# Why Become a Learning Organization:
## Measuring the Dimensions of Learning at the University of the Bahamas

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*In the 21st century, higher education institutions (HEIs) seek to remain relevant in a rapidly changing social and cultural landscape, knowing that innovation is critical to the ongoing viability of the organization. As a result, HEIs need to adapt to changes through continuous learning, thus fostering new regulatory paradigms which considerably grow among educational organizations. In this paper, a cross-sectional, data collection methodology utilized an adapted 21-item version of the Dimensions of Learning Organization Questionnaire (DLOQ). Furthermore, the selected instrument employed investigates the perception of university staff, faculty, and administrators in the organizational learning culture in a Bahamian higher education institution, namely the University of the Bahamas. The results illuminate some of the complexities and challenges of applying change management principles and processes derived from corporate management culture to the administration and governance of higher education in the Bahamas. Results indicate that when combining both staff and faculty responses compared to administrators, there was, in fact, organizational learning.*

*Keywords: higher education institutions (HEIs), learning organization (LO), The Bahamas, human resource development (HRD)*

## INTRODUCTION

The world, and specifically organizational environments, are becoming uncertain affecting micro and macro systems globally (Hatch, 2018). Indeed, this present era is dynamic: an organization needs to change, learn, implement, and adapt to become competitive or it becomes irrelevant (Morgan, 2006). Clearly, Albert Einstein stated, "If you want different results than what you are getting, you have to try different approaches," (Hamm, 2017, p.1). With this in mind, many organizations are affected by particular factors, such as globalization, or accelerated by the information age, heightened volatility, hyper-competition, demographic changes and explosion of knowledge. These, in turn, create an impetus for organizational learning and learning organizations (Easterby-Smith, Araujo, & Burgoyne, 1999). Learning is the critical component to growth and is seen as a catalyst to a better future both for individuals and organizations (Imran, Ilyas, & Fatima, 2017; Marquardt, 2002; Senge, 2006; Farrukh & Waheed, 2015; Garvin,1994).

Learning is vital to prevent any recurrence of the severe quality problems that surface from concurrent situations (Holba, Bahr, Birx, & Fischler, 2019). As Peter Drucker (2005) stated, all organizations in the 21st century must "accept the fact that learning is a lifelong process of keeping abreast of change," (Rutgers, 2019, p.1). Moreover, the essential task is to teach people how to learn together. Senge (2006) alludes to how the evolution of organizational life and structure is affected by "knowledge intensity" (pg. 15). Marquardt (2002) recommends that organizations strategically align themselves to become learning organizations. Senge (2006) defined a learning organization (LO) as one

> where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together (pp.12-13).

As Khasawneh (2011) points out, LOs help create, analyze, store, and disseminate increased amounts of knowledge within the organization and provide timely access to employees who are dealing with more urgent and complex problems. Furthermore, Wilkinson, Rushmer, and Davies (2004), and Lee (2008) both allude to how the concept of an LO is widely applied in organizations who survive in a competitive world. Thus, LOs implement strategy to adapt to turbulent change. Likewise, LOs value leadership, interpersonal skills, creativity, innovation, and initiative (Wilkinson, Rushmer, & Davies, 2004). As a result, Marsick and Watkins (2003), and Kim, Egan, and Tolson (2015) both attest how LOs may well be a remedy pursued by many human resource development (HRD) professionals to enhance their organizational capacity and competitiveness for survival (p.92).

Interestingly, Abbasi, Taqipour, and Farhadian (2012) indicate how recently, organizational learning and LOs are fostering new regulatory paradigms and have had considerable growth among industrial and educational organizations. Furthermore, Abbasi et al. (2012) explained how universities retain a competitive edge by realizing and responding to change, and thus, become an LO. According to Ponnuswamy (2016), HEIs almost universally acknowledge responding to change that plays a vital role in the progression of advanced "knowledge economies."

HEIs can be conceptualized as LOs and may appear as the perfect incubator. Khasawneh (2011) reveals that HEIs must enhance the learning climate through more systemic-embedded mentoring and action-learning that magnifies the broader workforce by developing a shared vision to become LOs.

As an illustration, The University of The Bahamas (UB) is currently in a state of reorganization, reengineering, and restructuring the learning climate. Human resource management is currently restructuring to expand the linkage toward building a learning organization. This is in direct response to accreditation-seeking endeavours.

This paper attempts to look into the fundamental assumptions regarding LOs and uses the Dimensions of Learning Organization Questionnaire (DLOQ) developed by Watkins and Marsick (1996) to measure the extent of a learning organization score at the University of The Bahamas. The goal for achieving specific accreditation, and finding areas where gaps exist, can be implied and implemented as a result from what the DLOQ reveals. By measuring the impact of an LO's practices and process on organizational performance, human resource management can discover areas needing further development. The results are analyzed, followed by conclusions and recommendations for future research.

**THEORETICAL BACKGROUND AND HYPOTHESIS**

This literature review identifies the concept and dynamics of an LO. However, the research reveals and addresses several barriers. The organizational culture plays a principle part in defining how much an organization lends itself to being an LO. Managing change is the ultimate precedent that permits the LO to emerge and grow. HRD plays a vital role in the systemic adaption for change.

