approach provides a holistic view of how various factors influence learning, offering valuable insights for HRD practitioners and policymakers in developing countries. By adopting SEM, this study advances the methodological rigor in HRD research and contributes to a better understanding of the complex dynamics at play in educational institutions like UB.

Hypothesis Testing

Hypotheses testing is a fundamental aspect of this study, aiming to elucidate the relationships between organizational culture (OC) types and dimensions of learning at the University of The Bahamas (UB). This analysis is crucial in understanding how different OCs—clan, adhocracy, market, and hierarchy—affect individual, team, and organizational learning within a higher education institution in a developing country. The hypotheses are structured to test both positive and negative correlations between these variables, providing a comprehensive view of the cultural dynamics at UB.

Individualized Learning

The R^2 of this model is 0.22, indicating that the variables contributed about 22 percent of the variance in individualized learning. As indicated in Table 2, clan culture ($\beta = 0.16$, $t = 0.34$, $p=0.236$), adhocracy culture ($\beta = 0.34$, $t = 0.16$, $p=0.430$), market culture ($\beta = -0.05$, $t = 0.15$, $p=0.456$), and hierarchy culture ($\beta = 0.15$, $t = -0.05$, $p=0.747$) were not significantly related to individualized learning. Therefore, H1a – H1d are not supported for the now or the preferred cultures.

TABLE 2
INDIVIDUALIZED LEARNING & NOW CULTURE HYPOTHESES TESTING

Hypothesis	Relationships	Path Coefficients (β)	T Values	P Values	Results
H1a	Clan culture - IL	0.16	0.34	0.236	Not Supported
H1b	Adhocracy culture - IL	0.34	0.16	0.430	Not Supported
H1c	Market culture - IL	-0.05	0.15	0.456	Not Supported
H1d	Hierarchy culture - IL	0.15	-0.05	0.747	Not Supported

Note: *** Significant at 0.01 (1-tailed), ** significant at 0.05 (1-tailed), * significant at 0.10 (1-tailed).

As indicated in Table 3, when assessing the relationship between the "preferred" organizational and organizational learning, clan culture (β = 0.32, t = 1.05, p=0.293), adhocracy culture (β = 0.10, t = 0.57, p=0.569), market culture (β = 0.19, t = 0.81, p=0.416), and hierarchy culture (β = -0.14, t = 0.76, p=0.447) were not significantly related to individualized learning.

TABLE 3
INDIVIDUALIZED LEARNING & PREFERRED CULTURE HYPOTHESES TESTING

Hypothesis	Relationships	Path Coefficients (β)	T Values	P Values	Results
H1a	Clan culture - IL	0.21	1.05	0.293	Not Supported
H1b	Adhocracy culture - IL	0.10	0.57	0.569	Not Supported
H1c	Market culture - IL	0.19	0.81	0.416	Not Supported
H1d	Hierarchy culture - IL	-0.14	0.76	0.447	Not Supported

Note: *** Significant at 0.01 (1-tailed), ** significant at 0.05 (1-tailed), * significant at 0.10 (1-tailed).

H1a: *The clan culture is positively related to individualized learning.*

The clan culture, characterized by its focus on collaboration, shared values, and a family-like atmosphere, is hypothesized to positively influence individualized learning. This hypothesis posits that the supportive environment fostered by a clan culture encourages personal growth and development, leading to enhanced individualized learning outcomes at UB. The anticipated positive correlation indicates that as clan culture becomes more pronounced, so too does the level of individualized learning.

H1b: *The adhocracy culture is positively related to individualized learning.*

Adhocracy culture emphasizes flexibility, creativity, and innovation, which are conducive to individualized learning. This hypothesis suggests that the dynamic and entrepreneurial environment of an adhocracy culture fosters personal initiative and self-directed learning. The expected positive correlation implies that an increase in adhocracy culture elements will lead to higher levels of individualized learning at UB.

H1c: *The market culture is positively related to individualized learning.*

Market culture, with its focus on competitiveness, achievement, and goal orientation, is hypothesized to positively affect individualized learning. This hypothesis explores the idea that the performance-driven nature of market culture motivates individuals to improve their skills and knowledge to meet organizational

targets. The anticipated positive correlation indicates that a stronger market culture will enhance individualized learning outcomes at UB.

H1d: *The hierarchy culture is positively related to individualized learning.*

Hierarchical culture is defined by its structured and orderly environment, which may also support individualized learning through clear guidelines and expectations. This hypothesis posits that the stability and predictability of a hierarchical culture can provide a conducive environment for personal development. The expected positive correlation suggests that as hierarchical elements increase, individualized learning will also improve at UB.

