



State Ministry of Skills Development,
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PROCEEDINGS



COVID 19 TRANSCENDING CHALLENGES, RECOVERY MEASURES AND RESILIENCE



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PREFACE

NSBM Green University is honored to present the International Conference on Business Innovation (ICOBI) 2020 for the third consecutive year. NSBM Green University, which turned a new page in the Sri Lankan Higher Education System by being the first of its kind in South Asia, successfully held the second International Conference on Business Innovation (ICOBI) in 2019 attracting wide recognition. With ICOBI 2020, NSBM takes a giant leap in the academic arena by creating a platform to bring together both local and foreign research conducted despite the Covid 19 pandemic. The theme of our third International Conference : COVID 19: TRANSCENDING CHALLENGES, RECOVERY MEASURES AND RESILIENCE has attracted the attention of many academics, researchers, and strategists during recent times. We strongly believe that the discussions and findings of ICOBI 2020 will contribute tremendously towards re-building a Covid-free world tomorrow.

It is our privilege to acknowledge the guidance and unwavering support extended by Prof. E. A. Weerasinghe, the Vice Chancellor of NSBM Green University the visionary leader behind the success of this conference: and Deputy Vice Chancellor, Prof. Chaminda Rathnayaka, for their support and guidance throughout the process. We are also grateful for the expert input and constant guidance of Prof. J. Baratha Dodankotuwa, the Head of Academic Development and

Quality Assurance, without which the conference would not have been a success.

We would like to extend our gratitude to all the local and international presenters and participants for their fine contribution towards the success of this conference. Finally, we are grateful to all the reviewers who helped us compile the conference proceedings and maintain the high quality of official manuscripts. ICOBI 2020 creates a platform for valuable academic contributions and intellectual discourses that will enhance the quality of higher education and eventually contribute to the development of the world tomorrow. The timely theme of the conference will also address the problems and issues of these unprecedented times and hopefully aid us in the process of finding solutions.

We wish all the attendees a productive and wonderful time at ICOBI 2020 organised by NSBM Green University, Sri Lanka. We will make sure to accommodate the presentations that were deterred due to the pandemic in the coming year. With your support and participation, the conference will strive towards success. Until then, we hope your experience with us remains fruitful and long lasting.

The Conference Organizing Committee
ICOBI 2020

MESSAGE FROM THE CONFERENCE CHAIR



I am delighted and honoured to provide this message on behalf of the organizing committee of the 3rd International Conference on Business Innovation (ICOB) 2020 which is to be held at the NSBM Green University.

This year has been challenging and critical for the whole world due to the Covid-19 pandemic. However, as the organizing committee of the NSBM, we decided to hold this prestigious conference in 2020. With the associated issues, the conference has been planned to address Covid-19 challenges head-on. Hence, our theme of 'Transcending Challenges, Recovery Measures and Resilience' was created to leverage it among the amazing gathering of academics and professionals to bridge

the gaps in multidisciplinary research areas and to connect them in a "new normal" arena. This conference provides some valuable opportunities on top notch research, showcasing innovative ideas that utilize revolutionary technology. With a record number of participants expected this year, I hope that this annual conference will become much more impactful every year.

Hopefully, the conference will allow researchers and participants to get involved in a constructive dialogue not only towards gaining excellence in research, but also in managing business. Some of the fundamental issues in research and business innovation are included in depth in our conference program, highlighted by our keynote, guest speakers and session chairs. I extend my sincere appreciation to them for the efforts undertaken in this journey to success.

As Conference chair, I believe that the success of such an achievement depends eventually on the work of many individuals around us, who were involved in planning and organizing the conference. I am truly amazed by the support given to us by the Vice Chancellor, Prof. E. A. Weerasingha, Deputy Vice chancellor, Prof. Chaminda Rathnayaka, Head of Academic Development and Quality Assurance, Prof. Baratha

Dodankotuwa, Deans of all three faculties, who have had a clear-cut vision to upgrade research and business innovation in our university.

In particular, I must thank the organizing committee members who have given me a tremendous support without hesitation on details of vital aspects of the conference programs. A special note of appreciation should be extended to the academia for their thorough and timely reviewing of manuscripts on this special occasion.

Finally, I would like to extend my heartfelt gratitude to our participants who have contributed towards making ICOBI 2020 a success. I earnestly hope you will enjoy the conference sessions and will have pleasant memories of the time you spend with us.

On behalf of the Conference Committee, we are looking forward to seeing you at the NSBM Green University in not-too-distant future.

Prof. Ganga Karunathilaka.

Conference Chair,
International Conference on Business
Innovation 2020,
NSBM Green University.

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A Critical Review on the Foreign Trade Policy, Export Potential amidst COVID-19; The Role of Institutions and Policy Reforms Required in Sri Lanka

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ABSTRACT

The global economy is heavily impacted by the ongoing calamity, COVID-19. The pandemic impacts the global economy both directly and indirectly and its consequences on the economy will last for a long period of time. Given that, it will exacerbate the critical position of Sri Lanka, being a country, whose trade policy has not been sound and engaging in a continuous struggle over the years to create sustainable foreign trade policy. This paper examines the impact of COVID-19 on the Sri Lankan economy with a special reference to foreign trade policy. This study is primarily based on a review of secondary data and literature. This paper critically reviews and analyses the foreign trade policy of Sri Lanka since the time the country became an open economy. In doing so, it mainly identifies the factors which have led to poor export performance, the untapped export potential of the country and the opportunities COVID-19 has given to rethink and reform in terms of foreign trade policy.

Keywords – COVID-19, foreign trade policy, trade performance, policy reforms, role of institutions

1. INTRODUCTION

COVID-19, was identified in Wuhan, People's Republic of China. Although virus emerged from animal hosts initially, it spreads through human-to-human contact. The mortality rate of the virus is in the range of 1%- 3.4%. However, in terms of the infection rate, COVID-19 has a higher infection rate surpassing the infection rate of other infectious diseases such as MERS, Ebola

and SARS. As a result, the number of COVID-19 confirmed cases has increased significantly in China as well as in rest of the world, rapidly surpassing the totals from SARS (Asian Development Bank Briefs, 2020).

Although the mortality rate of the disease is low, the rapid spread of the disease has forced many countries to take various restrictions to control the spread of the disease specially because the health systems of most countries are not in a state to tackle ever expanding number of patients and it will not be able to manage with the flow of seriously ill patients (Chugaiev, 2020). While health impacts remain in that nature, these quarantine measures taken to control the spread of the disease have disrupted the regular economic activities at a global scale impacting the global supply chains, export import trade, leaving fewer immune economies like Sri Lanka more vulnerable. The main purpose of the study is to examine the impact of COVID-19 on Sri Lankan economy with a special reference to foreign trade policy in bringing out policy stability and consistency to make exports and foreign trade an integral part of long-term economic growth of Sri Lanka.

2. INTERNATIONAL TRADE IN SRI LANKA – A HISTORICAL REVIEW

The trade performance of Sri Lanka has been far below the expected level when compared to other competing countries. Trade as a share of

country's GDP and also as a percentage of world trade has declined since 2000. Although major blame for the above factor goes to the uncertainty of external environment, looking at the performance of countries such as Vietnam, Bangladesh, it is really the fault of external environmental uncertainty is questionable. Thus, it leads to arriving at the viewpoint that the root cause for the country's lackluster performance is something homegrown (Athukorala, Ginting, Hill & Kumar, 2017).

The trade liberalization process of Sri Lanka was initiated in 1977. In the decades that followed, the trade in goods and services accounted for about 90% of GDP in 2000 where major contribution was from tea and apparel industries due to the comparative advantage the country had over these two commodities. Although the process was subjected to time-to-time policy changes due to different political regimes that were in power and uncertainties in the country, Sri Lanka had become one of the most open economies in the developed world by the mid-1990s. However, Sri Lanka's openness to trade declined drastically at a time where rest of the world was trying to achieve economic growth through accelerated integration and openness. During the year 2015, trade in goods and services as a percentage of GDP dropped to 36% (Athukorala et al., 2017).

2.1. Undiversified Exports Basket and Export Markets

This is one major factor which has affected Sri Lanka to lag behind many other countries in terms of its export's performance. Sri Lanka's export competitiveness has been deteriorating day by day making the country less prepared to face the competition from late industrializing countries.

One major reason behind Sri Lanka not being able to reap benefits from international trade is the country's inability to diversify its exports basket over the years. Also, Sri Lanka is accessing a very narrow base export market. Over 50% of Sri Lankan exports are to the US and the EU. The export basket of Sri Lanka is limited to a very few products such as textiles,

petroleum-based products and primary commodities like tea, rubber and coconut (Institute of Policy Studies of Sri Lanka, 2013).

In contrast, in most other second tier exporting countries, the number of products they have exported to the rest of the world has increased over time. The exports basket of Sri Lanka which had 238 products in 2010 dropped to 175 products in 2011 (Institute of Policy Studies of Sri Lanka, 2013).

The root cause for this decline is something within the country. This is clearly evident because most of the other countries within the region have outperformed Sri Lanka over the years and they have made international trade an integral part of their economic development.

For example, both Vietnam and Sri Lanka had the same number of products in 1995. However, over the years Vietnam has increased the number of products and it stood at 248 in 2011 whereas Sri Lanka only had 175 in 2011 (Institute of Policy Studies of Sri Lanka, 2013).

2.2. Impact of Foreign Direct Investment on Export Performance

Attracting right kind of FDI s and creating more enabling environment for trade is a must to broaden the sources of Sri Lankan economic growth. The need for attracting the right types of FDI s in building export capacity is paramount. FDI flows to the country still remain less than 2% of GDP despite the completion of 30-year war in the country which is much lower in comparison to countries like Vietnam and Bangladesh (Athukorala et al., 2017).

Also, the FDI inflows to the country are mainly focused on infrastructure development rather than going into industries associated with global production networks either in manufacturing or service sectors. In 2015, out of the total FDI attracted, 46.7 % has been invested in infrastructure where 26.5% and 26.3% have been invested in manufacturing and services respectively. Attracting right foreign direct investments in place of debt financing is an immediate need of the country and the Board of

Investments of Sri Lanka, the central facilitation point for investors has a crucial role to play in this regard (Institute of Policy Studies of Sri Lanka, 2016).

2.3. Impact of Trade and Tariff Structure on Trade Performance

The Sri Lankan tax regime mainly targets protectionist purpose and revenue. In considering the tariff structure of Sri Lanka, most basic essential items and raw materials are duty free while most processed and finished goods, especially the goods that government wishes to protect, have higher tax rates. However, the tariff policy of the government is subjected to continuous changes which increase the uncertainty among traders and investors. Major problems are associated with transparency and consistency of tariff policy, especially with regard to para tariffs. For example, although the CESS was introduced with the objective of export promotion, it is primarily used as a revenue generating measure while it is also claimed to be used against unfair trade practices such as invoicing, dumping, subsidization by foreign countries and non-adherence to standards (Institute of Policy Studies of Sri Lanka, 2015).

Certain border taxes are imposed on exports as well for reasons such as exports of item in raw form, ensuring local suppliers and generating funds for cultivation. Ad hoc changes done to these negatively impact predictability and transparency. Further, the ad hoc changes done to export taxes distort efficiency in resource allocation and restrict the emergence of product patterns which support the country's comparative advantage (Institute of Policy Studies of Sri Lanka, 2015).

3. UNTAPPED EXPORT POTENTIAL OF SRI LANKA

Sri Lanka has an untapped export potential of US\$ 7.4 billion which could be unleashed by focusing on the country's top performing industries. Products which have the highest

export potential from the country are apparel sector and tea (Ahlam, 2020).

When looking at tea as an export, although Sri Lanka has been identified globally as one of the premium tea exporters, due to low focus quality and innovation many late comers are eating into country's share. According to ITC (2020), Sri Lanka still has a greater untapped potential in exporting Black tea.

Being an island surrounded by sea, whether Sri Lanka is reaping adequate benefits from fisheries resources is questionable. The country has a greater untapped potential in that arena. Other areas where there is potential for further growth are re-exports with genuine value additions, rubber related products, gem and mining, telephone sets and other voice/image transmission apparatus and crude palm oil. Although opportunities are ample, major reasons behind inability to reap benefits are lack of focus on quality and innovation (Mendis, 2020).

4. COVID-19 – IMPACTS ON FOREIGN TRADE

As previously discussed, Sri Lanka's heavy dependence on a few numbers of products in generating export revenue is going to significantly impact the export revenue due to the global pandemic. Being a country, whose trade policy is not sound and struggling over the years to create sustainable foreign trade policy, Sri Lanka would be in a critical state in terms of economy.

The country is heavily dependent on apparel exports. It is the largest export earner for the country which generates 5bn USD annually. However, the industry expects 1.5bn USD loss April – June quarter of 2020. This is mainly because the primary export destinations of Sri Lankan apparel exports are heavily exposed to COVID-19 outbreak. The US and Canada account for about 60-65% Sri Lankan apparel exports and these two markets have collapsed due to continuous lockdown and social distancing. Further, due to lack of long-term focus, holistic view on the value chain has changed. Sri Lanka has been importing raw

materials required for apparel production from countries such as China, Hong Kong and Taiwan and that has resulted in Sri Lankan apparel exporters facing a raw material shortage (Semage, 2020).

The preset target of Export Development Board of Sri Lanka to achieve a 18.5 bn USD earnings from exports has now dropped to 10.75 bn USD with an indicative decline of 8bn USD (Export Development Board, 2020).

Tourism Industry of Sri Lanka, which generates substantial income to the country, is severely negatively impacted by the global pandemic. The industry which was gradually recovering after Easter Sunday attacks has again been hit by global travel restrictions. Further, worker remittances which are another primary flow of foreign exchange to the country is significantly negatively impacted by Sri Lankan employees being terminated in Middle East countries, South Korea and Europe.

Disruptions to global and local supply and demand chains have negatively impacted the export performance. Earnings from merchandize exports have dropped substantially 42.3% on year-on-year basis. Export of textiles and garments has dropped by 41.3%, rubber by 58%, gems and jewelry by 73% and tea by 50% (Central Bank of Sri Lanka, 2020).

The significant decline in exports coupled with decline in tourism industry and worker remittances has resulted in a considerable depreciation of Sri Lankan rupee against the Dollar. Rupee which stayed relatively stable until second week of March 2020 significantly depreciated with the outbreak of the pandemic to 1 USD equaling to Rs. 199.75 while reaching a peak during mid-April (Central Bank of Sri Lanka, 2020).

Imports have also dropped as a result of the urgent measures taken by the government and the Central Bank of Sri Lanka to prevent further depreciation of Sri Lankan rupee against US Dollar by suspension of import of motor vehicles and non-essential consumer goods. Merchandize

imports have dropped by 30.3% on year-on-year basis. The import expenditure on crude oil, machinery, equipment, textiles, building material, fertilizer and chemical products has witnessed decline. Government restrictions on nonfood consumer goods such as personal vehicles, telecommunication devices and home appliances continued to be imposed. However, import expenditure on essential consumer goods such as big onions, wheat, potatoes and sugar has increased (Central Bank of Sri Lanka, 2020).

4.1. Opportunities amidst Uncertainties

On a positive note, tea industry in Sri Lanka has got a chance to rethink the way they do the business, and also with the positive trend of people identifying medicinal value of tea as a hot beverage which boosts the immunity (Ranasinghe, 2020).

Agricultural sector, in which the country possesses its comparative advantage over the years would have a huge role to play in the recovery process. Farmers have been complaining over the years regarding the surplus of veggies during the harvesting and lower prices at which they have to sell their harvest. If policy makers looked at the issue as an opportunity to be seized, Sri Lanka could gain huge export opportunities from the sector in which the country possess its comparative advantage and rather than over dependence on tea, this will give an opportunity to diversify the export basket.

Although the apparel exports are suffering apparel manufacturing companies are moving into production of medical gear and protective apparel production to fill the increased demand for such products due to COVID-19 (Semage, 2020). Online clothing retail has the opportunity, but growth will be limited because often clothing is impulsive buying and consumers will have other priorities as long as the pandemic lasts (Semage, 2020).

The opportunities for fresh food items and processed food items are expected to grow rapidly during the next couple of years in the recovery of corona outbreak. Thus, seizing this opportunity with proper technological knowledge with the intention of value addition

and ensuring high quality products, it will give a huge opportunity for Sri Lanka to develop the economy through these agricultural exports (Mendis,2020).

Sri Lanka is no longer a location for cheap labor since cost of labor has increased over the years. This is one major reason why foreign companies are increasingly moving to cheaper locations such as Bangladesh. However, a considerable percentage of Sri Lankan labor force is educated which gives a greater opportunity for Sri Lanka to focus on service-based exports taking the advantage of country's geographical location as well.

With the increased global recognition for ayurvedic products, and indigenous local medicine, local herbs are immediate export opportunities to be seized (Export Development Board,2020).

5. TIME TO RE-THINK- ROLE OF GOVERNMENT AND INSTITUTIONS

Frequent ad hoc policy changes should be avoided, and policies related to economy should be formulated. The country should have a vigorous policy formulation mechanism, prepare long term economic policies and establish an effective institutional mechanism to support it.

One vital prerequisite to ensure that there is policy certainty is political stability. One major force behind high level of policy inconsistency in Sri Lanka is lack of strong political leadership, election-oriented decision making, frequent changes in the size and composition of cabinet ministers and oversized cabinet of ministers (Mendis,2020).

Government, the political leaders and all government institutions should be extremely committed to bring about policy consistency and required policy reforms to promote exports, tourism and FDI s to Sri Lanka which result in foreign exchange stability and would positively contribute to attainment of many other macro-economic objectives of the country.

Dedicated institutions for export promotion such as Export Development Board (EDB), Sri Lanka Export Credit Insurance Corporation and Board of Investments (BOI) are functioning with the

objective of increasing the demand for domestically produced goods and services through provision of better knowledge about foreign markets, provision of access to credit and attraction of foreign direct investments to support growth.

These responsible government institutions should actively engage in developing a systematic export promotion policy which drives the country to focus on exports at national level. Further, their efforts should be directed towards creating an export-based development culture by bringing policy certainty and policy consistency which are essential for export development.

6. CONCLUSION

It is evident that exports and foreign trade play a key role in attaining economic growth in Sri Lanka. Boosting exports and integrating Sri Lankan economy with global economy are extremely vital to achieve an accelerated economic growth. While ideal remains in that, in reality, country's world market share in trade has gradually declined over the years and Sri Lanka is well behind other Asian peers who have opened their economies at a much later time than Sri Lanka. Undiversified export basket, lack of commitment to attract sustainable FDI which promotes FDI, short term political agendas targeting elections, lack of visionary leadership over the years, policy inconsistency and instability and lack of institutional commitment can be identified as primary reasons behind country's poor performance over the years.

Due to these factors, Sri Lanka has been less immune to economic shocks. However, with the global pandemic COVID-19, the situation is further worsen resulting substantial depreciation of rupee against the dollar. However, the silver lining is amidst the negativities as the pandemic has also given enormous opportunities to the country, and also time to rethink. Thus, it is in the hands of policy makers to bring necessary policy changes to help economy to bounce back to growth path by reaping benefits through these new opportunities and by increasing institutional

and general public commitment to attain economic growth and development.

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Factors Associated with Sri Lankan Traditional Preventive Measures against Covid-19 Pandemic

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ABSTRACT

The main objective of this study is to identify the magnitude of the factors associated with Sri Lankan traditional preventive measures against Covid – 19 pandemic. This synopsis has been tested with a sample of 200 randomly selected citizens in Sri Lanka which covers different age groups, gender, & various kinds of health conditions. A survey was developed and utilized to gather data regarding the factors that are significantly associated with the preventive measures of Covid – 19 pandemics. The data gathered, was statistically analyzed in order to support or reject the research hypothesis. The findings of the research had indicated that there were significant impacts between Covid-19 & the tools or the preventive traditional measures such as regular use of medicinal concoction of Koththamalli (coriander seeds - *Coriandrum sativum*), also known as cilantro, use of Ginger (*Zingiber officinale*) with tea & Veniwalgata (*Conscium fenestratum*) on a daily basis that help to enhance the inflammation, immunization & prevent respiratory failures. According to the world records, Sri Lanka has achieved the reputation of ranking the second place among the States in the globe who recovered from Covid-19, by adhering to good health practices by consuming traditional indigenous Sri Lankan medicines. The researcher then suggested, making this golden situation as a unique opportunity to promote Sri Lankan Koththamalli (*Coriandrum sativum*), Ginger (*Zingiber officinale*) & Veniwalgata (*Conscium fenestratum*) considering them as our assets to promote & win the international market share. Throughout this study, the researcher suggests strategies to be

coordinated by all relevant parties to optimize & succeed the targeted goal of winning the international market share.

Keywords - *traditional preventive measures, indigenous medicine, promotion, international market*

1. INTRODUCTION

The pandemic of COVID-19 hit us without a warning. What started out in December 2019 as an isolated outbreak of a respiratory illness, apparently transmitted from the horseshoe bat in a wet market in the city of Wuhan, China, led rapidly to a public health emergency of international concern on 30 January 2020 and was declared a pandemic on 11 March by the World Health Organization (WHO). In a short span, it has affected almost 6 million people worldwide, resulting in more than 355,000 deaths. The world has not seen such a widespread disease since the H1N1 swine flu pandemic in 2009 and the Spanish Flu in the early twentieth century.

The impact of this current pandemic is much greater than more recent outbreaks such as SARS and Ebola because of globalization and ease of travel. Many countries instituted drastic and sometimes extreme quarantine measures. COVID-19 is widespread in Asia, but mortality rates are much lower than in Western European countries and the USA. The enigma of lower death rates in East Asia cannot be explained easily. Researchers are examining many factors,

including differences in genetics and immune system responses, separate virus strains, and regional contrasts in obesity levels and general health, but the results have been inconclusive so far.

According to Tarek Mahbub Khan (2020), this pandemic has become a major threat for the public health and as a controlling mechanism of the spread of Covid-19 virus, institutional gathering is discouraged while ensuring frequent hand hygiene for all. Moreover, easy accessible and available hand sanitizer and soap are provided, frequent monitoring of hand wash practice, cough etiquette & waste disposal is implemented. Classes should be rescheduled to avoid interclass gathering, if unavoidable holding classes in open air and well-ventilated space is thoroughly advised. At the same time, avoiding food sharing, ensuring safe health safety of persons working in the school cafeteria, advising students and staffs to stay home in self quarantine if they suffer from mild symptoms of COVID-19 are some of the other preventive measures taken.

The world has now surpassed 40 million confirmed cases of coronavirus infections. Ireland announced some of the strictest measures in Europe. Part of Germany's Bavaria region will go into a strict lockdown, residents will not be able to leave their homes without a valid reason for two weeks. Schools, restaurants and hotels will be closed to stop the spread of the virus. In the United States, cases of COVID-19 continue to rise in almost every state, and an analysis by Reuters found the number of new cases in the past week rose to 13%, more than 393,000, approaching levels last seen during a summer peak. The United States continues to lead the world in COVID-19 cases with 8.2 million infected people and more than 220,000 deaths, according to Johns Hopkins.

Mike Ryan (2020), the agency's top emergency expert, said that the populations of Asian countries have shown "higher levels of trust" in their governments that have reduced the spread of the virus by isolating cases and quarantining contacts. According to Lahiri, Arista; Jha, Sweetie Suman; Bhattacharya, Saikat (2020), as a prearrangement to avoid the spread of Covid-19

pandemic, social distancing is done while stressing the importance of increasing tests and increasing the number of hospital and ICU beds. The later components are particularly important during the social mixing period to be observed after lifting of lockdown.

In Australia, the southern city of Melbourne is slowly coming out of three months of strict lockdown orders. The city's 5 million residents can spend as much time away from home as they wish for exercising or school, and the distance they can travel away from home has been increased from 5 to 25 kilometers. Outdoor gatherings have an increased limit from five people to ten from two households. By considering all these facts, it's evident that globally, number of cases & number of deaths are growing fast in each minute.

2. SIGNIFICANCE OF THE STUDY

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. The virus which causes the respiratory infection Covid-19, was first detected in the city of Wuhan, China, in late 2019. Most people who fall sick with COVID-19 will experience mild to moderate symptoms and recover without special treatment. Coronavirus cases have risen over the last few months in several regions in the world. Europe is currently seeing the steepest rise in new cases. The World Health Organization (WHO) has warned that the global death toll could hit two million before an effective vaccine is widely in use. As per the below table, it clearly reflects how this pandemic of Covid 19 has been spread this much far.

Table 1. World Covid-19 Dashboard

Confirmed cases around the globe	Confirmed deaths around the globe	Recovered cases around the globe
54,328,752	1,300,576	37,869,096

So far, according to the world records, there is no firm recommended medicine found as a permanent solution for this pandemic. Based on WHO records, the coronavirus COVID-19 is affecting 216 countries and territories around the world as displayed in Figure 1.

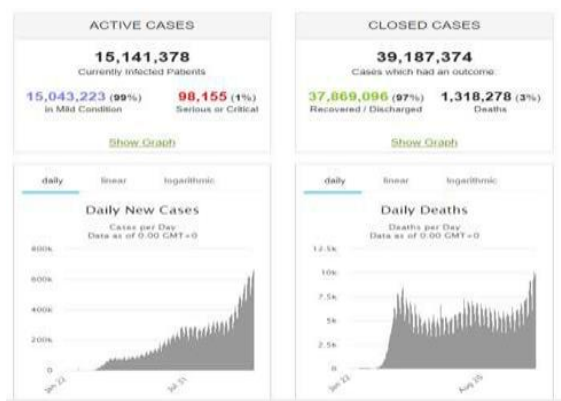


Figure 1. World Covid-19 Dashboard

Further, the researcher focuses & brings down the attention of Covid-19 spread in Sri Lanka and the way it has been controlled. Referring to table 2, the records clearly show that Sri Lanka holds a good position in global ranking in Covid-19 recoveries. It is no doubt that achieving this level of control was supported by the application of our inherited ancient treatment methods & domestic practices.

Table 2. Sri Lankan Covid-19 Dashboard

Confirmed cases in Sri Lanka	Confirmed deaths in Sri Lanka	Recovered cases in Sri Lanka
16,583	58	11,324

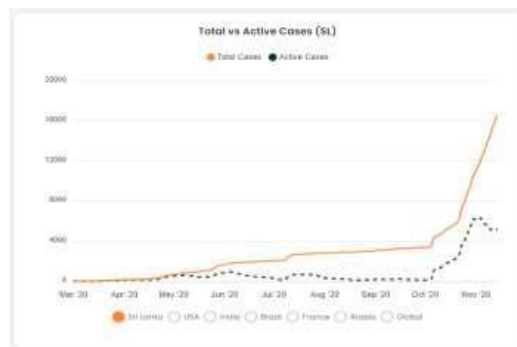


Figure 2. Sri Lankan Covid-19 Dashboard

Apart from Ayurvedic treatments, certain measures that are adapted during the present pandemic of COVID-19 are not new to the Sri Lankan indigenous medicine methods. Practices such as self-quarantine measures were already practiced for infectious diseases among communities in Sri Lanka.

This isolation technique practiced in the community was also communicated to the fellow villagers by hanging neem leaves and mango branches outside the house since ancient times. These leaves demonstrate antiviral activities and it is a recognized indication of isolation from outsiders.

Indigenous Medicine of Sri Lanka is an ancient wisdom tradition of healthcare and healing practices inherited by cultural heritage unique to native people. Indigenous medical knowledge and practices dispersed throughout the country are culture-bound repository of ancestral wisdom prevailed through generations.

Sri Lanka's indigenous medicine history runs 8,000 years back to the period of sage Pulasthi who is the grandfather of King Rawana. After that, Sri Lankans used to practice special medical systems in which both Ayurveda and indigenous medicines were combined as the basic principles of both medical systems show synergy. Ayurveda mentions about infectious diseases in the chapter named 'Janapadodvanshaneeya Adhyaya'. They are described as the diseases which destroy large populations at once, affecting their physical features, dietary patterns, psychological attributes etc. Viruses come under the classification of 'Krimi roga' in Ayurveda.

The researcher elaborates following key traditional preventive measures for further analysis with applicability,

Use of Koththamalli: Scientific name – Coriandrum Sativum.; Family name – APIACEAE; English name – Corriandum

Loosely known as Koththamalli, this miracle herbal drink has cured colds for many generations. In Sri Lanka, it is a popular medicinal concoction. Koththamalli is simply coriander, also known as cilantro, but according to Dr. Sachini Lakshika (2020), there's anti-inflammatory properties – Koththamalli helps reduce the inflammation of your sinus, high in Vitamin C – which has not really been proved to have any effect on a cold, but it's a great antioxidant. Antioxidants neutralize free radicals in blood, cold or not, antioxidants are dietary essentials.

As per Dr. Sachini Lakshika (2020), the presence of quercetin (antioxidant), vitamin C and iron strengthens body's immune system. According to a study of Molecular Neurobiology, diets high in coriander helped target inflammatory pathways and prevent neurodegenerative diseases.

Use of Ginger: Scientific name - Zingiber officinale; Family name – Zingiberaceae; English name – Ginger.

According to Dr. Sachini Lakshika (2020), ginger has a very long history of use in various forms of traditional and alternative medicine. It reduces nausea, and helps fight the flu and common cold, to name a few of its purposes. The unique fragrance and flavor of ginger come from its natural oils, the most important of which is gingerol. Gingerol is the main bioactive compound in ginger. Gingerol has powerful anti-inflammatory and antioxidant effects, according to research. Increased appetite – very often when your cold is at its worst, you may lose your appetite, a little bit of ginger can help work up on appetite. Anti-inflammatory properties of ginger can reduce the inflammation of your sinus. Ginger can also induce sweating, which, and, according to German research, sweat contains a powerful germ-fighting agent that may help fend off infections.

Use of Veniwalgata: Scientific name - Coscinium fenestratum.; Family name – Menispermaceae; English name – Veniwalgata.

Sometimes called as “Yellow Vine”, Veniwalgata has a long history as a medicinal plant in the various traditional medicines of the regions where it grows. As of the article published by Dr. Sachini Lakshika (2020), this is one of the top items in Ayurveda, Unani and Siddha medicine in India, Sinhala medicine in Sri Lanka, the Kru Khmer healing traditions in Cambodia, traditional Vietnamese medicine of Thuoc Nam, etc. This medicine is used for a large variety of diseases and conditions, from fevers and diabetes to celiac disease and snake bites. Laboratory tests have shown that the plant has potent bioactive properties.

3. CONCEPTUAL FRAMEWORK

As shown in the following figure 3, in this research “Prevention & Control from Covid 19 Pandemic” is the dependent variable & there are three independent variables such as “Use of medicinal concoction of Koththamalli”, “Use of Ginger as a supplement”, “Use of Veniwalgata as a drink”.

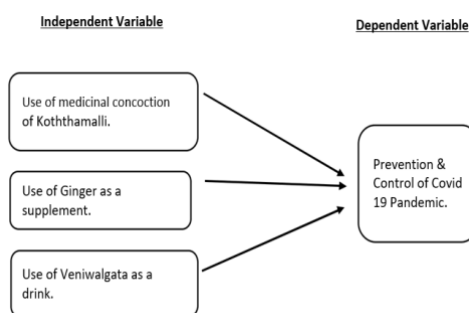


Figure 3. Conceptual Framework

4. HYPOTHESIS DEVELOPMENT

Under each category it is assumed that the hypothesis relevant to each traditional measurement in indigenous medicine has an influence over the prevention & control of

Covid-19 pandemic. The primary objective of the study is to prove the hypothesis.

H1- There is an impact between the use of medicinal concoction of Koththamalli and prevention and Control of Covid-19 Pandemic.

H2 - There is an impact between the use of Ginger as a supplement and the prevention and control of Covid-19 pandemic.

H3 - There is an impact between the use of Veniwalgata as a drink and the prevention and control of Covid-19 pandemic.

5. DATA ANALYSIS STRATEGIES

This section discusses the analytical strategies used in the study to achieve its objective. Method of analysis includes a statistical analysis of information collected using bar charts. However, as a data analysis tool, the author is going to use SPSS. The SPSS is a summary table of descriptive statistics that gives figures for all the measures, and it uses graphical options to make comparisons between the variables simpler.

6. DATA ANALYSIS

Researcher has analyzed the level of responses regarding traditional preventive measures with the Pandemic of Covid-19 by applying descriptive statistics. Mean, standard deviation and coefficient of skewness have been used to test the responses. According to descriptive statistics, all the mean values of variables are very close to the Likert scale 4. This says that response with regard to the variables are in an agreeable level. Highest standard deviation belongs to “Use of medicinal concoction of Koththamalli” as the highest standard deviation is 0.73. This says that using Koththamalli has comparatively higher variance. Minimum variance belongs to the “Use of Veniwalgata as a drink” as the minimum standard deviation is 0.61. This indicates that comparatively prevention and the control of Covid-19 has minimum variance. All the coefficients of skewness are between -1 and +1.

Table 3. Descriptive Statistics

Variable	Valid:	Miss:	Mean	Std Dev	Skewness
Use of medicinal concoction of Koththamalli.	200	0	3.86	0.737	-0.415
Use of Ginger as a supplement.	200	0	3.94	0.713	-0.479
Use of Veniwalgata as drink.	200	0	3.92	0.617	-0.320
Prevention & Control of Covid 19 Pandemic.	200	0	3.97	0.670	-0.077

According to the correlation analysis, the probabilities of use of medicinal concoction of Koththamalli and use of Ginger as a supplement are highly significant between the prevention and the control of Covid-19 pandemic (endogenous variable) and other mentioned factors (Exogenous variables). Use of Veniwalgata as a drink is significant with the prevention and control of Covid-19 pandemic. Coefficients of correlation between them are positive. Their values are more than 0.6. This means that traditional preventive measures in indigenous medicine are having strong positive association with the prevention and control of Covid-19 pandemic.

Table 4. Correlation Analysis

Independent Variables		Prevention & the control of Covid 19 Pandemic
Use of medicinal concoction of Koththamalli.	Pearson	.886**
	Correlation	
	Sig. (2-tailed)	.000
	N	70
Use of Ginger as a supplement.	Pearson	.712**
	Correlation	
	Sig. (2-tailed)	.000
	N	70
Use of Veniwalgata as a drink.	Pearson	.649**
	Correlation	
	Sig. (2-tailed)	.000
	N	70

Probability of F test statistics of the regression ANOVA is highly significant as the P value is 0.000. This means that the model is jointly significant, and the measures of traditional indigenous medicine jointly influence on the prevention and the control of Covid-19

pandemic. Model is appropriate. Individual effect has been analyzed above. Probability of Sri Lankan traditional preventive measures is highly significant with positive beta values. Their probabilities are less than 0.01. This says that they positively influence on prevention and control of Covid-19 pandemic.

Table 5. Regression Results

Model	Sum of Squares	Mean Square	F	Sig.
1 Regression	24.710	8.237	86.658	.000 ^b
Residual	6.273	.095		
Total	30.983	69		

Table 6. Individual Effects

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.025	.241		2.599	.000		
	Use of medicinal concoction of Koththamalli.	.246	.103	.365	1.033	.000	.258	3.883
	Use of Ginger as a supplement	.735	.076	.809	9.623	.045	.434	2.305
	Use of Veniwalgata as a drink.	.234	1.21	.216	1.926	.049	.245	4.088

These assumptions have been tested as diagnostic tests to decide the validity of regression results. In the model summary, D-W test is in the accepted level and residuals are independent. All the Variance Inflation Factors (VIF) are less than 10 and it indicates that independent factors are not highly or perfectly correlated. Therefore, there is no multicollinearity problem in the regression model. Accordingly, regression model is highly valid.