**LO Concept**

Leufvén, Vitrakoti, Bergström, Ashish, and Målqvist (2015) reveal how, in the 21$^{st}$ century, the climate is continually changing, and organizations that succeed must continuously transform and adapt to new circumstances. Those who can, adopt the characteristics of an LO. Mishra and Bhaskar (2013) explain the LO concept exiting for quite some time.

However, Senge (1990) brings it to the forefront gaining substainal attention after publishing his research on the subject. Senge (1990) describes an LO in terms of five principles: personal mastery, mental models, shared vision, systems thinking, and team learning. This concept has attracted significant attention from both scholars' and practitioners' definitions. These mainly focus on the importance of acquiring, improving, and transferring knowledge; facilitating individual and collective learning; and integrating and modifying behaviors and practices of the organization and its members as a result of learning that has occurred (Ellinger, Ellinger, Yang, & Howton, 2002; Mbassana, 2014; Yukl, 2013).

Necessary to realize, Cierna, Sujová, Hbek, Horská & Kapsdorferová (2017) allude how LOs were interpreted in different ways in the last few years, and many definitions materialized. However, according to Örtenblad (2004), many researchers concur that the specific quality of an organization supports learning from one's experience and the experiences of others.

An LO is not only a related concept that uses theoretical findings from organizational learning but, correlates with literature from other disciplines such as system theory, cognitive science, and organizational development (Ponnuswamy & Manohar, 2016). Morgan (2004) personified LOs metaphorically as a brain because of how organizations shift and react to knowledge intensity.

In LOs, the value of learning, innovation, experimentation, flexibility, and initiative are embedded in the culture of the organizations (Moore, 2004, p.97). Correspondingly, Easterby-Smith et al. (1999) indicate how LOs enable "the learning of its members in such a way that it creates positively valued outcomes, such as innovation, efficiency, better alignment with the environment and competitive advantage" (p.61). According to Watkins and Marsick (1993,1996), LOs must require seven key characteristics to become an active LO:

    (1) create an environment that continuously supports learning
    (2) promote inquiry and dialogue
    (3) encourage collaboration and team learning
    (4) establish systems to capture and share knowledge
    (5) empower people to have a collective vision
    (6) connect the organization to its environment, and finally
    (7) leaders should provide strategic support for learning (p.16).

Learning is the core subsystem for organizations, and it needs to take place at individual, group, and organizational levels (Marquardt, 2004). Also, Luhn (2016) emphasizes that the LO is categorized as an open system because it embraces mutual relationships with their surroundings and information that reaches inside the systems of the organization.

Furthermore, individuals in LOs see learning as a way of life rather than a random event. LOs persistently encourage, support, accelerate, and reward individual learning through an organizational system that promotes continuous self-development and employability (Marquardt, 2004; Gilley, Eggland, Gilley, & Maycunich, 2002). Overall, LOs have a healthy relationship with their physical, social, and cultural environments because these types of organizations provide opportunities and resources that balance the personal and professional growth needs of employees and encourage them to use new skills in innovative ways (Khasawneh, 2011; Watkins & Marsick,1996; Farrukh & Waheed, 2015; Hussein, Mohamad, Noordin, 2014: Power & Waddell, 2004).

**Dynamics of Organizational Learning**

According to Easterby-Smith, et al. (1999), the way organizations learn takes place by aligning the organization with its environment. In other words, a processual character of learning (Easterby-Smith et al. 1999, p.75) as Giley et al. (2002) mentioned: "it is an enhanced intellectual and productive capability gained through companywide commitment and opportunity to learn continuously" (p.11).

Argyris and Schon (1978) originally define the concept of organizational learning as accumulated experiences of members, intellectual capital, and shared decisions held within the organization and higher than the total sum of individual participants. Furthermore, Argyris (1992) explained how organizational learning framework aided us to understand that as a researcher, we help people learn to see problems for themselves, and engage them to inquire and enhance their organizational learning ideas (Benjamin, 2009; Ortenbald, 2002; Martin, 2004).

To clarify, Hodgkinson (2000) reveals how Argyris (1992) postulated organizational learning as a process of detecting and correcting the error. It comprises of three levels, which are single-loop (adaptive) learning, double-loop (generative) learning, and deutero-learning. Specifically, Maden (2012) states how organizational learning processes create a 'flow of change' through individual, team, interdepartmental group, and organizational levels and its performance depends on the effective management of inter-level activities.

Marsick and Watkins (2003) highlight how organizational learning is significant in today's workplace because employees frequently change jobs or hoard what they know because they feel that sharing knowledge could be detrimental to their success. Marquardt (2011) indicated that organizational learning occurs through the shared insights, knowledge, and mental models of members of the company.

Building on prior knowledge and experience leads to a culture shift. Additionally, Marquardt (2011) mentions how the organization could achieve this process by utilizing three types of organizational learning: adaptive, anticipatory, and action (p.40). With this in mind, Pace (2002) acknowledged that organization learning necessitates four constructs and processes: (a) knowledge acquisition; (b) information distribution; (c) information interpretation; and (d) organizational memory (p.459). Senge (2006) and Shao, Feng, and Hu (2017) both posit how organizations must change, reassess their purpose, and re-adapt their goals to stay competitive for survival. For instance, HEI's can benefit from the assessment: measuring, disseminating, and restructuring routine behaviors during processes of growth and change (Benjamin, 2009, p.20).

