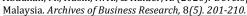
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Development of Post-Pandemic Covid19 Higher Education Resilience Framework in Malaysia

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ABSTRACT

The pandemic of Covid-19 will drastically change the world. The thought and functioning of governments, organisations, and citizens will change dramatically - even for the long term. The higher education (HE) market is currently experiencing a tectonic change among many economic sectors. Following the pandemic in Covid-19, the country is home to tens of thousands of students either forced to live in the campus or deportation from the campuses and academic staff. Higher education institutions (HEI) are split up and teachers and students struggle with the new sudden law of teaching and learning completely implemented in the field of technology. How has Covid 19 pandemic altered main processes in education, including academic recruitment, academic management, teaching and learning processes, study and advancement processes, student life (accommodations on the campus, financial and co-curricular activities and other student welfare activities including food, transportation etc.)? On the other hand, how has Covid-19 compelled the institutions of HE to implement new approaches, and to let go of their current teaching practices. The benefits, drawbacks and barriers to online platforms are included. In addition, intellectual honesty is a crucial concern in the online educational network. In this paper, all the main issues described above will be addressed through the development of a conceptual framework as a response to the Covid-19 pandemic that is happening throughout the world. The framework is based on the propositions developed by Duchek (2020). In this process-based framework the issues are connected to a set of constructs that act as enablers of Higher Education Resilience (HER). The enablers or drivers of HER include 'metacapability' of HE (knowledge, resource availability, social resources, and power/responsibility) and resilience stages (anticipation, coping, and adaptation). The practical application of this study is the formulation of Higher Education Resilience Index (HERI) which will help stakeholders such Ministry of Higher Education (MOHE) to categorize each HEI according to the level of HERI, as either Very Low,

Low, Moderate, and High Resilience. Using the HERI categories the governments, MOHE in particular, would be able to come up with 'stimulus packages' for HEIs that needs assistance (financial and non-financial) from the government.

Keywords: Covid19 Pandemic, Higher Education, Conceptual Framework, Meta-capability, Higher Education Resilience

INTRODUCTION

The global scenario witnessed how the COVID-19 pandemic compelled colleges and universities to shut down their campuses — moving online classes and dramatically changing their teaching-learning process and ways of doing assessment — and those in higher education are grappling with how to meet the challenge. The world is still in search of the best approach to cope with COVID-19. This crisis has pushed the idea of the importance of innovative and resilient organizations that prepare students to be creative and resilient.

With the pandemic pushing education entirely online, universities must acknowledge that the game has changed and try new ways to progress with virtual learning.

Regardless of this, COVID-19 did not come down to a higher education environment in a position of power and stability. Rather, it has further disrupted an industry which has already experienced major disruption. As a result, entities in moderate distress can intensify their problems, and those whose status was previously unknown will find themselves on the edge.

It is time for these organizations to assemble leadership, convene committees, engage experts and make hard decisions to ensure institutional viability. This can sound like a rumbling comment. Given the current state of the planet, one would conclude that every organization is now actively engaged in introspection, appraisal and preparation. Nevertheless, our experience in recent years leads us to conclude that this might not be the case.

Nevertheless, universities and colleges are still extremely slow in understanding distress, drawing up appropriate and knowledgeable plans and actions. There are numerous explanations for this. For decades, higher education identified with the classification of institutions as 'business,' and the identified unwillingness to recognize the types of problems and to follow the types of solutions that businesses outside higher education have recognized and adopted since years. It is shifting, but it has been a gradual transition.

Another challenge is the lack of knowledge and experience. Many institutional leaders, even those leading decades, have never led an organization through a time of substantial financial difficulty. Many boards lack a single manager or trustee with significant experience on troubled organizations, structural fusions or campus wind-downs. And institutional leadership will fail to escape professional judgment. Universities and colleges enjoy packing their boards and administrators with students. While big advocates for their schools, alumni are frequently strongly contested to endorse the closure of programs or locations, a reduction in size, or the sales of the school.

HIGHER EDUCATION'S RESPONSE TO POST-COVID19 PANDEMIC IN MALAYSIA

Malaysian universities have endured enough problems to tackle before the emergence of Covid-19 Pandemic. They experience declining support, intense competition from local and overseas universities, increased Malaysia quality assurance (MQA) requirements, and shift of government in the 14th General Election (Husin, Abdullah and Ali, 2018). More recent research by former deputy chancellor Tun Razak University estimates that 55% of Malaysia 's private institutions of higher education have been financially losing money. Any of them have either been shut down or are under serious financial stress. For instance, in 2016, Allianze University College in Medical Sciences closed its doors permanently with a campus in Kapala Batas, Penang and Kangar, and left the workers unpaid. After only two years of service, Albukhary International University, Alor Setar, Kedah terminated its employees and closed its doors only to open again a few years later in 2014. The College of Arts and Science International University closed its doors permanently in 2016.