7. DISCUSSION

When the researcher considers the hypothesis made during this study, the hypothesis no 01 indicates that the use of medicinal concoction of Koththamalli has a positive impact or relationship with prevention and control of Covid-19 Pandemic. According to the correlation analysis, the probability of the use of medicinal concoction of Koththamalli is 0.886 and the standard must be 0.7. Therefore, there is significant between use of medicinal concoction of Koththamalli needs with prevention and control of Covid -9 Pandemic. According to the regression analysis, probability of the use of medicinal concoction of Koththamalli is highly significant with positive beta value. Their probability is less than 0.01. This says that they s positively influence on prevention and the control of Covid-19 Pandemic. These assumptions have been tested as diagnostic tests to decide the validity of regression results. Accordingly, regression model is highly valid.

When it comes to hypothesis no 02, the use of Ginger as a supplement has a positive impact or relationship with organizational performance, according to the correlation analysis, the probability of the use of Ginger as a supplement is 0.713. Therefore, there is a high significance between with use of Ginger as a supplement & prevention & the control of Covid 19 Pandemic. Accordingly, Correlation model is highly valid. According to the regression analysis, probability of the use of Ginger as a supplement is highly significant with positive beta value. Their probability is less than 0.01. This says that they positively influence on prevention and the control of Covid-19 Pandemic. These assumptions have been tested as diagnostic tests to decide the validity of regression results. Accordingly, regression model is highly valid.

Hypothesis no 03 states that the use of Veniwalgata as a drink has a positive impact or relationship with prevention and the control of Covid-19 Pandemic. According to the correlation analysis, the probability of the use of Veniwalgata as a drink is 0.649 and therefore there is highly significant between use of Veniwalgata as a drink with prevention & the control of Covid 19 Pandemic.

8. CONCLUSION

The statistics shown throughout in the research by the researcher and the analysis revealed the positive impacts of Sri Lankan indigenous medicine to combat Covid-19 and save human beings in Sri Lanka and worldwide, the regulators and the policy makers need to take necessary steps making Covid-19 outbreak as a great opportunity to promote our indigenous medicine in the global market. In this scenario, the avenues to be designed and implemented by the collective efforts of the state leaders are to utilize resources as Ministry of Indigenous Medicine, Export Development Board and Trade Ministry.

Researcher suggests the motivation of entrepreneurs in Sri Lanka by the Ministry of Indigenous Medicine to arrange necessary standards and certifications from standardizing institutions and universities to the level of acceptance in the international market. Trade ministry and the foreign ministry could take the leadership providing improved opportunity to Sri Lankan manufactures to explore market outside Sri Lanka. Ministry of Indigenous Medicine easily could get the assistance from Sri Lankan relevant government ministries to develop indigenous plantations to complete the raw material supply network. Author believes that due to this golden resilience in this transcending of Covid-19, Sri Lanka will win global market through promoting our indigenous medicine and reap unbelievable harvest of foreign income.

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A Study on Work-Life Balance of Employees Working from Home during the Covid- 19 Lockdown Period

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ABSTRACT

The study unfolds the impact of work from home on employees in terms employee work-life balance during the Covid-19 lockdown period in Sri Lanka. The research approach is mixed method and data was gathered through questionnaire survey and structured telephone interviews. The research findings indicate that the impact of work from home on work-life balance of employees differs from employee to employee. Further, the research findings unveil that there is a significant impact of work hours of an employee during work from home period on employee-work life balance.

Keywords - Covid-19, work from home, work-life balance, work hours, working conditions

1. INTRODUCTION

The first Covid-19 patient in the world was recorded in Wuhan, China on December 2019. The virus spread across the world rapidly and the virus was declared as a Public Health Emergency of International Concern in January 2020 and as a pandemic in March 2020 by the World Health Organization (hereafter, referred to as the WHO).

The first Covid-19 case in Sri Lanka was reported on 27th January and the first Sri Lankan Covid-19 patient was discovered on 11th March 2020.

As per Lau et al (2020), many governments across the globe-imposed lockdown state to reduce the spread of the virus. The Sri Lankan government also imposed a lockdown period nationwide in March to mitigate the spread of the virus.

With the impose of the lockdown period, most organizations across all industries in the country declared work from home status for the employees. The newly introduced work from home state was an unprecedented turmoil in the lives of the Sri Lankan employees.

As per Jaiswal & Arun (2020), due to work from home the employees experienced major changes to their job roles, conflicts with families, disturbances to the work-life balance, increase in stress levels and exhaustion during the lock down period.

Therefore, it is worthwhile to examine the impact of work-life balance and employee exhaustion experienced by the Sri Lankan employees who work from home due to Covid-19. Under this broad topic the following research questions are being addressed.

1. What was the impact of work from home on employee work-life balance?
2. How did the work hours of the employees impact the work life balance of the employees?
3. How did the working conditions available at home impacted the work-life balance of employees during the lockdown period?

These questions are addressed in the Sri Lankan context to achieve the following objectives.

1. To explore the impact of work from home on employee work-life balance.
2. To explore the impact of work hours on employee work-life balance.
3. To explore the impact of working conditions on employee-work life balance.

2. LITERATURE REVIEW

2.1. Covid-19 Crisis

As per the UNDP (2020), Covid-19 pandemic started off as a health crisis but twisted into the greatest global humanitarian crisis after the Second World War.

The contagious virus evolved with different variants and spread across the globe rapidly. The rate of the spread increased rapidly, and many measures taken by individuals and single entities were deemed fruitless as stated by key contributors in the area. (Jaiswal & Arun, 2020).

2.2. Lock Down: the response to the crisis

As per Brooks et al (2020), governments around the globe declared lock down states with the intention of isolating the diagnosed patients and the citizens who are maintaining close relationships with the infected patients from the rest of the citizens to bring down the rate of transmission of the disease.

2.3. Work from Home during Lockdown Period

Existing literature defines work from home could as an employee working for an organization performing the duties of the employee outside the physical premises of the organization and maintaining communication with the employer and the organization using telecommunication methods. (Morgan, 2004, Nilles, 2007 & Savić, 2020)

Crosbie & Moore (2004) suggests that the concept of work from home is not a new concept to the modern world.

However, the key contributors in the area emphasize that the concept of work from home became widespread during the year 2020 due to most organizations being forced to adapt to work from home concept as the governments urged the citizens to stay home and imposed lockdowns. (Shareena & Shahid, 2020, & Jaiswal & Arun, 2020).

2.4. Work-Life Balance

The existing literature defines work-life balance as the level of prioritization and the allocation of time between an individual's personal and professional life. (Felstead et al, 2002, & Crosbie & Moore, 2004).

2.5. Work from Home and Work-Life Balance

The existing literature provides mixed thoughts about the impact of work from home on employee work-life balance.

Several researchers in the area argue that work from home allows employees to spend more time with their families, manage household chores, reduces commuting time that can be utilized for personal activities and therefore, improves the work-life balance. (Sullivan & Lewis, 2001, & Savić, 2020).

On the other hand, several key researchers in the area have provided contradictory opinions and stated that work from home negatively impacts the work-life balance as employees tend to allocate the time saved by working from home rather than commuting to work on either more official work or household chores that further reduce the time allocated for their personal activities. (Hilbrecht et al., 2008).

2.6. Research Gap Identified

With Covid-19 there was a paradigm shift in the work practices of the organizations and the lives of the employees where most employees were required to work from home irrespective of their willingness or the facilities at home.

The researcher identified that it's worthwhile to examine the impact of work-life balance and

employee exhaustion experienced by the Sri Lankan employees who work from home due to Covid-19. Under this broad topic, the following research questions are being addressed.

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3. How did the working conditions available at home impacted the work-life balance of employees during the lockdown period?

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3. To explore the impact of working conditions on employee-work life balance.

3. RESEARCH METHODS

3.1. Research Approach

The research adopted a mixed method of questionnaire survey and structured interviews.

The researcher conducted the survey online and approached 130 respondents representing a variety of industries that worked from home during the lockdown period due to Covid-19. 111 individuals out of the invited respondents responded to the survey.

Structured telephone interviews were conducted with 15 randomly selected employees from the respondents.

The data gathered through the survey was analyzed statistically using the software SPSS to identify the impact of work from home on employees. The statistically analyzed

information was then triangulated against the information generated through the interviews.

3.2. Conceptual Diagram

The conceptual diagram was developed using the Boundary Theory by Kossek et al. (2012).

The diagram elaborates how the work hours and the working conditions of an employee impact the work-life balance. The work-life balance is determined using the parameters professional deadlines, personal choices, time for relaxation and conflicts with family members due to professional commitments.

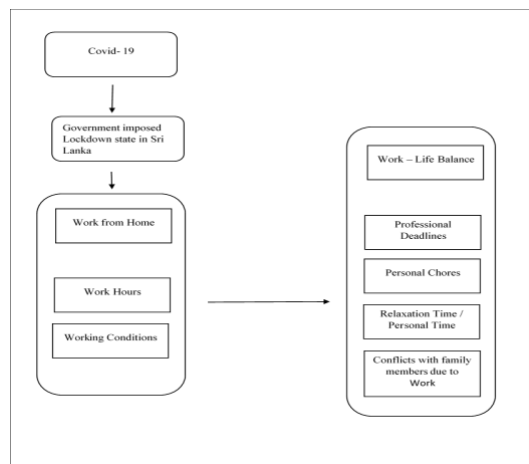


Figure 1. Conceptual Diagram

3.3. Operationalization

The variables given in the conceptual diagram could be operationalized as below.

1. **Work Hours:** The number of hours that an employee worked per day during the lockdown period.
2. **Working Conditions:** The facilities that an employee had during the lockdown period to work from home including a separate workstation, access to devices and a strong internet connectivity)
3. **Professional Deadlines:** The official deadlines that an employee is required to meet during the work from home period. Failure to meet the deadlines indicate that

the employee does not have a proper work-life balance.

4. Personal Chores: The household and other personal chores that are expected from the employee. Failure to perform these chores indicates lack of work-life balance.
5. Personal Time: The time that the employee spends on himself/herself. Lack of personal time during the work from period indicates a lack of work-life balance.
6. Conflicts with family members due to work: Having conflicts with family members to due to work related issues indicate a lack of work-life balance.

3.4. Sources and Collection of Data

Data was collected through two main sources.

1. Online Survey: The researcher conducted the survey online and approached 130 respondents representing a variety of industries that worked from home during the lockdown period due to Covid-19. 111 individuals out of the invited respondents responded to the survey. The survey included open ended questions as well as five-point Likert scale questions.
2. Structured telephone interviews: The researcher conducted structured telephone interviews with 15 randomly selected respondents who have filled the survey questionnaire.

The data collected through the survey was subjected to statistical analysis using SPSS statistics software.

The information obtained through the statistical analysis was then subjected to data triangulation against the information generated from the telephone surveys.

3.5. Test Hypothesis

In order to find the relationship between the work hours during work from home and work-life balance, and the relationship between working conditions and the work life balance, the following two hypotheses are tested at a significant level of 95%.

3.5.1. The Relationship between Work Hours and Work-life Balance.

H1: There is a significant relationship between work hours and the work-life balance.

3.5.2. The Relationship between Working Conditions and Work-life Balance.

H2: There is a significant relationship between working conditions and the work-life balance.

The following Regression Model is used.

$$Y = \beta_0 + B_1X_1 + B_2X_2$$

β_0 refers to the intercept of the regression. B_1 refers to the coefficient of variable X_1 . X_1 refers to the variable work hours. B_2 refers to the coefficient of the variable working conditions and X_2 refers to the variable working conditions.

4. FINDINGS AND DISCUSSION

4.1. Descriptive Statistics

The data was collected from both male and female employees working in clerical level, executive level, management level and senior management level of all age groups that are allowed to work.

The gender and employment level composition of the respondents are given in table 1.

Table 1. Gender and Employment Level Composition

		Emp_Category				Total
		Clerical level	Executive level	Management level	Senior Management level	
Gender	Female	3	46	8	1	58
	Male	2	31	18	2	53
Total		5	77	26	3	111

The respondents represented the following industries: Apparel, Education and Consultancy, Finance, IT, Logistics, Manufacturing and Industrial, Plantation and Agriculture, and Retail and Trade and employees with various educational and professional qualification levels and work experience.

Therefore, the respondents represented a wide array of social and other levels in Sri Lanka.

4.2. Statistical Analysis

4.2.1. The Work-Life Balance

The work-Life Balance of employee was computed using the information derived from Likert scale questions targeting the four sub variables of measurement of work-life balance.

4.2.2 The Regression Analysis

As indicated in Figure 3, the regression analysis gives the relationship between the independent variables and the dependent variable as given below.

$Y = -.965 - .247 \text{ Work Hours} -.054 \text{ Working Condition}.$

As per the statistical results, both independent variables indicate a negative relationship with the dependent variable.

Table 2. Results of the Regression Analysis

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.965	.140		-6.916	.000
Work_Hours	-.247	.061	-.367	-4.084	.000
Working_Conditions	-.054	.130	-.037	-.417	.678

a. Dependent Variable: Work_Life_Balance

However, for the hypotheses to be either accepted or rejected, the significance tests should be conducted at the significant level of 95%.

4.2.3 The Significance Test

The p value of work hours is 0.000 and the p value of working conditions is 0.678. The rule for hypothesis is to accept the alternate hypothesis if the probability is less than 5% and to accept the null hypothesis if the probability is greater than 5%.

4.2.4 Rejection/ Acceptance of Hypotheses

As per the hypothesis acceptance/ rejection rule, the alternative hypothesis, H1: There is a significant relationship between work hours and the work-life balance is accepted since the p value is less than 5%.

As per the hypothesis acceptance/ rejection rule, the alternative hypothesis, H1: There is a significant relationship between working conditions and the work-life balance is rejected since the p value is more than 5%.

4.3. Respondent Statements

Given below are a few statements extracted from the telephone interviewees.

Ms. A, a lecturer at a leading private university who delivered online lectures and worked online from home stated, "I was not prepared to conduct online lectures. I have two children at home, and they disturbed me all the time when delivering lectures. I had so many conflicts with my family. Overall, the work from home context resulted in negative impact on my work-life balance".

Mr. B, an IT expert from a leading IT firm stated, "I used to work around 10 hours per day before Covid-19. But now with work from home I am working more than 18 hours every day. We have meetings even at 10.00 pm. I had to sacrifice many personal and family related things and I had so many fights with my wife. Work from home created an unpleasant situation for me".

Mr. C, a logistics professional of a leading company stated, "I had no designated place to work and I enjoyed time with my family. Whenever, I was not busy with meetings, I helped my wife with household chores and played with my children. For, me work from home was good".

Ms. D, the Finance Manager of a retail company stated, "I had a designated workplace, a laptop and an internet connection given by the company. I only worked during the office hours. I had a routine. Therefore, I experienced only minor changes in my work-life balance".

5. DISCUSSION AND CONCLUSION

After data triangulation the researcher identified the following.

There is a significant negative relationship between work hours and employee work-life balance which is supported by the existing literature. (Crosbie & Moore, 2004).

The relationship between working conditions and work-life balance varies from one person to person. The researcher failed to establish an opinion since the statistical results could not be backed up in the data triangulation as several respondent indicated that there is a significant relationship between the two.

The researcher identified that the impact of work from home on the employee-work balance differs from one employee to another as several employees were benefitted from the situation whereas several employees were penalized. This is again backed by the existing literature that provides a both positive and negative school of thought about the impact of work from home on employee work-life balance. (Hilbrecht et al., 2008, Sullivan & Lewis, 2001, & Savic, 2020).

The researcher found out that the majority of the employees who worked from home were mentally exhausted due to the long hours, isolation from other employees, being congested to their residences and the routine lifestyle due to work from home.

6. IMPLICATIONS OF THE STUDY

The research contributed to the existing literature on the area through analyzing the work from home context in Sri Lanka and its impact on the employee work-life balance by concluding that there is a significant relationship between the work hours and the work-life balance.

The research would be helpful to the corporates and the employees to understand that even during a work from home period, there is a need for a work hour limit for a day for the employees to maintain a healthy work-life balance.

7. LIMITATIONS OF THE RESEARCH AND SUGGESTIONS FOR FUTURE RESEARCH

The research was conducted using a small number of Sri Lankan respondents and therefore the results may not be universally applicable.

The research did not study the differentiating factors such as the gender, age, marital status and residence that could be the reason for the different opinions of employees about work-life balance during work from home.

Therefore, it is recommended to expand the number of respondents to gather information and to expand the number of variables to include the differing factors that result in the differences in employee perceptions regarding work from home and work-life balance.

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Contemporary Issues of Women Migrant Entrepreneurs Workers in Developing Countries: With Special Reference to Southeast Asia

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ABSTRACT

Entrepreneurship is a powerful driver of economic growth and job creation: it creates new companies and jobs, opens new markets, and nurtures new skills and capabilities. Women migrant workers from developing countries engage in paid employment in the countries where they are not citizens. While women have traditionally been considered companions to their husbands in the migratory process, most adult migrant women today are employed. Women entrepreneurship is the process where women organize all the factors of production, undertake risks, and provide employment to others. The definition of women entrepreneurship has never been differentiated based on sex and hence could be extended to women entrepreneurs without any restrictions. This research focuses primarily on the contemporary issues of women migrant entrepreneurship in southeast Asia. The research objectives are to study the contemporary issues of women migrant entrepreneurs in developing countries. Research problem is “what are the contemporary issues of women migrant entrepreneurs in developing countries?”. As the research methodology, qualitative research methodologies are used. The research identifies the economic impact, impact of maternal migration, impact of gender role, impact of destination countries, exploitation and abuse, reproductive health, external finance and sex discrimination of issues affecting women migrant entrepreneurship in Southeast Asia. Accordingly, it is evident that there are negative factors for women migrant entrepreneurship in southeast Asia.

Keywords - *women migrant entrepreneurs, contemporary issues, developing countries, Southeast Asia.*

1. INTRODUCTION

Prostitution has undergone a massive increase in scale in Southeast Asia in recent decades, such that it has been argued that there is a significant commercial sex sector, which has been integrated into the economic, social and potential life of the countries of the region. There is a strong relationship between this development and population movement. On the one hand, different kinds of population changes have created important markets for prostitutes. This includes concentrations of contract workers (usually men) in plantations, mining and oil fields, sawmills, etc. The rapidly developing urban areas where isolated workers are attracted. Similarly, rapidly expanding international tourism has created demand for sex workers. Gender is a cross-sectional migratory issue and it may be one of, if not, the most important factor shaping the migratory experience. Major steps have been used up in migration research resulting in a wealth of literature as easily as orbit research, which clearly establishes gender as a crucial element in our apprehension of the reasons and consequences of international and internal migration, and that gender is relevant to most, if not all, facets of migration. Globally, international migration has become increasingly

diversified as a consequence of recent global economic and geopolitical changes, in addition to policy shifts. Such changes can affect men and women differently, leading to gender-based migration patterns. Laws and regulations governing geographical mobility often have gender implications; migrants are positioned differently in labour markets and labour demand is often gender-specific across different economic sectors. Furthermore, migration involves economic and social costs and benefits for migrant men and women, in addition to models and outcomes of gender-based migration. In addition, policies which affect migration, integration or the reintegration process of migrants into societies or communities may also affect men and women differently. This affects the livelihoods and rights of men and women migrants (Piper, 2007). Gender policies can lead to inappropriate responses and solutions to issues. For example, research on diasporas shows that expectations differ within households; thus, programmes aiming to facilitate migrants' return to their home countries should feature an array of fiscal and professional incentives, as well as encouragements for child's education, health provision and housing (IOM, MRS 26, 2006).

1.1. International Migration

International migration occurs when people move across state borders and stay in the host state for a minimum period of time. Migration takes place for many causes. Many people leave their country of origin to seek economic opportunities elsewhere. Others migrate to be with relatives who have migrated or due to political conditions in their country. Another reason for international migration is that students are studying abroad. While there are several different possible systems for categorizing international migrants, one system organizes them into nine groups: Temporary labour migrants; irregular, illegal, or undocumented migrants; highly skilled and business migrants; refugees; asylum seekers; forced migration; family members; return migrants; And long-term, low-skilled migrants. emigration, family members, returnees and unskilled long-term migrants. They may also be divided into two major groups, permanent and temporary.

Permanent migrants intend to establish permanent residency in a new country and perhaps become citizens of that country. Temporary migrants intend only to continue for a circumscribed period of time; perhaps until the death of a special program of work or for the duration of a work contract or a certain work season. These two types of migrants have a significant impact on the economy and society of the target country and country of origin.

Likewise, the countries which receive these migrants are frequently grouped into four classes: Traditional settlement countries, European countries which encouraged labour migration after World War II, European countries which receive a significant percentage of their immigrant populations from their former colonies, and lands which formerly were points of emigration but have lately emerged as immigrant destinations.

1.2. What Is Women's Entrepreneurship?

Globally, women's entrepreneurship is increasingly a driver of economic development and business creation. Asia and the Pacific stand to earn 70% in per capita income within roughly two generations by getting rid of gender disparities in employment, including in the field of entrepreneurship. Granting to the International Finance Corporation, women own 50% of microenterprises and 59% of small and medium-sized enterprises (SMEs) in East Asia and the Pacific, and women in South Asia own 10% of microenterprises and 8% of SMEs. In that location is no universally accepted definition of a "women-owned" or "women-led" business, or of a "woman entrepreneur." In fact, few sources explicitly define these terms, some of which use them indifferently. However, there are differences of meaning. For example, 'women-led' could involve partial or total ownership, and this could refer to management or operations. In this account, the analysis focuses on women entrepreneurs who are both majority owners of their own occupations and receive financial and operational decision-making power over those lines. There are also many different ways to define MSMEs. Definitions vary across countries but are generally based on a combination of four

criteria: number of employees, net or total assets, annual turnover and amount of capital invested. Most women's businesses qualify as MSMEs, particularly as micro and minor enterprises. In fact, only one in ten women-owned businesses in Southeast Asia employs more than five employees. In Cambodia, 65% of MSMEs are classified as "women-led", but women own only a third of registered companies and less than 1% of companies with more than 10 employees. In South Asia, only eight to nine per cent of official SMEs are owned by women. In total, MSMEs account for more than 96% of all enterprises in Asia and Women migrant workers from developing countries engage in paid employment in the rural areas where they are not citizens. While women have traditionally been seen as the companions of their husbands in the migratory process, most adult migrant women are now employed on their own. In 2017, of the 168 million foreign workers, more than 68 million were women. The increase in the proportion of migrant workers since the beginning of the 20th century is often called the "feminisation of migration". the Pacific, with an average contribution of 42% of total exports and employment to 62% of the workforce.

Entrepreneurial motivation – the engine of work ethics and business decisions – is an important factor influencing outcomes for women-owned businesses. But the motivating factors are not always the same. In lower-income nations in Asia and the Pacific, as well as globally, a higher ratio of women-owned businesses are set up out of necessity, due to a lack of engagement opportunities; while in higher-income countries, a larger percentage of women's entrepreneurship is driven by opportunities emerging in the marketplace. This eminence is an important one, as entrepreneurs who begin a job in response to a perceived opportunity— as opposed to a lack of other alternatives for income generation—are more likely to be growth oriented, which implies that they are more likely to aim to flesh out their businesses, hire more workers, and achieve higher financial returns.

At the regional level, adult females and men start businesses out of necessity at roughly the same pace, but there is a substantial gender gap in some

nations, though not constantly in the same way. In the Philippines, for instance, 43% of women entrepreneurs set up subsistence enterprises (necessity), compared to only 28% of men entrepreneurs. Yet in Indonesia and Malaysia, over 80% of female entrepreneurs are motivated by opportunity, while their male counterparts are almost twice as likely to be motivated by necessity (footnote 8). And in the People's Republic of China (PRC), almost two-thirds of women entrepreneurs are responding to opportunities in the marketplace, though many of their businesses remain small due to limited access to business loans.

Most women workers emigrate from developing countries to high-income countries, which has a major impact on their countries of origin and destination. Women migrant workers send upwards of \$300 billion in remittances to their lands of origin each year, often using this money to ante up for their families' basic health, living accommodations and training needs. On a macroeconomic level, remittances from emigrant workers can account for up to 25% of national gross domestic product and help these developing nations cope with trade deficits and external debts. However, migrant women are required to leave their country of origin to support themselves financially and are often separated from their families. This has contributed to an uneven distribution of reproductive labour globally: in destination states, immigrant women help address the care worker shortage, and enable more local women to get into the work force. On the other hand, in the countries of origin, the emigration of many women forces other members of the community to assume heavier burdens of domestic work.

Migrant women generally work in gender-sensitive occupations such as domestic work and work disproportionately in private homes. Therefore, they are relatively 'hidden' from society and are more susceptible to exploitation and abuse. In addition, various government policies have increased their vulnerability to abuse. For example, in Arab states, migrant domestic workers rely on their employer for legal status, which leads them to tolerate a significant amount of abuse for fear of deportation. Many

countries also forbid migrant workers to have sex or get pregnant.

Of the current 271 million international migrants, 130 million, or close to half, are women. The percentage of women migrants increased from 46.7% in 1960 to 48.4% in 2010, but has waned somewhat over the past two decades, from 49.1% in 2000 to 47.9% in 2019. Among migrant workers, there are also more males than females. According to the International Labour Organization, only 68.1 million, or 41.6 percent of the 164 million migrant workers in 2017, were female.

Although migration between developing countries is generally more substantial than migration from developing to high-income countries, the World Bank estimates that there are about 73 million migrants from developing countries living in high-income OECD countries. Immigrants from developing countries living in high-income OECD countries. Women outnumber men among immigrants in the developed world, with 50.9% of all immigrants in the developed world. However, in developing countries, women make up only 45.7% of total immigrants, compared to 54.3% for men.

2. RESEARCH OBJECTIVES

1. To study the contemporary issues of women migrant entrepreneurs in developing countries.
2. To study of the current women entrepreneurship in Southeast Asia and its trends.
3. To study of the negative factors for women migrant entrepreneurship in Southeast Asia.

3. BACKGROUND

In response to calls from several Asian labour sending countries, a Ministerial Consultation for Asian Labour Sending Countries was held in 2003 in Colombo, Sri Lanka, launching the so-called Colombo Process. The ten initial participating states - Bangladesh, China, India, Indonesia, Nepal, Pakistan, the Philippines, Sri Lanka, Thailand and Viet Nam - made passports for the efficient management of overseas employment programmes and agreed to regular

follow-up meetings. This first step proposes to share experiences, lessons learned and best practices in overseas work; consult on issues faced by overseas workers, labour sending and receiving countries and offers practical solutions for the wellbeing of vulnerable overseas workers. It too tries to optimize development benefits from organized overseas employment and enhance the dialogue with countries of destination, as easily as to review and monitor the execution of the recommendations and identify further steps for action. Four policy-based research studies were conducted by IOM offices in Bangladesh, Sri Lanka, Thailand and Vietnam on the links and impacts between gender and labour migration. The report was enriched by an additional study conducted in the Philippines on the Filipino migrant family and a paper related to gender and migration in China produced as a follow-up to the Conference on Migration, Poverty Reduction and Development in Asia, organized under the auspices of IOM, UK Department for International Development (DFID) and the Government of China, and convened in Lanzhou, China (March 2005). In improver to these six state chapters, IOM has also invited an expert on gender and migration in Asia, Nicola Piper, to produce an overview and a closing to this publication.

4. SOUTHEAST ASIA

Migrant workers are important to the economic development of Southeast Asia. For decades, countries in the region have sent or received many migrant women. Demand for contract labour in the Arab countries as good as other Southeast and East Asian nations has contributed to significant emigration amongst women workers in the Philippines, Indonesia, Sri Lanka and Thailand. In the 1990's, the Philippines became the largest source of government-sponsored migrant workers. Annually, over 700,000 migrant workers migrated from the Philippines, most of whom were women. Today, Filipino migrant workers send over \$24 billion in remittances every year, representing 8% to 10% of Filipino GDP.

A large number of female emigrants from South-East Asia are engaged in domestic and care work,

a phenomenon that researchers call "the global nanny chain" or "the international division of reproductive work". In fact, in Southeast Asian countries like the Philippines, more than 60% of migrant workers are women, and more than two-thirds of these women do domestic work. Likewise, in Indonesia, 70% of all immigrant workers leaving Indonesia for Saudi Arabia, Singapore, Malaysia, Hong Kong, and South Korea are women seeking domestic and maintenance work. Hong Kong and South Korea are women looking for homework and care.

Some governments in Southeast Asia have actively encouraged female emigration, both to reduce unemployment and to increase remittances. In Indonesia, for instance, the Department of Manpower set up a Center for Overseas Employment, along with breeding plans for potential emigrant women domestic workers to improve their domestic service skills.

In the meantime, labour shortages have prompted other Southeast Asian countries, such as Singapore and Malaysia, to turn to immigrant workers as a source of cheap labour. In Singapore, the increase in the number of migrant domestic workers is consistent with an increase in the activity rate of Singaporean women. From the 1980s to the 1990s, the participation rate of women in the labour market in Singapore increased by 70%. Likewise, the number of women migrant domestic workers also increased significantly, and by 1999, Singapore had over 100,000 immigrant women domestic workers in a small city-state with just under 4 million residents.

Millions of Burmese women emigrate to Thailand every year, where they are employed almost exclusively in agriculture and manufacturing, where they work almost exclusively in the agricultural and manufacturing sectors. Thailand's manufacturing and agricultural sectors rely on Burmese migrants – more than half of whom are women – because of their low pay and long working hours. As these Burmese migrant workers are generally undocumented, there is limited protection under Thai law. In fact, they often face hostility from the Thai government and police violence.

5. RESEARCH METHODOLOGY

As the research methodology qualitative research methodologies were used, and a variety of information gathering apparatus (viz, direct observation and documents) was employed to collect information.

(1) Primary data: interviews - in governmental, academic, lecturer and other professional fields.

(2) Secondary data include websites, books, magazines and magazines.

In evaluating this study, we used some basic methodologies to achieve the study objectives. The study used qualitative secondary data from e-books, research papers and scholarly articles to gather a comprehensive understanding. This study used document and conceptual analysis as basic analytical methods. Documentary analysis defines a pattern of qualitative inquiry in which documents are rendered by the researcher to present a meaningful subject. In the literature review, it gathers available documents and data relevant to the study in question and interprets them to determine the specific question. The conceptual analysis is often based on a review of the design study documentation. This can be further illustrated, as a procedure of enquiry that explores concepts for their degree of development as revealed by their interior construction, use, representativeness and relation to other concepts. In addition, the use of direct citations in the study allows the researcher to provide a precise description of what is being assessed. Depending on the research methodology, it is the design of the research involving the data-based questions that are based on the research survey. However, according to the methodology, it clearly explains the data collection method, which it analyses for the search answer according to the questions (Ranjit, K., 1999). However, it will help identify the related areas across its borders that will help answer the questions formulated according to the specific research. Semiotic analysis techniques were used for data analysis.

6. FINDINGS AND DISCUSSION

6.1. Economic Impacts

Studies in the Philippines, Sri Lanka and Malaysia have shown that migrant women seek employment abroad mainly to help pay for the basic expenses and health needs of their families. In 2015, migrant workers paid over \$601 billion into their home countries. Developing countries received more than \$441 billion, three times more than development aid and almost as much as the foreign direct investment they received. In developing countries like Nepal, foreign remittances represent close to 25% of GDP. Furthermore, many migrant workers send remittances informally, so the actual total is even higher.

While surveys in Mexico and the Philippines have recorded that men remit more and a larger proportion of their income than do women, other studies in Bangkok, Laos and rural Philippines have found that women remit a bigger dimension of their income. found that women remit a larger proportion of their income. Data from the World Bank indicates that even though women migrant workers typically make less than their male counterparts, their contributions account for half of the \$601 billion informal remittances sent in 2015.

Remittances from migrant women are more likely to be used for “health, education, family and community development” while remittances from men are usually used for investments. In developing countries such as Nepal, most remittances from migrant workers are aimed at reducing household poverty. A study of migrant Nepalese women workers found that 45% of them used remittances exclusively for basic needs such as food and health care, and the education of their children. At the macro level, remittances can also help countries of origin to bridge trade deficits, reduce pressure on the local currency and reduce external debt. Other studies challenge the existence of a link between migration and development for migrant women. While remittances have stimulated development in some countries, in other communities, they have had an adverse impact on growth.

6.2. Effects of Maternal Migration

Migration of migrant workers has resulted in an uneven international division of breeding work. As women migrant workers leave their rural areas of origin to pursue domestic work in other countries, they often leave behind a deficit in domestic labour in their countries of origin that female relatives or less privileged local women will induce to go on.

The emigration of mothers in particular can profoundly impact the social and emotional well-being of their children. One study of children in Sri Lanka with mothers working abroad found that these children had mental health problems at higher rates than the comparator group. Despite the efforts of migrant mothers to maintain contact with their children, their interactions are often inconsistent and “do not allow for meaningful exchanges.” As a result, these children often do not get to know their parents. Children's education is also affected by the lack of parental oversight and support.

6.3. Gender Impact Assessment

Some women emigrate to escape oppressive gender norms, leave their homes and achieve greater economic independence and freedom. It can strengthen women's position in the family by improving their relative bargaining position. Women workers have more influence within the household because they control some economic goods.

Liu, a sociologist who studies gender, sexuality, family and work in China, says social roles follow migrant workers in their new environment. There is a close link between a woman's role in rural life and her new life in another city or country. Women accept the treatment they receive because it is normalized in accordance with their traditional and domestic roles, such as their role at home as a housewife and homemaker.

On the other hand, Beneria, a Spanish-American economist, argues that gender roles evolve as women from Latin America leave their families and make a move to pursue domestic care work in Western Europe. He admits that most migrant workers work in highly gendered occupations

such as domestic work and care, where their traditional gender roles are enhanced. However, she also argues that the choice of a woman to leave and to give money to her family entails a reversal of gender roles within her family.

The emigration of women also demands that men left at home adapt to the evolution of gender standards. For example, Sri Lankan women are migrating more and more to the Middle East to carry out domestic duties. This emigration forces those who stay in the villages of Sri Lanka to adopt new gender norms that may be contrary to traditional gender ideals. Among these men, drinking is considered a male occupation. Others find their own jobs in and out of their communities. Even though these human beings often get less than their migrant wives, they do not fully relinquish their traditional roles as the breadwinners of their families, and are therefore able to save some of their masculinity. The few men who choose to assume the domestic burden usually done by women are often considered "too feminine". Since they are no longer the breadwinners, certain members of their community no longer consider them "men".

6.4. Impacts on Recipient Countries

Globalization facilitates the transfer of reproductive work from preferred women in high-income countries to migrant domestic workers in developing countries. Women migrant domestic workers coming from developing countries. This domestic worker delegation allows more women in developed countries to continue their careers like men. In Singapore, the large influx of foreign housewives between 1980 and 1994 followed a 70 per cent increase in the activity rate of Singaporean married women.

In many developed countries, such as the U.S., an aging population has contributed to the greater need for long-term care workers. As a consequence, these developed countries are increasingly turning to migrant workers to look after the elderly. In the U.S., 75% of senior caregivers in L.A. and 95% of nursing home operators in Hawaii are Filipino migrant workers. Argue that the United States' reliance on women migrant workers in the long-term care sector has legitimized the low pay of workers in this

industry and devalued the Eldercare profession as a whole.

6.5. Impacts on Women Migrant Workers

6.5.1. Exploitation and Abuse

Women migrant workers are primarily employed in the informal sectors, and are frequently either not cut through or only partially covered by the labour legislation, social protection, and public assistance provisions of their host countries. The exploitation of migrant workers is less identifiable than that of male migrant workers, since the exploitation of women often happens in situations where labour inspection services are weak. Migrant stay-at-home women in particular are often isolated and can become dependent on their employers. Examples of maltreatment include: not getting paid, limited movement, removal of personal identity documents, long transformations, working for a whole week without days-off, sexual maturation, and poor living conditions with inadequate food, urine, and adjustment. Employers seizing personal effects have also been identified (e.g. passports, mobile devices) and lock closets and refrigerators to stop migrant domestic workers from taking meal breaks.

Furthermore, Cheng says migrant workers are isolated even in their own social circles. As a result, they often have poor support systems, further increasing their reliance on their employers' households and placing them in a vulnerable position.