**Barriers for HEIs in Becoming LOs**
According to Simon (2017), HEIs may appear as the perfect incubator for an LO. However, the deeper one delves into the topic, the more ambiguous the linkage between HEIs and LOs becomes. Örtenblad and Koris (2014) allude to how HEIs seem to single-loop learn (learning within the current mindset) much more than they double-loop learn (questioning the current mindset and learning a new one), which makes HEIs already organizational LOs, but only to a limited extent (p.199).

As mentioned earlier, the 21st-century workplace is rapidly evolving affecting socioeconomic trends and markets, overnight innovation by competitors, mergers across corporate culture and industries, new distribution channels and globalization of business (Marquardt, Berger, Loan, 2004, p.114. ). Notably, Ponnuswamy and Manohar (2016) disclosed how HEIs, similar to other industries, face fierce competition and hence, strive to achieve competitive advantage by updating their practices, services, and competitiveness through several methods. Furthermore, Ponnuswamy and Manohar (2016) added how HEIs are unlike other business organizations because the primary focus is research and teaching.

Similarly, Habtoor, Arshad, and Hassan (2019) clarify how modern HEIs are moving away from being merely public service organizations operating to improve performance. However, Habtoor et al. (2019) added that improving the performance of HEIs requires various characteristics that lead to the achievement of management's goals and objectives. Holyoke, Sturko, Wood, and Wu (2012) speculated that higher education faces barriers beyond those in private industry, preventing it from quickly adapting to change.

According to Holyoke et al. (2012), Kezar and Eckel (2002), HEIs considered loosely coupled systems which may act as a barrier to them becoming LOs. Likewise, Brown (1997) implies how HEIs lag behind the corporate world in applying the five disciplines by Senge (2006): personal mastery, mental models, shared vision, team learning, and systems thinking. Furthermore, Brown (1997) concludes that these five principles could be present in the classroom and research laboratory; they do not describe the

system of higher education as a whole, nor units within the system. Therefore, literature foundation forms our first research question as:

***Research Question 1:*** *To what extent do the staff, faculty, and administration of the University of the Bahamas perceive the impact of dimensions of a learning organization on organizational performance?*

## Culture of Higher Education Institutions

According to Ivanevich, Matterah, and Konopaske (2018), a country's culture affects how the organization conducts transactions. Culture is omnipresent and embedded locally and cross-culturally in every organization (Richerson & Boyd, 2005). Uniquely, culture appears to be the preferred lens for understanding transformation within higher education, but it is a term loaded with different meanings for different groups (Jeris,1998). Johnson (2011) justified that culture is how things work in organizations. Yukl (2014) recognizes that culture consists of shared assumptions, beliefs, and values for the member (p.286). Schein (1991, 2004) defined organizational culture as:

> A pattern of underlying assumptions -- invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration – a pattern of assumptions that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (p. 14).

With this in mind, the purpose of culture is to help individuals understand and respond to their environment, (Yukl, 2014., p.286). By explaining the culture, we focus on how the organizational culture in HEIs exists. According to Chickering (2003), HEIs have current structure and organizational assumptions making institution-wide change extremely difficult in higher education. As a matter of fact, at UB, the cultural transitioning is challenged by the norm of individuality and local autonomy.

Most compelling evidence, Holyoke et al. (2012) addresses HEIs as often lacking organizational learning culture. Watkins (2005) adds how the culture of higher education has some elements that may mitigate against making system changes, yet one component in higher education's culture that has great potential to support change is the passion for learning.

Watkins (2005) conducted extensive research on HEIs that reveals two significant aspects of an HEIs culture transitioning to a research university: 1) research university is faculty governance and local autonomy, which leads to a firmly entrenched culture; 2) the focus on research and teaching requires continuous learning which is a fundamental principle of a learning culture. In contrast, once a faculty member is awarded tenure, there is no drastic consequence if the individual no longer continues to maintain his or her scholarly productivity (pp. 3-4).

The Bahamas is considered a collectivistic society with a high-power distance that presents hierarchical subcultures: executive (the administration), engineering (the faculty), and operations (staff). Johnson (2011) documents how subcultures have a variety of important implications for organizational learning in HEIs. Such is the case at UB.

## Organization Development (OD) in Higher Education Institutions (HEIs)

In the 21st century, HEIs are seeking to remain relevant in a rapidly changing social and cultural landscape knowing that innovation is critical to the ongoing viability of the organization (Ivanveich et al. 2018., p.218). For HEIs or any organization to remain relevant, an organization's development practices must be utilized, which is known as a process of going between and among groups to help them (Argyris, 1970). According to Latta (2009), the purpose of organizational development (OD) is to increase institutional capacity for effecting change. For example, change indicative to individuals, organizational units, and the overall organization should be identified with specific strategic direction.

OD is appropriate in all settings, and organizational change is a core component of OD (Gilley et al., 2002; Johnson,2011). Human resource management practices infiltrate OD components in all types of

organizations. Additionally, Freed (2001) alludes that change in HEIs starts with the people at the top: chancellors, presidents, vice presidents, provosts, and deans.

During the OD process, the presence of human resource facilitators at every stage of diagnosis, planning, and implementation is needed to be effective (McLean, 2005; Rothwell, Sullivan, & McLean, 1995). Overall, Serralde (1985) concludes that organizational development knowledge and practices increase and improve business efficiency. OD begins to show signs of becoming a formal movement by seeking to grow with a particular emphasis on quality and productivity (Serralde,1985, p. 21).