Now, the Covis-19 has added salt to the wound, unleashing a crisis of global proportions. There is much added uncertainty within higher education sector. Along with health devastation, Covid19 pandemic is forcing institutions to close. The global lockdown of education institutions is going to cause major (and likely unequal) interruption in students' learning; disruptions in internal assessments; and the cancellation of public assessments for qualifications or their replacement by an inferior alternative. What can be done to mitigate these negative impacts? The answer is develop self-belief in the higher education institutions by incorporating organisational resilience paradigm.

Organizations must build the capacity to adapt appropriately to unforeseen incidents or disruptions and take advantage of events that can potentially endanger the sustainability of an organization (Lengnick-Hall et al . 2011). This function differs from other related constructs like flexibility, agility or robustness. Whilst the academic interest for the organizational resilience has gradually evolved in recent years, the conceptualization and operationalisation of the framework are still in its infancy.

The purpose of this paper is to develop a conceptual framework that describes the interrelationships concerning the resilience of Malaysian higher education which in dire need to survive in uncertain environments and to foster future success.

IMPACTS ON ACADEMIC

A thorough study on the impacts of the Covid19 pandemic would help the HEIs to be able to carry out the following:

- 1. Measure how Covid19 pandemic has impacted on the core processes, i.e.,
 - a. The HE admissions process (promotion and marketing for local and foreign/international students)
 - b. The academic administration process (e.g., academic calendar, class timetable, exam at faculty, graduation, and convocation process at chancellery levels, etc.)
 - c. The teaching-learning process (class, tutorial, assignment etc.)
 - d. The academic process (exam, assessment, etc)
 - e. The research and innovation process
 - f. The student accommodation (in campus) process
 - g. The student financial assistance (loan, scholarship etc.) process
 - h. The students' activities (co-curriculum, sports etc.)

- i. The student welfare (food, transportation, and other in-campus facilities)
- j. Other academic and non-academic process
- 2. Measure how Covid19 pandemic has impacted on HE's adoption of new strategies, i.e., letting go off their existing practices of transposing classroom to online medium. Particular aspects to be evaluated are;
 - a. The advantages of online platform for teaching-learning
 - b. The challenges/obstacles for effective online teaching-learning
 - c. The academic integrity (e.g., exam and assessment) related to online teaching-learning process
 - d. HEIs have to let go off their academic know-all stance and become willing to collaborate with digital learning specialists to train their teachers and re-design higher education for the newest online education world
 - e. How online-platform approach will change the face of research and innovation in HEIs?

LITERATURE REVIEW

While several studies have been carried out on important issues of organizational resilience, several open questions remain concerning the conceptualization and the factors contributing to resilience and how it is assessed. Bhamra et al. (2015), for example, presented an updated version of (Bhamra et al., 2011) that included 100 articles and five organizational definitions. Annarelli & Nonino (2016) studied organizational resilience research on the basis of literature review and analysis of co-citation. Linnenluecke (2017) contributed one of the recent research on organizational resilience to the development of the theory of organisation's resilience. She recognized that there is no unified theory and put forward various future questions for research, such as "What capacity really creates resilience? "or" How can / should the resilience be operationalized? ".Other researchers who discussed this issue at organizational level include Carmeli et al. (2013), Hollnagel (2006, 2008), Hollnagel et al. (2006b), Lengnick-Hall and Beck (2005), McManus et al. (2008), Paltrinieri et al. (2012), Riolli and Savicki (2003), Sheffi (2007), Miller and Xiao (2007), Paltrinieri et al. (2012), Stephenson et al. (2010), and Woods and Wrethall (2008).

The most recent attempt at addressing conceptualization of organizational resilience was made by Duchek (2020) who has laid out a set of theoretical propositions concerning organizational resilience. She documented the definition of resilience differed over time. The organizational capabilities underlying the three stages of resilience – and therefore the meta capabilities of organizational resilience – depend on different contexts. Duchek (2020) stresses that resilience is highly complex and profoundly involved in social contexts and that the factors and conditions for achievement and growth can be far from established. However, the existence of strategic contexts (knowledge base) and drivers (resource availability, social resource and power / responsibility) is of immense importance.