6.5.2. Reproductive Health

Some Gulf States, such as the UAE and Kuwait, prohibit migrant women from engaging in sexual activities. prohibiting migrant workers from having sex. If these women get pregnant during their stay in the Gulf, they are jailed for a year for the crime of zina. They have to deliver in jail and are forcibly separated from their children when they are deported.

6.5.3. Present Challenges

While women entrepreneurs and women-owned business networks are on the rise, they face a

number of challenges and barriers. One of the main challenges facing women entrepreneurs is that of traditional gender roles that are structurally internalised by society. Entrepreneurship is still considered a male-dominated field, and it can be difficult to outperform these conventional viewpoints. In addition to the dominant stereotype, women entrepreneurs face several obstacles related to their company.

6.5.4. Human, Social and Fiscal Barriers to Capital.

One of the arguments raised by the study of gender discrimination in venture capital financing is that the demand for qualified women entrepreneurs is greater than the supply. In 1999, the Diana Project showed that, contrary to conventional wisdom, many of the adult females who were not financed through growth capital had the necessary skills to establish a high-growth business.

Other research has indicated that women entrepreneurs are already launching ambitious businesses in the high-technology industry, expanding their social nets, and arriving at their pitches more relatable to the male-dominated VC industry, despite many industry people believing that adult females are not answering that. Some surveys, though, have looked at the social networks of women entrepreneurs, showing that their nets are different from that of their male counterparts and aren't overlapping as much with financial networks. An entrepreneur's social capital is defined by the networks they have access to, and receiving private equity financing is heavily determined by an entrepreneur's social capital and whether it overlaps with that of venture capitalists. As such, women continue to be disadvantaged in this respect when seeking private financing.

The human capital of an entrepreneur, based on education, training and experience, is another important factor in obtaining private equity funds. Some surveys have indicated that adult females were less likely to accept the necessary experience in executive or technical management, since they tended to be more present in the retail, finance, service and real

estate sectors. This has led other researchers to look at women entrepreneurs with significant human capital to see if they are still facing discrimination in their search for funding. In a survey that employed data from MIT Venture Mentoring Service, it was found that women with substantial human capital were even less likely to pursue their high-growth business ideas full-time. Education, especially in STEM fields, is another hurdle that women face in reaching the human capital they need.

6.6. Obstacles in Supply Specifically in STEM

The STEM fields are very male-dominated, and women are extremely underrepresented. Many people believe that this issue is improving, and while it may be, it is still a major issue that needs to be addressed on a larger scale. According to a 2010 AAUW study, underrepresentation appears to stem from societal norms that create barriers. Such barriers include gender stereotypes and prejudices. Only one of the most important aspects that is frequently not realised as much is that some of these barriers come from the way that engineering and mathematics programs at universities are geared more towards adult males. An example outlined in this survey was that a woman going into a math exam naturally feels more pressure due to the idea that humans are more adept at math, and the environment of being in a room with more men would subconsciously affect performance as good. Moreover, women with the ability to break out of the mindset they have a fixed amount of intelligence is imperative to achieve more in the scientific world. Hundreds of peer-reviewed research papers covering many aspects of education, particularly STEM, explain the implicit bias against women. For model, a review, "Males under-estimate academic performance of their female peers in undergraduate biology classrooms", stated that men rate their fellow male classmates as more knowledgeable than their female peers.

There are also problems of gender segregation as a result of discrimination in hiring in the fields of technology and mathematics. This is due in part to how society gives the impression that it is socially abnormal for women to work in areas

related to STEM. In summation, this issue is exceedingly difficult to make because it is so ingrained in society, but it is significant that there are alternatives for young ladies to become involved in STEM related classes and extracurricular at a young age in order to create less of an inequality of opportunity. It will also help break the standard that STEM is the domain of humans.

6.7. Gendered Processes in Finding Financing

A different approach to research on gender-based discrimination in venture capital financing is to study gender-based funding review processes.

It has been proven that in the venture capital world, there is a strong tendency towards homophily, meaning that people with a certain background will associate themselves with people with a similar setting. Therefore, entrepreneurs seek financing from people of their gender. Their results support this hypothesis, since only 8.9% of proposals brought to VCs were put forward by women, yet though the writers couldn't find a statistically important deviation between the probability for women and adult males to get equity. This presents a huge challenge for women entrepreneurs seeking financing from other adult females, since the act of women venture capitalists has decreased from 10% in 1999 to 6% in 2014, which is why the Diana Project argues that for increasing women-led ventures' access to capital there should be more women VCs.

At the same time, this could also be explained by the higher demands women face when submitting a VC funding proposal. One study found that funding evaluators regard women without technical training as less skilled than men without technical training. Technically trained women had an advantage over their male counterparts to be rated as more sociable and have better leadership skills. This also implied that for women to be considered as legitimate entrepreneurs they needed to exhibit higher qualifications than male entrepreneurs, calling for both a technical background and a higher social capital, therefore strong social ties with people from the industry. This shows that for

evaluators to trust the abilities of women entrepreneurs, they need to see greater potential than their male counterparts, possibly due to gender stereotypes.

But other studies have shown that these are not the only barriers women face due to gender stereotypes. Multiple studies on discrimination faced by women seeking funding for their speculations have been constructed on top of the gender role congruity theory, which states that individuals expect men and women to work in ways that meet their gender stereotypes. In one study it was observed that qualities associated with successful entrepreneurs converged to attributes that evaluator assigned to male entrepreneurs, while the characteristics opposite to those of an ideal entrepreneur were generally attributed by evaluators to femininity. This underlines the fact that sexist stereotypes are consistently used in the decision-making process of venture capitalists. Gender stereotypes in CVs decision making were also highlighted in a different study that showed that men and women are asked different questions during their presentations. Questions for women entrepreneurs are focused on prevention and loss, while their male counterparts are provided with questions focused on potential gains. It is not just entrepreneurs who are impacted by gender stereotypes. The whole process of looking for funding, from the relationship between entrepreneurs and investors to human and social capital, has been marked by gender. It has been proven that women tend to accentuate the human and social capital they have, in an attempt to make up for the deficiency of resources commonly associated to the ideal entrepreneur, particularly since other studies have demonstrated that the ideal entrepreneur usually has attributes generally associated to male entrepreneurs. In order to highlight their potential, women also tend to insist on male participation as board members and board chairs in their businesses. The authors classified female entrepreneurship strategies that focus on more "male" attributes of their business, such as growth ambitions, as compensatory signalling strategies. Another aspect highlighted by this study is that industry experience in "feminine" industries, such as the spa and fitness industry, is

seen as less valuable by investors than experience in industries generally associated with masculinity, such as the petrol industry.

The gender perspective of venture capital on the entrepreneur's experience is just one example of female entrepreneurs held to different standards than their male counterparts. In a survey focusing on the financing received by entrepreneurs from banks it was found that male entrepreneurs received more support than their female counterparts, despite holding the same number of employees and past performance track record (two genes that show viability for a business). As a result, women's strong track record was not as strongly correlated with funding received as for men, so their reward was lower for the same trade attributes.

6.8. Obstacles Specific to Starting New Firms

The theory of "homophilis" is a concept described by social scientists as the tendency of people to seek out or be attracted to those who are similar to themselves. This theory impacts the number of adult females who are able to take up new firms, because there are less women than men who have their own companies; women compose about half of the labour force, but own just 36 percent of US companies. This statistic shows how obvious the number of women in this field is disproportionate in relation to the population. Recent data suggest that when women entrepreneurs start their businesses, their level of capital is considerably lower than that of men. Disproportionate access to capital, as opposed to male entrepreneurs, is also a systemic barrier to starting a new business. Women starting their own businesses have a greater chance of success if they have available financial or social capital. Without that possibility, there are many more barriers that place women at a disadvantage than their male counterparts. Women entrepreneurs start to be at a disadvantage when they start their businesses, making it harder to navigate the early stages of a personal business. Other barriers include the fact that women-owned companies tend to be smaller than men, are more likely to go bankrupt, and have lower sales, profit and employment levels. Knowing that these barriers exist can be a

deterrent to women entrepreneurs or increase the chances of success for less successful businesses. Structural elements include gender-based discrimination and internalized stereotypes create those barriers. As well, women-owned businesses are primarily in the service and retail sector. Consolidating women-led businesses in a specific sector highlights internalized stereotypes about the abilities and interests of women entrepreneurs.

6.9. Externally Funded and Gender-based Discrimination

Women's personal financial assets are generally lower than their male counterparts. This means that for a given opportunity and an equally capable person, women need to get extra resources relative to men in order to exploit the opportunity; because they control less capital. The question of whether women have more difficulty obtaining financing than men for the same business opportunity developed in her own subfield. A potential problem with raising external capital is that 96% of senior venture capital firms are male and may not understand women-oriented businesses as well. However, there seems to be some improvement. A study by Babson College found that in 1999, less than 5% of venture capital investments were directed to women-owned companies on the executive team. In 2011 it was 9% and by 2013 it was 18%.

A specific solution to women's challenges in accessing funding has been microfinance. Microfinance is a financial institution that has become extremely popular, particularly in developing economies. Women entrepreneurs have also done particularly well in securing funding through crowdfunding platforms such as Kickstarter.

Due to deficiency of funding for adult females in new businesses, many women founders have experienced to hire or create fake male profiles to work as co-founders, administrators, or the typeface of their businesses to attain advancement.

6.10. Barriers to the Operation of a Small Business

Studies of women entrepreneurs show that women face stereotypical attitudes towards women every day. Business relations with customers to suppliers and banks constantly remind the entrepreneur that she is different, sometimes in a positive way, such as by praising her for being a successful entrepreneur even though she is a woman. Employees tend to mix the perceptions of the manager with their images of female role models, leading to mixed expectations on a female manager to be a director as well as a "mother". The workload of running a small business is not easy to combine with child and family care either. However, even if incomes are slightly lower, women entrepreneurs feel more in control and happy with their situation than if they worked as employees. Women entrepreneurs have been acknowledged as a significant source of economic growth. Women entrepreneurs create new jobs for themselves and others and bring different solutions to management, organizational and corporate problems to society. But they still represent a minority of all business owners. Female entrepreneurs often face gender-based barriers to starting and growing their commercial enterprises, like discriminatory property; matrimonial and inheritance laws, and/or cultural practices; lack of admission to formal finance mechanisms; limited mobility and access to information and networks, etc.

A women's entrepreneurship can make a particularly strong contribution to the economic welfare of the family and communities, poverty reduction and women's empowerment, therefore leading to the Millennium Development Goals (MDGs). Governments worldwide, as well as various development organizations, are actively promoting women entrepreneurs through a variety of programs, incentives and promotional measures. Women entrepreneurs in the four southern states and Maharashtra account for more than 50% of all small women-run industrial units in India.

6.11. Obstacles to Growing Firms

A specific issue for women entrepreneurs seems to be their inability to achieve growth, in particular sales growth. Another problem is that of finance and, as stated earlier, the entrepreneurial process depends somewhat on the initial conditions. In other words, as women often have a hard time assembling external resources, they pop out as less ambitious firms that can be financed to a larger degree by their own available resources. It also affects the company's future growth. Essentially, firms with more start-up resources have a greater chance of growth than firms with fewer resources. Resources consist of social position, human resources and financial resources. This initial allocation in the company is very important for its survival and above all for its growth.

A survey by the Kauffman Foundation of 570 high-tech firms started in 2004 showed that women-owned firms were more probable to be organized as sole proprietorships, both during their startup year and in the years to conform to. Women entrepreneurs were also significantly more likely to start their business outside their home and were less likely to have employees. This fact may serve as an indication that women either anticipated having smaller firms or were operating under resource constraints that did not permit them to launch firms requiring more assets, employees, or financial resources. This survey also found that women only raised 70% of the sum of money that men raised to set about their firms, which ultimately affected their ability to bring in new products and services or expand their occupation in terms of employees or geographic locations.

While many women entrepreneurs face barriers to growth, they remain in a position to achieve strong growth. In that location are exemplars of these both in a number of developing economies (Ethiopia, Tanzania, and Zambia) surveyed by

the ILO, as considerably as in more developed economic systems such as the United States.

6.12. Key Barriers to Women's Entrepreneurship

From the data available, this section outlines the common challenges facing women entrepreneurs in Asia and the Pacific. Where possible and relevant, subregional and national data points are used to illustrate larger regional trends and comparisons regarding the limited access to markets, finance, information, and relevant education and skills training, together with the impact of discriminatory laws and regulations, work environments that are unfriendly to women, and unpaid caring responsibilities.

It is important to emphasize how the roadblocks preventing women from achieving their entrepreneurial potential are rooted in societal norms and customary practices that dictate how much capital, time, and autonomy a woman will be able to devote to entrepreneurial activities. Social norms that place the interests of family and community ahead of individual advancement can negatively affect women's entrepreneurship. In South Asia, for instance, it is usual for adult females to stop undertaking paid work upon marriage, while in many Pacific Island nations, the social obligation to carry on the financial commitments of the extended family weighs heavily on women, sometimes pushing them to leave the work force. Any effort to break down barriers, which are described in more detail below, must also consider the underlying cultural norms of a residential neighborhood.

6.13. Limited Access to Markets

In rural areas where economic development is at a nascent stage, adult females are more probable to be used in the farming sector, including agricultural production at an informal stage to supplement subsistence livelihoods. Research shows that 37% of women around the world work in agriculture and 47% in services. In developing nations, women are underrepresented in the manufacturing sector; and that is the case in Asia and the Pacific, where women in manufacturing make up only 33% of the entire work force. However, as economies grow,

women have more entrepreneurial choices. For instance, while women in Vanuatu are concentrated in agricultural production, women in Bangladesh are frequently employed in the apparel industry. And in the Lao People's Democratic Republic (Lao PDR) and Viet Nam, women hold a strong presence across those countries' dynamic manufacturing sectors. The particular market to which a woman entrepreneur seeks access will depend upon her education, her family situation and the community of the economic system. Market access is key to progress for women entrepreneurs because it allows women who run MSMEs to earn more revenue and women who have established businesses to grow. But women typically face multiple challenges: lower confidence; limited access to technology; limited mobility (compared with their male counterparts); insufficient knowledge of line, including product differentiation and labeling; and special approach to networks, including those of large-scale purchasers. This section provides information on markets where women entrepreneurs sell goods and services.

7. CONCLUSION

This change is the result of a wide variety of economic and social factors, including economic growth, education and social norms. Looking more generally at improving women's access to quality employment, improving women's educational attainment beyond secondary education is an essential policy area. And mainly contemporary issues of women migrant entrepreneurs in Southeast Asia countries and current women entrepreneurship in Southeast Asia and its trends and negative factors for women migrant entrepreneurship in there are many problems.

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Developing a Framework for Productivity Measurement in Sri Lankan Public Sector; Insights from Literature

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ABSTRACT

Productivity is commonly defined as a ratio of a volume measure of output to a volume measure of input use. The definition of productivity as being concerned with the relationship between input and output does not cover issues that many people have in mind when they talk about public sector productivity. In many countries, public sector productivity has been assumed to be zero in the national accounts. But recently there have been several attempts to measure it. The aim of this paper is to develop a framework to measure public sector productivity in Sri Lanka. A range of earlier studies on productivity measurement have been critically examined and analyzed to identify a suitable approach. Productivity level vs. productivity change, disaggregated vs. aggregated approach, monetary measurement, Output index method, matrix method and scorecards are some of the methods presented in literature. The authors suggest to use an input output approach to measure productivity in Sri Lankan public sector which will include three basic steps; measuring inputs, measuring outputs and calculating productivity indices. However, there are number of challenges meet in the process including measuring outcomes, intangibility of services, not attributing prices for services, difficulty in including capital costs, managerial perceptions etc. Though cross- national assessments are difficult to carry out, it is recommended at least to measure national, sectoral, and organizational level productivity calculations in Sri Lanka. National Productivity secretariat which is backed by Asian Productivity Organization can operate and lead this task at

organizational level while Department of Census and Statistics could measure productivity at national level.

Keywords - *productivity measurement, public sector, Sri Lanka*

1. INTRODUCTION

According to the Organization for Economic Co-operation and Development (OECD), productivity is commonly defined as a ratio of a volume measure of output to a volume measure of input use, that is, outputs divided by inputs. Public sector productivity is as important to economic performance of a country as that of the private sector (Linna et al., 2009). The interest of developing public sector measurements include; broadening national measures to include public sector, assessing productivity trends in public sector, improving accountability of inputs used, providing feedback on policy initiatives etc. Changes in public sector productivity may have significant implications for the economy. However, within the public sector measuring productivity is a far more challenging task (Asian Productivity Organization, 2016). The literature suggests different approaches to measure public sector productivity. It has been done as comparative cross- national assessments, national and sectoral levels and organizational level. It can either be a top to bottom or bottom-up approach. Public sector in Sri Lanka is spread over a wider range of sectors and plays a

significant role in the economy. Other than the direct contribution to the national economy, public sector contributes indirectly by providing employment, raising capital for investment and controlling inflation through their subsidized services (Mahanama, 2016). However, productivity of public sector in Sri Lanka is frequently questioned through last decades. Efficiency and effectiveness of government service delivery are criticized by the general public often once they reach to offices to get their work done. As no other private authority cannot provide the compulsory services like national defence, issuing national identity cards, passports etc. general public has to depend on government irrespective of the productivity of the service delivered. Major criticism towards government services are inefficiency, ineffectiveness and corruption.

In addition to that Sri Lanka government has nearly 1.8 million servants employed in government sector in order to provide services. Salaries and wages for these employees' costs nearly 22 percent (750 billion rupees) of total government expenditure <<http://www.treasury.gov.lk/>>. Based on that reason too the productivity of government services is questioned. Therefore, it is of great importance to measure the productivity of public sector in Sri Lankan context. This study investigates how public sector productivity can be measured in Sri Lanka using the productivity measurement frameworks found from different countries highlighting the challenges meet in the process.

2. PRODUCTIVITY IN PUBLIC SECTOR

(Thornhill, D., 2006) identifies three main reasons for why public sector productivity is crucial. First, the public sector is a major employer. Second, the public sector is a major provider of services in the economy, particularly business services (affecting cost of inputs) and social services (affecting labour quality). Third, the public sector is a consumer of tax resources.

The definition of productivity as being concerned with the relationship between input and output does not cover issues that many people have in

mind when they talk about public sector productivity (Linna et al., 2009). In many countries, public sector productivity has been assumed to be zero in the national accounts. The output of the government sector has been measured as equal in value to the total value of inputs. This output input convention has increasingly come under scrutiny in recent years. The challenge is to devise alternative estimates based on output measurement in a public sector context – where collective services are provided and where there is, in most instances, no market transaction in services provided to individuals (Boyle, 2006).

3. METHODS, FRAMEWORKS AND APPROACHES IN MEASURING PUBLIC SECTOR PRODUCTIVITY

Many different methods have been presented in the literature to measure productivity in general. Productivity level vs. productivity change, disaggregated vs. aggregated approach, Monetary measurement, Output index method, Matrix method and scorecards are some of the methods or frameworks presented in literature. Though monetary measurement method seems potentially suitable in-service providing companies it is of no use for public organizations which do not have markets and prices in the same way as companies do (Jääskeläinen, n.d.). Output index method, matrix method and scorecards are commonly practiced methods in countries. (Rosen, E.D., 1993) has proposed a measurement method for better quantifying complex service outputs. Two aspects of output are distinguished: output quantity and output quality. Productivity matrix is a method in which a set of direct and indirect productivity measures are used to compose a single measurement result. Every measure has its own weight (0-100) in the calculations. Performance measurement systems, such as the Balanced Scorecard, were developed in the 1990s for strategic management purposes of companies (Kaplan, and Norton, 1992). They include different strategy-driven perspectives which all have their own objectives and measures.

Approaches in measuring productivity can be identified in different ways; scale on which

productivity is measured, using whether efficiency or effectiveness, whether it is a top down or a bottom up.

(Boyle, 2006) presents three aspects of productivity in an attempt to measure productivity in Irish public sector; comparative, cross-national assessments of public sector efficiency and performance; national and sectoral public sector productivity measurement initiatives; and a more micro-level examination of productivity measurement looking at organization-base. Same author describes cross national assessments and national or sectoral; assessments as top to bottom approaches and organization base as a bottom-up approach.

(Pritchard, 1995) distinguished three categories for definitions concerning productivity:

- 1) The techno-economic approach- productivity as an efficiency measure (Output/input)
- 2) Productivity as a combination of efficiency and effectiveness
- 3) A wide approach that contains everything that makes an organization function better

One of the important arguments in public sector productivity measurement is on efficiency (output) and effectiveness (outcome). A more general interpretation of productivity encompasses broader concerns about the outcomes achieved by the public sector. In common parlance, many people talking about public sector productivity have in mind the general question of what value they receive from public services in return for the utilization of public funds (Linna et al., 2009). (Putnam, R.D., 1993) rejects the idea of including outcomes in productivity measurement. His argument is that to focus on outcomes (changes in health rather than patients treated; changes in educational status rather than numbers of lessons taught) includes changes over which the government has no control.

(Dunleavy, 2016) presents five essential steps in measuring productivity in the public sector; Identify the 'core' outputs or activities of the agency, develop unit costs or activity accounting for core outputs, develop a cost-weighted total output metric for each agency, Develop an

accurate total inputs cost number for the agency, Divide total outputs by total inputs to give a total factor productivity (TFP) number for the organization and Decide on a strategy for controlling quality issues.

However, public sectors have different characteristics in different countries. Therefore, a method, framework or approach used in one country will not be utilized for another country straightforward. Instead, alterations and amendments at required occasions will work.

4. CHALLENGES IN MEASURING PUBLIC SECTOR PRODUCTIVITY

Many challenges in the measurement of public service productivity have been identified. For example, the intangible nature of services and the complexity of service outputs have been regarded as key reasons for the lack of appropriate productivity measures (Jääskeläinen, n.d.). There are challenges in measurement, both of inputs and outputs. Inputs are made up of three elements: labor, procurement of goods and services and capital consumption (Atkinson, 2005). Measurement of each of these elements may pose particular challenges in practice. For example, with regard to labour, should number of hours worked (differentiated by skill) be used instead of the number of people employed? (Boyle, 2006). A further challenge with regard to output measurement for productivity purposes is how to incorporate changes in the quality of outputs (Boyle, 2006). Another challenge is that Public-sector goods and services mostly do not have prices, or their prices are not a good indicator of value. For example, a public-school education is usually provided free of charge. Consequently, we have to look to other ways to incorporate value and quality in public-sector output measures and to add together the outputs of different goods and services.

Yet another challenge with regard to measurement relates to possible time lags between the inputs and outputs. Money spent on public sector inputs may not have an impact in terms of improved outputs for some time (in some cases years) after the initial expenditure.

(Ammons, D., n.d.) points out that many government managers are inclined to focus on their department's activities or workload – its outputs, rather than on the bigger picture of whether their efforts lead to positive changes in the lives of citizens or produce other results they were designed to bring about (Linna et al., 2009).

5. DEVELOPING A FRAMEWORK FOR SRI LANKA

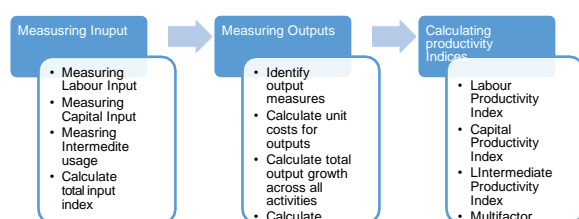


Figure 1. Framework for Measuring Public Sector Productivity in Sri Lanka

In the context of Sri Lanka being a rapidly developing middle income country, adopting continuous changes through policy reforms is essential to improve efficiency and productivity, explore new potentials and sustain a high growth in the economy, in a highly competitive global economic environment (Mahanama, 2016). Productivity promotion in Sri Lanka was emphasized in 1966, after Sri Lanka got the membership of Asian Productivity Organization. However, there are very few evidence in literature measuring public sector productivity so far, the only study found is (Mahanama, 2016) in which he has done a public sector productivity measurement in two of the public sector departments; Inland revenue and Immigration and emigration by analyzing total factor productivity, revenue to expenditure ratio, number of full-time equivalent staff, and labor productivity. In this paper authors are trying to introduce a framework using inputs and outputs to estimate public sector productivity in Sri Lanka. The authors follow Asian Productivity Organization's guidelines in building the following framework and steps (Figure 1).

5.1. Measuring Inputs

Labor should be measured in terms of hours worked or full- time equivalents, if possible. Capital input is often hard to obtain. Consumption of fixed capital or depreciation are reasonably sound measures. If they are not available, a direct measure of the scale of capital, such as number of classrooms or number of hospital beds, can be a good option. Expenditures on intermediates are usually available from financial records. These need to be adjusted for inflation by using a price deflator.

5.2. Measuring Output

Public sector organizations involve different activities producing several different outputs, but not all of them are used here. Most important activities that have the greatest effect on desired outcomes should be identified and prioritized. This assessment can be done considering the organization's objectives to improve broad economic social and environmental outcomes. The identified activities should have relatively large differences in unit costs between activities, but small differences in unit costs within an activity grouping. Next it should be decided how the output is going to be measured, a simple count measure is normally used but there may be options in a count sometimes (ex –Hospital: no pf patients treated or no of patient days). The next step is to calculate the unit costs for each output. Unit costs are calculated by dividing the total cost to produce by the number produced. The outputs of individual service activities cannot be simply added together, because the activities and their outputs are different. Cost shares of the different activities in total agency costs are used as weights to calculate the growth in total outputs as the weighted sum of growth in outputs of individual activities.

5.3. Calculating Productivity Indices

Productivity indices are readily calculated as the ratio of the output index to the input index (multiplied by 100), where the input index can be labor, capital, intermediates or combined inputs. These generate labor, capital, intermediates and multifactor productivity respectively. Where

possible, it is best to rely on an MFP measure, as this will deal with the situation in which there has been a switch in input use. A switch from in-house to contracting out (intermediate use) is common. A labor productivity measure will give a spurious indication of efficiency in these circumstances whereas an MFP measure will indicate efficiency based on use of all three inputs. Capital data is the most likely to be unavailable. In this case, it is still worth proceeding with a multifactor productivity estimate based on the two inputs of labor and intermediates. This will deal with a switch to contracting out.

5.4. Dealing with Quality and How Outcomes are measured

Quality indicators must be viewed alongside productivity measures, rather than be used to explicitly boost or discount productivity measures. We want to know whether productivity results have been achieved while quality has improved or deteriorated and by a little or a lot. There are two types of quality indicators:

1. Output standards reflect the standards of service an agency provides and for which it can be held accountable.
2. Outcome indicators reflect the community objectives that the agency's outputs are targeted at, but, since they are subject to other external influences, the agency is not responsible for all changes.

Outputs can become more effective and so have a greater effect on outcomes. These are changes in the quality of outputs that should rightly be considered as part of output growth. To illustrate a quality change, take longer life expectancy as a desired outcome. Let us say that, as a result of changes in technology, the life expectancy (the outcome) from a hospital treatment (the output) increases by 2 years on average. That 2-year increase is a quality improvement. Indicators of desired outcomes (such as improved life expectancy in this case) should be monitored for changes that can be linked to improvements in the quality of outputs. Outcomes need to be

monitored for changes in the effectiveness of outputs. Outcome effects are one form of quality change. The key outcomes to monitor are determined by community and government objectives. However, in monitoring outcomes, the influence of factors other than the public-sector outputs also needs to be considered.

6. CONCLUSION AND RECOMMENDATIONS

Measuring productivity in public sector is quite different from measuring productivity in any private sector service providing organization. There are different approaches to measure productivity in public sector and a country should choose a method without altering the basics. After analyzing literature, the authors suggest to use an input output approach to measure productivity in Sri Lankan public sector which will not focus on outcomes in the primary calculations. This approach includes three basic steps: measuring inputs, measuring outputs and calculating productivity indices. However, there are number of challenges meet in the process including intangibility of services, not attributing prices for services, difficulty in including capital costs, managerial perceptions etc. Though cross-national assessments are difficult to carry out, it is recommended at least to measure national, sectoral and organizational level productivity calculations. National Productivity secretariat which is backed by Asian Productivity Organization can operate and lead this task at organizational level while department of census and statistics could measure productivity at national level. However, it is essential to give a comprehensive training to the officers who carry out this task. Further research could be applied in examination on overcoming challenges like identification of outputs.

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Effectiveness of Online Assessments in the Perspective of NSBM Green University Town, Sri Lanka

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ABSTRACT

With the Covid-19 outbreak, the physical learning experience that students got in a traditional class room transformed to virtual platform. Since education providers had to conduct academic activities to meet the timelines irrespective of the pandemic, universities implemented student evaluation also using online platforms. A key issue that arose with online assessments is whether online assessment methodology is effective as physical evaluation procedures used to be. When analyzing literature published in this area, it was understood that the outcome gained from studies varied based on the study context. Therefore, it was a timely requirement for the NSBM Green University to analyze whether the online assessments conducted by them due to the pandemic are effective in evaluating student performance. Hence this study was conducted to analyze effectiveness of online assessments under two sub areas as student's perception in online assessments and student performance in online vs physical examinations. Primary data was collected via questionnaires to analyze student perception while marks that student have scored in physical vs online examinations are used as secondary data in the analysis of student performance. As a result of the analysis, it was understood that students prefer online assessments to physical examinations and performance-wise there is a difference between student marks for well performing students that belong to A category while there is no difference in student marks for B and C categories.

Keywords – Covid-19, online assessment, physical assessment

1. INTRODUCTION

Covid-19 outbreak emerged as a pandemic in Sri Lanka in March 2020 and thereafter the government of Sri Lanka executed a variety of preventive measures such as social distancing via closure of schools and higher educational education institutes, introducing work from home model to reduce the public gathering, introducing travel bans and furthermore, at times imposed the island wide curfew and police division curfew. Currently there are 62,445 total confirmed Covid-19 positive cases in Sri Lanka and 6742 out of them are active ones (Health Promotion Bureau, 2020).

Due to the Covid-19 outbreak a shift in mode of education happened in higher education sector of Sri Lanka. The physical lectures conducted in a class room/ lecture hall environment is transformed into the online platform. But online lectures are not a brand-new concept that students are unfamiliar with. It has been there as a practice in minor scale in combination with physical lectures for some time. But the use of online platforms for assessment purposes were rarely used due to many issues related to reliability (Khan & Jawaaid, 2020). Yet, with the uncertainties arisen due to Covid-19 pandemic

all over the world, it is evident that educational institutes have no option but to keep on doing their learning and assessment activities as planned using alternative modes of communication. At the same time, the University Grants Commission of Sri Lanka has thought of conducting examinations of state universities in an online basis (Hiru News, 2020). In this regard, a significant issue gets highlighted as to whether conducting online assessments for analyzing student's performance is effective as same as the traditional physical assessment mode that education institutes used to conduct for years. When going through the published literature to analyze this situation elaborated above, it was identified that even though there are ample number of published studies related to identifying the effectiveness of online education, only a few researches were concerned on the research gap of identifying the effectiveness of online assessments. Majority of such studies have not considered the sudden shift to online platforms for student assessment due to Covid-19 pandemic. Furthermore, an empirical research gap was identified in studies done to analyze the effectiveness of online assessment for the context of Sri Lankan Higher Education Sector.

Therefore, the key objective of this study is to fill the above elaborated empirical research gap which is to analyze the effectiveness of shifting from a physical assessment methodology to an online based methodology in the perspective of students as well as from the point of view of the educational institute. Since the study scope is for Sri Lankan higher education sector, the study was done concerning one major higher education provider in Sri Lanka who has already conducted end of semester examinations in online basis, The National School of Business Management Green University Town, Homagama.

The remainder of the paper is organized as follows; literature review, data analysis, and closure of the paper by offering conclusions and an attempt to provide some perspectives on future research.

2. LITERATURE REVIEW

Literature Review was conducted based on papers published in the domain of higher education, online vs physical learning experience and online/physical assessment mode analysis. The findings are as follows.

A study was conducted by Neuhauser (2010) to determine if there were significant differences in learning outcomes between two ways of teaching Principles of Management undergraduate course, one taught asynchronously online and one taught using traditional format of Face-To-Face. The study has found that learning preference and type had little or no impact on final grades because of the insignificant differences of the two groups between grades and learning preferences, and low or nonexistent correlation between learning types and grades.

Similarly, student performance was compared in online and face-to-face classes in terms of interaction and efficacy in a public administration class, taught by the same instructor at the California State University-San Bernardino. After analyzing the grades of online and face-to-face results of students, this paper provides evidence that student performance as measured by grade is independent of the mode of instruction, even though the fail rate of online class students was insignificantly higher than that of face-to-face students (Ni, 2018).

A study was conducted by Wang (2014) to develop an assessment-centered e-Learning system in an elementary school Mathematics course. It was found that compared to the e-Learning models without personalized dynamic assessment, e-Learning models with personalized dynamic assessment are significantly more effective in facilitating student learning achievement and improvement of misconceptions.

Student perceptions of the effectiveness of different types of formative assessment used in online learning environments were investigated where students positively perceived graded online discussions and peer-assessed assignments compared to other types of formative assessments. Students perceived that Computer Marked Assignments provide them

with more immediate feedback than Peer Assessed Assignments and Teacher Marked Assignments. The paper concludes saying the practitioners in eLearning to use formative assessment and feed-back mechanisms more effectively to aid undergraduates to improve student confidence (Ogange et al., 2018).

Turner & Briggs (2018) investigated assessment effectiveness in terms of student satisfaction, pass rate and level of pass rate. Students were largely very positive about the use of ongoing assessment across all of the modules and they preferred coursework-based assessment over examinations. Findings suggests that, students may perform slightly better overall in modules which use an EMA (End of Module Assessment), rather than an examination. The study concludes identifying a research gap to compare the outcomes from distance learning and more conventional university modules (i.e. those taught primarily through face-to-face lectures and classes) as a means of establishing the degree to which method of delivery of teaching impacts on performance and satisfaction outcomes.

A study was conducted by Woit & Mason (2003) to assess the effectiveness of online assessment of student programming abilities for introductory programming courses in Computer Science. Results of the study shows that both the instructors and students believe that the online tests hold students to a higher standard and motivate them to strive to achieve a higher level of practical competency. Thus, both students and faculty benefit when online evaluations are implemented appropriately.

According to Buttner & Black (2014), implementation of the online learning system improved student test performance and suggest the online learning system is an effective strategy for enhancing student learning and test performance. The study further indicates that the computer-scored assignments make it possible to enhance student learning without imposing significant time commitments in grading and record-keeping for faculty.

The findings of the study by Vonderwell et al. (2007) suggest that asynchronous online discussions facilitate a multidimensional process

of assessment demonstrated in the aspects of structure, self-regulatory activities, learner autonomy, learning community and student writing skills. It also indicated that structure of an online discussion is essential for successful learning and assessment.

The study (Ni, 2018) has compared and contrasted the grade distribution in the case study done for online vs face to face learning environment. As results it was identified that the failure rate is comparatively higher in online classes even though both classes are done by the same lecture panel, with the same course content and same assignments. According to the data analysis, 8% of students fail in online class as compared to 3% in face-to-face class in general.

A study has been conducted by Adnan & Anwar (2020) to analyze the effectiveness of online education with Covid-19 outbreak in the study context of Pakistan, an underdeveloped country in the world. Based on the findings of the study it was identified that the lack of on-campus socialization has caused difficulties for students to do group assignments in distance learning mode. But the study has stressed on the fact that a vast majority of students in the study context has difficulties in accessing the internet due to technical and financial concerns.

In the paper by Soffer & Nachmias (2018), effectiveness of 3 online courses were compared with the same 3 courses in a physical lecture format, which had the same characteristics (the same instructor and final exam content and place). A significant importance was given to the assessment aspect of teaching and it was found out that students' grades were higher, in general, in the online courses compared to the face-to-face courses. At the same time, it was identified that students have given favorable comments for online education.