**HEI Managing Change in the Bahamian Context**

Change in any society is challenging, and managing change in developing nations can be tedious. As an illustration, The Bahamas assumes a significant role in the potential for change. In Bahamian society, the depth of uplifting classes of people away from poverty to becoming productive and acquiring economic resources, employs whole systems change (WSC) methodology. Therefore, evidence of effective ways to manage and facilitate organizational change emerges in the Bahamian economy (Manning & DelaCerda, 2003, p. 52).

The concept of learning organizations in the Bahamas is in its infancy stage. There is a lack of empirical research in this area, specifically in higher learning institutions in the Bahamas. However, a recent study conducted by Davis (2014) reveals the challenges for the University of The Bahamas: aligning its internationalization strategies and limited resources with its academic mission and values. In addition, this ensures that mechanisms are established so as to avoid pitfalls in a rapidly changing, complex, competitive global context (p.5).

According to Habtoor, Arshad, and Hassan (2019), improving the performance of HEIs is a common concern in different countries around the world. In this case, The Bahamas is one of those countries in which its HEIs are operating in a volatile environment. As Davis (2014) stated about UB, there is a need to adopt new strategies that actively reduce challenges, adopt new ways to survive and cope with changes imposed by the external and internal environments. As a result, a continuously changing environment requires HEIs to unremittingly reassess their goals and management strategies (Doyle & Brady, 2018). As with any HEI in a developing country, such as UB, the organization faces many obstacles within a volatile environment. Most notably, inefficiencies cause shortcomings, and thus, prevent attaining higher levels of performance and productivity.

Interestingly, Marquardt, Berger, and Loan (2004, p.305) surmise that developing countries struggle to understand and interpret their past in the hope of creating a brighter outlook. Another critical point, Marquardt et al. (2004) identify public management in developing countries that depend on the development of administrative systems, which, in lesser-developed countries, tends to progress as per models called by international lenders as indicative of effective government and economic development (p.309). Overall, to achieve success at UB, Kaivo-oja and Lauraecus (2018) elucidate achieving success in HEIs depends on the ability to manage networks of knowledge and to collect, document, and analyze data involving complex systems that create or produce a flexible, adaptable, and continuous learning environment.

*Research Question 2: Are there significant differences in the perceptions about the learning organization disciplines based on the demographic characteristics of faculty, staff, and administration and gender?*

**Problem and Research Question**

According to Ponnuswamy and Manohar (2016), universities, similar to industry, face fierce competition which forces them to achieve competitive advantage by updating their practices, services, and competitiveness through several methods. The integral business of an HEI is research and teaching. Furthermore, the quality of research performance sets a top university apart from its competitors (Ponnuswamy & Manohar, 2016). However, Pratt, Margaritis, and Coy (1999) posit how HEIs continue to operate in a fiscally challenged environment, and hence universities employ various management strategies such as organizational restructuring, quality management, and training as a part of their ongoing

learning initiatives (as cited in Ponnuswamy & Manohar, 2016). Above all, HEIs, especially in developing countries, such as The Bahamas, must apply structural reforms with new management practices, hence, forcing new forms of organizational practices. Therefore, this research paper intends to address the objectives of the study as follows:

**R1:** *To what extent do the staff, faculty, and administration of the University of the Bahamas perceive the impact of dimensions of a learning organization on organizational performance?*

**R2:** *Are there significant differences in the perceptions about the learning organization disciplines based on the demographic characteristics of faculty, staff, and administration, and gender?*

## THE SIGNIFICANCE OF THE STUDY

This study aims to investigate the organizational knowledge performance outcomes based on the perception of LO culture among the staff, faculty, and administration at UB. This study adopts the Watkins and Marsick's (1996) LO model as its theoretical base. Furthermore, to define the construct of an LO, the DLOQ assists researchers in examining predictors of the LO construct in the Bahamian context (Mahseredjian, Karkoulian, & Messarra, 2011). Most compelling evidence demonstrates that there is a lack of pertinent documented literature to evaluate the LO behavior in the context of HEI setting, particularly in The Bahamas.

Additionally, there have been no empirical studies in The Bahamas that support the LO concept in an HEI. Taking into account the necessity of all HEIs to be an LO is an essential concept for an organization to learn, transform, and adapt to the uncertainties, including in The Bahamas. Thus, the significance of the study mentioned earlier reveals the predictors of the LO construct in the Bahamian context at the HEI with the DLOQ. This research attempts to fill a gap on research investigating to what extent an HEI in the Bahamas addresses exhibiting itself as an LO. This creates an impetus for HRD to implement new initiatives. The model and the instrument, DLOQ, are further discussed in the next section.

### Definition of Operational Terms
*Higher Education Institution (HEI)*
According to What is Higher Education Institution? (1988), HEIs are levels of education provided by universities, vocational universities, community colleges, liberal arts colleges, institutes of technology and other collegiate-level institutions, such as vocational schools, trade schools, and career colleges, that award academic degrees or professional certifications.

*Learning Organization (LO)*
The concept LO is most commonly associated with Senge's (2006) work, in which he posited five constructs of an LO: systems thinking, personal mastery, mental model, shared vision, and team learning. However, Watkins and Marsick (1993) proposed an integrated model based on LOs defined by the total employee's involvement in the process of collaboratively conducted and collectively accountable change directed towards shared values or principles.