Team Group Learning

The R2 of this model is 0.17, indicating that the variables contributed about 17 percent of the variance in individualized learning. As indicated in Table 4, clan culture (β = -0.15, t = -0.30, p=0.304), adhocracy culture (β = -0.30, t = -0.15, p=0.464), market culture (β = 0.06, t = 0.03, p=0.882), and hierarchy culture (β = -0.03, t = 0.06, p=0.701) were not significantly related to individualized learning. Therefore H2a – H2d are not supported "now" cultures.

TABLE 4
TEAM GROUP LEARNING & NOW CULTURE HYPOTHESES TESTING

Hypothesis	Relationships	Path Coefficients (β)	T Values	P Values	Results
H2a	Clan culture – TGL	-0.15	-0.30	0.304	Not Supported
H2b	Adhocracy culture – TGL	-0.30	-0.15	0.464	Not Supported
H2c	Market culture – TGL	0.06	-0.03	0.882	Not Supported
H2d	Hierarchy culture - TGL	-0.03	0.06	0.701	Not Supported

Note: *** Significant at 0.01 (1-tailed), ** significant at 0.05 (1-tailed), * significant at 0.10 (1-tailed).

As indicated in Table 5, when assessing the relationship between the "preferred" organizational and organizational learning, clan culture (β = 0.11, t = 0.62, p=0.536), adhocracy culture (β = 0.30, t = 1.81, p=0.070), market culture (β = -0.06, t = 0.28, p=0.780), and hierarchy culture (β = 0.04, t = 0.24, p=0.809) were not significantly related to individualized learning. Therefore H2a – H2d are also not supported "preferred" cultures.

TABLE 5
TEAM GROUP LEARNING & PREFERRED CULTURE HYPOTHESES TESTING

Hypothesis	Relationships	Path Coefficients (β)	T Values	P Values	Results
H2a	Clan culture – TGL	0.11	0.62	0.536	Not Supported
H2b	Adhocracy culture – TGL	0.30	1.81	0.070	Supported
H2c	Market culture – TGL	-0.06	0.28	0.780	Not Supported
H2d	Hierarchy culture - TGL	0.04	0.24	0.809	Not Supported

Note: *** Significant at 0.01 (1-tailed), ** significant at 0.05 (1-tailed), * significant at 0.10 (1-tailed).

H2a: *The clan culture is positively related to team group learning.*

Given its inherent focus on collaboration and teamwork, clan culture is hypothesized to positively influence team group learning. This hypothesis suggests that the inclusive and supportive nature of a clan culture fosters effective teamwork and collective learning. The anticipated positive correlation indicates that as clan culture becomes more pronounced, team group learning initiatives and outcomes are likely to improve at UB.

H2b: *The adhocracy culture is positively related to team group learning.*

Adhocracy culture, with its emphasis on flexibility and innovation, is hypothesized to positively impact team group learning. This hypothesis posits that the dynamic environment of an adhocracy culture encourages collaborative problem-solving and creativity within teams. The expected positive correlation implies that an increase in adhocracy culture elements will lead to higher levels of team group learning at UB.

H2c: *The market culture is positively related to team group learning.*

Market culture's focus on competitiveness and achieving targets may also foster team group learning. This hypothesis explores the idea that the goal-oriented nature of market culture can drive teams to work together more effectively to achieve shared objectives. The anticipated positive correlation suggests that a stronger market culture will enhance team group learning outcomes at UB.

H2d: *The hierarchy culture is positively related to team group learning.*

Hierarchical culture, with its structured and orderly environment, is hypothesized to positively support team group learning. This hypothesis posits that the clarity and stability provided by a hierarchical culture can facilitate organized and systematic team learning efforts. The expected positive correlation indicates that as hierarchical elements increase, team group learning will also improve at UB.

Organizational Learning

The R^2 of this model is 0.16, indicating that the variables contributed about 16 percent of the variance in individualized learning. As indicated in Table 6, clan culture ($\beta = 0.96$, $t = -0.27$, $p=0.339$), adhocracy culture ($\beta = 0.69$, $t = -0.16$, $p=0.490$), market culture ($\beta = 0.48$, $t = -0.11$, $p=0.629$), and hierarchy culture ($\beta = 0.02$, $t = -0.00$, $p=0.987$) were not significantly related to individualized learning. Therefore H3a – H3d are not supported for the now or the "now" cultures.