As identified by Miller (2009), a self-regulated learning environment was created using computer aided assessment framework for the study context of a bachelor's degree. As findings of this study, it was identified that even though students had very positive feedback regarding the first survey done on the feasibility of computer aided assessments, in latter surveys it was

uncovered that more moderations needed to be done to the computer aided assessment in student's point of view in order for the studies to be more effective.

Therefore, when comparing the published literature, it is evident that contrasting ideas are generated as conclusions based on different case contexts regarding the effectiveness of online assessment. Furthermore, the number of papers that have considered Covid-19 out-break as a condition is assessing the effectiveness of online assessment is very low. Considering these factors, it can be considered that there exists a void in literature that have concerned about the effectiveness of online assessment in Covid-19 outbreak in the study context of Sri Lanka.

3. METHODOLOGY

The present study was aimed at understanding the effectiveness of online assessments faced by undergraduates. Accordingly, the quantitative research design was employed where, primary data were collected to assess the student perception on the effectiveness of online assessments, and secondary data were collected to compare and evaluate the marks of the assessments conducted via online platforms in 2020 due to the Covid-19 pandemic situation, and held physically in 2019, in NSBM Green University.

In order to identify the student perception on the effectiveness of online assessments, a structured online questionnaire was employed to collect primary data from 1493 undergraduates of the two selected faculties; Faculty of Business Management and Faculty of Computing, who used online platforms to conduct the assessments.

In order to assess the effectiveness of online assessments, the study covered secondary data from six common modules of the above two faculties, who used online platforms to conduct the assessments in 2020 and held assessments physically in 2019 for the selected six modules. SPSS data analyzing tool was used to analyze the collected data and the below hypotheses were

developed in order to achieve the objectives of the study.

H₀: There is no significant difference in effectiveness between online assessments and on-campus assessments.

H₁: There is a significant difference in effectiveness between online assessments and on-campus assessments.

4. ANALYSIS

The analysis was conducted considering the student performance in online vs physical examinations and student perception in conducting examinations and assessments online.

4.1. Analysis of Student Perception in Online Assessments

5% of the students have stated that they strongly agree with the absence of technical problems in online platforms and 36% of the students have mentioned they agree with the statement. However, 33% of the students have rated it neutral while, 19% and 5% of students have disagreed and strongly disagreed respectively for the statement. Accordingly, it could be concluded that, although majority of the students were satisfied with online platforms due to absence of technical problems, a considerable number of students have been identified who have rated for the availability of technical problems in online platforms.

Table 1. Student Perception on Online Assessments

Question	Strongly Disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)
Most of the times there are no technical problems in online platforms	5	19	33	36	7
I prefer online assignments to hard copy submissions (Eg : Reports)	4	10	23	42	21
I prefer online quizzes to in campus exams (Eg : mid exams)	7	9	19	42	23
I prefer online presentations to in campus presentations	10	18	27	31	14
I prefer online end semester examinations to in campus end semester examinations	13	12	21	31	23

21% of the students have stated that they strongly prefer online assignments than hard copy submissions and 42% of the students have mentioned they prefer online assignments than

hard copy submissions. However, 23% of the students have rated it neutral while, 10% of students have not preferred online assignments and 4% have strongly disagreed for online assignments than hard copy submissions. Therefore, it could be concluded that, majority of the students prefer online assignments than hard copy submissions.

23% of the students have stated that they strongly prefer online quizzes than in campus exams and 42% of the students have mentioned they prefer online quizzes to in campus exams. However, 19% of the students have rated it neutral while, 9% of students have not preferred online quizzes and 7% have strongly disagreed for online quizzes to in campus exams. Accordingly, it could be concluded that, majority of the students prefer online quizzes than in campus exams.

14% of the students have stated that they strongly prefer online presentations than in campus presentations and 31% of the students have mentioned they prefer online presentations than in campus presentations. However, 27% of the students have rated it neutral while, 18% of students have not preferred online presentations and 9% have strongly disagreed for online presentations than in campus presentations. Accordingly, it could be identified that a considerable number of students do not prefer online presentations than in campus presentations.

23% of the students have stated that they strongly prefer online end semester examinations than in campus end semester examinations and 31% of the students have mentioned that they prefer online end semester examinations than in campus end semester examinations. However, 21% of the students have rated it neutral while, 12% of students have not preferred online end semester examinations and 13% have strongly disagreed for online end semester examinations than campus end semester examinations. Therefore, it could be concluded that, majority of the students have preferred online end semester examinations than campus end semester examinations. The figures are elaborated in table 1 below.

4.2. Analysis of Student Performance in Online Assessments

The analysis with regard to the point of view of the university was conducted considering the student performance in end of semester examinations. Educational systems typically employ classical methods of performance evaluation such as on exam results and is evaluated only as success or failure (Gokmen et al., 2010). So, for this analysis the same technique is utilized.

For the analysis, secondary data was gathered from the department of examination, NSBM Green University Town. The data was collected with respective to two faculties: School of Business and School of Computing who have conducted online examinations. The modules considered for the analysis are common modules for the undergraduate degree programs.

The appendix 1 provides an in detailed description of grade wise breakdown of results with respective to the course modules. When comparing the failure rates of respective modules, a significant observation made is the drastic reduction of failure rates of online examinations when compared with the physical examinations. In four modules where the failure rate is more than 10% in physical examination conditions, has reduced to less than 5% in online context. The only exception has occurred in one module, where the failure rate of online examinations has increased by 1% when compared with the physical examinations.

This observation is quite contradictory to some conclusions derived at studies regarding online assessments. It disagrees with the findings of (McLaren, 2004; Ni, 2018), that the online classroom experiences a higher dropout rate as compared to face-to-face classroom for the study context of the NSBM Green University.

A further analysis of student performance is carried out by using the independent two sample T test since the above failure rate analysis does not give a in depth understanding as to how student grades have varied based on the platform of assessment. This test is used to determine if a difference exists between the means of two independent groups on a continuous dependent

variable. According to the study context dependent variable is the mark students got and the two independent variables are online platform and physical platform for examination. The pass grade categorization considered for the study is A category, B category and C category while the platforms of assessment considered are online vs physical.

4.2.1. Variation of Grades of A Category - Online vs Physical Assessment Marks

The A category refers to the grades of A Plus, A and A minor. The independent two sample T test was conducted using SPSS software and as results it was identified that the no of results in A category was very much high in online context with a mean of 40.9 than physical context (mean = 5.08).

4.2.2. Variation of Grades of B Category - Online vs Physical Assessment Marks

The B category refers to the grades of B Plus, B and B minor. The independent two sample T test was conducted using SPSS software as above for this category as well. It was identified that the no of results in B category was very much high in online context with a mean of 46.28 than physical context which has a mean of 29.61.

4.2.3. Variation of Grades of C Category - Online vs Physical Assessment Marks

The grades considered under C category are the pass grades of C plus and C. According to the independent two sample T test results done for this category, it was identified that the C category has behaved in a different manner to the previous categories. The physical results of C category were higher with a mean of 21.33 while the online category remained with a mean of 20.83.

The above elaborated details are summarized in table 4 below.

Table 4. Results of Independent Two Sample T Test

		Mean
A Category	Online	40.9
	Physical	5.08
B Category	Online	46.28
	Physical	29.61
C Category	Online	20.83
	Physical	21.33

To further analyze whether the preference for online and physical assessments significantly differ for each category, hypothesis testing for two means is done for category A, B and C using SPSS.

Table 2. Hypothesis Testing Results for the Category A

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
A_Category	Equal variances assumed	15.565	.000	2.581	31	.015
	Equal variances not assumed			3.410	20.959	.003

Table 3. Hypothesis Testing Results Generated for the Category B

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
B_Category	Equal variances assumed	2.261	.142	1.225	34	.229
	Equal variances not assumed			1.225	30.532	.230

Table 5. Hypothesis Testing Results Generated for the Category C

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
C_Category	Equal variances assumed	.006	.941	-.045	22	.964
	Equal variances not assumed			-.045	21.476	.964

5. DISCUSSION

When considering the student perception, we can see higher percentage of students prefer online platforms for their assessments than the physical assessments for all the methods such as, assignments, quizzes, presentations and year end examinations. The preference for online

platforms is calculated as the addition of both strongly agree and agree percentages.

When it comes to the students' performance in online and physical assessments, we have to discuss all three categories A, B and C separately.

The SPSS results generated for the category A with 95% confidence level, shows that the P value is less than 0.05 (0.015 and 0.003) which means we can reject the null hypothesis with 5% significance. So, we can reject the idea that there is no significant difference in effectiveness between online assessments and on-campus assessments of the students who got A plus, A or A minus *or* we can say the effectiveness of online assessments and on-campus assessments are significantly different for the students who get high marks. This is further proven by the generated test statistics 2.581 and 3.410 which falls in the rejection area above 1.96.

The SPSS results generated for the group B with 95% confidence level, shows that the P value is greater than 0.05 (0.229 and 0.230) which means we fail to reject the null hypothesis with 5% significance. So, we do not reject the idea that there is no significant difference in effectiveness between online assessments and on-campus assessments of the students who got B plus, B or B minus *or* we can say the effectiveness of online assessments and on-campus assessments are not different for the students who get average marks. This is further proven by the generated test statistics 1.225 and 1.225 which falls in the acceptance area below 1.96.

The SPSS results generated for the group C with 95% confidence level, shows that the P value is greater than 0.05 (0.964 and 0.964) which means we fail to reject the null hypothesis with 5% significance. So, we do not reject the idea that there is no significant difference in effectiveness between online assessments and on-campus assessments of the students who got C plus, C or C minus *or* we can say the effectiveness of online assessments and on-campus assessments are not different for the students who get lower marks. This is further proven by the generated test statistics 0.045 and 0.045 which falls in the acceptance area below 1.96.

6. CONCLUSION

Based on the study, it was understood that student's preference was into online assessments rather than physical assessments. Based on secondary data on student performance, it was further understood that there is a difference in student performance in online vs physical examinations in well-performing (A category) category. Therefore, the future researchers are encouraged to study on the factors that have affected this outcome. Since the study is limited to the context of NSBM Green University, future researchers are encouraged to generalize the study to a greater population.

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APPENDIX

Grade	Online						Physical					
	Operations Management	Marketing Management	Macro Economics	Operating Systems	Statistics for Computing	Software Architecture	Operations Management	Marketing Management	Macro Economics	Operating Systems	Statistics for Computing	Software Architecture
F	4	3	0	0	1	0	7	7	9	1	3	1
D	3	2	1	0	2	0	0	3	4	1	1	0
D+	3	1	2	0	2	0	2	5	5	1	4	1
C-	13	1	0	0	2	0	6	13	6	4	0	6
C	47	9	22	0	4	0	27	77	13	2	16	0
C+	100	24	31	2	11	0	41	57	10	1	9	3
B-	124	61	37	1	12	2	65	88	21	3	2	2
B	107	100	33	3	19	5	63	77	17	2	7	3
B+	100	140	45	3	34	7	80	71	19	3	7	3
A-	54	146	38	7	29	2	75	66	14	2	9	2
A	66	136	41	7	68	4	133	64	29	2	12	0
A+	2	0	7	0	9	1	34	5	14	0	1	0
Absent	49	49	16	1	6	1	44	44	7	0	3	1
Student Count	672	672	273	24	199	22	577	577	168	22	76	22
Pass Rate	96%	99%	99%	100%	96%	100%	97%	95%	85%	68%	89%	62%
Fail Rate	4%	1%	1%	0%	4%	0%	3%	5%	15%	32%	11%	38%

Table 1 - Grades Comparison Between Online and Face-to-Face Cla

Emotional Reduction Techniques to Empower Rural Community: A Case Study of Farmers in Anuradhapura and Polonnaruwa

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ABSTRACT

In Sri Lanka, many farmers are operating in small scale farming and often face many socioeconomical challenges. Most of these rural farmers suffer from poverty and therefore with negative emotions. When these negative emotions are rooted it adversely affect to their daily life as well as work life. In psychology these negative emotions are examined using emotional reduction therapy. This study was conducted before COVID-19 pandemic, however, has similar effects during the pandemic too, as many people are surrounded with negative emotions. This research paper is aimed at examining the factors of farmers' empowerment and the resultant productivity of their work life. Its further analyze whether the negative emotions of farmers two methods were used as, Neuro linguistic Programming (NLP) and Emotion Reduction Therapy (ERT). The main objective of this study is to examine the impact of controlled negative towards farmers empowerment considering a sample of 30 families in Anuradhapura and Polonnaruwa Districts. A longitudinal study was conducted with support of trained mobilizer for a period of 12 months. The results reveled that after being treated with 'intervention techniques' carefully out of 30 families, 23 (77%) had a positive change in the lifestyle and work life and out of them, 14 had an improvement in their income. The study concluded that emotional reduction methods

are effective when continuously practiced and can influence the empowerment.

Keywords - emotional reduction method, empowerment, negative emotions.

1. INTRODUCTION

Counselling professionals and researchers who work with farmers of rural areas in Sri Lanka have noted that emotional issues of farmers have a significant input on overall productivity of their work life. The recent COVID-19 pandemic hit the rural farmers significantly and they were unable to sell their harvest on time due to lock down. The economic situation of these rural farmers is not satisfactory, and the situation has aggregated the negative impact. When fear and uncertainty dominate their emotions, these farmers feel depressed and that will result on their behavior. Many violent acts and suicides were recorded during the pandemic and most of these cases of violence have been reported against women and children (ipsnews.net, 2020). These negative emotions can be studied using Neuro Linguistics Programme (NLP) techniques. Even though the study period for this paper is before the pandemic it is planned to extend to the pandemic situation as well.

1.1. Emotion and Human Behavior

Emotion is defined as a complex reaction pattern, involving experiential, behavioral, and physiological elements, by which an individual attempt to deal with a personally significant matter or event. The specific quality of the emotion (e.g., fear, shame) is determined by the specific significance of the event. For example, if the significance involves threat, fear is likely to be generated; if the significance involves disapproval from another, shame is likely to be generated. Emotion typically involves feeling but differs from feeling having an overt or implicit engagement with the world. (Hastings & Taunt, 2002)

1.2. Emotion-Focused Coping

A stress-management strategy in which a person focuses on regulating his or her negative emotional reactions to a stressor. Rather than taking actions to change the stressor itself, the individual tries to control feelings using a variety of cognitive and behavioral tools, including meditation and other relaxation techniques, prayer, positive reframing, wishful thinking and other avoidance techniques, self-blame, seeking social support (or conversely engaging in social withdrawal), and talking with others (including mental health care professionals). It has been proposed that emotion-focused coping is used primarily when a person appraises a stressor as beyond his or her capacity to change. Compare problem-focused coping. [identified in 1984 by Richard S. Lazarus and Susan Folkman (1938–), U.S. psychologists].

1.3. Emotion-Focused Therapy (EFT)

An integrative individual therapy that focuses on emotion as the key determinant of personality development and of psychotherapeutic change. In sessions, the therapist helps the client to become aware of, accept, make sense of, and regulate emotions as a way of resolving problems and promoting growth. Techniques are drawn from client-centered therapy, gestalt therapy, and cognitive behavior therapy. A principal proponent of this approach is South African-born Canadian psychologist Leslie S. Greenberg (1945).

1.4. Emotional Disturbance

A fear, anxiety, or other emotionally based condition that results in maladaptive behavior—ranging from withdrawal and isolation to acting out and aggression—and adversely affects an individual's academic and social functioning. Children with a longstanding condition that meets specified criteria, such as the inability to form satisfactory relationships with peers and teachers, are considered to have a serious emotional disturbance (SED) that constitutes a disability under the Individuals with Disabilities Education Act.

1.5. Negative and Positive Emotions

An unpleasant, often disruptive, emotional reaction designed to express a negative effect. Negative emotion is not conducive to progress toward obtaining one's goals. Examples are anger, envy, sadness, and fear. Compare positive emotions. An emotional reaction designed to express a positive effect, such as happiness when one attains a goal, relief when a danger has been avoided, or contentment when one is satisfied with the present situation. Compare negative emotion (Cunningham, 1999).

2. FAMILY EMPOWERMENT AND INTERVENTION TECHNIQUES

Discussions of empowerment indicate that it can exist at three main levels (Landry-Meyer et al., 2005). At the broadest level, community empowerment reflects actions taken by a group of people to improve life in a community. Organizational empowerment involves processes and structures designed to enhance goal-directed actions by members of an organization. At the individual level of analysis, psychological empowerment requires an understanding of the sociopolitical environment, which includes knowledge of the laws and an appreciation of one's rights and responsibilities. It also incorporates beliefs regarding competency to act and understand. These beliefs encompass concepts of self-efficacy, locus of control, and self-esteem. Finally, empowerment involves an effort to exert control over one's environment, through proactive action or advocacy. Empowerment research with families focuses on

perceiving families as active agents while interacting with the larger community.

Empowerment theory states that empowerment can be viewed both as a process, incorporating actions, activities, or structures, and as an outcome, suggestive of an achieved level of empowerment (Chadiha et al., 2004). At the individual level, empowering processes include both giving and receiving help in a mutual process focusing on gaining control over one's life (Gutierrez & Lewis, 1999). The process of empowerment, incorporating the ways by which empowerment can occur, is difficult to assess due to its dynamic nature and is most often studied using qualitative methods. Empowerment outcomes, which are more easily measured, include intrapersonal, interactional, and behavioral components (Koren et al, 1992). The intrapersonal component is conceptualized as the individual's set of (Dodwell, 1995) beliefs about their control, self-efficacy, and perceived competence. The interactional component incorporates the individual's relationship to their social environment. Finally, the behavioral component focuses on a person's actions taken to exert some control over the environment. Each of these components can be measured in a study of parental empowerment.

2.1. Intervention Techniques

The techniques were used in the Family Empowerment Program by the mobilizers and it was emphasized at these demonstrations that these techniques do not deal with changing memories but deals with emotions attached to the memories. Empowering a person, is a process of gradual erasing, one by one, these accumulated emotion circuits deeply hidden inside one's unconscious. How does one erase these circuits? One must first understand how these hidden emotion circuits when reactivated by a similar bad situation, re-create bad feelings, thereby disempower.

In the first method of intervention used in this program, a technique to disrupt these signals from the brain to the body is used. When a person is angry, or when a past anger is being recalled in a person, if certain points in the head and neck are gently tapped at a low frequency in a

particular manner, this tends to send a clashing signal to the brain. Brain as activated by the emotion circuit is sending a high frequency whereas the physical tapping is stimulating a contrasting low frequency. The casualty in this situation is the emotion circuit. Repeated stimulation of this process has been found to dissolve off the emotion circuit completely. This first method of intervention can be called a "mind-disruption" technique.

The second way of how an emotion circuit activate, is by producing bio-chemicals or what are called neurotransmitters. The first method, which is based on signals, will send the message of anger, fear, frustration, etc. to the body organs. When a person is angry for example, it is not just the body organs that know that you are angry, every cell in the person gets the message of anger. But there are no neurons (or nerves) from the brain to every cell of you, so there is no way the cells can get the frequency change signal. It is the bio-chemicals that do the work of informing every cell that you are experiencing a feeling.

2.1.1. Emotionally Focused Therapy (EFT)

Emotionally Focused Therapy (EFT) is a short-term form of therapy that focuses on adult relationships and attachment/bonding. The therapist and clients look at patterns in the relationship and take steps to create a secure bond and develop trust to move the relationship towards a healthier, more positive direction. Couples and families in distress can benefit from EFT and learn to improve their relationships. Often, clients are dealing with anger, fear, loss of trust, or sense of betrayal in their relationship. EFT has also been proven effective for couples who are having trouble coping with their own illness or that of a child. EFT focuses on the present time to makes changes in the here and now. There are three stages of EFT. The first is to de-escalate the couple's or family member's negative cycle of interactions and help them see and understand what is happening in their relationship. Clients come to see that the problems lie in insecurities and distance. The next stage is to restructure interactions, wherein the therapist helps clients discuss their fears in

the relationship, using language that does not push the other away. Clients learn to turn toward each other and discuss their needs and they become more open and responsive to each other. Consolidation is the third stage of EFT, wherein the therapist helps clients see how they got into negative patterns and points out how they were able to change those patterns and continue these types of conversations in the future.

2.1.2. Neuro-Linguistic Programming (NLP)

NLP is the acronym for 'Neuro Linguistic Programming'. It was founded by Richard Bandler and John Grinder in the 70s, modelling it after other therapies. In short, NLP is used to understand how people organize their thinking, feeling, language, and behavior to create the results and outcomes in their life that they do. In fact, it is frequently called the 'user manual for your mind', as studying NLP gives you an insight into how thinking patterns can affect every aspect of our lives. There are quite a few definitions of what NLP is, but the co-creators defined it as:

"NLP is an attitude which is an insatiable curiosity about human beings with a methodology that leaves behind it a trail of techniques." Richard Bandler (co-creator of NLP)

"The strategies, tools and techniques of NLP represent an opportunity unlike any other for the exploration of human functioning, or more precisely, that rare and valuable subset of human functioning known as genius." John Grinder (co-creator of NLP).

3. METHODOLOGY

A longitudinal study was carried out Anuradhapura and Polonnaruwa districts in Sri Lanka during May to June in 2019. The sample was selected with the help of Grama Niladari of each division and the selection consisted of 30 families for the final research. In the first stage mobilizers were used to practice and supervise the two relaxation methods. A survey questionnaire was completed before starting the relaxational methods and mobilizers have observed their progress during these two months.

There were two emotional reduced techniques used by the mobilizers in both districts named, 'touching stress points' and 'open heart'. 53.33% families followed the first method known as touching stress points while 46.66% of them were using second method called open heart. Mobilizers said that most beneficiaries practiced these two methods as they have felt it affected positively and it was more comfortable for them. As a result, mobilizers have continued those two methods for convenience of beneficiaries without executing other methods.

In the second stage a survey was conducted using these 30 families and results are reported in the following section. Longitudinal study has been conducted and the survey was carried out to examine the level of influence of the emotional reduction techniques to examine the impact of controlled negative towards farmers empowerment.

4. DATA ANALYSIS

With the survey conducted after stage one, the table 1 shows the recorded level of significance of the techniques being used.

Table 1. Level of Influence

Level of Influence	No. of Families	Percentage
Strong	10	33.33%
Average	17	56.67%
Weak	03	10.00%
Total	30	100%

Table 1 shows that the level of influence of the utilized relaxation method over 30 families which were under the survey. Among 30 families 10 families said the relaxation method was strongly affected them (33.33%); while 56.66% of families were saying that method affected them at average level. Three out of 30 families or 10% said that the method is weak.

Further the survey was carried out to examine the effectiveness of the relaxation method they have used. Table 2 shows their perception towards the effectiveness of the relaxation technique.

Table 2. Effectiveness of the Relaxation Technique

On Relaxation Method	I fully agree	Fairly agreed	Cannot say any thing	total
easy to understand	12 (40%)	17(56.6%)	1(3.3%)	30
easy to use	13(43.3%)	16(53.3%)	1(3.3%)	30
confidence about the techniques	13(43.3%)	16(53.3%)	1(3.3%)	30
mentally relaxed	14(46.6%)	15(50%)	1(3.3%)	30
changes in life	12(40%)	17(56.6%)	1(3.3%)	30
positive change in behavior	12(40%)	16(53.3%)	2(6.6%)	30

Table 2 shows that 40% of families fully agreed and 56.66 % families fairly agreed for leisurely understand this method. 43.33% of families said that they can easily use this method and they have fully confidence for this technique. 46.66 % families fully agreed that they got relaxed their mind while 40% of families fully agreed that they have got significant and positive change on their emotional feelings. Only one or two respondents were in neutral position for all questions asked them in the survey. That was 3.33 % or 6.66% . Rest of other families fairly agreed for all questions asked them. That was more than 50%. It indicates that whole beneficiaries of families have not rejected this method and the have enough confidence to involve with this process.

Table3. Progress Before and After on Farmers' Empowerment

Progress Category	before	after	Positively change	No change	Total
career	29(96.66%)	29(96.66%)	23(76.66%)	06(20%)	30
income	07(23.33%)	21(70%)	14(46.66%)	16(53.33%)	30
land	29(96.66%)	29(96.66%)	00	30(100%)	30
house	30(100%)	30(100%)	00	30(100%)	30
other assets	13(43.33%)	16(53.33%)	11(36.66%)	19(63.33%)	30
have obtained loans	11(36.66%)	16(53.33%)	05(16.66%)	14(46.66%)	30
loans have been used properly	-	27(90%)	27(90%)	03(10%)	30
continue studies of children	08(26.66%)	11(36.66%)	03(10%)	14(46.66%)	30
ability to help others	17(56.66%)	21(70%)	04(13.33%)	09(30%)	30
good recognition from society	18(60%)	24(80%)	15(50%)	06(20%)	30

development of positive emotions	00	29(96.66%)	29(96.66%)	01(33.33%)	30
intervention should be continuing	00	30(100%)		00	30

Progress of the beneficiaries of the project is shown in table 3. Of the 30 families selected from both districts, 23(76.66%) families were identified as having a positive change in their career and 14(46.66%) families were in a positive change in their income. Although neither a land nor a house has been added to a family after this project was being conducted and 19(63.33%) families said that they have not added any extra assets during this project was going on. Reasons they said that they faced wild elephant crisis and water supply issues effected to their farming process. Hence, they were not able to generate extra income. 27(90%) families utilized the benefited money in useful way. 100% families agreed with to continue the intervention is being conducted. Increased Helping to others and social recognition of families were 04 (13.33%) and 15 (50%) respectively. Findings shows that 29 (96.66%) of beneficiaries got positive emotions after they have practiced the emotional reducing method. 100% families of both districts said that this intervention should be continued furthermore.

5. CONCLUSION

A longitudinal study was carried out in Anuradhapura District using 30 families to test the and effectiveness of emotional reduction techniques to empower farmers, The result of this study helps to understand that people or the farmers who are in low-income category can be empowered by changing their negative emotions. Hence, we can search possible avenues of using NLP techniques to apply to minimize academic

difficulties of students as well as maximize the productivity of the organization by empowering employees specially during a pandemic situation where lot of stressors and anxiety dominates.

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Extended Literature Review on Strategic Implementation Connecting to Public Sector Universities in Sri Lanka: An Initial Thematic Model

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ABSTRACT

The objective of this work is to review the literature of the main concepts that lead to determining the strategic Management, Theories behind Strategic implementation, Factors behind Strategy Implementation, strategy formulation, and as a guide for the Strategic management in public sector and Challenges in implementation, considering the effects produced by the different types of strategies on the public sector universities and organizations. In this article, the systemic literature review method was used to synthesize the result of multiple investigations and scientific literature from exiting journals. This research support in public sectors and filling the gap in Strategic Execution Literature additionally this research reveals the lack of scientific literature containing important theoretical concepts that serve the strategists as a guide in the creation, formulation, and implementing of strategies. This review contributes to the existing literature to future researchers and finally developed initial thematic model that factors affecting on Strategic implementation in public universities in Sri Lanka. Key factors identified based on Literature review: Student Politics, Communication, Trade union, Training and Organization culture and Resource availability. This model can used for future study in a base of quantitative study.

Keywords - strategy, thematic model, implementation, training, resource availability

1. INTRODUCTION

In different institutions and sectors, the Sri Lankan Government has implemented strategic planning to resolve separate, priority strategic concerns to enhance service quality and boost employee and organizational performance. In recent years, higher education institutions and, more importantly, public universities have complied with this law by setting out and implementing strategic plans in institutions. In any project management process, be it in the public or private sector, the driving concepts are to consider what reform is needed for, how such improvements are enforced and handled, and how a strategy is built to achieve enhanced results. The failure to guide the organization in the implementation of its plans causes considerable anxiety about the challenge of making the strategic plan a living plan rather than a document that gathers dust on the shelf. The company's strategic plan is intended to be a guide to the company, but the inadequate implementation of the procedure results in ineffective documentation. It is, therefore, critical that a company places due emphasis on the execution step of its strategic plan and allocates appropriate capital to achieve the required objectives.

This chapter focuses on the historical, philosophical, and scientific literature line of research. This first deals with the theoretical contexts for study, the literature on policy and strategic management, variables shaping strategy implementation, Challenges and determine the most contemporary factor/factors.

2. THEORETICAL BACKGROUND

2.1. The Concept of Strategic Management

Strategy is a tactical course of action which is designed to achieve long term objectives. It is an art and science of planning and marshalling resources for their most efficient and effective use in a changing environment. Strategy of a business enterprise consists of what management decides about the future direction and scope of the business. It is ongoing planning, monitoring, analysis, and assessment of all which contributes to achieving organizational goals and objectives. It can be divided into several schools of thought. A prescriptive approach to strategic management reflects how strategies should be formulated. Then descriptive approach refers to how strategies should be put into practice (Sammut-Bonnici, 2015). Strategic management is a set of management decisions and actions that determines the long run performance of a corporation. It includes environmental scanning, strategy formulation, strategy implementation and evaluation and control to achieve the objectives of an organization. The study of strategic management emphasizes the monitoring and evaluating of external opportunities and threats in light of a corporation's strengths and weaknesses. Strategic management process includes setting up of strategic intent, strategic formulation, strategy implementation and strategy evaluation and control. Setting up of strategic intent includes vision, mission, and objectives. Strategy formulation includes environmental appraisal and organizational appraisal. Strategy implementation also consists with five steps: activation of strategy, designing structure, process and system, behavioral implementation, functional implementation, and operationalizing strategy. Strategy evaluation processes with three

steps evaluate, monitor and review (Freeman et al., 2010).

Strategy implementation means the convert chosen strategy into reality to accomplish strategic goals and objectives. It can be defined as a series of activities and choices that involve the implementation of a strategic plan. It consists of developing, utilizes, and integrates organizational structure, systems, and culture as fit with the strategies which lead to earning competitive advantage (Mišanková and Kočíšová, 2014).

Strategy formulation involves turning formulated strategies into action. To realize the expected goals of the organization the fullest contribution of the management and employees is required (Capon, 2008). As strategy implementation brings a change to the organization, perseverance is essential to gather all necessary resources, skills, and competences to execute the decisions. (Johnson G., 2011) Strategic implementation is a process followed by operationalization, institutionalization, and monitoring and controlling (Drucker, 1997). Operationalization emphasizes the responsible parties and the suitability of the organizational structure which could facilitate or hinder successful strategy implementation (Mintzberg and Waters, 1985). Through institutionalization strategy implementation collaborates with the day-to-day operations and leadership, structure and organizational culture are the influential elements here (Ansoff, 1990). (Yabs, 2007) states that process of mentoring and controlling assure the realizing expected results while reviewing gaps and changes in the environment. Strategy implementation includes an expansive scope of endeavors which center around the change of vital goals energetically (Miller and Dess, 1996). With respect to Noble (1999), strategy implementation is characterized as: The communication, adoption, interpretation, and depiction of strategic plans. For Wheelen and Hunger (2012), implementing a strategy comprises taking ideas, plans, decisions, policies, objectives, and other features of the selected strategy and implementing them into action.

Strategy implementation is an iterative procedure of implementing strategies, policies, programs, projects, and activity designs that permits a firm to use its assets to make the most of chances in the serious condition (Harrington, 2006). Usage is the activities started inside the organization and its relationships with external constituencies to realize the strategy (Homburg et al, 2004). Implementation in a hands-on operation and action-oriented human social activity calls for official administration and key administrative aptitudes (Schaap, 2006). Strategy implementation is tied in with planning fitting authoritative structure and control frameworks to put the association picked system enthusiastically (Hill et al, 2007).

2.2. The Concept of Strategic Implementation

Organizations plan their future activities results based on market data and other types of sources. That means, every organization have strategy intentions. A strategy intention can be defined as an action that is expected to be practiced by an organization in the future. Strategy implementation can be defined as the process of converting the strategy intentions to strategic actions. In simple terms, strategic implementation can be defined as making the plans of the organizations true (Elbanna, Andrews and Pollanen, 2016; Zaidi et al., 2018).

When implementing a strategy, an organization should interact with the elements of the internal environment and external environment. After formulating a strategy, an organization has to find resources that are required to help the organization implementing the strategies. An organization should interact with human resources, knowledge resources, physical resources, and several resources when implementing the strategies. That means an organization should develop proper policies when obtaining the support of the resources. For example, when interacting with employees, an organization needs a human resources policy or employee policy. Moreover, to implement the strategies, managers and leaders should have managerial and leadership skills. A sound knowledge in the field in which he or she is

working, theoretical knowledge on technology, and knowledge of interacting with other people is needed by a good manager to implement the strategies successfully (Elbanna, Andrews and Pollanen, 2016; Rani, 2019).

Strategy implementation is the action stage of strategic management. It refers to decisions that are made to install a new strategy or reinforce an existing strategy. Further, strategy implementation is a term used to describe the activities within an organization to manage the execution of a strategic plan. Organizational structure, control systems and culture to follow strategies that lead to competitive advantage and better performance. Strategy implementation poses a threat to many managers and employees in an organization. New power relationships are predicted and achieved. New groups are formed whose values, attitudes, beliefs and concerns may not be known. With the change in power and status roles, the managers and employees may employ confrontation behavior. Strategy formulation and strategy implementation are different, and it needs to be sound and excellent. Strategy fails because of failed implementation and not because of the strategy model. Strategy implementation is putting strategies into action. The strategies formulated at various levels of the organizations are implemented to achieve the objectives taken up at the corporate level. Strategy implementation happens in two stages: project implementation and procedural implementation. Implementing strategy has always been a challenge for organizations across the industry. The ability to implement strategy is the deciding factor between the success and failure of a strategy of the company. Every strategy to be implemented has its unique strategic window. Successful implementation is usually spearheaded by top management applying teamwork or participatory styles of leadership. Planning for strategy implementation is usually ignored due to that excitement after choosing strategy (Heracleous, 2000; Verweire, 2014).

Strategy implementation can be referred to as the procedure where the arranged methodologies are converted into thoroughly executed activity (Nyarige, 2013). Li, Guohui and Eppler (2008)

see implementation as a dynamic, iterative and complex procedure which is involved a progression of choices and activities by managers and employees influenced by various interrelated inward and outer elements to transform vital plans into reality to accomplish key goals. Powerful strategy execution requires a tireless quest for working greatness and it is the activity for the organization's entire supervisory group, in this manner achievement relies on the abilities and participating directors who can push required changes in their associations' units and reliably convey great outcome (Thompson, 2007). He further perspectives the procedure as an administration activity plan for actualizing and executing the picked technique that rises out of evaluating what the organization would need to improve, given its specific working practices and organization situation, to execute the strategy capability and accomplish the focus on financial and vital execution. The strategy implementation phase thus is surrounded by many challenges because it is the most involving and consuming in terms of organizational resources.

Implementation of the strategy is a whole procedure that starts with the advancement of momentary goals which interpret the long-range yearnings into focuses for activity. Dealing with the usage and execution of strategy is a task arranged action planned for performing center business exercises in a system steady way. It is effectively the most requesting and tedious piece of the strategy boarding procedure (Thompson, Strickland and Gamble, 2007). Pearce and Robinson (2011) see system usage as the activity period of the vital administration process and to guarantee achievement, the strategy must be converted into painstakingly executed activity. This implies the strategy must be converted into rules for day by day exercises of the organizations' individuals, the technique and the firm should get one and the system must be reflected in the manner the firm sorts out its exercises, the key organization leaders, the way of life of the organization; the organization's administrators must establish controlling controls that give vital control and the capacity to alter procedures, responsibilities and destinations in light of ever-changing future conditions.

Robinson (2003) as referred to in Wachira (2012) sees that after the excellent methodologies are resolved and long-haul targets set, the assignments of operationalizing, organizing and controlling the system despite everything remain. This period of vital administration process involves making an interpretation of thought into key activity. Yearly destinations, useful systems and explicit arrangements give significant methods for conveying what must be done to execute the general procedure. By making an interpretation of long haul aims into momentary manual for activity, they make the technique operational. In any case, strategy should likewise be standardized to penetrate the very everyday existence of the organization in the event that it is to be successfully actualized. Three hierarchical components give the key long haul implies for standardizing the company's procedure that is structure, initiative and authoritative culture. Strategy implementation requires presence of both external and internal environmental factors.