*University of The Bahamas (UB)*
As reported on its website, UB originated in 1974 as The College of The Bahamas (COB) after the amalgamation of four institutions: The Bahamas Teachers' College, San Salvador Teachers' College, C.R. Walker Technical College and the sixth form program of the Government High School (2017). Moreover, COB institution's initial academic offerings were limited to associate degrees, certificates, and diplomas. According to UB Website History (2017) the directive to help develop the human capital and to build a more prosperous and competitive Bahamas influenced COB development of the undergraduate programme, which in the early 1990s, introduced baccalaureate degree programmes in a variety of disciplines including Business, Education, Science, and Nursing. In addition, COB was offering five

bachelor degrees in approximately fifty-five majors. As a result of this initiative, the transition of COB into the University of The Bahamas became official on 10 November 2016, considered the University's Charter Day, in fulfilment of a vision for higher education and the national development of The Bahamas expressed more than four decades ago (UB website History, 2017).

*Dimensions of the Learning Organization Questionnaire (DLOQ)*

The instrument is "Dimensions of the Learning Organization Questionnaire (DLOQ)" coined by Watkins and Marsick (1993, 1996). It was developed based on a theoretical framework that integrates four overarching frames—organizational learning, workplace learning, learning climate, and learning structure perspective (Leufvén, Vitrakoti, Bergström, Ashish & Målqvist, 2015; Ortenblad, 2002). Furthermore, the questionnaire consists of the seven dimensions of a learning organization:

> (1) creating continuous opportunities (continuous learning); (2) promoting inquiry and dialogue (inquiry and dialogue); (3) encouraging collaboration and team learning (collaboration and team learning); (4) empowering people toward a collective vision (empower people); (5) establishing systems to capture and share learning (create systems); (6) connecting and organization to its environment (connect the organization); and (7) providing strategic leadership for learning (Watkins and Marsick, 1993, 1996; Marsick and Watkins, 1999).

Additionally, the seven dimensions of an LO are also categorized into four groups: (1) individuals (continuous learning, inquiry, and dialogue); (2) teams (team learning); (3) organization (empowerment, systems capture learning); and (4) global (strategic leadership and connection to environment) Kim, Egan, and Tolson (2015); Sadegh Sharifirad (2011).

Initially, the DLOQ contained a 43-item scale, then refined to an abbreviated version by Yang, Watkins, and Marsick (2004) to 21 items that did not depreciate the original theoretical structure. As a result, through experimental validation procedures, the abbreviated version of the DLOQ has been assimilated as an instrument applicable to measuring the concept of the LO (Yang et al., 2004).

Interestingly, Mbassana, (2014), Song, Joo, and Chermack (2009), Sadegh Sharifirad (2011), and Kim, Egan, and Tolson (2015) all allude to how the DLOQ has been deployed internationally, primarily by researchers in the field of HRD, in 15 countries across Africa, Asia, Australia, Europe, the Middle East, South America; and the United States and Canada. Necessary to realize, Song, Joo, and Chermack (2009) and Lien, Hung, Yang, and Li (2006) both reveal how the results of cross-cultural studies verified the applicability of the DLOQ in various cultures, providing internal consistency of each item's reliability (coefficient alpha range from .71 to .91) and reliable factor structure of the dimensions of the LO. Building upon this research, application of the DLOQ is determined to be a good fit to measure the extent of being an LO for the specific HEI in The Bahamas.

## METHODOLOGY

### Population and Sample

A quantitative survey method is utilized for this study to evaluate respondents' perceptions of the dimensions of the learning organization questionnaire (DLOQ). The population for this study was chosen among administrators, faculty, and staff (N = 150) from UB. The age to participate in the research is at least 18 years of age. The totaled responses was N=121.

While conducting the study, the researcher considered the APA Ethics Code of Conduct because it is fundamental to conceptualization, planning, execution, and evaluation of the research (Cozby & Bates, 2018). Moreover, to recruit respondents (e.g., administrators, faculty, and staff), the university webpage and the university email were used to communicate to faculty, staff, and administration from the public relations department explaining the purpose of the study on campus.

**Data Collection**

For this cross-sectional study, the 21-item, shorter version of the DLOQ was considered most appropriate because of its superior psychometric properties, as well as its ease of completion and, thus, its reduction of loss to follow-up (Leufvén et al., 2015). The dimensions were measured on a 6-point Likert scale (1 – almost never, 6 – almost always). According to Benjamin (2009), the Cronbach's Alpha for the total DLOQ 21 item scale was .958, and all-dimensional scales exhibited excellent reliability. The highest Cronbach's Alpha was for Dimension 7 (.867), and the lowest was for Dimension 1 (.786). In an investigation into (DLOQ) cross-culturally, Song et al. (2009) found several studies have been done to examine the validity and reliability of measures of the learning organization in several cultural contexts: The United States, Colombia, China, and Taiwan.

Furthermore, Song et al. (2009) reveal the results of these studies verified the applicability of the DLOQ in different cultures, providing internal consistency of each item's reliability (coefficient alpha range from .71 to .91) and reliable factor structure of the dimensions of the learning organization (as cited in Lien et al., 2006).