TABLE 6
ORGANIZATIONAL LEARNING & NOW CULTURE HYPOTHESES TESTING

Hypothesis	Relationships	Path Coefficients (β)	T Values	P Values	Results
H3a	Clan culture - OL	0.96	-0.27	0.339	Not Supported
H3b	Adhocracy culture - OL	0.69	-0.16	0.490	Not Supported
H3c	Market culture – OL	0.48	-0.11	0.629	Not Supported
H3d	Hierarchy culture - OL	0.02	-0.00	0.987	Not Supported

Note: *** Significant at 0.01 (1-tailed), ** significant at 0.05 (1-tailed), * significant at 0.10 (1-tailed).

H3a: *The clan culture is positively related to organizational learning.*

The clan culture, characterized by its focus on collaboration and shared values, is hypothesized to positively influence organizational learning. This hypothesis suggests that the supportive environment

fostered by a clan culture promotes continuous learning and knowledge sharing at the organizational level. The anticipated positive correlation indicates that as clan culture becomes more pronounced, organizational learning will also enhance at UB.

H3b: *The adhocracy culture is positively related to organizational learning.*

Adhocracy culture's emphasis on flexibility and innovation is hypothesized to positively impact organizational learning. This hypothesis posits that the dynamic and entrepreneurial environment of an adhocracy culture encourages organizational adaptability and continuous improvement. The expected positive correlation implies that an increase in adhocracy culture elements will lead to higher levels of organizational learning at UB.

H3c: *The market culture is positively related to organizational learning.*

Market culture, with its focus on competitiveness and achievement, is hypothesized to positively affect organizational learning. This hypothesis explores the idea that the performance-driven nature of market culture motivates the organization to continuously improve and adapt. The anticipated positive correlation suggests that a stronger market culture will enhance organizational learning outcomes at UB.

H3d: *The hierarchy culture is positively related to organizational learning.*

Hierarchical culture, with its structured and orderly environment, is hypothesized to positively support organizational learning. This hypothesis posits that the stability and predictability provided by a hierarchical culture can create a conducive environment for systematic organizational learning. The expected positive correlation indicates that as hierarchical elements increase, organizational learning will also improve at UB.

DISCUSSION

The outcomes of the structural equation modeling (SEM) analysis provided insightful revelations about the intricate dynamics between organizational culture (OC) and the dimensions of organizational learning at the University of the Bahamas (UB). By leveraging SEM, this study elucidated the multifaceted interrelationships between different types of OC and learning dimensions, contributing significantly to the body of knowledge in organizational behavior, particularly within higher education institutions (HEIs) in developing countries.

The findings indicated that the relationships between OC and the dimensions of organizational learning (individual, team, and organizational) were not statistically significant. This lack of significance, however, should not be viewed as diminishing the relevance of OC in influencing learning outcomes. Instead, it highlights the complexity of these relationships and suggests that other mediating variables or contextual factors might be at play. The insignificant results invite further exploration and underscore the need for more nuanced research to unravel these complex dynamics.

Despite the statistical insignificance, the study offers valuable insights into the cultural preferences and prevailing OC at UB. The use of the Organizational Culture Assessment Inventory (OCAI) revealed that participants preferred clan and hierarchy cultures, while the current culture is predominantly hierarchical and market-oriented. The preference for a clan culture indicates a desire for a more collaborative and supportive environment, fostering shared values and a sense of community. In contrast, the hierarchical culture signifies a structured and controlled environment, whereas the market culture underscores a competitive, results-driven ethos. These cultural inclinations provide a foundational understanding of the existing and desired cultural states within UB, highlighting areas for potential development and intervention.

To deepen the understanding of how OC impacts organizational learning, future research should consider longitudinal studies within UB. Such studies could track cultural changes over time and their

effects on learning outcomes, offering a dynamic view of the evolution towards a learning organization. Moreover, identifying specific mechanisms through which OC influences learning is crucial. Future research should aim to pinpoint these mechanisms and examine the effectiveness of strategic interventions designed to enhance OC in a university setting. These interventions could include programs to foster a clan-like environment, promoting collaboration and shared goals, which could, in turn, enhance learning and knowledge-sharing practices.

Additionally, the innovative use of SEM in this study demonstrates its applicability and value in HRD research within developing countries. SEM's ability to handle complex relationships and latent constructs makes it a robust tool for examining the interplay between OC and learning dimensions, offering a sophisticated analytical approach that can reveal deeper insights than traditional methods.