Mintzberg and Quinns (1996) noticed that 90% of all around detailed methodologies come up short at usage stage. The reasons that have been progressed for progress or disappointment of the strategies rotate around the fit between the structure and strategy, the allocation of resources, the organizational culture, leadership, reward as well as the nature of the strategy itself (Kithinji, 2005). The achievement of any strategy principally relies on the successful usage of thoroughly thought-out strategies. Effective strategies necessitate that the procedure, the association, the individuals and their connections, the frameworks and the measures all must be adjusted and made to progress in the direction of a shared objective (Mwangoe, 2011). Effective strategies will undoubtedly come up short or succeed depending on how realizing offices screen, assess and continually oversee factors both in prompt inward and outer condition of the organization. Strategy implementation can be viewed as successful if things go easily enough that the organization accomplishes its vital and financial related performance targets and shows great procedure in achieving the management strategic vision (Thompson, 2007).

According to Mburu (2013), strategy implementation was found to be meaningfully influenced by a set of six underlying features which include regulatory environment, stakeholder engagement, resource availability and utilization, internal work systems, co-ordination of strategy implementation, and strategy alignment with the external environment. Kurendi (2013) identified that effective strategy implementation is a big obstacle, emphasizing factors such as top management commitment, clear identification of activities to be carried out to successfully implement strategy, current legal requirements, the existence of budgetary allocation and internal control mechanisms, as those that must be adhered to if the successful implementation of strategy is to take place. Lastly, Oyugi (2011) agrees that factors both internal and external to an organization influence the entire process of strategy implementation.

2.3. A Review of Conceptual Models and Frameworks for Strategy Implementation

Models are the theoretical systematic grouping of associated ideas and rules that give a system to, or integrate, a huge subject matter as dissipated information is not data except if eyewitness knows about the hypothesis that will clarify connections (Olum, 2004). Subsequently, theories and hypothetical models give measures to what is applicable, they empower us to convey productively and they challenge us to continue finding out about our reality or the field we work in as nature is ever evolving (Chiuri, 2015).

There are some generally used models and frameworks available for researchers and managers in the areas of strategy analysis and formulation in strategic management such as SWOT analysis, Porter's generic strategies, portfolio models (Okumus, 2003, Wheelen and Hunger, 2012). By contrast, there is no agreed-upon, generally accepted and dominant framework in "strategy implementation" (Siddique and Shadbolt, 2016).

Kurt Verweire (2014) thinks about that as some administration creators consider methodology to be as an exhibition estimation and the executives

work out, where methodologies are converted into key Performance Indicators (KPI) that you course further down the association. Others consider the procedure to be as making an authoritative culture that engages individuals to act in accordance with the methodology. Still others consider execution to be a key undertaking portfolio the board. Methodology usage is the entirety of that, and considerably more, system execution is a wide space that contacts a wide range of the board zones, from heading and objective setting to HR, activities culture and the nature of initiative group that is in control. So, administrators should give noteworthy consideration to building up a connecting with hierarchical atmosphere and community-oriented structure and culture.

Reviewing strategy implementation literature shows that most strategies about procedure usage might be decided in two gatherings; the primary considered the term of strategy implementation as a total of elements that exchanges, connects, and coordinates inside strategy implementation. This second gathering of approaches considered the term technique usage as "process", accordingly this gathering might be called as "process- oriented" approaches (Amjad, 2013).

2.4. Key Theories and Framework Related to Strategic Implementation

2.4.1. Three Distinct Conceptions for Strategic Implementation

Three distinct conceptions for strategic implementation can be seen as follows.

In the first conception, processes involved in strategy implementation are considered and it is called a process perspective. According to the process perspective, strategic implementation is a process that includes several numbers of sequential steps. In this method, top management and departmental heads should decide the sequential steps which should be followed for implementing the strategies (Hourani, 2017).

The second conception is a behavior perspective, which states that strategic implementation is a collection of concrete actions of managers and

employees. Actions of the people should be interacted together and process a single output in strategic implementation (Hourani, 2017).

The third approach indicates that strategic implementation is a collection of both sequential steps and actions of employees. It suggests that strategic implementation is a collection of the first two approaches and thus it is called a “hybrid approach” (Hourani, 2017).

Two fundamental theories are based on continuing the study, namely, open systems theory and resource-based theory.

2.4.2. Open Systems Theory

Open System Theory (OST) refers to the concept of creating an environment that deliberately impacts organizations (Balogun and Johnson, 2004). This theory was first introduced by Bertalanffy in 1968. Open system theory explains that the survival of the organizations depends on its relationship with the external environment and they are greatly influenced by the external environment (Kurendi, 2013). Open System Theory is a recent change of system-based management theory designed to create healthy, innovative, and resilient communities and organizations in changing and unpredictable environments today. Organizations are being perceived as an open system where many actors exist and have a mutual relationship while interacting with each other (Chiuri, 2015). At many levels of the organizational process particularly at the input, process, and output external environment is involving by providing resources and absorbing outputs of the company (Waithaka & Waiganjo, 2017). Importantly in strategy management, formulation, and implementation of strategies should be shaped with the changes in the environment so that successful strategic achievement can be obtained (Pearce & Robinson, 2011). When organizations and societies perform their activity, they control and alter their external climate and, concurrently, become influenced through a two-way transition defined when successful adaptive adjustment by significant shifts in the local and foreign setting (Graetz and Smith, 2005).

Several forces around the planet have various economic, political, or social influences. The environment also provides essential methods for coordinating change and restoration (Carrington, Scott and Wasserman, 2005). Organizations and communities are open systems; they develop with time and affect each other. A free system needs a transparent and successful adaptive partnership with its external environment to ensure its sustainability, as a stable and viable open system has, over time, a secure connection with its external environment as regards shift in values and aspirations (Graetz and Smith, 2005). It indicates that if the ideals and standards of specific organizations or groups are inconsistent with those of the social world, the particular organization or culture may inevitably become dysfunctional and unviable.

People are also open systems. They affect and alter their external environment through their behavior while continuously being changed through shifts in their external environment (Carrington, Scott and Wasserman, 2005). From the viewpoint of an employee, the company itself is the immediate external climate. The aggregate impact of this critical transition is known as the socio-ecological shift between persons and their organizations and society and the external environment. Socio-ecological developments in today's globalized and networked environment are rapid and rapidly growing (Graetz and Smith, 2005).

2.4.3. Resource-Based Theory

The distinctive resources conducive for achieving competitive advantage in the organization and resources of an organization include human resources, physical assets, unique processes and procedures, technology, intellectual resources, and finance (Johnson, et al., 2011). The resource-based vision theory considers that the company is a cognitive system with distinctive and context-dependent skills that are central to strategic purposes. These are dependent upon hierarchical capabilities or routines which contribute to the management of the corporate core business processes that help create value. Competencies often allow specific expertise to be developed, so firms should adhere

to a short to medium-term strategy that cannot be modified rapidly (Andersén, 2010). The concept of a resource-based plan is that successful firms draw on their future productivity characteristics; they are often unique and different in each organization and may also be tacit and intangible. The competitive edge is a collection of knowledge, abilities, resources, and commercial properties that a business holds or, in every other way, the smart use of physical and intellectual capital as part of a company's core competence (Andersén, 2010).

Resource-Based View elucidates that unique resources and competencies determine the competitive position over rivals while threshold resources and competencies are the supporters. (Barney, 1991) Points out that development of the resources could be achieved via consolidation with stakeholders of the organization beyond market and Tarde transactions but with social interactions as unique resources based on trust and devotion which are inimitable. Moreover, (Barney, 1991) resource-based view argues that companies need to develop resources that are inconveniently ambiguous, socially complex, and time-consuming to gain competitive advantage. Resources and competencies of the organization demonstrate the strategic capability and growth possibility. Further, the extent of organizational performance can be explained by the ownership of the resources. In the strategic implementation, a vital role is played by organizational resources as it denotes the possibility and extent of current resources to facilitate strategy implementation and further necessities (Penrose, 1959). The lack of resources impacts adversely on strategy implementation and require some changes in structures or process of the organization particularly widen the access to information, effective and systematic allocation of scarce resources facilitates to efficient decision making (Barney, 1991). The further balance between organizational resources is a salient feature in resource-based view as the importance and applicability of certain resources may inefficient in the absence of another needful resource.

According to (Barney, 1991), effective interaction with primary stakeholders is a way of creating such a resource. Of starters, businesses willing to engage customers beyond business deals build politically involved leverage focused not on time, but on credibility and confidence. Likewise, points out that companies that establish ties with primary stakeholders focused on shared partnership and faith are in a more excellent place to gain benefits than companies that do not. Because it takes time to build trust and collaboration between the company and partners, which contributes to mutual benefit transactions, such exchanges lead to improved business performance (Humphries and Wilding, 2004).

Resource-based proponents argue that the strategy should be the basis, not of the environment, but the resources of the organization (Boxall & Steeneveld, 2009). Given the apparent discrepancies, these pragmatic strategies share one aspect in common; they both aim to improve efficiency by enhancing the role of one company in the same economic sense concerning other organizations, and thereby differentiate the entity. Each organization builds its capability structure embedded in its terms of business, past obligations, and expected specifications (Song, et al., 2007). The resource-based view of the company describes how businesses distribute their finite capital to achieve and exploit productive capacities. The organization that has the wealth and potential to make the most of its strengths and invest in muscles that support the current system of competence should then be able to leverage its distinctive capabilities (Song, et al., 2007).

2.5. Theoretical Framework Developed on Strategic Implementation

The Existing Model / Framework discussed in earlier sections can be summarized in the table below.

Table 1. Theoretical Framework Developed on Strategic Implementation

Conceptual Framework	Components and descriptions of Conceptual Framework	Researchers
Three distinct conceptions for strategic implementation	<p>Process perspective - Processes involved in strategy implementation is considered.</p> <p>Behavior perspective - It states that strategic implementation is a collection of concrete actions of managers and employees.</p> <p>Hybrid approach - strategic implementation is a collection of both sequential steps and actions of employees.</p>	(Hourani, 2017)
Open Systems Theory	Open System Theory (OST) refers to the concept of creating an environment that deliberately impacts organizations. Open system theory explains that the survival of the organizations depends on its relationship with the external environment and they are greatly influenced by the external environment.	(Sammur-Bonnici, 2015)
Resource-Based Theory	The distinctive resources conducive for achieving competitive advantage in the organization and resources of an organization include human resources, physical assets, unique processes and procedures, technology, intellectual resources, and finance, The resource-based vision theory considers that the company is a cognitive system with distinctive and context-dependent skills that are central to strategic purposes.	(Hitt, Xu and Carnes, 2015)
Strategic leadership	Determining strategic direction, Establishing balanced organizational controls, Effectively managing the organization's resource portfolio, Sustaining an effective organizational culture, Emphasizing ethical practices organizational controls	(Mubarak and Wan Yusoff, 2019)
Three roles of a leader in SM	Leader as An Innovator , Leader as An Analyst , Leader as A Decision Maker	(Hunitie, 2018)
Other theories identified	<ol style="list-style-type: none"> 1. Great Man Theory 2. Trait Theory 3. Behavioral Theory 4. Cognitive Resource Theory 5. Leader – Member Exchange (LMX) Theory 6. House's Path – Goal Theory 7. The Path Goal Theory 	(Callahan, Whitener and Sandlin, 2007; Clawson, 2008; Alanazi <i>et al.</i> , 2013; Amanchukwu, Stanley and Ololube, 2015; Ahmed, Nawaz and Khan, 2016; Ahmad <i>et al.</i> , 2017; Fahmeena and Moore, 2018)

3. STRATEGIC IMPLEMENTATION PRACTICES

Strategies are successfully implemented by aligning the strategy planned and executed, aiming together at achieving the organizational vision. The components of the implementation of policy - communication, interpretation, adoption, and action - are not necessarily successive and cannot be distinguished. (Čater & Pučko, 2010) Note that although the strategic execution cycle is significant, there has been much more work on the design of strategies than on strategy executions. At the same time, Alexander argues that the focus on the long-term preparation and approach is on substance rather than the actual implementation of strategies, about which “nothing is reported.” The explanations for this apparent lack of study include that the area of strategy execution is regarded as less glamorous as a field and that researchers sometimes underestimate the complexities involved in researching the subject – particularly when the conceptual models are thought to be fundamentally inadequate (Samuel and Idunnu, 2007).

Wolf and Floyd, (2013) has suggested that companies differ in structure, and that theory should move away from the “one best way” to an emergency approach, as this structure should reflect the company’s situation and strategies. The structure of the company influences the flow of information and its context and nature. The structure also provides a means of collaboration and communication, coordination, and power and responsibility allocation (Čater & Pučko, 2010).

Traditionally, this core need for coordination and cooperation has been tackled through hierarchical configurations, centralized decision-making, rigorous adherence to formally defined rules and procedures, and carefully constructed roles and relations. Others started moving towards de-layering hierarchies because of bureaucratic unpopularity in large companies (Thorpe & Morgan, 2007). Downsizing has dramatically altered employee roles as the structure is being re-engineered. Collective decision-making limited executive teams and

reliance on horizontal communication rather than vertical communication distinguish such organizations. The type of plan execution varies for organizations that change in terms of layout according to the enterprise and management style of the business.

Strategic typologies are becoming increasingly popular in research strategy (Fuentes, et al., 2020) M. Taxonomy, description of the phenomenon, and clarification of the specification promote the growth of our consciousness. Taxonomic methods have become standard practice in marketing philosophy, and especially in the analysis of strategy (Nutt, 1999). Observed that styles of leadership would play a key role in addressing transition obstacles and that Moorman and Miner (1998) suggested an improvisational method for achieving structural reform. Those researches, however, focused exclusively on the level of the corporate or functional unit to the detriment of a more micro-manager orientation. Original work intends to address this topic by introducing a taxonomy of execution types and concentrating on the role of the managers in the mid-level managers in big business.

According to (Schmidt & Brauer, 2008), action analysis will be more appropriate to determine how successful the board members perform the position in strategic execution. However, one big obstacle for scholars in corporate governance is that there is an exception for participatory studies rather than a law (Cetinkaya, Niavand and Rashid, 2019). The reasons for these difficulties lie in the privacy of strategic issues, and in the fact that today’s board members increased legal accountability makes them even less inclined to allow researchers to comply.

Alternative approaches for observational analysis are required under the assumption that only a few researchers can examine encounters between board members and between board members and executives that may show their success in guiding the policy execution.

Besides, there are several studies relating to the role of MASs in designing strategies and their

method of execution (Bhimani & Langfield-Smith, 2007), while extensive evidence about the application of the approach in the broader field of management is scarce (Ittner & Larcker, 1995). Studies on discrepancies in the usage of MAS and the implementation of UET-related strategies, in particular, are sparse and have scarcely been reviewed in Sri Lanka concerning the use of MASs and the execution of policy (Bhimani & Langfield-Smith, 2007). Studies have never taken place in Sri Lanka to determine the effect of UET on the use of MAS and the implementation of strategies, to the extent known to the authors.

Specific program typologies have been used for the execution of the strategy (Sumer & Bayraktar, 2012). The Miles and Snow Theory typology provides forms and methods to respond to various situations, contributing to a double spectrum between defensive defense strategy and prospector strategy, where supporters focus on increasing the quality between their current deals, while prospectors are still searching for potential business prospects.

According to UET, the history of top managers may be measured by measurable demographic features such as era, functional experience (track), work experience, employment, socio-economic origins, financial status, and community features. It is argued that its design, form, and purpose for using MASs and implementing a strategy would be different based on its top management orientation. Based on UET, the writers define senior managers as professional (technically) managers based on their educational and functional experience.

3.1. Strategy Implementation Practices of Public Universities and other Public Organizations in Sri Lanka

Strategic management has become a crucial part of the success of any organization. Recently, the public sector has paid attention to the applications of strategic management. It is hard to incorporate strategic management into the public sector. Following the theories of the private sector, SM considerably affects the

growth, profitability, and to gain a competitive advantage over its competitors. However, all those are not always fit the public sector.

Strategic management ensuring that the strategy is implemented effectively and thus, encouraging strategic learning, thinking, and acting on an ongoing basis. Strategic planning refers to developing strategies that give a holistic view of the organization by adopting long term thinking, goal analysis, and evaluating subjectively about values, goals, and priorities (Weerakkody, Karunananda and Dwivedi, 2009). Strategic implementations consider as a key part of the SM. It provides an opportunity to chart future directions and actions to ensure the organization's feasibility, efficiency and public value addition. Further, the implementation process of a strategy is one of the key aspects that affect the success of the strategy (Weerakkody, Karunananda and Dwivedi, 2009; Menike, 2016).

Most public organizations operate with low productivity and inefficiently. Thus, the public sector should have a vision, mission, and objectives. SWOT analysis is a powerful tool of the SM. Thus, it is ideal for carrying out a SWOT analysis in the public sector. Through gaining an understanding of these things they will be able to trace a way forward (Mišanková and Kočíšová, 2014).

Government organizations are responsible for finding the best ways to achieve and implement actions as planned. SM emphasizes the importance of monitoring and evaluation. It is compulsory to determine the effectiveness of their activities and whether the input is worth the output. Not only that SM allows the organization to identify and understand both internal and external threats against their objectives. Through proper understanding, public sector organizations will be able to protect themselves (Mišanková and Kočíšová, 2014; Weerasooriya, Khatibi and De Alwis, 2014).

Today, public universities deal with the fast-moving environment; thus, they focus on strategic changes with different intentions. To

grab the opportunities that occurred from the changing population, changes in student preferences, technology changes. Simply world is changing every day, to absorb the positive effects of the changes, and to avoid or minimize the negative effects of the changes, organizations continuously develop strategies. It might be a new leadership style or innovative product or service so on. Strategies lay the foundations for an organization's growth and development. To innovate, grow, and develop every organization requires a well-developed strategic plan. It focuses on what they have and how it utilizes better. However, two-thirds of the educational organizations in the public sector (global) fail to execute their strategic plans. Improper resource allocation, poor communication, poor Administration skills are common reasons for failing to execute strategic plans (Rowley and Sherman, 2001; Mišanková and Kočíšová, 2014).

4. FACTORS AFFECTING STRATEGY IMPLEMENTATION IN PUBLIC UNIVERSITIES

4.1. Organizational Culture

Culture is what a group learns over some time as that group solves its problems of survival in an external environment and its problems of internal integration. Such learning is simultaneously a behavioral, cognitive, and emotional process (Schein, 2004). (Bushardt, et al., 2011) Revealed a positive correlation between organizational culture and strategy implementation. Yet (Farson & Keyes, 2002) shows that as every strategy implementation brings a change to the organizational culture may be a barrier for some changes as some cultures are resisting changes. The organizational culture where live employees shape their attitudes, behaviors, and acts so that it ultimately impacts decision making and actions relating to strategy implementation. Further (Bushardt, et al., 2011) elaborates those different cultures have a different level of influence on implementation ranging from most effective (clan culture) to less effective (bureaucratic culture). The relationship between organizational

culture and performance has a close correlation with strategy implementation as high-performance fosters effective and successful implementation. The further culture where value flexibility, participative decision making, innovation, empowerment has a great positive impact on strategy implementation while bureaucratic cultures have less positive impact on implementation. Empirical analysis shows that organizational cultures of successfully performed companies are aligned with their strategies and some organizations have shaped their strategies according to the company culture to reduce resistance and barriers for smooth functioning.

4.2. Students' Political Activities

In the Sri Lankan context political engagement of university undergraduates is quite high and political stress is also considerable. According to (Samaranayake, 2015) the mass education system in the Sri Lankan University context provides huge freedom to engage in political activities and (Weeramunda, 2008) claims that politicization, university educational structure, youth unrest, socio-economic dynamics have great influence over political activities of university students. Further, no empirical evidence can be identified concerning the impact of students' political activities on strategy implementation in the Sri Lankan University context. Yet Sri Lankan society has been experiencing positive and negative influences on university students' political activities. Investigating this fact therefore worthwhile to fill the research gap identify their impact on strategy execution of universities.

4.3. Trade Union Activities

(Armstrong & Taylor, 2014) define trade unions as an association of employees whose intention to achieve a common goal relating to working conditions and represent employees' interest to their employers. Activities of the trade union can have favorable or unfavorable influences on the performances of organizations (Deery & Iverson, 2005). In the Sri Lankan context particularly in the public sector trade unions are powerful and their influence is relatively negative on strategy

implementation as human resource and time resource take away from the execution process.

5. STRATEGY IMPLEMENTATION CHALLENGES

For the plan to be successful, decisions on the correct organizational framework, pay method, corporate culture, personnel, and leadership should be endorsed. Just like the organization's plan must suit the external climate; it must also fit the multiple forces responsible for its execution. As further noted by (David, 2011), effective execution of policy will tackle core problems in its application, including, inter alia, integration of organizational framework with policy, and the creation of a positive organization's culture. Ansoff (1990) states that an organizational structure is a part of its internal capabilities and therefore has the potential to either facilitate or hinder the successful implementation of the strategy. Typically, structural designs begin with the organizational chart. It concerns the responsibilities of managers, their degrees of authority, and the consolidation of installations, departments and divisions, work design, and production technology. While (Lederer & Zheng, 2014) identify three variables (formality, complexity, and centralization) in the organizational structure.

(Ren et al., 2018) argues that the secret to a plan is the devotion of the upper management to the policy itself and stresses that this is certainly a pre-condition for its execution. Therefore, top executives will display their commitment to allow the deployment cycle efficient and committed. At the same time, this demonstrable dedication is a good symbol for all the organizational participants involved. Senior leaders will give up the idea that lower-level managers have the same understanding of the strategy and its implementation, the underlying rationale, and purpose to improve the overall likelihood of the Plan being executed as expected. Rather, they must believe the exact opposite. We cannot resist persuading the workers of their proposals (Ren et al., 2018).

Successful policy execution, according to (Thompson, et al., 2007), relies on

knowledgeable and efficient internal organizational structures. Neither company will expect to conduct the activities necessary for successfully implementing policies until skilled executives nor are individuals with appropriate skills and intellectual capacity drawn, inspired, and retained. As (Cummings & Worley, 2005) stated, it is important to delegate the challenge of bringing out demanding strategic strategies to managers with expertise and ability and to translate judgments and activities into outcomes for the fulfillment of defined objectives. The execution cycle could end up getting disrupted by missing time frames, misdirected, or inefficient actions without a knowledgeable, productive results-oriented management team. Creating a competent organization is also a goal in the execution of policy. The need to develop and improve strategic skills and operational capacity is one of the key goals in organizational development throughout the execution of the policy. Training is therefore necessary as a company steps into a plan that calls for specific expertise, skills, and abilities.

The execution of a plan relies in turn on the actual leaders of the organization. Motivating and praising employees and units' successful results are essential success drivers' inefficient execution of policy. (Cummings & Worley, 2005) Conclude that workplace incentives are a strong motivation to enhance the efficiency of staff and working classes. This may also contribute to strong workplace happiness. Interventions with reward systems are used to generate and maintain desired levels of performance. The reward system should align individual actions and objectives with the objectives and needs of the strategy of the company. Financial rewards are effective compensation tools as they promote management achievement following tasks and results. Inherent non-financial incentives such as versatility and work control are essential motivators for management. Negative incentives such as maintaining financial and inherent success bonuses must be promoted to motivate managers' contributions (Thompson et al, 2007). To ensure good execution of a plan, the organizational framework alone is not enough,

strong leadership is required. (Bateman & Zeithman, 1993) Describe a leader as one who inspires others to accomplish their objectives. Leaders have a dream to push individuals and organizations in the path they would not otherwise go. In a competitively chaotic environment, a strategic leader makes a clear vision, direction, and purpose for the company and shares it with it (Thompson, et al., 2007). Leadership is the key to the effective implementation of the strategy. The position of the CEO is vital as a mechanism that is strongly connected to and essentially accountable for the performance of a plan. The behavior of the CEO and the perceived intensity of a chosen policy can affect the contribution of subordinate managers to execution. A CEO's interests and beliefs greatly affect a company's purpose, policy, and primary long-term objectives. The best administrators will always be in the correct place to execute a new plan successfully. Goodwill and dedication to top management to accelerate the mechanism is therefore key to the successful execution of the plan. According to (Thompson, et al., 2007), the Strategic Manager will guide the organization by ensuring that the long-term objectives and priorities of the companies are identified and recognized and maintained.

(Siam & Hilman, 2014) Said difficulties in the execution of the plan are often seen in sources beyond the organization. A favorable legislative framework could be hindered by macro environmental forces such as the political-legal forces. Also, political unrest can adversely affect strategy execution by disrupting political goodwill to mobilize the strategic plan's resources. Civil unrest could destabilize the competence of human resources and lead to infrastructure destruction to promote the institutionalization phase. The macroeconomic influence can also impact the execution of policies, where economic controls and competition compete with market share and thus overall productivity.

5.1. Strategic Implementation Challenges in Public Universities

Several issues have been identified by researches related to strategic implementation in the public sector and especially in universities. Organization Structure and strategy implementation an organizational structure is necessary for strategic implementation purpose, thus the organizational structure is a major priority in implementing a carefully formulated strategy (Hussey, 1998). If activities, responsibilities, and interrelationships are not organized in a manner that is consistent with the strategy chosen, the structure is left to evolve on its own. If structure and strategy are not coordinated, the results will probably be inefficiencies, misdirection, and fragmented efforts (Hussey, 1998).

Ineffective Training - Effective strategic initiatives will lay the ground for proper training to staff who are selected to execute the plan. Some universities resist providing proper corporate and learning opportunities for their staff. However, there are some ways to provide learning opportunities for employees as they fit with employees' busy schedules. Right training options will sharp employees' skills or teaching new skills, avoid too much time utilization; thus, save the money. Also, it provides feedback that employees apply learned practices in their daily workflows (Joyce, 2004; Jiang and Carpenter, 2013).

Lack of Resources - The direct costs of implementing a new strategy, generally consists of the consultants or board members involving in planning, implementing, providing training as well as the cost associated with the new technology. However, it can be prohibited or reduced with different conditions. Hence, start small, and then it can be expanded once primary objectives have been met. Thus, a strategy implementation method should be selected as the firm can accessible, scalable, and can be broadcast throughout the organization (Rowley and Sherman, 2001; Andrews et al., 2011).

Lack of communication - There should be an effective flow of communication in every university. Effective, transparent, honest communication is not the only factor to determine the quality of an organization, but it is an essential factor possessed by the organization. Lack of communication, weak the effectiveness of strategic implementation (Joyce, 2004; Höglund and Svärdesten, 2015).

6. HOW TO OVERCOME THE STRATEGY IMPLEMENTATION CHALLENGES

(Awino, Ondoro and Abong'o, 2018) stated that business executives will take early and proactive steps to institutionalize the organization's agenda as an important phase toward ensuring that the company's approach is effectively executed. The managing partner, the president, and other key leaders will ensure the strategy of the company is evident and will communicate clearly with investors about the information, meaning, and significance of the company. Management representatives can also seek early for the feedback and encouragement of main community leaders and encourage all association partners to help the plan. Over time, these activities will help promote collaboration among stakeholders, which will lead to increased overall support for the strategic plan and facilitate its execution (Thakur-Wernz and Samant, 2017).

Planning is a crucial and important phase in the strategy's execution. A detailed overview of the actual behaviors and tasks, responsibilities, schedules, monitoring methods, and follow-up required to accomplish the organization's organizational goals is part of execution preparation. Implementation plans often take the shape of detailed maps detailing the course of action of the corporate executives over 24 to 36 months. Achieving a standard of clarity in such recommendations offers a concrete and measurable feedback manual that helps both the organization and its stakeholders to measure success in the implementation over time (Oskooee, 2017).

Successful execution of a corporate plan also involves the incentive program of the organization's owners, the success assessment

approach, and other relevant organizational environment and customer team management frameworks and procedures to be aligned with the desired strategy of the firm. The most common (and probably critical) example of a program requiring teamwork is spousal compensation. Organizations also frequently adopt action strategies to accomplish results and require partner collaboration and coordination but do not change the partner pay program to reflect such activities. Because management procedures and structures cannot be balanced with a newly implemented strategy, adoption attempts frequently cease when organization leaders guide individual actions to adhere to the company's conventional incentive scheme and not to a freshly developed program (Chao and Chen, 2005).

According to (Arvate & Lopes, 2007), effective approaches warrant a well-marketed operational framework. When a company drastically shifts the strategy, it has to undertake substantial adjustments to the overall institutional configuration as the current framework may become inefficient. Too many workers, too much time is concentrated on resolving inter-departmental conflicts, too much power, too many unattainable targets suggest an inefficient organizational framework. Systemic changes, though, do not render a poor strategy effective or ineffective managers strong or excellent administrators, or terrible management, or excellent products on the market (Chandler 1992).

7. CONCLUSION AND RECOMMENDATION

According to the above literature we can found that the implementation of strategies in the universities was affected by organizational culture, structure, resources, top management commitment, and communication. In summary, Detail of the factors which cause effect strategic implementation in the public sector. The Initial Thematic model is developed based on Literature review.

Table 2. Initial Thematic Model in Strategic Implementation in Public Universities in Sri Lanka

No	Factor	Findings
1	Organizational Culture	The organizational culture where live employees shape their attitudes, behaviors, and acts so that it ultimately impacts decision making and actions relating to strategy implementation (Bushardt, et al., 2011).
2	Students' Political Activities	The mass education system in Sri Lankan University context provide huge freedom to engage in political activities and claims that politicization, university educational structure, youth unrest, socio-economic dynamics have great influence over political activities of university students (Samaranayake, 2015).
3	Students' Political Activities	Sri Lankan society has been experiencing positive and negative influences of University students' political activities. Investigating this fact therefore worthwhile to fill the research gap identify their impact on strategy execution of universities (Weeramunda, 2008).
4	Trade Union Activities	Activities of the trade union can have

		favorable or unfavorable influences over performances of organizations. In the positive impact, it can enhance the strategy implementation and when the trade unions start work strikes and other activities which disturb the ongoing activities of the universities, it will affect the strategic implementation negatively (Wijewantha and Gamage, 2011).
5	Trade Union Activities	Public sector trade unions are powerful and their influence is relatively negative on strategy implementation as human resource and time resource take away from the execution process (Deery & Iverson, 2005).
6	Staff Training	Right training options will sharp employees' skills or teaching new skills, avoid too much time utilization; thus, save the money. Also, it provides feedback that employees apply learned practices in their daily workflows (Joyce, 2004; Jiang and Carpenter, 2013).
7	Resources availability	Strategic implementation it can be prohibited or reduced with different

		conditions. In public universities, computers, facilities in education and novelty of human resources is low (Rowley and Sherman, 2001).
8	Communication practices	There should be an effective flow of communication in every university. Lack of communication, weak the effectiveness of strategic implementation (Höglund and Svärdsten, 2015).

Above thematic model was identified and future researcher can use this thematic model for their quantitative study.

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Force Majeure, Supervening Impossibility & Frustration of Contract in light of COVID-19

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ABSTRACT

The unprecedented upheaval caused by COVID-19 has affected the normal performance of contractual duties. Operational issues, health and safety rules, and government imposed stringent 'lock-downs' for extended periods of time have restricted life and commercial activity on an unparalleled scale. A post COVID world is afflicted by delays, non-payment, defaults and a failure to comply with contractual obligations. In these circumstances, contracted parties are eager to learn their legal rights and remedies when the performance of a contract becomes impossible. There are many inquiries as to whether contracted parties are legally excused from discharging their contractual obligations under the doctrines of force majeure, supervening impossibility or frustration. Force majeure is a contractual agreement incorporated in contracts and frustration is an English contract law doctrine that acts as a device to discard contracts where an unforeseen event renders contractual obligations impossible. The doctrine of Supervening impossibility means events that render the performance of the contract impossible to perform, consequently resulting in the termination of contracts. The purpose of this article is to identify applicable laws surrounding such force majeure and/or supervening impossibility and/or frustration events, in the context of a public health crisis, in an effort to assist Sri Lankan business moving forward. This article also focuses

on possible avenues of redress when a contract becomes impossible to perform.

Keywords - commercial contracts, force majeure, supervening impossibility, frustration of contract, remedies, COVID-19 pandemic

1. INTRODUCTION

While COVID 19 continues to unleash devastating impacts on human activities in countries worldwide, its outreach has also reached commerce and business. It has become a new normal to have lockdowns¹, restricted movements and curfews without due notices. Furthermore, many governments have enforced closures of certain types of business premises, such as supermarkets, restaurants and non-essential shops. Customer demand is dampened and supply chains have been mangled. As a consequence, businesses have been facing adverse impacts and commercial contracts are subject to scrutiny including revisions and amicable arrangements.

The question that has been deemed very relevant in the contractual context today for businesses is whether the effects of COVID 19 can frustrate commercial contracts. The purpose of this article is to identify applicable laws surrounding such a force majeure event and the supervening impossibility and/or frustration events, in the context of a public health crisis, in an effort to assist businesses to keep moving forward. This

¹ In this context, a lockdown means a restriction policy imposed by the government for people or community to stay where they are, usually due to health risks owing to COVID 19, to themselves or to others if they

can move and interact freely. The term "stay-at-home" or "shelter-in-place" is often used for lockdowns that affect an area, rather than specific locations.

article also focuses on finding possible avenues of redress when a contract becomes impossible to perform.

2. FORCE MAJEURE

Parties to a contract will consider that it may be wiser to include a clause in a contractual Agreement defining in advance mutual rights and duties if certain events occurred beyond their control.² Such clauses are in fact, frequently employed in commercial contracts. They are known as 'force majeure' clauses and vary considerably in ambit and effect.³ A force majeure clause differs from an exception clause in that the latter is intended to protect a party who is in breach, whereas the former applies when a certain event happens, whether or not, in consequence of that event, the party would be in breach.⁴ A force majeure clause enables the parties to the contract to void, suspend or terminate their contractual obligations where the occurrence of such exceptional events or circumstances renders the performance impossible. An example of an operative clause is: "neither party is responsible for any failure to perform its obligations under this contract, if it is prevented or delayed in performing those obligations by an event of force majeure".

In commercial contracts, a force majeure clause would typically provide a short-term reprieve to a party from performing obligations stipulated in the contract on the occurrence of a force majeure event. The typical force majeure events that may be accepted include riots, war, rebellion, government restrictions, earthquakes, floods, fires, strikes, and civil unrest. As such, for a force majeure clause to become effective, the occurrence of such events should be beyond the control of the parties, and it is required to demonstrate that they have made attempts to mitigate the impact of such force majeure event. If an occurrence or circumstance comes within the ambit of a force majeure event and fulfills the conditions for applicability of the clause, then the

result would be that the relevant party would be relieved from fulfilling its obligations undertaken by that party under the contract during the period that such force majeure event continues. Further, consequential liabilities depending on the language of the clause, may accrue and the relevant party may be required to give a notice formally intimating to the other party of the occurrence of such event and the consequential liabilities and invoking the force majeure clause. Some contracts also contain a provision that if such force majeure event continues for a prolonged period of time, the parties may be entitled to terminate the contract.

Force majeure clause can usually be found in various contracts such as purchase agreements, supply contracts, manufacturing contracts, distribution agreements, project agreements, finance agreements and sales agreements. However, this concept does not extend to excuse negligence or other malfeasance of a party as opposed to non-performance caused by the usual or natural consequences of external forces, or where the intervening circumstances are specifically set forth. It is salient to mention that force majeure cannot be invoked in the absence of the occurring of a force majeure event specified in the contract just because the contract has become financially or commercially more difficult to perform.

3. IS COVID-19 AN EVENT OF FORCE MAJEURE?

The term COVID-19 has always been referred to as "pandemic", 'epidemic' or 'disease'. If the wording of a contract includes one of the above terms as constituting an event of force majeure, then COVID-19 should be recognized as an event that triggers force majeure. However, it must be noted that, the term 'lockdown' is something new, unexpected and an alien term to be used in a force majeure clause. However, the term 'Act of God' is used in force majeure clauses and it is

² *Fairclough Dodd & Jones Ltd v JH Vantol Ltd* [1957] 1WLR 143.