Upon IRB approval, the instrument was disseminated hardcopy and online via Google forms to faculty, administration, and staff of various schools and departments at the University of the Bahamas to evaluate respondents' perceptions contained in the DLOQ. The study utilized a convenience sample for data collection, and the form was distributed to interested participants to fill out anonymously. Out of the 150 proformas distributed, 121 (N=121) completed forms were considered and analyzed, denoting a response rate of 81%.

**Strengths and Weaknesses of Chosen Design**

The design is a cross-section study looking at respondents' perceptions of an HEI in the Bahamas at one point in time with the (DLOQ). According to Cozy and Bates (2018), cross-sectional methods share similarities with independent groups, whereas the longitudinal approach is similar to the repeated measures design (p.238). Furthermore, Weng, Huang, Chen, and Chang (2015) indicate how practical limitations could arise when using a cross-sectional design and recommend future researchers use the longitudinal model because behavior over a more extended period presents more accurate results.

**Data Analysis**

The collected data was analyzed using IBM SPSS Statistics 24 for Windows and Mac (www.spss.com). According to Creswell and Creswell (2018), the SPSS program assists with simulating statistical concepts. In this case, descriptive statistics were used to report the mean and standard deviation of the variables. The $t$-test utilizes comparison of mean scores for two different groups of people or conditions. Additionally, one-way ANOVA was applied to compare between-groups with the optimism scores for three groups (staff, faculty, and administration) to determine the $p$-value less than .05 significance.

**RESULTS**

Table 1 reports the demographic characteristics of the participants in this study. Out of the 150 proformas distributed, 121 completed forms were considered, corresponding to a response rate of 81%. Reported demographics identified gender and work capacity.

# TABLE 1
## DEMOGRAPHIC CHARACTERITICS OF THE STUDY SUBJECTS

| Gender | Number | Percentage |
|---|---|---|
| Male | 28 | 23.1% |
| Female | 93 | 76.9% |
| Work Capacity | | |
| Staff | 76 | 62.8% |
| Administration | 22 | 18.2% |
| Faculty | 23 | 19% |

*Note*: N=121

Below, Table 2 identifies each of the questions in the DLOQ and identifies descriptive statistics for each question. The range for all questions is 5, the minium is one and the maxium is 6. The means of Q1 to Q21 range between 2.64 on Q15 ("My organization supports employees who take calculated risks") to 3.88 in Q2 ("In my organization, people are given time to support learning"). The standard deviation for the statements, as calculated from the table, is 1.295.

# TABLE 2
## DESCRIPTIVE STATISTICS AS PER STATEMENT

| Statement | N | Mean | Std. Deviation |
|---|---|---|---|
| **Dimension 1. Individual learning** | | | |
| Q1. In my organization, people help each other learn. | 120 | 3.6333 | 1.29598 |
| Q2. In my organization, people are given time to support learning. | 121 | 3.8843 | 1.24626 |
| Q3. In my organization, people are rewarded for learning. | 120 | 3.4167 | 1.52063 |
| Q4. In my organization, people give open and honest feedback to each other. | 118 | 3.0593 | 1.28297 |
| Q5. In my organization, whenever people state their view, they also ask what others think. | 120 | 3.0417 | 1.21887 |
| Q6. In my organization, people spend time building trust with each other. | 120 | 2.7083 | 1.29249 |
| **Dimension 2. Team learning and collaboration** | | | |
| Q7. In my organization, teams/groups have the freedom to adapt their goals as needed. | 120 | 3.3083 | 1.29508 |
| Q8. In my organization, teams/groups revise their thinking as a result of group discussions or information collected. | 121 | 3.2727 | 1.23153 |
| Q9. In my organization, teams/groups are confident that the organization will act as their recommendations. | 120 | 2.7750 | 1.21242 |

| Dimension 3. Organizational Level | | | |
|---|---|---|---|
| Q10. My organization creates systems to measure gaps between current and expected performance. | 121 | 2.9835 | 1.24488 |
| Q11. My organization makes its lessons learned available to all employees. | 121 | 2.9669 | 1.30342 |
| Q12. My organization measures the results of the time and resources spent on training. | 121 | 3.0661 | 1.24990 |
| Q13. My organization recognizes people for taking initiatives. | 121 | 3.2727 | 1.36015 |
| Q14. My organization gives people control over the resources they need to accomplish their work. | 121 | 2.8182 | 1.27148 |
| Q15. My organization supports employees who take calculated risks. | 121 | 2.6446 | 1.19624 |
| Q16. My organization encourages people to think from a global perspective. | 120 | 3.4667 | 1.30244 |
| Q17. My organization works together with the outside community to meet mutual needs. | 118 | 3.3814 | 1.25350 |
| Q18. My organization encourages people to get answers from across the organization when solving problems. | 121 | 3.1570 | 1.37240 |
| Q19. In my organization, leaders mentor and coach those they lead. | 120 | 2.8917 | 1.27547 |
| Q20. In my organization, leaders continually look for opportunities to learn. | 121 | 3.3223 | 1.39771 |
| Q21. In my organization, leaders ensure that the organization's actions are consistent with its values. | 121 | 3.1570 | 1.34169 |

In Table 3, the means of the three dimensions (Individual Learning, Team Learning, and Organizational Learning) are present; however, Organizational Learning shows high means for staff M-38.0141 (12.71612) and faculty 38.4348 (10.36965) whereas Administration mean 31.500 (12.05444) was lower. Important to realize, faculty and staff means were almost similar.