CONCLUSION

The study aimed to investigate the relationship between organizational culture (OC) and the dimensions of organizational learning (OL) at the University of the Bahamas (UB) using structural equation modeling (SEM). Despite finding no statistically significant relationships between OC and OL, the research offers valuable insights into the cultural preferences and prevailing OC at UB. The preference for a clan culture indicates a desire for a more collaborative and supportive environment, while the current hierarchical and market-oriented culture signifies a structured and competitive ethos.

These findings underscore the complexity of the relationship between OC and OL and suggest the need for further research to explore other mediating variables or contextual factors. Longitudinal studies could provide a dynamic view of cultural evolution and its impact on learning outcomes, facilitating targeted interventions to enhance organizational culture and promote a learning environment.

The use of SEM in this research underscores its utility and innovation in HRD studies, particularly within developing countries. SEM's ability to handle complex relationships and latent constructs provides a more nuanced understanding of how OC impacts learning dimensions, which traditional analytical methods may not capture.

The study also highlights the necessity for further research to explore the intricate mechanisms through which OC influences organizational learning. Longitudinal studies at UB could provide deeper insights into the evolution of OC and its impact on learning outcomes, facilitating the development of targeted interventions to foster a more conducive learning environment.

This research contributes to understanding OC and OL in higher education institutions (HEIs), particularly within a developing country context. By leveraging SEM's sophisticated analytical capabilities, the study provides a nuanced perspective that traditional methods might overlook, laying a foundation for future studies and strategic initiatives aimed at fostering continuous learning and adaptation at UB and similar institutions.

REFERENCES

Belmonte, R., & Cerny, P.G. (2021). Heterarchy: Toward paradigm shift in world politics. *Journal of Political Power*, *14*(1), 235–257.

Cameron, K.S., & Quinn, R.E. (2011). *Diagnosing and changing organizational culture: Based on the competing values framework.* Jossey-Bass.

Crumley, C.L. (2007). Heterarchy. In W.A. Darity (Ed.), *International encyclopedia of the social sciences* (2nd ed., pp. 468–469). Macmillian.

Cumming, G.S. (2016). Heterarchies: Reconciling networks and hierarchies. *Trends in Ecology & Evolution (Amsterdam)*, *31*(8), 622–632. https://doi.org/10.1016/j.tree.2016.04.009

Dasgupta, M., & Gupta, R.K. (2009). Innovation in organizations: A review of the role of organizational learning and knowledge management. *Global Business Review*, *10*(2), 203–224.

Easterby-Smith, M., Araujo, L., & Burgoyne, J. (1999). *Organizational learning and the learning organization*. Thousand Oaks, CA: Sage.

Garavan, T., Carbery, R., & Rock, A. (2012). Mapping talent development: definition, scope and architecture. *European Journal of Training and Development*, *36*(1), 5–24. https://doi.org/10.1108/03090591211192601

Gilley, J., Eggland, S., Gilley, A.M., & Maycunich, A. (2002). *Principles of Human Resource Development.* Basic Books.

Hafit, N.I.A., Asmuni, A., Johan, Z.J., & Othman, N.A.F. (2019). The relationship between performance culture and organizational learning in higher education institutions. *International Journal of Advanced Research in Education and Society*, *1*(1), 21–29.

Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., & Tatham, R.L. (2014). *Multivariate data analysis* (7th ed.). Pearson.

Kline, R.B. (2016). *Principles and practice of structural equation modeling.* Guilford Publications.

Marquardt, M., Berger, N., & Loan, P. (2004). *HRD in the age of globalization: A practical guide to workplace learning in the third millennium.* New York, NY: Basic Books.

Murrell, J.L. (2019). *Examining perceptions of organizational culture at two community colleges in the mid-Atlantic region* (Publication No. 27545166) [Doctoral dissertation, Morgan State University]. ProQuest Dissertations and Theses Global.

Ponnuswamy, I., & Manohar, H.L. (2016). Impact of learning organization culture on performance in higher education institutions. *Studies in Higher Education*, *41*(1), 21–36. https://doi-org.ezproxy.regent.edu/10.1080/03075079.2014.914920

Schein, E.H. (1991). What is culture? In P. Frost, L. F. Moore, M. R Louis, C. C. Lundberg, & J. Martin (Eds.), *Reframing organizational culture* (pp.243–253). Newbury Park, CA: Sage.

Schein, E.H. (2004). *Organizational culture and leadership (3rd ed.)*. San Francisco, CA: Jossey-Bass.

Watkins, K.E., & Marsick, V.J. (1993). *Sculpting the learning organization: Lessons in the art and science of systemic change.* Jossey-Bass.

Watkins, K.E., & Marsick, V.J. (1996). *In action: Creating the learning organization*. American Society for Training and Development.