³ Carole Murray, David Holloway and Darren Timson-Hunt, '*Schmitthoff's The Law and Practice of*

International Trade' (12th Edn, Sweet & Maxwell, 2012) 136.

⁴ *Fairclough (n1)*, Lord Tucker.

felt that the COVID-19 pandemic should fall within the ambit of this term. An Act of Gods has been legally defined as: -

'such a direct and violent and sudden and irresistible act of nature as the defendant could not, by any amount of ability, foresee would happen. Or, if he could foresee that it would happen, he could not by any amount of care and skill resist, so as to prevent its effect'.⁵

In *Transco plc v Stockport Metropolitan Borough Council*⁶, it was held that, the term force majeure includes one of the events that 'involved no human agency'. Act of Gods is normally confined to natural disasters such as floods and earthquakes. Therefore, it is highly unlikely that 'lockdowns' would fall within the definition of an 'Act of God'. A lockdown may be described as an official order to control the movement of people or vehicles because of a dangerous situation. However, it should be noted that the nature of this pandemic and its wide effects cannot be seen as an event which persons are able to avoid.

The lockdowns are imposed by governments and they should fall under government restrictions. It is apparent that the government-imposed lockdowns render a negative impact on businesses due to the consequential decrease in profits. In addition, certain processes are also delayed, such as financial facilities and government approvals. When the government imposes a lockdown, the public loses access to a wide range of services. The same is true for businesses, which often rely on government. In the light of that, this paper suggests that, the government-imposed lockdowns should be treated as events that constitute force majeure.

If a force majeure clause is not incorporated in a contract, the parties can invoke remedies under the doctrine of 'frustration'. This doctrine is

identified as 'supervening impossibility' under Roman-Dutch law which is applicable in Sri Lanka.

4. FRUSTRATION OF CONTRACTS

Frustration is a common law doctrine that is similar in nature to force majeure, but somewhat narrower in scope. Frustration is an event which makes a contract impossible to perform. The effect of frustration is that it brings the contract to an immediate or automatic end, and releases the parties from the need to perform their obligations under the contract.

For a contract to be discharged by frustration, the following conditions should be fulfilled:

- There is a **subsequent event**
- **Outside the control of the parties**
- Which **renders the contract**
 - Impossible
 - Illegal
 - Radically different

The frustrating event should occur after the contract was entered into. If the relevant event occurred before the contract was entered into, then this would be a 'common mistake' as to the existence of the subject matter and the contract would be void.⁷ The Frustrating event should not be self-induced. If it is self-induced, then this would amount to a breach of contract.⁸ The party relying on frustration should be able to prove that the event leading to frustration is externally caused.⁹ If there is any suggestion that one party was instrumental in causing the extraneous factor, then there may be self-induced frustration.¹⁰ If there is a suggestion of self-inducement, the burden of proof switches to the party who alleges it. In other words, the frustration should be caused by some extraneous event or change, and this should be quite without any fault or blame attributable to either party. Supervening impossibility of performance is the most obvious ground for frustration. There are

⁵ *Nugent v Smith* [1876] 1 CPD 426.

⁶ [2003] UKHL 61.

⁷ *Amalgamated Investment & Property Co Ltd v John Walker & Sons Ltd* [1976] 3 All ER 509.

⁸ *Lauritzen, J. AS v Wijsmuller BV (The Superservant No 2)* [1990] 1 Lloyd's Rep 1.

⁹ *Maritime National Fish Ltd v Ocean Limited* [1935] AC 524.

¹⁰ *F C Shepherd & Co Ltd v Jerrom* [1986] 3 WLR 801.

various ways which make contracts impossible to perform. It must be noted that, not all impossibility creates invariable grounds for discharge of contract.¹¹ Generally, frustrating events include destruction of a particular thing¹², death or incapacity¹³, illegality¹⁴, radically different (non-occurrence of events).¹⁵

Sometimes performance of a contract may become more difficult or more expensive as a result of change of circumstances. However, this does not have the effect of frustrating the contracts.¹⁶ Eventually, it is clear that contracts are not frustrated when it is self-induced and when it should have been foreseen¹⁷ and when a contract becomes more onerous or more expensive.

When an event of frustration occurs, the parties may share the losses as provided by case law, common law, statutory provisions or their provisions which they included into their contract. For example; the Law Reform (Frustrated Contracts) Act 1943¹⁸ provides that,

“All sums paid or payable to any party in pursuance of the contract before the time when the parties were so discharged shall, in the case of sums so paid, be recoverable from him as money received by him for the use of the party by whom the sums were paid, and, in the case of sums so payable, cease to be so payable: Provided that, if the party to whom the sums were so paid or payable incurred expenses before the time of discharge in, or for the purpose of, the performance of the contract, the court may, if it considers it just to do so having regard

to all the circumstances of the case, allow him to retain or, as the case may be, recover the whole or any part of the sums so paid or payable, not being an amount in excess of the expenses so incurred”.¹⁹

5. IS COVID-19 A FRUSTRATING EVENT?

There is no reported court case which sets out a precedent for establishing COVID-19 as a frustrating event and therefore, it is uncertain whether the pandemic may be deemed as a frustrating event by court. However, it is clear that this pandemic has caused disruption to the world's economy in an unprecedented manner. Despite the fact that the disease itself may not be deemed to be sufficient to render a contract frustrated, the impact due to COVID-19, by way of curfews and lockdowns will likely be seen as being wide enough to make the performance of a contract impossible. It is clear that many commercial entities were forced to close as a result of government orders and performance of commercial activities became impossible due to a reason which contracted parties did not have control of.

However, the doctrine of frustration is likely to be applicable only to short-term commercial contracts. It is clear that, temporary closure of businesses coupled with economic disruptions may not give rise to a legally valid reason to reject the performance of a long-term contract. The hardship faced by the parties due to curfews and lockdown is unlikely to trigger frustration of a contract regarding most substantial obligations arising out of a long-term contract. The only

¹¹ G H Treitel, 'The Law of contract' (10th Edn, Sweet & Maxwell, 1999) 808.

¹² *Taylor v Caldwell* [1863] 3 B & S 826.

¹³ *Condor v Barron Knights Ltd* [1966] 1 WLR 87, *Jackson v Union Marine Insurance Company Limited* [1874] LR 10.

¹⁴ *Fibrosa Spolka Akcyjna v Fairbairn Lawson Combe Barbour Ltd (The Fibrosa)* [1943] AC 32.

¹⁵ *Krell v Henry* [1903] 3 KB 740 - Sometime it may be possible to physically carry out the contract, but non-occurrence of an event on which the contract is based may render the contract meaningless. In such cases, if the

object of the contract was the occurrence of the event, then the contract is frustrated.

¹⁶ *Tsakiroglou Co Ltd v Noble Thorl GmbH* [1962] AC 93.

¹⁷ If an event is foreseen and if the contract does not provide that the contract is terminated in such an event, then the contract is not frustrated when such event occurs. The idea is that the parties have assumed the risk of the event.

¹⁸ This act applies only where it is already decided whether a contract is frustrated. It has no relevance, when deciding whether the contract is frustrated or not.

¹⁹ Law Reform (Frustrated Contracts) Act 1943, sec 2(1).

effect that these hardships can cause are temporary cessations of fulfilling contractual obligations. For example; moratoriums offered by financial institutions on repayment of loans. If the parties enter into a contract during or after a lockdown, they may not be able assert frustration because of foreseeability.

6. RECOVERY AND RESILIENCE

This pandemic is expected to give rise to a wave of legal disputes over non-performance of contractual obligations. As a result of disruptions caused to businesses and the general public due to COVID 19, the world is likely to experience a tsunami of force majeure invocations in contractual obligations. In the near future it is very likely to have court decisions based on force majeure or frustration principles defining the rights of parties affected by COVID-19.

Also, in the wake of this unprecedented pandemic, the parties may seek to incorporate a clause of force majeure into their contracts. In the future the words like 'pandemic', epidemic, lockdowns, shutdowns, government restrictions, state of emergency and curfews will feature in clauses of force majeure.

The contracts where parties have not incorporated a force majeure clause may require to invoke remedies under the doctrine of frustration. In that event, the courts will have to decide whether the contract in question has become impossible to perform. As mentioned above, this will be applicable only to short-term contracts where performances were due during the lockdown period and the postponement of performances were not possible. For example, a musical event. The long-term contracts will be subject to re-schedules, revisions, temporary cessations and negotiations.

If one party fails to perform his/her contractual obligations owing to the circumstances related to lockdowns, the other party may not get a right to terminate the contract and invoke remedies. Therefore, treating of contracts as having been frustrated on anticipatory or repudiatory breach during the pandemic may not be welcomed by courts. One has to be careful as to how he/she should treat temporary cessation of performance by the other party during lockdowns. Sometimes this may be the case for a long period even after

lockdowns. For example, a tourist hotel in Sri Lanka where it may take years to recover financial losses it suffered due to restrictions and lockdowns. If the hotel has financial commitments to banks, it may need a longer period to settle those dues.

Every business entity may need to be prepared to face challenges and respond in its own fashion. Such response may require precision planning and execution. In the light of that, this paper suggests adopting the following steps to avoid any unnecessary legal consequences and to offer resilience.

- **Negotiation;**

It is highly recommended to negotiate with each other and identify key terms in the contract. This may enable the parties to offer substantial performance instead of total compliance. If one party has a financial difficulty, it should immediately be brought to the other party's attention. This will help to have reviews of contractual terms. For example; further time to settle payment, concessionary payment terms, temporary cessations, moratorium and waive off provisions.

- **Understand the impact of lockdowns to the other party of the contract;**

Better understanding about the party's status would help the decision-making process. If there are more contracts with different parties, with better understanding, one can be able to recognize contracts that need revisions and reliefs. It is highly advisable not to terminate the contract without proper understanding and assessment of the other party's financial capabilities during the pandemic.

- **Try mitigation**

Offer the other party mitigation options to minimize their losses. Similarly, the same should be practiced by the creditors to minimize their losses. In that event, both parties will have a good understanding about each other and this may help to ease the pressure exerted by the pandemic during lockdowns.

- **Assess Risk**

It is absolutely vital to assess the risk associated with the business in order to have a clear picture about financial capabilities. This will help the decision-making process as to what the business can offer to other contracted parties.

- **Seek help**

The government, international instruments and NGO's may offer reliefs to businesses which are badly affected by COVID-19. If one suffers financial issues, it is advisable to look for above organizations to seek financial or other assistance.

- **Have an Insurance Cover;**

It is also advisable to have an insurance policy that covers pandemics and epidemics. This will help to overcome financial trouble when such an event occurs. However, this may not be practical to be applied to all businesses and individuals because not everyone can afford insurance premiums.

- **Court actions to be the last resort;**

It is not advisable to seek legal remedies amidst chaos. Courts are facing an unprecedented level of delays due to the backlog compiled during the lockdowns and court cases may be dragged on for years. Therefore, it is advisable take alternative measures such as negotiations or mediation rather than invoking judicial remedies. On the other hand, as it is still uncertain as to how the judges will react to legal issues which have arisen over non-performance of contracts owing to lockdowns. It is suggested that as far as possible these issues to be sorted out with mutual understanding of the parties. There may be instances where judges tend to apply just and equitable principles rather than the principle of frustration to contracts when performance of the contract became impossible.

7. CONCLUSION

It has been almost a year since Sri Lanka started to feel the heat of these exceptional circumstances. It is clear that small businesses have been affected very badly. However, disasters or pandemics are not something unusual to human beings. From time to time, the world has risen to take up the challenge and it is apparent that this time also the world will overcome this pandemic as well and the resulting hardships. The governments, financial institutions and other corporate bodies have offered various stimulation packages to ease pressure exerted by COVID-19. For short-term contracts it is desirable to have government intervention to offer some sort of reliefs to the affected parties. The long-term contracts may be subject to re-negotiations by parties to allow further time to fulfil contractual obligations. Finally, it is understood that, this is a very challenging period that tests the resilience of mankind. It is clear that, resilience can help us to get through and overcome these hardships. We build resilience over time with experience and experiments. This is why we have to respond to these adversities with flexibility and an open mind.

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From ‘Frying Pan to Fire’: Unprecedented Challenges of Covid-19 on Blind People in Sri Lanka

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ABSTRACT

COVID-19 has shattered all wakes of people's lives in most countries in diverse proportions. Sri Lanka being no exception, has experienced the spread in early March 2020 and later in September in the same year. Since then, the Government has implemented a wide range of far-reaching health measures and several other social restrictions with the view to combating the spread of the disease. Among the badly challenged fractions of the population due to pandemic was the people with disabilities. It is known that the persons with visually impairments and blindness represent the majority of this vulnerable community. The impact of the pandemic on the blind people are mostly untouched. Purpose of this paper is to examine the challenges of COVID-19 experienced by the blind people in the light of their social and economic life. A qualitative case study approach was adopted for data collection. Thirty-six blind persons representing of diverse livelihood activities, selected through purposive sampling method were interviewed. The interview transcriptions were initially examined through word cloud and subjected to thematic analysis for examining changes to social and economic activities. Results highlight that owing to COVID-19 pandemic shutdown, blind people have been severally disturbed in several aspects, some of which are unique to this community. The key challenges identified are related to mobility and transportation, acquisition of daily needs, disturbed social interactions, income earning opportunities, and information and communication. The precautionary measures implemented on COVID-19 pandemic has brought about disturbances that are relatively severer for

the blind people on moving forwards with their day-to-day life activities, than the sighted people. The decision makers dealing with pandemic situations should take into consideration of inclusive policies.

Keywords - Covid-19 pandemic. challenges to disabled, visually impaired and blind

1. INTRODUCTION

All nations including Sri Lanka, have been severely hit due to Covid-19 pandemic. Emerging virus called Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) was first reported in humans in Wuhan, China in December 2019, the World Health Organization (WHO) declared the novel coronavirus disease (COVID-19) outbreak a Public Health Emergency of International Concern, and subsequently a global pandemic on 11 March 2020 (World Health Organization, April 2020). This disease outbreak of Covid-19 has been hastily spreading across continents breaking borders, resulting in an unprecedented challenge to the economies, public health, and societies. Sri Lanka is no exception. The pandemic has lasted more than a year by now and WHO asserts that people will have to live with this pandemic, under a 'new normal' till a vaccine is discovered. The effects of COVID-19 pandemic and the associated distraction to people's lives, cut across all communities, irrespective of their social and

economic standing and the physiological and psychological differences.

People with disabilities in particular are more prone to the consequences of COVID-19 pandemic and pandemic response. Census of 2012 estimated that 8.7% of Sri Lanka's population above the age of five live with some form of disability, and out of which about 996,939 people are visually impaired or blind (DCS 2012). It has been observed that a number of studies in different parts of the world have been undertaken to examine the problems encountered by disabled communities in general and by the visually disabled in particular. However, the empirical studies on this issue in low- and middle-income countries are observed to be very little, and thus this paper aims to bridge this knowledge gap.

2. LITERATURE REVIEW

2.1. Consequences of Pandemic to the Blind People

The prevalence of people with visually impaired and blindness is a major public health challenge worldwide. It is estimated to 285 million people being visually impaired of which about 39 million people are totally blind (Pascolini & Mariotti, 2012). As per WHO, a higher prevalence of visually disabilities is found in low and middle-income countries.

The challenges to persons with visual disabilities during pandemic could impact their personal, mobility, psychological, social and economic concerns. While this pandemic has affected all communities in many respects, the vulnerable individuals, such as disabled have been very badly hit putting them at extreme risk in morbidity and mortality (Armitage & Nellums, 2020).

Out of five sensory modalities (i.e., Visual, Auditory, Gustatory, Olfactory and Tactile/haptic memory), the visual modality has been mostly researched and is the dominant sense (Pascolini & Mariotti, 2012). The blind people depend exclusively on four other senses, sans visual, for information gathering, mobility and

day-to-day activities. With the 'social distancing' and 'wearing face mask', the blind people compelled to manage to their activities without gustatory, olfactory and tactile sense modalities.

During the Covid-19 pandemic, traveling and transport facilities are either very limited or none in some places. Thus, those who rely on public or shared transport prevents from accessing daily needs on groceries and medicines (Cochran, 2020; Brucker & Henly, 2019). Particularly, disable people desire traveling, not only for seeking food and other services, but also to entertain leisure, recreation activities and social interactions (Mattson, et al., 2010; Páez & Farber, 2012). In contrast, owing to Covid-19 pandemic people with disabilities are pushed towards social exclusion and that can lead to deteriorate the mental and physical health conditions of disable people (Berg-Weger & Morley, 2020; Repke & Ipsen, 2020).

Disable people living in cities, compared to others may have four times of chance of getting ill or die during the Covid-19 response, not due to their vulnerability, but the absence of disability inclusive urban health policies and practices are largely affected (Pineda & Corburn, 2020). Visually disable people, amongst other disabilities have high chance of contacting Covid-19 due to many factors; inherently depending on someone's assistance for daily activities and understanding the environment with touch and tactile senses; poor access to information on disease transmission and preventive measures particularly for rural poor; difficulty in handling and wearing face mask, no or lack of disability access to hand washing are some of which (Senjam, 2020). Moreover, poor access to services, particular the health care services further aggravate the disable conditions and overall health outcomes (Armitage & Nellums, 2020; Senjam, 2020).

Poor or no access to transport impedes the disable people seeking and continuing employment (Loprest & Maag, 2001). Disable people particularly in developing countries rely on self-employment of the informal sector (UN, 2018). A survey conducted in three areas –

Polpithigama, and Jaffna Divisional Secretariat, and Hambantota District—too reinforced that visually disable people is mostly engaging in self-employment. However, these livelihood activities are limited only to meagre trades such as lottery tickets selling, carpet weaving, incense sticks selling (Bandara, et al., 2020).

3. METHODOLOGY

Case study approach has been adopted as the main qualitative methodology and 36 persons (i.e., severely blind and totally blind) represented the case participants. The target population is blind persons in Sri Lanka above 18 years. Data collection was based on in-depth interviews using a pre-tested semi-structured interview protocol. The participants were purposively selected to represent a cross section of the society. Taking into consideration the sensitivity of the data collection exercise, a researcher who himself is blind has been involved with the data collection process and the consent of participants were obtained on individual basis.

The interviews were conducted during July – August 2020, and the proceedings were transcribed and translated into English. The transcripts were subjected to a word cloud analysis and applied advanced natural language processing tools to produce bigram and trigram visualization. Using pattern matching and thematic analysis technique the transcriptions were closely examined to derive key challenges.

4. RESULT AND DISCUSSION

4.1. Profile of Respondents

Thirty-six visually disabled persons comprising of 22 totally blind and 14 severely blind individuals including six females, from different geographical locations in Sri Lanka between the ages of 18 and 62 years were the case study subjects. Out of these individuals 13 were married, and one was divorced and other were unmarried. The occupation of these subjects varies and included public servants and government teachers, graduate job seekers, self-employed person such as incense stick sellers, lottery ticket sellers, people attending to home based small businesses, unemployed and

housewives. It is worth noting that the respondents also consisted three community leaders (i.e., presidents of societies dedicated to blind persons).

4.2. Socio Economic Situation of Blind Persons

The blind people in Sri Lanka have been experiencing many social and economic downturns even before the Covid-19 pandemic. The Chairman of the National Federation for the Blind, spoke about the life of Blind persons, thus:

“... Our organization is one of the largest societies with over 2,500 members. Opportunities for education of blind people is very limited. Only a very little number of blind people has opportunities to access to higher education. Opportunities for government jobs with lower education is very limited, a very few works in private companies. Those who are willing to work are mostly self-employed; selling lottery tickets, incense sticks etc. In this sense most of our people are economically very poor. They live in dependency manner, and some are begging in public places.”

The statement of the President of Sri Lanka Association Self employers with visual impairment also confirmed this situation. These findings highlight underprivileged socio-economic conditions such as poor access to education, lack of employment opportunities and poverty ridden family conditions. Loprest & Maag (2001) stated that no or very little transport opportunities reduces seeking and continuing jobs by blind people. Further, the recent study in certain areas in Sri Lanka also confirmed the above scenario (Bandara, et al., 2020).

4.3. Challenges Imposed by Covid-19

Apart from the prevailed vulnerable conditions, the pandemic pushes these people to a further deprived situation. This situation is discussed under five key areas identified through word cloud (Figure 1) and other analyses. They are related to challenges on mobility and transportation, acquisition of daily needs, income earning opportunities information and Communication, and social interactions.

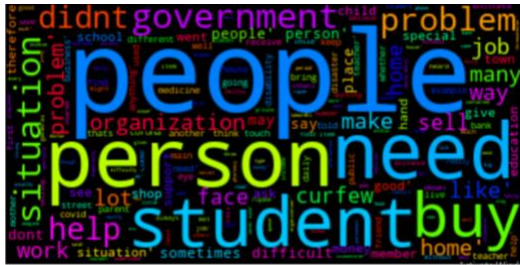


Figure 1. Word Cloud Visualization Interview Proceedings

4.4. Challenges to Mobility and Transportation

In addition to the white cane, the support of a sighted person is always required for the blind people to move around. With the introduction of Covid-19 health measures, they are inevitably required to maintain physical distance, wear face mask, no hand holding is allowed. These measures place them in difficulty where they are deprived of usual means of understanding the environment, travelling and mobility. These challenges are confirmed by the Chairman of the National Federation for the Blind, thus:

“It is difficult to travel on roads with white cane alone and wearing face masks. We always need people around us to assist us. Usual practice is when we go somewhere or get into a bus, someone around us hold our hands and direct us to move around. But these practices go against Covid-19 health regulations, and such situation pushes us to be further cornered or isolated. Since we recognize the environment by touch feel and smell, now we are badly in trouble. No one comes near us for support.”

This observation has been reinforced by the following narration of a teacher:

“We both—my husband and I—are totally blind, and we hold hands together, depending on each other when walking. However, social distancing rule prevents us from doing so. We travel therefore individually using the white cane. This sudden detachment of us generates many issues on us”.

“I recently went to a bank on my own alone with no support from a sighted person. When I was standing in queue someone came close to me

ignoring the distance rule. I suddenly asked him to keep way from me. Then only he told me he is a blind person. With that experience, I realized we, the blind people are at serious risk particularly when we go out for our day-to-day activities where no touch and smell can be experienced or guided us”.

“My colleague teachers as well as my students, holding the elbow, take me to the places where I want to go. I cannot imagine how I should interact with them in future. They may be scared to get close to us due to fear of Corona-19 virus”.

Another teacher said that they normally use public transport but during the Covid-19 period they have to use a three-wheeler and it is costly. Several other respondents confirmed the difficulty in mobility and transport. Cochran (2020) very strongly emphasized that limited transport poses difficulties in accessing personal care, employment, and social interactions.

The practice of blind persons is to go to shops and boutiques nearby for buying household utensils and food items while for medicines and other requirements they go to nearby towns using public transport. Acquiring such basic needs also become a challenge during this situation that is substantiated by the following responses.

“Both myself and my wife are blind. We have to depend on the delivery vans and trucks for food stuff and other things. However, it was even hard for me to get a loaf of bread from a choon-paan three-wheeler. I could not catch this Choon-Pann man because by the time I slowly walk up to the road, he flies away. Other day’s people were there to help us, but not now” (a Teacher from Chilaw).

“I used to go to Hambantota or Matara town to get my raw material. Now most places are locked down I have no way of going by bus to these places and get my raw material” (A blind incense sticks producer and seller in Siyanetugama Village in Hambantota)

“When we go to shops to buy potatoes, onions, and dry fish etc. we touch these things and also smell them to understand the quality. With this Covid-19 problem we are not allowed to do so

and have to accept anything given to us” (A lady from Siyanethugama).

It can be seen that the blind persons are severely challenged in comparison to sighted individuals when it comes to obtaining food items, raw material for small business and other household needs. This finding is in conformity with past research.

4.5. Challenges to Livelihood Opportunities

Taking into consideration that most visually disabled persons belong to low-income category, and are self-employed, they are badly disturbed economically. However, the people working in the state sector and as government teachers are somewhat safer. A principal of a special needs school in Monaragala said:

“However, many blind people are facing the problem of unemployment. I talk to these people a lot. They have to face a big problem to make money for living. There is no one to look into these problems. Although some people are getting small some as a disability allowance, there are many who do not get any support.”

4.6. Information and Communication Related Challenges

The blind persons are facing many problems related to receiving information. Access to information for disabled people is very limited, particularly during a pandemic situation (Cochran, 2020; Senjam, 2020). All the Covid-19 related written announcements and information are targeted for sighted persons. No visual disability friendly materials are available.

One blind lady from Galle said:

“I used to visit Karapitiya hospital regularly and get my medicines. This time I could not go due to Covid-19 and sent my prescription book through a neighbor to OPD. Doctors have written something in the book and sent along some tablets. This time I was confused because the shape of one tablet is different. How can I read what doctor has written?”

Another respondent said:

“I was told that in banks and shops etc. some marks are written on the ground to indicate the

places that people must stand keeping the meter distance. We cannot see them and therefore we go all over.”

“That day I was in Kandy town, walking as usual. I suddenly realize that people are rushing as if there is some emergency. I had no idea, and there was no one to ask. Everyone seemed busy...after some time only I got to know that curfew is going to be imposed suddenly. Those who use mobile phones got SMS messages. but I had no way to get such information in that way.”

These narrations bring about the need for presenting information in disability friendly manner. Further, information related to emergency lockdowns would cause many hardships to the blind people.

4.7. Challenges Related to Disturbed Social Interactions

Most issues related to social interaction of blind persons triggered due to Covid-19 pandemic appear to be quite similar to that of sighted persons. However, the impact of such issues as loneliness and isolation may be severe for the blind people.

A secondary school student studying in a leading school in Colombo who is severely blind said:

“I do not find any major difference between being in the class and online mode of learning. But I know many of my blind friends are distressed being confined to their homes, and they get angry easily.”

Another teacher from Anuradhapura narrated his story of feeling loneliness, thus:

“I live in a separate small house close to my sister’s home. On weekends, my sister brings in my meals to my place. With this Covid-19 problem, no one comes to visit me, even my sister who brings my meals just leave the plate in the veranda and go back quickly. I am alone and very lonely, do not know what to do. The only social contact is getting a phone call one in a while from friends.”

5. CONCLUSIONS

While the Covid-19 pandemic poses challenges to all communities, the persons with blind and other form of disabilities are badly disturbed. These unprecedented challenges for the blind people are brought about due to some health measures including wearing mask, and maintaining social distancing. These processes hamper them from experiencing the surrounding environment through smell, taste, and touch. Even their usual limited earning opportunities are disrupted. As such, the policy makers should take into consideration the specific requirements of disable communities in formulating Covid-19 response measures. Further, certain special support arrangement needs to be provided for coping the pandemic down-turn for such vulnerable communities.

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Green Innovations As a Differentiation Strategy to Drive Sustainable Competitive Advantage

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ABSTRACT

Greening an organization is an emerging concept, that leads an organization to become the leader of related markets and to achieve sustainable competitive advantage. Nowadays customers tend to buy more innovative green products and are more concerned about firms with innovative green processes rather than the cheap products or services as they focus on their health as well as the environmental protectionism. The aim of this study was to discover whether the green innovations of a firm link with differentiation strategy in order to achieve sustainable competitive advantage. Qualitative analysis was used with purposive sampling method and data was collected through interview method. Collected data was analyzed using thematic approach and case Study approach. The study revealed that green product innovation and green process innovation of a firm can be considered as differentiation strategy in order to achieve sustainable competitive advantage. The results also present several implications for managers and provide some suggestions for future researchers.

Keywords - *green product innovation, green process innovations, differentiation strategy, sustainable competitive advantage*

1. INTRODUCTION

1.1. Background of the Study

Organizations in today's context are bound to protect the environment, to decrease the use of natural recourses, to reduce the impact on environment due to their actions and to consider

environmental protectionism as a corporate social responsibility. Most of the organizations in Sri Lanka, nowadays follow the concept "Go Green" and always use their green concept as a tool when they promote their brand. According to Ranaraja et al., (2019) "Today pollution is occurring on a wide and unprecedented scale all over Sri Lanka. causing all-around damage to the atmosphere, water, land to the various elements of the environment and to the ecosystem itself. There are lots of man-made pollution and environmental degradation that the severe challenge ahead for all Sri Lankans".

As mentioned by Andersen (2008) "environmental innovation research is still in its early phase, and there are worldwide very few actual innovation researchers working with environmental issues." Mostly in the innovation management field, it is well known that only a few scholars have conducted researches dedicated to new product/service development of green innovations. In Sri Lankan Context no study has been found on linking these green innovations and differentiation strategy especially as a driver of sustainable competitive advantage, while very few scholar articles have been done by other countries. Many researchers have mentioned this as a research gap (Zhu et al., 2008 and Jabbour et al., 2016). Kemp and Pearson (2007) stated that green innovations are "the production, assimilation or exploitation of a product, production process, service or management or business method that is novel to the organization (developing or adopting it) and

which results, throughout its life cycle, in a reduction of environmental risk, pollution and other negative impacts of resources use (including energy use) compared to relevant alternatives”. Differentiation strategy is known as a business strategy that is used to reach competitive advantage by providing customers’ products or services which are unique, different and distinct from products or services of their competitors may offer in the market. It is important to investigate the relationship between green innovations of a firm and its differentiation strategies as it is directly influencing the market position of the particular firm and to achieve sustainable competitive advantage. This study considers four leading industries in Sri Lanka and its uppermost firms and then ask customers which firm they prefer and why, with related to the green concept of the firm. The aim of this study is to determine the linkage between green innovations of a firm and its differentiation strategy in order to achieve sustainable competitive advantage.

1.2. Research Question

Based on the problem statement developed as above, the following research question is to be addressed;

“What is the linkage between green innovations of a company and its differentiation strategy in order to achieve sustainable competitive advantage?”

1.3 Research Objective

According to the research question, the following objective is organized;

“To examine the linkage between green innovations and differentiation strategy in order to achieve sustainable competitive advantage”.

2. LITERATURE REVIEW

2.1. Green Innovation

As mentioned by Díaz-García et al., (2015) there are different terms or notations used in the literature to describe innovations that have a

minimized negative effect on the environment: “green”, “eco”, “environmental” and “sustainable”. The purpose of allowing green innovations within an organization is that, it assures the reduction of adverse impact on the environment, so it provides a great opportunity for organizations to achieve their environmental related goals and benefits (Wong et al., 2013; Lin et al., 2014). According to Eiadat et al. (2008), green innovation can be defined as “innovation that puts emphasis on the reduction of waste, pollution prevention and environmental management system implementation”. There are three main categories of green innovation or eco innovations, namely: green product innovation, green process innovation and green managerial innovation (Chen et al., 2006; Chen, 2008; Damanpour et al., 2009).

2.2. Green Product Innovation

Green product innovations can be defined as “the improvement in products characteristics such as improvements in technical components and materials that aims to reduce environmental impacts during an eco-product’s entire life cycle” (Carrillo-Hermosilla et al., 2010; Christensen, 2011; Chen, 2008; Pujari, 2006) or “the act of introducing a modification to a component of a product or the complete addition or replacement of a new or significantly improved product in order to reduce negative impact to the environment regarding their characteristics” (Pujari, 2006). Examples of green product innovation activities are; increasing of useful life of products (including of recycling schemes for products), lessening toxic components within products, reduction of energy consumption and emissions during product usage, (Dangelico & Pujari, 2010).

2.3. Green Process Innovation

According to Carrillo-Hermosilla et al., (2010) and Pujari, (2006), Green process innovations can be defined as “improvement of existing production processes or creation and implementation of improved production

processes to reduce environmental impact”. “With green process innovation activities, companies aim to reduce environmental effects with a development on current production facilities or adding some new processes” (Cheng et al., 2014).

2.4. Green Innovation and Differentiation Strategy

“A differentiation strategy is a business strategy used to achieve competitive advantage by providing customers products or services which are unique, different and distinct from products or services of their competitors may offer in the market” (Kuijk, 2018). Differentiation strategy has several advantages that are helpful in developing a unique niche within an industry, some of them are reduced price competition i.e. a differentiation strategy that allows a company to compete in the market with something other than lower prices ;unique products i.e. a product that builds on the unique qualities ;better profit margins i.e. when products are differentiated and turned into higher-quality products, they offer more opportunities for larger profit margins ;consumer brand loyalty i.e. it will create brand loyalty in customers if a business maintains the perceived quality; no perceived substitutes i.e. if the strategy is successfully implemented, then it may give the impression that there is no other product existing on the market to substitute. Green innovations are “innovations that consist of new or modified processes, practices, systems and products which benefit the environment and so contribute to environmental sustainability” (Oltra and Jean, 2009). There is less supportive literature to show that firm’s green innovations are considered as a differentiation strategy. Walker and Wan (2011) carried out a study titled “The Harm of Symbolic Actions and Green-Washing: Corporate Actions and Communications on Environmental Performance and Their Financial Implications” and in his study he has stated that

“besides reducing production costs and avoiding liability costs, green innovation may represent a source of differentiation advantage and may allow the firm to increase market share and its revenue”. And Cerulli et al., (2016) have proven in their study titled “The role of firm research and development effort and collaboration as mediating drivers of innovation policy effectiveness”, that proactive green innovators can attract more clients and then the market share of the focal firms they considered would increase. Since the differentiation strategy is about creating unique, different products or services in order to be superior than a firm’s competitors while green innovations are for creating unique and different products or services with decreasing impact on environment, which contributes more to increase the firm’s image (Walker and Wan, 2011), then the similarities of green innovations and differentiation strategy can be seen. The results of this study will be helpful in clarifying this relationship.

3. METHODOLOGY

3.1. Conceptual Framework

Based on their hypothetical behavioral pattern, the proposed conceptual framework is depicted in Figure 01 below.

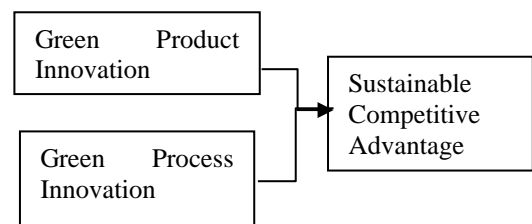


Figure 1. Conceptual Framework

Source: Author, 2020

3.2. Research Proposition

To investigate the linkage between green innovations and differentiation in order to

achieve sustainable competitive advantage following proposition has been developed.

P1= Green innovations of a firm is considered as a differentiation strategy in order to achieve sustainable competitive advantage.

3.3. Sample Profile

Population will include customers of four leading industries. They are namely, hotel, banking, dairy and telecommunication Industries. In hotel industry, Jetwing Hotels, John Keels Hotels and Aitken Spence Hotels are considered for the analysis according to the highest rating given by popular booking websites, namely, TripAdvisor, Expedia, Booking.com and Agoda. Two state banks (Bank of Ceylon and Peoples Bank) and three private commercial banks (Commercial Bank, Hatton National Bank and Sampath Bank) are selected, based on their profit before taxation of a financial year, i.e. all of these banks have over 15 billion profit in last financial year. For the Dairy industry, Highland and Fonterra are selected based on their commitment towards environmental protection as mentioned in their financial reports and websites. Among telecommunication service providers in Sri Lanka, Dialog Axiata PLC and Mobitel Pvt Ltd are the leaders, therefore they are selected for the analysis. Purposive or judgmental sampling method will be used to select customers from each industry. For hotel industry five customers will be interviewed, for banking industry eleven clients will be interviewed, for dairy industry five will be interviewed while for telecommunication industry nine clients will be interviewed.

3.4. Data Collection Method

Interview method will be used for qualitative Study. Interviews will be carried out face to face and over the phone base on an interview guide.

3.5. Data Analytical Method

The data collected through interviews will be analyzed using either thematic approach or case study method. If any industry does not provide sufficient evidence, then the researcher plans to go for case study approach and if the information

is freely available, then researcher will go for thematic approach. Under thematic approach, researcher will first identify the respondents, and then will organize the themes. Then sub-themes will be organized. Then all the views of the respondents will be reviewed by the researcher.