## TABLE 3
## DESCRIPTIVES OF DIMENSION INDIVIDUAL LEARNING, TEAM LEARNING, AND ORGANIZATIONAL LEARNING

| | | N | Mean | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
|---|---|---|---|---|---|---|---|---|---|
| TL | 1.00 Staff | 75 | 9.2933 | 3.39225 | .39170 | 8.5128 | 10.0738 | 3.00 | 18.00 |
| | 2.00 Administration | 21 | 9.0000 | 2.79285 | .60945 | 7.7287 | 10.2713 | 5.00 | 14.00 |
| | 3.00 Faculty | 23 | 9.8696 | 3.00461 | .62650 | 8.5703 | 11.1689 | 6.00 | 16.00 |
| | Total | 119 | 9.3529 | 3.20907 | .29417 | 8.7704 | 9.9355 | 3.00 | 18.00 |
| OL | 1.00 Staff | 71 | **38.0141** | **12.71612** | 1.50913 | 35.0042 | 41.0239 | 13.00 | 68.00 |
| | 2.00 Administration | 22 | **31.5000** | **12.05444** | 2.57002 | 26.1554 | 36.8446 | 18.00 | 70.00 |
| | 3.00 Faculty | 23 | **38.4348** | **10.36965** | 2.16222 | 33.9506 | 42.9190 | 16.00 | 58.00 |
| | Total | 116 | 36.8621 | 12.34285 | 1.14601 | 34.5921 | 39.1321 | 13.00 | 70.00 |
| IL | 1.00 Staff | 70 | 19.8857 | 5.82235 | .69590 | 18.4974 | 21.2740 | 7.00 | 36.00 |
| | 2.00 Administration | 21 | 18.1429 | 5.19890 | 1.13449 | 15.7763 | 20.5094 | 11.00 | 30.00 |
| | 3.00 Faculty | 23 | 20.6522 | 5.52358 | 1.15175 | 18.2636 | 23.0407 | 13.00 | 30.00 |
| | Total | 114 | 19.7193 | 5.66390 | .53047 | 18.6683 | 20.7703 | 7.00 | 36.00 |

Note: Showing the means of the three dimensions (Individual Learning, Team Learning, and Organizational Learning); however, Organizational Learning shows high means for staff M-38.0141 (12.71612) and faculty 38.4348 (10.36965) whereas administration means 31.500 (12.05444) were lower.

In the next step, the ANOVA test comparing the relationship between each of the professions in the three dimensions was performed. No significance was found: all three-dimension $p$-values are insignificant: Individual Learning P= 0.318, Team Learning P= 0.649, and Organizational Learning P=0.75 were greater than P= 0.005 as seen in Tables 4 & 5. The interaction effect between Groups (e.g., faculty, staff, administration) Work Capacity show it was not statistically significant.

## TABLE 4
## INDIVIDUALIZED LEARING BY OCCUPATION

| IL | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 74.143 | 2 | 37.072 | 1.159 | .318 |
| Within Groups | 3550.875 | 111 | 31.990 | 789 | |
| Total | 3625.018 | 113 | 789 | 123 | |

Note ANOVA table presenting: P >0.05, not statistically significant for individual learning

## TABLE 5
## TEAM LEARNING AND ORGANIZATIONAL LEARNING BY OCCUPATION

| TL | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 9.021 | 2 | 4.51 | .434 | .649 |
| Within Groups | 1206.155 | 116 | 10.398 | | |
| Total | 1215.176 | 118 | | 789 | |
| OL | | | | | |
| Between Groups | 783.655 | 2 | 391.828 | 2.646 | 0.75 |
| Within Groups | 16736.138 | 113 | 148.107 | 456 | |
| Total | 17519.793 | 115 | | | |

Note: ANOVA table presenting P >0.05, not statistically significant

The scores for the dimensions distributed by profession are displayed in Table 6 showing where faculty and staff were grouped since they shared a close mean. They were recoded into a new category called NewCap. Then NewCap was compared to administration using a *t*-test thus revealing a significant difference (P = 0.023) between the groups in Organizational Learning Dimension as seen in Table 7.

## TABLE 6
## RECODING GROUP STATISTICS OF THE ORGANIZATIONAL LEARNING DIMENSIONS

| | NewCap | N | Mean | Std Deviation | Std Error Mean |
|---|---|---|---|---|---|
| OL | 1 | 94 | 38.1170 | 12.13176 | 1.25130 |
| | 2 | 22 | 31.5000 | 12.05444 | 2.57002 |
| IL | 1 | 93 | 20.0753 | 5.72985 | 0.59416 |
| | 2 | 21 | 18.1429 | 5.19890 | 1.13449 |
| TL | 1 | 98 | 9.4286 | 3.29948 | 0.33330 |
| | 2 | 21 | 9.0000 | 2.79285 | 0.60945 |

Note: T-TEST GROUPS=NewCap (1 2):Faculty and Staff were grouped since they share a close mean then Recoded Occupation (Administration): (1=1) (2=2) (3=1) into NewCap.