Knowledge-based Capability

The company's information base plays an important role in the resilience process. Companies can draw from experience and internalize new information by a wide wide range of experts. Pregenzer (2014) suggests that a variety of skills, perspectives and experiences encourages creativity and innovation, contributing to better decisions and solution of problems. The knowledge base of an

organization is an essential framework for organizational resilience. This provides a basis in which important changes are predicted and adapted. The three phases of resilience can also improve the knowledge base of an organization.

Resource Availability

Covid19 pandemic has transformed the way core processes such as teaching-learning process in higher education. Due to social distancing enforcement in campuses, teachers and students have to resort to online or distance learning. No more traditional classes that involve fac-to-face interactions between students and instructors. In this unprecedented situation, availability of resources such as quality IT platform, fast internet connection apart from computer facilities such as laptops or PCs are essential. The financial resources can be a critical component in handling and recovering from acute crises (de Carvalho et al., 2016). The abrupt closure of campuses imposes serious and unplanned financial burdens on students who need to leave campus on short notice. Availability of emergency relief funds in the form of soft loans or private donations will help students with daily expenses in order to continue their studies.

Social Resource Capability

In an unprecedented situation as a result of Covid19 pandemic, social support system may provide a valuable relief to those severely affected by the crisis. Some of those affected groups may require psychological help or counseling in or order to avoid them from mental or emotional crisis that may lead to severe stress and depression. It is particularly important for various parties involved in the crisis to react resiliently and develop suitable solutions to overcome the undesired situation. Sawalha (2015) calls for an organizational culture which is open, trustful, and learning-oriented.

Power-based Capability

Crises can unlock new openings for adaptation process, and they can act as an agent of change, sense improper actions and seek new resolutions (Cheese, 2016). Contrary to this context, it is becoming increasingly important to involve and inspire workers across lower levels of the organization to work together with the management to find suitable solutions. Appreciation and recognition are closely related and can be a key to good relationship between top management and lower level employees. Building these unique capabilities are important for resilience to recognize and manage crisis such as Covid19 pandemic in order to anticipate quickly and get prepared and thus avoid unnecessary escalation.

Coping Capability

The value of collective sensemaking that can build cognitive resilience in organizations has been illustrated by research on organizational resilience (Linnenluecke et al., 2012). Various research that provide insight into the sensemaking process in organisations will provide a great benefit. (Maitlis & Christianson, 2014).

Adaptation Capability

Gressgard and Hansen (2015) addressed the critical role of collaboration and engagement in learning about the shortcomings in organizational crises. Within a situation unparalleled, such as in the aftermath of the Covid19 pandemic, where possible solutions can be found only by joint

efforts, the sharing of information between units or divisions within the organization is an important indicator that we can benefit from future failures.

Anticipation Capability

According Merriam-Webster (2020), 'anticipation' implies a prior action that takes into account or forestalls a later action or the act of looking forward. Wildavsky (1991) defines anticipation as the "prediction and prevention of potential dangers before damage is done". From these definitions, it seems obvious that the term 'anticipation' may be construed as an antecedent or enabler to 'resilience' for any incidence of unexpected events or dangers such as Covid19 pandemic. A good understanding of the meaning of anticipation and resilience in organisations may lessen the financial and non-financial fallouts from the COVID-19 pandemic in the future.

Based on this array of arguments in the literature, Duchek's (2020) came up with a set of propositions in order to measure organisational resilience. In this study, the conceptual framework derived from the theoretical propositions developed by Duchek (2020) is proposed (see Figure 1).

THE CONCEPTUAL FRAMEWORK

Figure 1 below describes the conceptual framework that will used as a basis for a future empirical analysis on Post-Covid19 Pandemic in Malaysia. The framework, consisting of drivers or enablers of Higher Education Resilience, e.g., *Meta-Capability* of Higher Education Institutions (HEIs) and *Stages of Resilience* (Anticipation, Coping, and Adaptation) lead to the Higher Education Resilience (HER).