4. RESULTS AND FINDINGS

4.1. Thematic Analysis of Hotel Industry

Among five customers four of them preferred Jetwing while the other preferred John Keels. Therefore, highlighting the most preferred hotel chain, i.e. Jetwing, for the analysis, only considered statements given by those who preferred Jetwing. Among them only three respondents' statements were considered, as facts stated by 25 percent or more participants can be included as themes (Dutton and Dukerich, 1991). Table 01 below shows the summary of respondents.

Table 1. Summary of Respondents who Preferred Jetwing Hotels

Participant	Characteristics
R1	Naturalist who travels around the country and frequent buyer
R2	A traveller from Netherlands, frequent and continuous buyer.
R3	A business traveller from Japan, frequent buyer

Source: Author,2020

The Themes were constructed as mentioned in Table 02 based on the statement given by above revealed respondents. Three themes were identified as prominent which are useful in further analysis. The researcher constructed sub themes and sub-sub themes by reading

transcripts line by line and identified what participants are trying to disclose.

Table 2. Themes and Sub-Themes of the Analysis- Hotel Industry

Themes	Primary Themes	Sub-Themes	Sub Sub-Themes
01	Green Innovations	Green Product Innovation	Eco products with improved features, Eco friendly Package
		Green Process Innovations	New eco products to utilize natural materials and to reduce waste related damage, Updated communication system with minimum impact on environment for a convenient communication with customers, Eco-friendly system as a tool in consumer marketing
Themes	Primary Themes	Sub-Themes	Sub Sub-Themes
02	Differentiation	Product/Service	Value added service, Perceived

		Attributes	perception, Responsiveness
		Firm-Customer relationship	Consumer Marketing, Brand loyalty, No perceived substitutes
03	Sustainable Competitive Advantage		

Source: Author,2020

4.2. Thematic Analysis of Banking Industry

Based on the comments and information provided by the 11 interviewees, it was found that five of them prefer Bank of Ceylon, another four prefer Commercial Bank, two of them prefer People's Bank. As most preferred bank, responses received for Bank of Ceylon has been considered for the thematic analysis. Among those five respondents, only four respondents' statements were considered. The Table 03 shows the summary of respondents.

Table 3. Summary of respondents who preferred Bank of Ceylon

Participant	Characteristics
R1	Private Sector worker and continuous client
Participant	Characteristics
R2	Businessman, frequent client

R3	Retired Government Officer and client for more than 30 years
R4	University student, new client

Source: Author,2020

Using the client's explanations for selecting Bank of Ceylon the themes, sub themes and sub-sub-themes were constructed as mentioned in Table 04.

Table 4. Themes and Sub-Themes of the Analysis- Banking Industry

Themes	Primary Themes	Sub-Theme	Sub Sub-Themes
01	Green Innovations	Green Product Innovation	Eco products with improved features
		Green Process Innovations	New eco products to utilize natural materials and to reduce waste related damage, updated communication system with minimum impact on environment for a convenient

			t communication with customers , Eco-friendly operation and / or production process to improve delivery time
02	Differentiation	Product/Service Features	Perceived perception Responsiveness, Time and Timeliness, Accessibility & Convenience
		Firm-Customer relationship	Brand loyalty
03	Sustainable Competitive Advantage		

Source: Author,2020

4.3. Thematic Analysis of Dairy Industry

Five interviewees were asked their preference between Highland dairy products (Milco) and Anchor dairy products (Fonterra). All of them prefer Highland over Anchor. Responses

received for Milco have been considered for the thematic analysis. Among those five respondents, only three respondents' statements considered. The Table 05 shows the summary of respondents.

Table 5. Summary of respondents who preferred Milco Products

Participant	Characteristics
R1	House wife with three children
R2	Teacher, mother of two children
R3	Private Sector worker, Father of one child

Source: Author,2020

Based on the client's explanations for selecting Milco Products, the themes were constructed as mentioned in Table 06.

Table 6. Themes and sub-themes of the Analysis- dairy industry

The mes	Primary Themes	Sub-Themes	Sub Sub-Themes
01	Green Innovations	Green Product Innovation	Eco-labelling, Eco-products to improve consumer safety
The mes	Primary Themes	Sub-Themes	Sub Sub-Themes
02	Differentiation	Product/Service features	Value added service

			safety
		Firm-customer relationship	Brand loyalty No perceived substitutes
03	Sustainable Competitive Advantage		

Source: Author,2020

4.4. Case Study Analysis of Telecommunication Industry

With respect to the telecommunication industry, nine people were asked their preferences among Mobitel and Dialog and to explain the reasons for it. Among them Six preferred Mobitel and three preferred Dialog. But no one gave the reason of "Go Green" of particular service provider as the reason for their selection and preference. With all these interviews and explanations, it can be seen that Mobitel has the competitive advantage over Dialog due to its rates and customer service. According to all interviewees 'Green Concept' is not playing a role in telecommunication industry in order create a superior feeling in customers' mind about them. Therefore, thematic analysis with respect to the telecommunication industry has not been carried out.

4.5. Summary of the Results

It was evident that facts revealed by interviewees for Theme 01 and Theme 02 are same for Jetwing Hotels, Bank of Ceylon and Milco products. Based on the evidences following summary can be presented.

Theme 01: Green Innovations

The evidence collected reflect that most of the participants had stated that their choice of products or services among other competitive products directly influenced by green innovations of that particular organization. On the other hand, they have recognized green product innovations and green process

innovations as reasons for selecting a particular product or service. Under green product innovation, eco-products with improved features, eco-products to improve consumer safety, eco-labeling and eco packaging are the most prominent indicators while under green process innovations, new eco products to utilize natural materials and to reduce waste related damage, updated communication system with minimum impact on environment for a convenient communication with customers and eco-friendly operation and / or production process to improve delivery time are the most prominent indicators.

Theme 02: Differentiation Strategy

Most of the participants stated that they select a particular green innovative product or service if they found them to be unique when compared to the other competitive products or services available. As mentioned by MacMillan and McGrath (1997), outcomes of differentiation strategy are unique products/services, brand loyalty and no perceived substitutes. From this analysis it can be seen that most of the participants are loyal to the particular product/service specially in banking industry and dairy industry. It was found that customers of Bank of Ceylon are loyal due the differentiation they feel about that bank while customers of Milco products are also loyal to that brand due to the eco-products. And most of the time they stated that they do not have any substitute for their choice in the market as they found it 'Green'. All these evidences clearly pointing out that green innovations of a firm is directly link with differentiation strategy of the firm.

Theme 03: Sustainable Competitive Advantage

The natural resource-based view (NRBV) of the firm (Hart, 1995) suggested that an organization's attains competitive advantage when its resources and skills interact with the natural environment. Thus, going green is a

valuable practice adopted in most of organizations in order to increase their sustainable performance. From the evidence collected, it can be identified that green innovations of a firm is directly link with differentiation strategy which will lead to the sustainable competitive advantage. Therefore, it can be recognized that Jetwing Hotels, Bank of Ceylon and Milco enjoy sustainable competitive advantage in their market segments due the green innovations adopted as differentiation strategy.

5. DISCUSSION & CONCLUSION

Findings of Carrillo-Hermosilla et al. (2010) proposed that green innovations are used to improve corporate image and to gain Competitive Advantage. Chen et al. (2006) examined those green innovations of a firm are positively linked with competitive advantage. Hence, engaging in green innovations vigorously has positive impact on sustainable competitive advantage. According to Reinhardt (1998), Organizations which have environmentally friendly applications to differentiate their products or services from other competitors gain a competitive capability. As per the findings of current research, people perceive Jetwing Hotels, Bank of Ceylon and Milco (Highland) due to their green products and green process innovations. The respondents also highlight the unique factors of each of these brands of which they prefer them over its competitors and what really make them buy these products. Each and every factor they highlighted pointing the direction of differentiation as mentioned in Chapter Five. It is true that some organizations tend to highlight their green innovative approach in order to attract customers towards them. For example, the environmental sustainability at NSBM Green University is used to attract students. The green concept has created a fascination in the minds of the students as well as the outsiders as a differentiation strategy in their unique product. Further, Dilmah Tea is using the

label “Recycled” in all their outlets and in their packaging,” creating a strong impact in the minds of its clients. This ideology of green concept marks well differentiation strategy. Nevertheless, in the telecommunication field, all are interested in the best coverage and the cheap rates, thus, Mobitel and Dialog are extensively chosen. This scenario indicates that it is the cost leadership that is prioritized than differentiation. This result confirmed the strong and significant impact of green innovations on sustainable competitive advantage, confirming the innovation literature (Pujari, 2006; Chen et al., 2006; Chou et al., 2012).

It is true that everyone prefers eco products or eco-friendly services as it is known that it is safer to use products with minimum impact to the environment. Most of the people understand that if these environmental related issues continue for another ten more years, then there will be major consequences with related to the health and availability of natural resources. People have identified that ‘Go Green’ will minimize these consequences and are eager to buy green products or consume products or services with minimum impact to the environment. Findings of the research revealed that firms with the green products or services have good brand image when compared to the competitors, and they feel these products or services as unique and sometimes they feel that there is no substitute for that particular product or service they preferred. All these features highlight the outcomes of differentiation; therefore, it can be identified that green innovations of a firm is linked with differentiation strategy of the firm in order to achieve sustainable competitive advantage. Hence, it can be identified that green product innovation and green process innovations function as a differentiation strategy in most industries, though certain areas like telecommunication Industry, it is irrelevant.

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Improvements and Adjustments Needed to Overcome the Impact of COVID-19 by the Travel and Tourism Services Sector in Sri Lanka

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ABSTRACT

Since the end of the civil war, Sri Lankan Travel and Tourism sector has rapidly developed until its name has been popularized as a top travel destination in the world. Resulting this global popularity, travel and tourism sector has become the third largest export earner of Sri Lanka while supporting more than 10 percent of the total economy in 2019. Nevertheless, travel and tourism sector in Sri Lanka is severely damaged as a result of the Easter bomb attack and the Covid-19 pandemic. The severe downfall occurred in travel and tourism globally has heavily impacted tourism industry in Sri Lanka. As the COVID-19 pandemic is still uncontrolled, the impact over tourism industry could not be measured or predicted. Hence, it is crucial to take steps to overcome the situation by identifying and suggesting solutions for the already existing issues and regulatory loopholes in travel and tourism sector and introducing new methods of conducting business adjusting to the new normal. This qualitative research work, especially with an inductive analysis tries to address the contemporary issues faced by the Sri Lankan tourism industry due to COVID-19 pandemic. The main objective of this study is to identify the impact on the tourism industry due to COVID-19 and to discuss what measures Sri Lanka can take to overcome those challenges, especially referring to travel and tourism services sector.

Keywords - tourism and travel-related services, Covid-19, new normal, impact on the industry, recovery measures.

1. INTRODUCTION

Tourism is one of the largest sources of income for Sri Lanka after the workers' remittances and apparel. In 2019, the contribution of tourism and travel related services sector to Sri Lanka's GDP was LKR 1,591.1 billion (USD 8,924.18 million) equivalent to 10.3% of the total economy (Sri Lanka 2020 Annual Research: Key Highlights, 2020). Moreover, Sri Lanka's travel and tourism industry GDP counted for US \$5,102.7 million, which is 5.7% of the countries' total GDP (UNWTO & WTTC, 2019).

Tourism is one of the hardest hit industries by the COVID-19 virus. As it is based on mobilizing, some argue that tourism is one of the main reasons for the spread of the virus. Therefore, tourism is highly restricted by the majority of countries even closing down the ports and boundaries. As a result of that, tourism industry has to wait a longer period to restart unlike other industries. As WTTC expects, there would be an incline of 25 percent or more of tourist earnings and around 50 million job losses in the world. It also predicts that 30 million job losses from the above number will be from Asia (WTTC, 2020). Although it is a global pandemic, countries with weaker economies that are more weighted on the service trade would be more vulnerable to harsh conditions.

Sri Lanka also weighs on service trade; and the tourism industry makes a significant contribution to the country's economy (UNWTO & WTTC, 2019). Hence, the rapid downfall of tourist arrivals which leads to less income generation, deduction of foreign investments on tourism sector and the increment of unemployment rate are the major challenges that Sri Lanka faces due to pandemic.

As the paper's objectives are to identify the impact of COVID-19 on Tourism services sector and to suggest recovery measures, this paper tries to deeply address the questions: how hard Sri Lankan tourism industry is impacted due to COVID-19 and what measures can be taken to overcome those challenges with special reference to the Sri Lankan context. This is a non-empirical literature-based research work based on various literature sources from World Trade Organization (WTO), World Travel and Tourism Council (WTTC), World Tourism Organization (UNWTO), Sri Lanka Tourism Development Authority (SLTDA) etc. Additionally, an inductive data analysis is also used to identify the economic impact on Sri Lankan tourism industry.

2. TOURISM AND TRAVEL-RELATED SERVICES

The Services Sectoral Classification List of the World Trade Organization (WTO) which is called W120 identifies 154 services that are categorized under 12 sectors and tourism and travel-related services is one of them (S/C/W 298 (Tourism Services - Background Note By Secretariat), 2009). Tourism & travel related sector is yet again divided into four sub-sectors. The first three categories under them are listed under United Nations' Provisional Central Product Classification" (CPC)

- A. Hotels and restaurants (including catering) (CPC 641-643)
- B. Travel agencies and tour operators' services (CPC 7471)
- C. Tourist guides services (CPC 7472)

With the intention of understanding the tourism industry better, the OECD, the World Tourism Organisation (UNWTO) and Eurostat together

developed a recommended methodological framework called Tourism Satellite Account (TSA) in 2000. The objective of this framework is to provide a reliable measure of the right contribution of tourism to a national economy by analysing the features of demand for goods and services related to tourism, detecting the interface between demand and supply of those goods and services, while explaining how supply interrelates with other economic activities (Grosso, Leshner, & Pina, 2007).

Through a study done on Canada, Chile, Indonesia, Peru and Philippines by Asia Pacific Economic Cooperation (APEC) in 2004, key challenges to the long-term growth of international tourism are identified as: the relatively low-profile tourism has in most political environments, tourism is highly fragmented and tourism is highly vulnerable to external force (Canada, 2004). In addition to APEC study, OECD Tourism Trends and Policies 2010 has also identified several more challenges for the longer-term growth of tourism industry as: economy-wide impact of tourism, globalisation and changing markets, climate change and sustainability, the knowledge economy, the Human Resources and the productivity and competitiveness (OECD Tourism Trends & Policies 2010, 2010).

3. IMPACT OF COVID-19 TO SRI LANKAN TOURISM AND TRAVEL-RELATED SERVICES

Sri Lankan tourism industry is already facing several challenges as mentioned-above. Impact of COVID-19 is the core challenge currently Sri Lanka is facing. The rapid growth of Sri Lankan tourism industry was badly damaged after the Easter bomb attack (Mustaq, 2019). As COVID-19 pandemic emerges immediately after the Easter attack crisis, Sri Lanka did not have sufficient time to recover its damages from its former crisis. Hence, the impact of COVID-19 has doubled the damage to the tourism industry. In order to prevent the virus spreading, Sri Lankan government had to ban tourist arrivals since March 18th, 2020 (SLTDA, Monthly Tourist Arrival Report- November 2020, 2020). Accordingly, there were only 507,311 tourists travelled to Sri Lanka before the ban; and zero

tourist arrivals reported since March 18th to November. This is a decline of 69.7% compared to the tourist arrivals from January to November in 2019 (SLTDA, Monthly Tourist Arrival Report- November 2020, 2020).

Europe became the largest source of tourist traffic to Sri Lanka with 55.4 % of the total traffic received from January to November 2020. Asia and Pacific accounted for 35.7% of the total traffic, Americas 6.3 %, Middle East 2.0 % and Africa 0.6% (SLTDA, Monthly Tourist Arrival Report- November 2020, 2020). Compared to 2019, a decline of 75.8% from Africa, 75.3% from Asia & Pacific, 74.5% from Middle East, 70.1% from America's region and 64 % of decline from European region is recorded this year until November (SLTDA, Monthly Tourist Arrival Report- November 2020, 2020). From January to November, the top five international tourist generating markets to Sri Lanka have been India, United Kingdom, Russia, Germany and China. Nevertheless, all these countries are heavily hit by the pandemic. Hence, this would directly impact their arrivals to Sri Lanka. Above data shows that Sri Lanka still had a better condition for tourism even after Easter attack in 2019 compared to 2020. Therefore, it is clearly visible that COVID-19 has significantly impacted the Sri Lankan tourism industry.

In order to generate income through tourism industry, Sri Lanka has to re-open the country. Nevertheless, the uncontrolled situation in the country and the globe makes it largely unlikely to start tourism soon, especially to international tourists. As far as the situation in the world is unhealthy, Sri Lanka has to wait until the safety can be assured because tourism is a cross-border trading in service (Miththapala, 2020).

The tourism industry is an umbrella industry networked with diverse sectors directly connected with economy (Ranasinghe, Damunupola, Wijesundara, & Karunaratne, 2020). This would impact all the tourist service sectors. Hotel plants in Sri Lanka would experience huge financial losses and some who cannot survive will even leave the industry (Miththapala, 2020). According to SLTDA, 382 hotel projects have been approved for

constructions by adding 19,218 more hotel rooms. Most of these projects would be postponed due to the prevailing situation. The highest impact would be on the mid to lower range accommodation providers with 20 to 80 rooms while bigger chains have the 'staying-power' and the "mom and pop" small scale accommodation providers do not have much issues of layoffs, retrenchment and tax payments. Consequently, there is a high risk for mid to low range hotels to succumb (Miththapala, 2020).

Parallel to the accommodation sector, restaurants, tour operators and tour guide services have also collapsed (WSWS, 2020). The high risk of infecting tour guides has highly discouraged the tour guides to provide their service. In addition to those issues, with the fear of the virus spreading, the local public oppositions were raised and will raise towards tourist service providers and places (e.g., spice & herbal gardens, entertaining places). Most service providers provide services to both locals and international tourists. However, such oppositions could lead locals to deny taking the services from service providers resulting more negative impacts on their businesses.

Tourism contribution to labour force in Sri Lanka is significant. The tourism sector contributed to 11% of total employment in Sri Lanka, which accounted for 903,300 jobs in 2019 (WTTC). According to SLTDA, during 2018 the tourism industry generated 388,487 jobs of which 169,003 were direct employment and 219,484 were indirect (SLTDA, Annual Statistic Report, 2018). However, the entire tourism labor sector is in a high risk of losing their jobs or the income (WSWS, 2020). 95% of contract-basis employee jobs like safari drivers and tour guides have already lost their jobs and the dependent of tourism who earned a tip around LKR 750 per day in addition to the salary have completely lost their source of income. Moreover, around 20% of direct employees will also lose their employments due to staff cut-off (Science, 2020).

Lenders and loan providers like banks also reject to provide loans for the investors due to unstable

situation in the country (Science, 2020). Therefore, the investors tend to sell their properties, cut-off the staff or abandon the business out of debts and losses (WSWS, 2020). Furthermore, it is highly unlikely that the investors or employees would regain their business or jobs very soon because the pandemic is not yet under control.

4. RECOVERY MEASURES

As tourism industry plays a major role in the Sri Lankan economy, it is crucial to overcome the situation and to re-stabilize the tourism services sector. However, controlling a global issue is impossible for a country like Sri Lanka. Therefore, Sri Lanka should take recovery measures to overcome its impact. This situation can be also positively used by Sri Lanka to further enhance the tourism industry. Hence, tourism industry recovery measures can be used in two different ways as: taking measures to overcome the COVID-19 pandemic impact and taking measures to fix the existing issues during the pandemic break.

5. TAKING MEASURES TO OVERCOME THE COVID-19 PANDEMIC IMPACT

Many people in the field of tourism are currently facing financial issues due to the collapse of the entire industry (Miththapala, 2020). Being unemployed, losing income or source of living make them leave the industry and join with other industries. Although government is issuing a debt moratorium in capital and interest payment on debts for investors, this relief can be privileged only by investors (Science, 2020). Besides, investors are also not satisfied with the existing provisions and regulations.

Hence, the government needs to create a better plan which is more flexible for the investors. It is vital to secure the already existing international and local investors in the tourism industry. Thus, the government should take measures to strengthen the existing investors more than looking for new investors (Advocata, 2020). For that, an investor friendly financial strategic plan is required before the strategic planning for recovering the pain of loan repayments (Science,

2020). Moreover, it is also important to consider about the people who lose their income source due to the downfall of tourism industry. As same as for the investors, others should also get a certain relief. The government should take actions to encourage them to stick with the industry while guiding them to generate income using innovative methods until the industry recovers.

Until the country is open for the tourists, the government should gradually loosen the domestic travel bans (Antyra, 2020). Then the tourist industry should promote domestic tourism with attractive and affordable tour packages to locals like: discounted luxury hotel packages, food festivals, safari packages, marine activities, adventure tours etc.

Taking and maintaining safety measures in tourism services sector will be highly crucial. Entire world knows the seriousness of COVID-19 and is highly concerned about the safety. Furthermore, the entire tourism industry depends on the safety and healthy habits. Ensuring the safety of tourists as well as service providers is extremely important (Science, 2020). It would create confidence and trustworthiness among tourists to visit the country. It is also essential to train the tourism service providers to use safety measures while engaging with tourists. Then, the country should gradually open with strong risk management strategies to control the virus spreading.

In order to attract more tourists, travel restrictions imposed on some countries should be gradually loosen (Antyra, 2020). User friendly autogenerated or online systems should also introduce to facilitate tourists at the airport as well as at the visa proceeding (Science, 2020). In order to ensure the safety and facilitate tourist from top market destinations, Sri Lankan airlines can operate direct flights or easy flight connections (Samarathunga, 2020). Moreover, flexible payment methods, early bird offers, discount offers, customized bookings, real time engagement with quick responses will also help to attract more tourists (Advocata, 2020).

Focusing on quality than quantity in tourism is also important (Advocata, 2020). Sri Lanka should identify the types of tourists who contribute the most for the tourism services; and the purpose of their visit to Sri Lanka. Then tourism should promote focusing those categories while identifying their preferences. For example, a higher number of elderly European tourists visit Sri Lanka for traditional medical treatments. Hence, promoting health (ayurvedic) tourism creating a niche market for it, is a way of focusing on quality tourism (Ranasinghe, Damunupola, Wijesundara, & Karunarathne, 2020).

Another method of quality tourism is the thematic based targeting (Antyra, 2020). Tourists can be targeted based on different themes unique (wildlife, marine etc.) to Sri Lanka with attractive offers like honeymoon packages, meditation classes, tea plucking tours, cookery lessons, local dressing and house visits etc. Despite public opposition, the government's decision on fish hunting could attract more tourists. As it damages the biodiversity values, such activities should only allow temporarily and should be banned soon after the industry recovers.

However, it is more likely to have business travels more than leisure travels during the crisis (Antyra, 2020). Hence, Sri Lanka should also focus on business travellers and their preferences as the industry can profit more from them than ordinary travellers (Science, 2020). Sri Lanka should open for such tourists as an international hub to conduct international meetings, conferences, ceremonies etc. which could attract a large, rich crowd. By satisfying powerful rich businessmen, Sri Lanka can attract more investment opportunities that will lead the country to develop as an international trade hub in the future.

In addition to business travellers, it would be young people who would take the risk of travelling soon after the travelling restrictions are lifted (Miththapala, 2020). As they are not financially strong, the initial accommodation demands would be over the lower end or economic stay. Therefore, low budget but

attractive quality packages compared to other competitors should be introduced to such tourist categories.

Beside all, it is useless to take recovery measures if the news does not reach to tourists. Therefore, promoting Sri Lankan tourism globally is a key requirement (Antyra, 2020). Tourism can be promoted in various marketing platforms. Among them, social media plays a major role (Buhalis, 2012). Social Media like Facebook and Instagram can be used for inspirational marketing ads and for visual marketing about tourism in Sri Lanka. One of the most effective social media marketing methods is humanizing brands through emotional stories (Antyra, 2020). Touching the sensitivity of people will always keep a memory. Hence, stories like how locals protected tourists stuck in Sri Lanka during pandemic, innocent smiles of locals who try to communicate with foreigners etc. will motivate tourists to travel to Sri Lanka. Moreover, promoting uniqueness of Sri Lanka by applying to the current context is important. Hence, Ceylon tea, food and indigenous medicine can be promoted as immunity boosting methods to attract tourists (Ranasinghe, Damunupola, Wijesundara, & Karunarathne, 2020). Moreover, promoting Sri Lanka using word of mouth, especially through Sri Lankan diaspora would be very effective (Samarathunga, 2020).

In addition to that, email marketing is another cheaper method Sri Lanka can use (Antyra, 2020). Further, marketing can be done through search engine advertising and digital public relation (Digital PR) to improve Search Engine Optimizer. Sri Lanka should try to bring its tour destination suggestions at least to the first page of search results.

6. TAKING MEASURES TO FIX THE ALREADY EXISTING ISSUES IN THE TOURISM INDUSTRY

In 2000, an international standard methodological framework called "Tourism Satellite Account" is introduced to understand the tourism industry better (Grosso, Leshner, & Pina, 2007). This is currently followed by many countries to enhance the tourism industry.

Nevertheless, Sri Lanka has not yet adapted this framework (Advocata, 2020). Adapting to this framework would definitely help upgrade the country's tourism industry.

As a website often referred by foreigners, it would be more convenient if the Information in the Sri Lanka Tourism Development Authority (SLTDA) website consists of multi languages including Chinese, Hindi, French, German and Russian. This could also avoid misunderstandings that could occur due to language barriers.

It is mandated to register with SLTDA to provide service for tourists (Tourism Act no 38, 2005). However, there is a considerable number of unregistered service providers (Advocata, 2020). Thus, a less complex system can be implemented to identify the unregistered service providers and encourage them to register with SLTDA being flexible and at the same time, maintaining the sector standards.

7. CONCLUSION

Tourism is a major source of income to Sri Lanka. Any blow to tourism can impact the Sri Lankan economy. Unfortunately, COVID-19 has heavily impacted on tourism industry in Sri Lanka. In order to protect this industry, firstly, it is important to take necessary measures to overcome the situation. Secondly, the tourism industry can use this break positively to improve its standards of service solving the unanswered issues in the industry. Hence, future of the tourism industry would be more advanced and stable.

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Local Impact of E-learning during COVID 19; The Necessity of E-learning to a Better Future for Social Science Students

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ABSTRACT

The study emphasizes the local impact of the e-learning process during COVID 19. The e-learning process was a new experience to Sri Lankan students and undergraduates. The implementation of lockdown and social distancing enforced as one of the preventive measures to spread the coronavirus infection which has resulted in complete paralysis of global activities. The education system was completely interrupted and to continue with the academic process there was a need of shifting from the regular learning process to e-learning, using Zoom and relative applications. This can be cited with an increased number of online lectures, classes, conferences, meetings, webinars, and paper discussions. It can be noted that the Sri Lanka is completely dependent on information technologies during this crisis. The study was carried out in the context of Faculty of Arts and it was intentionally used as a sample of this study. In depth interviews were used as a main data collection tool and all the outcomes were analyzed through thematic and narrative analysis methods. The result shows that majority of the sample is not interested in e-learning and most of them have evaded online classes and discussions during the lockdown time period. They were not interested to interact with this new learning process and they were seeking the traditional teacher centered process and note gathering education curriculum. According to the study it was clear that the lack of knowledge between students and lecturers on e-learning is the main reason for this situation and the addition of excessive note gathering are the main reasons for the situation. It shows that the e-learning teaching skills and learning skills must be improved and the requirement of e-learning for a better future for

social science students pertaining to the upcoming social economic situation.

Keywords - e-learning, COVID 19, online learning, social science

1. INTRODUCTION

The global pandemic of COVID-19 poses multiple challenges to the world order including industry, world trade, travel, education system, health care services and human security. Social sciences, the nature of knowledge production we are currently engaged in challenged by the coronavirus with ethics of research, methods used and epistemological framework in general. And also, the learning space of the social sciences were challenged by the pandemic. Social sciences have a crucial role to play in understanding the nature of the life, livelihoods, economic processes, social support mechanisms, vulnerable groups in society, social harmony and international relations, to list a few areas of direct relevance to social sciences. The learning process also depend on the areas that really reliable to our day-to-day life. The problem is many a social science needs the face-to-face learning atmosphere for a long-lasting discussion and for a surface of questionable. The pandemic poses us a real threat to the current mode of education in social sciences globally and locally, and it helps us to change the whole education system in a rapidly changing global environment with shrinking resources and a wide variety of social, ecological and economic challenges.

Today's the student population in each and every part of the world is rightfully categorized as

digital natives. From the beginning of their education, they used ICT and internet. Such generation of students require more than just textbooks and tutorials. e-learning is commonly referred to the use of networked information and communication technology in teaching and learning. Online learning, virtual learning, distributed learning, network and web-based learning are also used as the terms related to e – learning. There is another similar system that bounds with e – learning, it is m – learning. It is an abbreviation of mobile learning, which means learning to use portable devices that allow the students to learn and gain knowledge in different environments and whilst on the move instead of being restricted to a classroom setting or tied to a desk. Commonly the universities in Sri Lanka uses ZOOM, go to meeting, skype and Team Viewer in the learning process of social sciences. This can be cited with an increased number of online lectures, classes, conferences, meetings, webinars, and paper discussions. It can be noted that Sri Lanka is completely dependent on information technologies during this crisis.

2. METHODOLOGY

The study, local impact of e -learning during COVID 19; the need of e-learning to a better future for social science students was carried out in the context of Faculty of Arts. In depth interviews were used as a main data collection tool and all the outcomes were analyzed through thematic and narrative analysis methods. The random sample of 32 students who represented all four years of the university was questioned by using WhatsApp calls and the data was noted and recorded under the permission of the respondent.

3. FINDINGS AND CONCLUSION

The result shows that majority of the sample is not interested in e- learning and most of them have evaded online classes and discussions during the lockdown time period. The students mentioned that the lack of network coverage is the most influenced issue during the pandemic and the next reason to evade online classes was the lack of understanding the subject facts. As they mentioned the lectures were conducted with too many students; specially in general streams

and first year lectures were too noisy and really hard to question the lecturer and gain more clear knowledge under this e – learning process. They were interested in taking part with discussion classes apart the main lectures. As respondents mentioned the lectures have used to upload the lecture recordings to LMS process and Google drive and they have used to collect lecture notes using them. This has become an addiction in between Social Science students and many of them have built WhatsApp groups to share those notes and recordings without participating the lectures.

Respondents were not much interested to interact with this new learning process and they were seeking the traditional teacher centered process and note gathering education curriculum. It seems that the student-centered education process is quite new to the social science students, especially in government universities as previously they haven't paid any kind of attention regarding e – learning. So, the current process is completely a new experience to the social science students and many of them are quite slow in achieving e – learning skills in this pandemic season. Universities have organized some online seminars and guidelines to make this process familiar but it doesn't seem to be successful.

According to the study it was clear that the lack of knowledge between students and lecturers on e - learning is another main reason for this terrible situation and the addiction of note gathering are the main reasons for the situation. It shows that the e - learning teaching skills and learning skills must be improved. Social science knowledge providers are becoming increasingly aware of the diversity of their current and potential learners. They are moving to provide a range of options for their engagement in learning process too. The increasingly flexible delivery modes available for university students provide multiple pathways and opportunities but the lack of gaining the entire process and requirements are slower in between social science students than other sectors.

Barriers to participation that external students may experience are particularly are evident in collaborative learning tasks through group work,

group presentations and group assessments (Davidson, 2015; Graham & Misanchuk, 2004; Jaques & Salmon, 2007) are the main issues that students faced overall in this e – learning process. According to the respondents some of the issues experienced are personal, as an example anxiety associated among the undergraduates regarding the use of technology; The e – learning being out of one’s comfort zone becomes a personal matter while working with a group. Also, the inequity in assessment and particularly in “group” assignments and work is another difficulty that social science students have been faced. Difficulty in peer interaction, particularly in presentations are some other issues that social science students have faced during the pandemic. These issues occurred especially with the inability of the authorities and managements to provide equitable and beneficial learning experiences for all students. The final year students specially have faced many issues during the pandemic in collecting primary and secondary data for their final year dissertations. As they mentioned the whole process that they kept for their researches has become useless because of this pandemic.

Many academic staff members of social science departments also feel apprehensive and not suitably equipped to teach using online methods as they themselves may be still learning to use some of the platforms in the most accurate manner. Therefor the need of e - learning to a better future for social science students for the upcoming social economic situation has become an essential need in whole local education field. The whole process should be optimized as soon as possible to choose the best of social science students for the society as the social science is that useful for a future of a country. The local education sector should pay their attention to fulfill these gaps because the researches, findings and the knowledge that are provided by social science students are really important to the knowledge society. If the responsible parties can provide more skills, education and develop the social science students, we can easily handle the current situation and it will make a flexible

education space for the future generation who wish to follow social sciences.

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Resilience and COVID -19 - A Multi-Disciplinary Perspective

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ABSTRACT

COVID-19 has been a cornerstone event rekindling the interest in business survival strategies. As businesses seek to find solutions to the current pandemic situation, the fundamental question remains the same. What makes certain businesses successful than others under difficult circumstances? From a historical standpoint, there have been significant challenges for many businesses at a global scale going through economic crisis, political turmoil as well as natural disasters to name a few. In this paper, by using a multidisciplinary perspective we aim to tackle the understanding of the concept of resilience. Resilience primarily explored in the psychology literature at its early stages, has evolved today to become a growing phenomenon crossing multiple fields of study. The main purpose of the paper is to conceptually identify key takeaway themes from a variety of subject areas related to resilience as well as devise certain conditions or prerequisites necessary for an organization to become 'resilient' irrespective of the industry in the business environment such as the COVID-19 global pandemic.

1. INTRODUCTION

The COVID-19 environment has not only created vulnerabilities in the socio-economic structures but has impacted the globalisation process of many enterprises (Ranasinghe et al., 2020). The virus that was first discovered in China has spread globally at the current stage, forcing many states to implement lockdown as well as social distancing protocols (Yuki, Fujiogi, & Koutsogiannaki, 2020). Apart from the immediate health and safety threats, the

pandemic has created even deeper cracks in the global economy and the business landscape. Key business ventures have been forced to close down and the effect is being felt heavily in sectors such as aviation, tourism as well as hospitality, creating an unprecedented disruption in most industrial and commerce sectors (Craven, Liu, Mysore, & Wilson, 2020; Donthu & Gustafsson, 2020). The situation has led to a saturation point for most organizations that are hanging by a thread for survival or seek for alternative paths towards product diversification or innovation (Seetharaman, 2020). However, diving into the human evolution literature, we could reflect on the Darwinian understanding of the survival of the fittest and their respective traits (Balady, 2002; Gimeno, Folta, Cooper, & Woo, 1997). This allows us to understand of the current world pandemic through a renewed lens. COVID-19 has given an opportunity for certain businesses to push their limits and operate in an innovative as well as a resilient business environment (Verma & Gustafsson, 2020). The conceptual paper aims to understand the phenomenon of resilience from a multidisciplinary perspective and based on a systematic literature analysis to synthesize the key takeaways from respective fields. In doing so the paper aims to provide some key conditions that are required to be developed in an organizational setting to ensure the business is able to develop their survival skills to mitigate risks from volatile market conditions such as the current global pandemic.