## TABLE 7
## NEW CAP AND ADMINISTRATION T-TEST

| | Equality of Variance | F | Sig. | t | df | Sig.(2-tailed) | Mean Difference | Std. Error Difference |
|---|---|---|---|---|---|---|---|---|
| OL | Equal Variance Assumed | .427 | .515 | 2.306 | 114 | **0.23*** | 6.61702 | 2.86991 |
| | Equal Variance not assumed | | | 2.315 | 31.734 | **0.27*** | 6.61702 | 2.85845 |
| IL | Equal Variance Assumed | .613 | .435 | 1.418 | 112 | .159 | 1.93241 | 1.36233 |
| | Equal Variance not assumed | | | 1.509 | 31.93 | .141 | 1.93241 | 1.28066 |
| TL | Equal Variance Assumed | 1.081 | .301 | .554 | 117 | .581 | 0.42857 | 0.77394 |
| | Equal Variance not assumed | | | .617 | 33.141 | .541 | 0.42857 | 0.69463 |

Note: * p < .05. *t*-test table presenting P=0.023, P=0.027 statistically significant difference at the p < .05 level in OL scores for the Administration group.

## DISCUSSION

The present study was conducted to assess various dimensions of an LO in a Bahamian HEI. New rules, policies, and training are being implemented; however, change fatigue impacts the majority of employees. HEIs around the world have always faced environmental changes (Gumport & Sporn,1999). Results from survey Q15, "My organization supports employees who take calculated risks" scored the lowest mean while Q6 "In my organization, people spend time building trust with each other" scored the second-lowest M=2.7. According to Reason (2010), leaders that exemplify faith and trust, which are paramount, can meet the profound and awe-inspiring challenges that arise each day in the university.

Furthermore, literature has shown that leaders with vision anticipate opportunities and challenges by sharing their vision to stimulate others to join them on the journey by continuously constructing and refining the collective vision of the University (Reason, 2010, p.55). As Ponnuswamy and Manohar (2016), Hussein et al. (2014) both state, the level of individual satisfaction depends on the degree or level of LO characteristics present in a particular higher education institution.

Results show significance for administration on scores in the organizational learning dimension. This particular group is considered the most educated with master's degrees or higher. While in administration, constraints are in place. For example, the concept of academic freedom enjoyed by faculty, thus restricts their leadership.

Gumport and Sporn (1999) allude to how administrative positions and expenditures have become prominent features of higher education organizations within management reform prescriptions. Administrators are increasingly the key actors who mediate and manage the relationships between the

organization and its environments. Overall, administrators are encouraged to discover the most appropriate leadership strategy, or a combination of policies and procedures that will best enable their school to achieve results (Amanchukwu, Stanley & Ololube, 2015). HRD is the key aspect of administration to implement change across the HEI.

**Limitations**

The results of this exploratory study provide some evidence of how perceptions vary across organizational levels at UB concerning the learning organization. However, results should be viewed, taking into consideration the study's limitations, which include the limited sample size of N-121 collected forms with a response rate of 81%. During the summertime, the majority of the employees at UB were on vacation. During the process of administering surveys, a minimal number of employees declined to complete the study citing no monetary gain or were two busy. Currently, the institution is in transition seeking to achieve international accreditation so as to become more competitive in the higher education marketplace. As a result, LO culture is touted as a means of strategic renewal in various business settings.

Finally, this study is conducted in a Bahamian HEI to understand its impact on research and knowledge performance among employees. The study is based on self-reporting and reflection, which may contain biases regarding personal attitude or job tenure within the organization. Since many positions and policies are influx, any possible impact from this was not specifically measured. Also, no background data, other than profession and gender, was collected to explore other correlations. This study was a cross-sectional study which leaves room for conjecture about causality among any inconsistencies. Furthermore, since this research was performed during the summer break, many regular faculty and staff were off contract or on vacation.

**RECOMMENDATIONS**

In this case, a recommended longitudinal study will substantiate the conclusions of the survey of how UB deals with changes and their perception of learning. Another recommendation can be utilizing a trust instrument to assess the perceptions of trust in the environment because, as shown in the response, trust was the second lowest mean.

This study can act as a baseline for assessment of an LO in an HEI in the Bahamian context. This can assist human resource practitioners to successfully to implement action planning initiatives for future organizational development planning. In addition, this research can be used to adapt, renew, and revitalize how an organization seeks to become an LO in response to changing environment for HEI in developing countries.

Other concepts, such as lean management practices, could offer a new dimension to this research. Further research on change management practices and effectiveness will also provide more depth of knowledge on how to plan and implement areas needing reengineering.

**CONCLUSION**

All in all, the model in this study fits the assumption held by practitioners, especially those in HDR that institutional interventions must focus on open communications, team learning, and building learning networks to promote continuous learning. Furthermore, the results of this study encourage the application of the DLOQ instrument in higher educational settings to measure LO characteristics for improving institutional performance at The University of The Bahamas. This study conducted in the Bahamian HEI context reveal findings as in previous studies despite the differences in national and cultural settings.

Important to realize, HEI need to adopt knowledge management in the academic and administrative departments, specifically HRD, because knowledge is the core of the work of these sections benefiting from the proposals of faculty members. To enhance a learning culture, the HRD administration is the critical change agent to mediate, manage, and encourage relationships between the organization and its environment. Moreover, administrators are considered the leaders of HEI with vision, which can stimulate

others to join them on the journey by continuously constructing and refining the collective vision of the HEI.

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