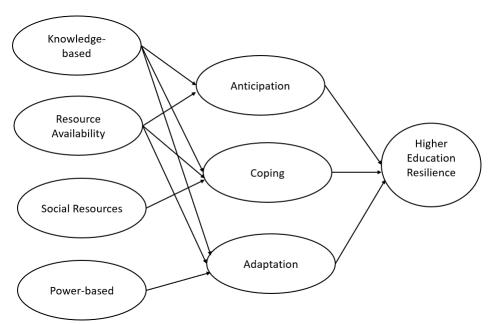


Figure 1: The Conceptual Framework for Higher Education Resilience

DEVELOPMENT OF HYPOTHESES

Based on the conceptual framework above, the following hypotheses statements are developed:

H1: There is a significant relationship between Knowledge- based and Anticipation

H2: There is a significant relationship between Knowledge- based and Coping

- H3: There is a significant relationship between Knowledge- based and Adaptation
- H4: There is a significant relationship between Resource Availability and Anticipation
- H5: There is a significant relationship between Resource Availability and Coping
- H6: There is a significant relationship between Resource Availability and Adaptation
- H7: There is a significant relationship between Social Resources and Coping
- H8: There is a significant relationship between Power-based and Adaptation
- H9: There is a significant relationship between Anticipation and Higher Education Resilience
- H10: There is a significant relationship between Coping and Higher Education Resilience
- H11: There is a significant relationship between Adaptation and Higher Education Resilience

PRACTICAL IMPLICATION

The outcome or practical implication from the implementation of the framework is the formulation of the Higher Education Resilience Index (HERI). Based on the levels of HERI (from 0 to 100), the categories of each HEIs are classified as follows: Very Low (Less than 40), Low (40 to 59), Moderate (60 to 79), and High (80 or higher) Resilience (see Figure 2).

In February 2020, the Malaysian government issued an emergency stimulus package worth US\$4.8 billion to counter the economic impact of the coronavirus (COVID-19) outbreak. In addition, the government will allocate 40 million ringgit (US\$9 million) to help SMEs in the agriculture sector (Medina, 2020). This fund will be used to enable SMEs to sell their products on e-commerce platforms and therefore to a larger pool of consumers.

It would be expected that the formulation of HERI will help the Ministry of Higher Education (MOHE) and Ministry of Finance (MOF) as the stakeholders, to do the follow-up actions such as introducing some 'Stimulus Packages' for each HEI according to the level of HERI, respectively (see Figure 3).

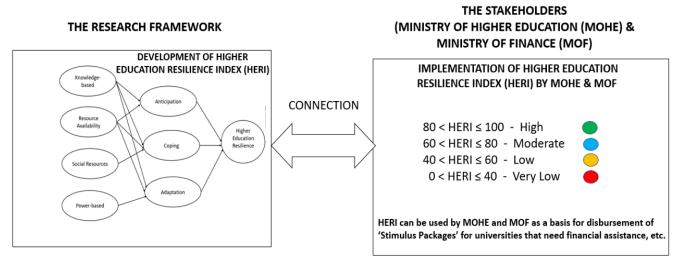


Figure 2: The Connection between the Higher Education Resilience Framework and Higher Education Resilience Index (HERI)

	ER EDUCATION NCE INDEX (HERI	Post-Covid19 Stimulus Packag HEI Scenario Allocation	e
High	80 < HERI ≤ 100	Business as Usual No AlLocation	
Moderate	60 < HERI ≤ 80	□ → Moderately Affected □ → Small Allocatio	n
Low	40 < HERI ≤ 60	Somewhat Affected Substantial Allo	ocation
Very Low	0 < HERI ≤ 40	Severely Affected Large Allocation	n

Figure 3: The Connection between the Higher Education Resilience Index (HERI) and the Government Economic Stimulus for HEIs

CONCLUSION AND RECOMMENDATION

This paper aims to explore the conceptual framework on an important issue currently faced by organisations globally due to the impact of Covid19 pandemic, with a special focus on its impact on Higher Education in Malaysia. Although the academic interest in organizational resilience has attracted attention in recent years, the conceptualization of the inter-relationships among the strategic constructs is still in its infancy. The proposed framework was developed from conceptualizing the propositions put forward by Duchek (2020).

While there are other theoretical frameworks proposed by several authors previously, the propositions suggested by Duchek (2020) seem to be very promising and workable in the context of creating organisational resilience in higher education. It is also considered the most recent work on organisational resilience that can be a good basis for future empirical analyses. Perhaps the future attempts at addressing the issue of organisational resilience can be extended to other business sectors such as Small and Medium Enterprises (SMEs), Tourism, Transportation, and other hospitality and service sectors that are prone to global disasters such as Covid19 pandemic. This is because the recent evidence has shown that these business sectors had been found to be most severely affected by the Covid19 pandemic globally as compared to other sectors and they had experienced huge losses financially.

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