2. LITERATURE REVIEW

2.1. Resilience

How well-performing organizations tend to survive in the market whilst the poorly performing ones tend to exit or disappear, at least in the long run, is a frequently debated topic (Gimeno et al., 1997). The increased complexity of the modern-day has raised the prominence of resilience as an aspect desired by individuals, organizations, communities as well as societies (Kantur & İşeri-Say, 2012). A concept derived from ecology as well as child psychology, resilience can be identified as the ability of a complex system to return to stability after going through disruption (Kantur & İşeri-Say, 2012; Winnard, Adcroft, Lee, & Skipp, 2014). The concept of resilience in the existing literature spans across several fields ranging from individuals to a population. In psychology, resilience is expressed via individuals and their resilience in a life course, engineering resilience is understood as the vulnerability of people to hazardous environments, giving resilience a variety of definitions across multi disciplines (Pike, Dawley, & Tomaney, 2010). In a business context, resilience can be identified as the ability of an enterprise to survive, adapt and grow in the face of volatile change (Dahles & Susilowati, 2015). It's pivotal for businesses to have the ability not only to be flexible in the face of change but more importantly, to overcome exogenous shocks and still remain competitive. This is why the concept of resilience is crucial and is more relevant than ever in present competitive markets. Resilient businesses have the ability to portray higher degrees of adaptive capabilities, even to the extent of changing the overall business concept (Dahles & Susilowati, 2015).

Resilience in the existing literature spans across a number of fields (Table 1)

Table 1. Definitions of Resilience

Author	Area	Definition
(Bodin & Wiman, 2004)	Physical systems	The speed at which a system returns to equilibrium
(Walker, Holling, Carpenter, & Kinzig, 2004)	Ecological systems	The capacity of a system to absorb disturbance and reorganize
(Walker et al., 2002)	Socio-ecological systems	The magnitude of disturbance a system can tolerate
(Luthans, Avolio, Walumbwa, & Li, 2005)	Psychology	The ability to rebound from adversity
(Bruneau et al., 2003)	Disaster management	Ability to mitigate hazards and carry out recovery
(McDonald, 2006)	Organizational	Ability to adapt to the requirements of the environment
(Hollnagel, 2009)	Engineering	Ability sense, recognize, adapt and absorb to changes

Source – Adopted from Bhamra et al. (2011)

2.2. Resilience in Business and Management

In the field of social sciences, the concept of resilience is not used as frequently as other fields and has emerged as a more recent phenomenon (Davies, 2011; Martin, 2012). Even though organisation resilience is becoming an even important research area, Kantur & İşeri-Say (2012) highlights the literature gap with regard to conceptualising work around organisational resilience as well as the need to synthesise and linking the growing body of literature in this area. Looking back at the current literature of organisational resilience, studies have focused on

understanding the principles of resilience, sources of resilience as well as identifying characters contributing to resilience, lacks a comprehensive theoretical framework focused on resilience in a firm setting (Kantur & İşeri-Say, 2012). As previously highlighted, though resilience has a variety of interpretations in a wide array of fields, Kantur & İşeri-Say (2012) highlights there is a lack of consensus of the definition of resilience and more importantly contrasting views in conceptualizing resilience as a personality trait or a dynamic process. However as Dahles & Susilowati (2015) points out resilience in a business context can be identified as the ability of an enterprise to survive, adapt and grow in the face of volatile change.

It is crucial to understand as highlighted by the literature, what resilience means in terms of survival, adaptation and growth in depth. As per Scott and Laws (2006), resilience can be identified in three key perspectives which include a return to a previous state of 'normality', the capacity to recover from a crisis by restoration and rebuilding markets and finally visualising crisis bringing about fundamental change. As highlighted above, survival is critical for any business and is relied upon the businesses' ability to ensure its operations continue in a manner that satisfies its stakeholders (Fleming, 2012).

Secondly, adaptation is an equally important element of resilience as per scholars. Burnard and Bhamra (2011) shows adaptation as this ability to evolve to newer capabilities and resources as the mechanism in which resilience is delivered. There are a few key aspects as highlighted by the scholars as to how an organization develops its adaptive capabilities. These include preparation with the awareness of risks, planning in advance, mitigation through reaction as well as recovering with restoring efficacy (Winnard et al., 2014).

Finally, the third key element of growth highlighted under resilience plays an equally important role in the business context. As per Winnard et al.(2014), businesses that aim to continue delivering high-quality benefits to its stakeholders doesn't necessarily identify

resilience as only a matter of survival, but also to have a flourishing business

2.3. Resilience in Ecology

The concept of resilience first introduced into ecology by Holling in 1973, was valuable in understanding the non-linear dynamics of ecosystems (Gunderson, 2000). Similar to what was previously stated, resilience from an ecological perspective also highlights the importance of different ecological system's ability to cope with external shocks as well as face irreducible uncertainty successfully (Walker1a et al., 2002). This means irrespective of the changes happening, a resilient ecological system has the ability to reorganize itself under disturbance driven circumstances. As highlighted by Evans (2011), resilience has attracted significant attention with amongst policymakers in ecology as its identified as a key mechanism to achieve sustainability. The ecology literature points out two key definitions of resilience, one which explains achieving an equilibrium state and the other explaining resilience as a more dynamic process. However, the crucial underlying factor here is the consistency in which resilience from an ecological perspective is identified as to achieve different aspects of stability (Gunderson, 2000).

2.4. Resilience in Engineering

As the concept of resilience has a multi-disciplinary range, the field of engineering is similarly highlighted by scholars. As per Zhao et al. (2013), resilience in an engineering sense refers to a system's ability to return to a state of equilibrium after volatility which is a city context refers to its ability to recover from disturbance and rebound. A key concern in terms of the broader concept of resilience as discussed previously in the ecological literature is the two main definitions of resilience. As per Holling (1996), one definition of resilience focuses on unpredictability, persistence and change, aspects celebrated by biologists from an ecological perspective. The second definition of resilience that emphasizes efficiency, consistency and predictability that is more traditional and focused on stability is understood as the foundations of

engineering resilience. Therefore, this is a key factor in differentiating two of the key areas of the literature of resilience where an ecological view highlights a dynamic view of resilience in contrast to the more traditional engineering approach towards resilience of achieving stability and restoring equilibrium

2.5. Resilience in Psychology

The concept of resilience and its roots can be traced to the field of child psychology alongside the work of ecology where it emerged as a key concept (Kantur & İşeri-Say, 2012). Lyons et al. (2015) further highlight how resilience has been a crucial construct of the field of psychology and is defined as a dynamic process in which individuals display adaptation capabilities despite adversity and traumatic conditions. Essentially this means the individuals have the ability to bounce back quickly from a negative situation as compared to others who are caught in their negative streaks. Therefore essentially resilience from a psychological perspective can be identified as the ability to cope and adapt effectively although faced with hardship, loss and adversity (Tugade & Fredrickson, 2004). Similar to what was seen in the engineering literature, resilience in a psychological perspective highlights maintaining an equilibrium without loss of normal functionality after facing trauma (Lyons et al., 2015). However, this understanding differs when looking at resilience from the ecological perspective as explained earlier. Kantur & İşeri-Say (2012) summarises resilience in psychology as the toughness as well as persistence to overcome negative consequences in contrast to the ecological understanding which stresses on system integrity and preserving organization functionality without major volatility.

2.6. Resilience in Disaster Management

Similar to other areas mentioned above, resilience is widely discussed in the disaster management literature (Kantur & İşeri-Say, 2012). The 2005 World Conference of Disaster Reduction was a key stage in which the concept of resilience found more space in both theoretical and practical sense in the disaster management

literature (Manyena, 2006). Resilience is understood more or less to cope with dangers and the ability to bounce back. A key point here is to understand the concept explains events that cannot be anticipated after it occurred but also resilience is made relevant for instances where there is a certain level of preparation (Kantur & İşeri-Say, 2012). Therefore from a hazardous literature perspective resilience could be identified as a concept that is spanning through both pre-event measures that seek to minimize damage and losses as well as post event strategies designed to minimize the various disaster impacts (Bruneau et al., 2003).

Based on the above understanding of resilience from multiple bodies of literature, we have devised the following figure to highlight the key themes emerging from the bodies of literature.

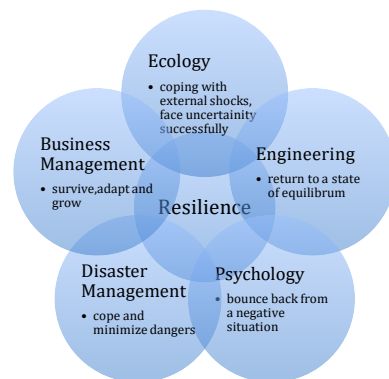


Figure 2. Resilience from a Multidisciplinary Perspective

3. RESILIENCE IN AN ORGANIZATIONAL SETTING

Even though resilience is conceptualised and defined in a variety of ways across a number of subject fields as shown above, one of the key highlights by many authors is that resilience is explained as a dynamic process and an elastic one rather than a static set of characteristics (Sutcliffe & Vogus, 2003; Valero, Jung, & Andrew, 2015). With the identification of the above themes from a multidisciplinary perspective it is important to see how they could be incorporated into an organizational setting based on literature. This is why to understand resilience in an organization setting, there is a need to identify what

dimensions or prerequisites need to be present for a certain organization to be considered 'resilient'. The statements that we have identified are universal statements irrespective of the industry or a particular context.

Based on the literature review few of the following statements are identified. This is further justified by the following literature.

Organizational resilience statements:

1. Resilient organizations take steps to prepare for the worst circumstances and develop routines to take rapid responses in unforeseen situations (Sullivan-Taylor & Wilson, 2009)
2. Resilient organizations are able to deliver excellent performance against current firm goals and effectively innovate against rapid market changes (Robb, 2000)
3. Resilient organizations stress on employee empowerment and broadening the decision making ability in responding to unforeseen circumstances (Mallak, 1998)
4. Resilient businesses are able to face exogenous shocks and remain competitive (Williams & Vorley, 2014)
5. Resilient organizations consists of resilient individuals capable of absorbing change and improvise solutions for survival (Kantur & İşeri-Say, 2012)

Based on this the figure 2 presents this work.

In terms of the proposed research key emphasis is placed upon the notion of organizational resilience which is identified as the capability for businesses to continuously avoid disturbances in the business environment and ultimately reach organizational goals successfully (Kantur & İşeri-Say, 2012). However, given that the literature on resilience in an organizational setting has been addressed in multiple ways, a conceptual framework is developed to delineate and identify the key constructs that could be developed in an organizational setting to face situations like the Covid-19 in a comprehensive manner.



Figure 3. Prerequisites in Achieving Resilience in an Organizational Setting

4. CONCLUSION

COVID-19 could be identified as a turning point in the human history which has allowed both scholars and practitioners to have a renewed interest in the concept of resilience to understand what makes certain organizations succeed under difficult circumstances. Resilience has multiple definitions and the paper aimed to summarize some of the key ideas of the concept based on a variety of subject fields. In doing so, the paper aimed to identify certain key conditions or prerequisites with complementary theoretical understanding that would assist in identifying a 'resilient business' from an ordinary one which could help to understand what makes it successful in uncertain conditions such as the current global pandemic.

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Resilience and Persistence of Sustainable Travel and Tourism Industry during the Impact of COVID-19 Pandemic

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ABSTRACT

The main objective of this study is to discover the impact of the coronavirus (COVID-19) pandemic on Travel and Tourism industry. This industry is one of the major sources of employment, government revenue, and foreign exchange earnings directly or indirectly for developing and developed countries. Sri Lanka is one of the top travel destinations in the world due to unparalleled natural resources, wildlife, unique cultural heritage, and warm and friendly locals. This industry has become the third-largest export earner of Sri Lanka while supporting the economy in 2019. According to the World Travel and Tourism Council in 2019, Travel and Tourism's direct, indirect and induced impact accounted for 10.3% of global GDP, 330 million jobs, 1 in 10 jobs around the world. Over the past five years, the sector has created 1 in 4 new jobs. COVID-19 pandemic has triggered an unprecedented crisis in this industry. It resulted 43% (142.6 Million) job lost, 43% (\$3,815 Billion USD) GDP loss in globally and 48% (87.4 Million) job lost, 50% (\$1,475 Billion USD) GDP loss in Asia Pacific region. Pandemic impacted the global arrival assumption by 65% international and 33% domestic globally and 71% international and 31% domestic in the Asia Pacific region. The data was collected through secondary sources and qualitative analysis was employed. Through this study, strategies were identified, including the challenges, recovery measures, and how-to resilience in the current pandemic situation to overcome the issues identified via the study for sustainable Travel and Tourism industry in Sri Lanka.

Keywords - sustainable, travel and tourism, covid-19 impact, resilience, persistence.

1. INTRODUCTION

The travel and Tourism (T&T) industry is one of the world's largest sectors of driving socio-economic development and job creation directly or indirectly. (WTTC, 2020). According to the statistics, 10.35% of the total economy of Sri Lanka was supported by the tourism sector (WTTC, 2020). Sri Lanka's T&T Industry GDP counted for US \$5,102.7 million (MN), which is 5.7% of the total GDP in 2019 (Calderwood & Soshkin, 2019). This indicates that the tourism sector has a significant impact on economic interest. As a result of Sri Lanka being blessed with natural beauty, wildlife, a long history, and global diversity, the T&T sector conclusively can expand even further in both the domestic and international markets as a generator of export earnings. Although the desired tourist destination is highly attractive, the safety of travelling is a top consideration of all the travellers. Therefore, terrorism, economic trends, natural disasters, weather and climate, health crises etc., can highly impact the tourism industry. (Novelli, Gussing Burgess, Jones, & Ritchie, 2018). The best example for this argument is the on-going COVID-19 pandemic condition around the world. The T&T industry is one of the major hits of this crisis. The World Health Organization

(WHO) recognised the COVID-19 viral outbreak as a pandemic and declared it on 12 March 2020. Globally, 74,299,042 confirmed cases of COVID-19, including 1,669,982 deaths as of 19 December 2020, reported to WHO (WHO, 2020). For the first time ever, the UN World Tourism Organization reported that 100 per cent of global destinations have introduced travel restrictions during the second quarter of 2020. Consequently, international tourism has been almost totally suspended, and domestic tourism has been curtailed by lockdown conditions imposed in many countries. Even though some destinations have started slowly to open up, many are afraid of international travel or are not capable to afford it due to the economic crisis. (UNCTAD, 2020). Immigration and entry/exit control regulations have a direct influence on the supply of international tourists. The statistics of the present COVID-19 pandemic shows how vulnerable the T&T industry to external shocks. The Easter Sunday attacks and COVID-19 pandemic have shown that the T&T industry is vulnerable to external and internal shocks. (UoR, 2020). Due to this condition, the stakeholders of the T&T sector have entered into an unprecedented period of zero revenue period, leaving them in a dilemma on the next steps to be taken. Therefore, the objective of this study was to discover the impact of the coronavirus (COVID-19) pandemic on the T&T industry and identify strategies for sustainable tourism and travel industry in Sri Lanka. Accordingly, this study based on an analytics-based approach. The content was assessed in the context of qualitative data analysis. The data was collected and analysed through secondary sources such as data disseminated in scientific journals, government publications, websites and reports.

2. TRAVEL AND TOURISM SECTOR

Table 2. Classification of Tourism and Travel related Services under each Sector.

1. Hotels and restaurants (including catering)	Hotel and motel lodging services
	Holiday center and holiday home services

(Central Product Classification - CPC - 641-643)	Letting services of furnished accommodation
	Youth hostel services
	Children's training and holiday camp services
	Camping and caravanning site services
	Sleeping-car and similar services in other transport media
	Hall residence of students
	Meal serving services with full restaurant services/ in self-service
	Beverage serving services & other food-serving services
2. Travel agencies & tour operators' services (CPC 7471)	Travel agency services
	Tour operator services
3. Tourist guide services (CPC 7472)	Sightseeing excursion services & services like aircraft or helicopter
	Tourist Guide services (mountain, hunting, fishing)
4. Other	Tourist information services (including travel information, advice and planning services; accommodation reservation services; and airline, train, bus and other reservation services relating to travel)

Source: (WTO, 2009)

T&T industry has a significant position as a source of foreign exchange, provision of employment opportunities and accounted for: US\$8.9 trillion contributions to the world's GDP, US\$ 1.7 trillion visitor exports (6.8% of total exports, 28.3% of global services exports), US\$ 948 billion (BN) capital investment (4.3% of total investment). (WTTC, 2019). Therefore,

T&T sector is one of the most critical sectors of the international economy and the Sri Lankan economy. According to the WTO Sectoral classification as category 9 of the Services Sectoral Classification List, "Tourism and Travel Related Services" is divided into four sub-sectors, as Table 1, under the United Nations' "Provisional Central Product Classification" (CPC). (WTO, 1991).

The multi sectorial linkages of T&T sector have potential sources of both strengths (extensive opportunities for poverty alleviation and economic diversification) and weakness (inefficiencies or inappropriate regulation in particular sectors can reduce overall competitiveness) (WTO, 2009). Under the General Agreement on Trade in Services (GATS), tourism trade can also be divided into the four modes of supply as below under the trade in the services category. Mode 1: Cross-border supply: (E.g., Hotels, travel agents, and guides using electronic and advanced technological methods). Mode 2: Consumption abroad: Tourists arriving from one country – the most typical mode for tourism. Mode 3: Commercial presence: (E.g., Hotel chains in multiple countries). Mode 4: Presence of natural persons: (E.g., Chinese chef giving service in an authentic Chinese restaurant in another country). As a result of the COVID-19 pandemic, all four of these modes face uncertainty in their economic and social conditions. According to the T&T Competitiveness Report 2019, Sri Lanka is in place of 77 out of 140 economies and 2nd place in South Asia according to the economy rank of the overall rankings. It measures the set of factors and policies that enable the sustainable development of the T&T sector, which contributes to the development and competitiveness of a country. It comprises four sub-indexes, 14 pillars and 90 individual indicators, distributed among the different pillars. The economies covered by the index account for approximately 98% of global T&T GDP and a similar proportion of international tourist arrivals. Many factors are affecting the stability of the T&T sector. (Calderwood & Soshkin, 2019).

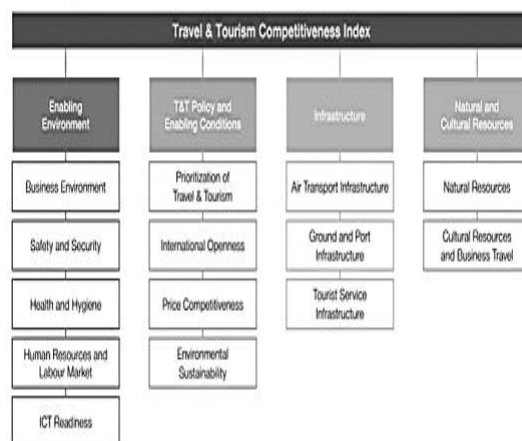


Figure 1. The T&T Competitiveness Index 2019 Framework

Source: (Calderwood & Soshkin, 2019)

The tourism service sector is largely hit by the COVID-19 pandemic. It results in many changes that are occurring in the sector. According to Figure 1; Health and Hygiene is one of the major pillars. Although the T&T sector has a rapidly growing international market for health tourism. Tourism is also a highly "perishable" commodity, in the sense that unsold airline seats, hotel rooms, etc., have no residual value (WTO, 2009).

3. T&T SECTOR AND EMPLOYMENT

T&T is a high labour- intensive industry an important source of employment. That creates employment opportunities for both urban and rural areas,, which helps change their lifestyles and develop in many ways. The mode 1 is one of the most characteristic aspects of international tourism, E.g., the "user" coming to the supplier. This occurrence brings many opportunities, even for the unskilled workers in remote areas, to become experts on T&T related services. The sector had already attracted negotiators' attention during the Uruguay Round. (WTO, 2009). In Sri Lanka, the contributed of the T&T sector to employment is 11% of total employment, which accounted for 903,300 jobs in 2019 and is expected to increase up to 1,148,700 by 2029 (WTTC, 2019). Total employment generation is 402,607. Among 173,592 are direct

employments, and 229,015 are indirect employments. (SLTDA, 2019). The employment opportunity has been declined by 1.1% compared to the 2018 which contributed to 12.1% of total employment or 1,000,300 jobs in Sri Lanka. The already difficult situation has worsened by the COVID-19 pandemic (E.g.: the high expense of low salaries, lack of job security, lack of insurance and other benefits) faced by the T&T suppliers, mainly micro-entrepreneurs of the industry (E.g.: food delivery people, taxi drivers, hoteliers). (Sigala, 2020).

4. T&T INDUSTRY AND SUSTAINABLE DEVELOPMENT

T&T industry can and must play a significant role in delivering sustainable solutions for people, the planet, prosperity and peace based on the 17 Sustainable Development Goals (SDGs) of the 2030 agenda, and the corresponding 169 SDG targets offer the world a new direction (UNWTO, n.d.). Tourism has the potential to contribute, directly or indirectly, to all of the SDGs. In particular, T&T has been included as targets in Goal: 8 (in Target 8.9 “By 2030 tourism is one of the driving forces of global economic growth by giving access to decent work opportunities in the tourism sector, society – especially youth and women – can benefit from increased skills and professional development), Goal:12 (Target 12.b, it is imperative to “develop and implement tools to monitor sustainable development impacts for sustainable tourism which creates jobs, promotes local culture and products” via T&T industry.) and Goal: 14 (Target 14.7: “By 2030 increase the economic benefits through the T&T industry to small island developing states and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism”). In Slovenia, a plan turned their capital Ljubljana into an ecological zone free from motorised vehicles, and by 2017, pedestrian areas in the city have increased by 620%. (UNWTO, 2020).

5. COVID-19 IMPACT ON T&T SECTOR: GLOBAL

Globally, the COVID-19 pandemic has triggered an unprecedented crisis in the T&T industry. Without improvements, it estimates that it will be increased by 53% (174.4 MN) job loss, 53% (US\$ 4,711 BN) GDP loss and the impact value of global arrival assumption may be increased by international 73% and domestic 45%. In the Asia Pacific region, it estimates that it will be increased by 59% (106.7 MN) job loss and 61% (US\$ 1,801 BN) GDP loss and the impact value of the global arrival assumption may be increased by international 82% and domestic 41% (WTTC, 2020). COVID-19 pandemic significantly impacts the global economic, political, socio-cultural systems. And various national and international public health organisations, including the U.S. Center for Diseases and Control and Prevention (CDC) and WHO have been closely monitoring this situation and recommending preventative measures to limit or slow down the spread of the virus (CDC, 2020). In following these guidelines, countries around the world have introduced regulatory actions that differ from advisory recommendations to legal enforcements. Worldwide destinations have introduced travel restrictions in response to the pandemic of different levels of implication. 97 destinations (45%) have totally or partially closed their borders for tourists. 65 destinations (30%) have suspended totally or partially international flights. 39 destinations (18%) are implementing the closing of borders in a more differentiated manner by banning the entry for passengers from specific countries of origin”. (UNWTO, 2020). International tourist arrivals fell sharply in March 2020 following the WHO's announcement of the COVID-19 pandemic. International tourist arrivals were decreased by 22% in 2020 first quarter (Q1), with arrivals in the month of March down by 57% following the start of the lockdown in many countries, widespread travel restrictions and the shutdown of airports and national borders. (UNWTO, 2020).

6. COVID - 19 IMPACT ON T&T SECTOR: SRI LANKA

The Central Bank predicts Sri Lanka's tourism industry will take more than a year to recover from the COVID-19 pandemic and state that "despite a rapid recovery from the Easter attacks, the tourism industry is likely to experience the brunt of not only the current pandemic but also its aftermath that may be long lasting and persistent" (CBSL, 2020).

Table 2. Monthly Tourist Arrivals Reports 2018 -2020 (January - December)

Month	2018	2019*	% Change 2018/19	2020*	% Change 2019/20
January	238,924	244,239	2.2	228,434	(6.5)
February	235,618	252,033	7.0	207,507	(17.7)
March	233,382	244,328	4.7	71,370	(70.8)
April	180,429	166,975	(7.5)	---	---
May	129,466	37,802	(70.8)	---	---
June	146,828	63,072	(57.0)	---	---
July	217,829	115,701	(46.9)	---	---
August	200,359	143,587	(28.3)	---	---
September	149,087	108,575	(27.2)	---	---
October	153,123	118,743	(22.5)	---	---
November	195,582	176,984	(9.5)	---	---
Total (Up to November)	2,080,627	1,672,039	(19.6)	507,311	(69.7)
December	253,169	241,663	(4.5)	---	---
Total	2,333,796	1,913,702	(18.0)	---	---

Source: (SLTDA, 2020)

According to the data, the tourist arrivals declining has occurred in 18% of cumulative value during 2019 compared to 2018 during the same period. Due to the termination of all passenger flight & ship arrivals in Sri Lanka from 18th March 2020 amid the coronavirus

pandemic, Sri Lanka had no tourists until the end of November 2020 (SLTDA, 2020). Table 2 shows the clear impact of the COVID-19 on tourist arrivals. Even though the T&T sector kept the 3rd rank comparing the foreign exchange (FE) earnings by Industry in 2018 & 2019, it results in 2.2% loss as a share of total FE earnings by T&T industry in 2019 by partaking 15.9% (LKR 711,961 MN) in 2018 and 13.7% (LKR 646,362 MN) in 2019. (SLTDA, 2019). Considering 2018 as a normal year, based on the SLTDA information, the main two seasons of tourist arrivals lie on November to January and June to September. 81% of the tourist visit for pleasure. The average guest night was 10.8 in 2018, and it was reduced to 10.4 in the 2019 with the impact of the Easter Sunday attack. In 2020, this value was reduced further due to the impact of COVID-19. According to the descriptive statistics, the main age group of the tourism arrival to Sri Lanka is 30 to 39 years old. Except Eastern Europe, a higher percentage based on gender arrivals was male. In the 2020 January to November period, the amount of visitors was dropped by 69.7% compared to the same period in 2019 with the biggest decline recorded from China -82.7%, the UK -68.8%, Germany -71.8%, India -70.9% and Russia -28.4%. (TRADING ECONOMICS, 2020). Sri Lankan inbound arrivals average shares over the 2016-2018 period are; India 18%, China 13%, United Kingdom 10%, Germany 6%, France 5%, rest of the world 49%. (WTTC, 2020). For instance, when we look at the contemporary issues of the pandemic situation at our 'Top 5' source markets, most of them have been seriously hit by the COVID-19 in terms of new cases with the spread of the virus and the mortality rate. Among the largest source market recorded from January to November was India, followed by the United Kingdom and Russian Federation. Almost 95 % of tourists travelled by air to Sri Lanka (SLTDA, 2020). It is expected that a revenue loss more than \$300 billion will be occurred. Zero income of tourism has created a financial distress to investors who have been trapped by indebtedness despite the loan moratorium granted. It has resulted in the layoff of temporary and casual employees while permanent employees are also in high risk of job loss. Approximately 20% of

indirect employees have lost their earning sources entirely. The COVID-19 impact has severely affected the livelihood of both types of employees (UoR, 2020).

The following Table 3 shows the SWOT analysis of the T&T industry based on the internal factors (Strengths, Weaknesses) and the external factors (Opportunities, Threats). The Table 3 developed based on the study to establish a reliable diagnosis of the internal potential shown by a T&T industry and its environment for optimising the marketing programs and sustainable T&T Industry.

Table 3. SWOT Analysis for T&T Industry

Strengths	Weaknesses
<ul style="list-style-type: none"> The ability of the tourism industry to withstand again based on the proven resilience in past crises. (E.g.: Ester bomb attack) Domestic tourism can be a buffer during the current situation with international travel restrictions Government support to the T&T sector Adaptation capacity of the public and government officers. (E.g.: safety and hygiene protocols, trips closer to home, value for money, responsible consumer behavior) The multi sectorial linkages of T&T sector have potential sources A prompt and effective collaboration and Cooperation of Various Departments The Medical and Health System is Gradually Improving and it indicates a green light to tourist on safety of them 	<ul style="list-style-type: none"> Lack of strategic planning and specified recovery measures for sustainable T&T industry. Absence of Tourism Satellite Accounts Inefficiencies or inappropriate regulation in particular multi sectorial linkages reduce overall competitiveness Lack of references in previous downturns A highly "perishable" commodity, in the sense that unsold airline seats, hotel rooms, etc., have no residual value Segments potentially affected are also high spenders. (E.g.: international, long haul, business travel and events) Major disruption in airline industry with airline failures and concentration Low levels of demand when restarting tourism due to social distancing Health Emergency Discipline is Underdeveloped
Opportunities	Threats
<ul style="list-style-type: none"> De-escalation phases initiated by several countries toward the 'new normal' Sri Lanka's universal health care system has proven itself, Leverage this to attract tourists and foreign investors to the property market Innovation and digitalization the system and process Progress in adaptation plans in destinations & companies Opportunities for Education in Infectious Diseases and avoid future impact based on the awareness Re-think business model and strategic plan A positive impact on environmental and T&T industry sustainability due to the restoration of environmental beauty Demand for sustainability and sustainable-oriented segments (rural, nature, health) More demand for islands as the tourist destinations 	<ul style="list-style-type: none"> The Public is Flustered and Lacks Awareness Along with the public's attention to the epidemic, various rumors have also emerged, no one of these rumors have any solid foundation in science or medicine Judgement of travel as a risk Economic environment (E.g.: world recession, rising unemployment and jobs at risk, closure of business mainly SMEs, disposable income, uncertainty weighing on consumer and business confidence) Uncertain length of pandemic (including resurgence) and vaccine unavailability Extent of lockdowns and travel restrictions Unknown form of the 'new normal' Impact of COVID-19 on the National Economy Investors tend to leave the industry Impact on the daily life, work, and psychology of the public Cases of COVID-19 Developed in Many Regions within a Short Period
Positive	Negative

Source: (Author, 2020)

This analysis enables T&T industry to focus on strengths, minimise weaknesses, address threats, and take the greatest possible advantage of opportunities available. Predominantly in

shaping the rules, education, research, and our socio-economic and political systems have all trapped our mentality on how we research, measure, understand, respond and focus on recovering from the COVID-19 pandemic. Accordingly, people have converted COVID-19 from a biological virus contagion to a financial crisis contagion and recently, an economic race to re-build our previous financial competitiveness. (Sigala, 2020)

7. DISCUSSION AND SUGGESTIONS

The impact of the COVID-19 on T&T in Q1 2020 caused 67 million fewer international tourist arrivals 80 US\$ BN lost in exports, and 100% of all worldwide destinations have introduced travel restrictions in response to the pandemic in different levels of implication (UNWTO, 2020). It is predicted that it will take at least one year or more time for the T&T industry to rebuild. COVID-19 has interrupted our lives, our sector and the global economy, pushing us to think about the future in a different way. The previous research and current COVID-19 situation proved that a single stakeholder group could not overcome the current pandemic impact on their own. It needs both inter-governmental cooperation as well as public-private collaboration. (WTTC, 2020). Although it requires its specific new T&T strategies and policies, it is not possible to rebuild the T&T industry in Sri Lanka without the collaboration with other counties. After a crisis, it is believed that there's the probability of having a higher number of business travels than leisure travel. The policy makers must priorities this factor to have a highly effective outcome in this endeavor. The policies should safeguard T&T stakeholders owing to their financial distress, while visitors must be protected in terms of health conditions (UoR, 2020). It can forecast more demand to islands that serve as tourist destinations including Sri Lanka, Maldives, Seychelles, Australia, New Zealand, Caribbean Islands etc. Although it creates a low demand for large scale hotels and resorts with a large number of rooms this approach creates a high demand for smaller hotels due to the prevailing situation. Concurrently, we can expect a high demand for alternative tourism (E.g., eco-tourism,

responsible tourism, community-based tourism, ayurveda and yoga, bird watching, agro-tourism etc.) instead of conventional mass tourism. (Samarathunga, 2020). There is an opportunity of grasping these visitors with the strategic planning for the T&T industry. Evolutionary COVID-19 research enables the industry to rethink and activate an operating environment that is human-centered and responsible for the values of sustainability and well-being (Sigala, 2020). The following suggestions will be supported to grasp the above-mentioned opportunities, to rebuild, and to have a sustainable T&T industry.

7.1. The Suggestions to Resilience and Persistence of Sustainable T&T

Both short term and long-term strategies should contribute for the implementation of a sustainable T&T industry. In the long run, it is important to understand that tourism industry should focus on quality more than quantity: Sri Lanka should be promoted as an international hub, thanks to its important geo-strategic place in the Indian ocean. In decision making, it is required to focus on some factors like the relatively low-profile tourism maintains in most political environments, the high fragmented and vulnerable nature of tourism to external force. Therefore, it is important to formalize and articulate guidelines under various sectoral relationships to avoid confusion and conflict and to address the relevant gaps in the systems. Also focus on health communication strategies and measures (E.g.: COVID-19: -social distancing, community lockdowns, stay at home campaigns, self- or mandatory-quarantine, travel and mobility bans and curbs on crowding) which have impacted the tourism industry in many forms; along with worsening economic situations in countries from which Sri Lanka has traditionally attracted tourists, the fear of further waves of outbreaks will likely deter consumers from travel and leisure. Consequently, each subsector should be ensured by training them to continue their jobs being secured from the COVID-19. Attention on Tourism Satellite Accounts (TSA) to improve tourism policy and economic impact assessments is important, because it is the most appropriate way to measure the economic contribution of tourism. The TSA

is a basis for complementary modeling techniques, including that of Computable General Equilibrium and Social Accounting Matrices. This analytics-based approaches can leverage new alternatives to upgrade the T&T industry. Utilizing the benefits of tourism is crucial to achieving the SDGs and implementing the agenda 2030 in terms of sustainability. Planning for sustainable & inclusive growth can be initially introduced to make the surrounding attractive to residents and then the tourists may follow the pattern similar to the Slovenian model. The tour packages should be developed in a way that the tourists would re-visit the country out of curiosity and interest of exploring than covering all in one. Promotion and marketing are key factors to develop the industry and the stakeholders of the industry. Nevertheless, it is important to focus on strategic marketing campaign (E.g.: Promotion of Ceylon Tea, Ceylon Cinnamon with its health benefits, biodiversity, natural beauty, integrate sustainable practices in the tourism industry adopt green and eco-friendly practices in their businesses to improve environmental sustainability, etc.) rather than focusing tourists all around the world at once. Innovation, automation and innovative online marketing strategies can be used to attract more tourists and retains. (E.g.: Social media marketing, the early bird registration, online platforms to check in/out, offers for credit cards, and App or brochure through the authorities to facilitate tourists with all the information regarding the registered tourist enterprises, services, destinations, maps, tour packages, etc.). The concessions and relief measures offered to local businesses may not be sufficient without a resilient plan. To ensure the persistence of the T&T industry, it is a must to focus on every node of stakeholders and especially investors. The effort should be made not only attract new investments to the industry, but also to retain the existing investors. A cohesive strategy with a quick and effective risk management protocol will be required by the government with the participants of all stakeholders to build confidence in the visitor's mind to grasp our country as a must visit and a safe destination in the world even during this kind of a pandemic situation.

The finding of this study revealed that the impact of the COVID-19 on T&T industry is significant. Therefore, future studies should focus on the recovery and sustainability of T&T industry locally as well as globally. Because the industry cannot regain itself or by individually. Further research can be conducted on recovery strategies and the best practices of T&T stakeholders. Research can also be conducted to evaluate and to benchmark the effectiveness of the various recovery strategies, to identify the best practices implemented by T&T stakeholders and to build resilience and the resetting of the T&T industry normal.

8. CONCLUSION

Considering, the actions were based on community safety concerns, all of the restrictions are leading to a decline in tourist arrivals which affects the employment and income along the supply chain, and completely decline the performance of the T&T sector, which gives statistically low-value GDP from industries, as well as create an economic crisis around the world. Based on GDP, foreign exchange earnings and sector-based employment statistics, it can be concluded that there is a negative relationship between the impact of the COVID-19 pandemic to both the earnings and the growth of the T&T industry. It is proposed that, an integrated e-service that can link the stakeholders with the responsible authorities as a strategic master plan must be designed and implemented. It is also important to thoroughly investigate the interaction effect among the stakeholders and assess the specific measures of policy implications and regulatory of industry, which is one of the best solutions during the pandemic and post-pandemic periods to develop a sustainable T&T industry.

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Tracking the Corona Virus Using Sentiment Analysis on Twitter Data: Application to Predict Stock Market Movements

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ABSTRACT

The novel Corona Virus Decease (COVID-19) has changed the world in many aspects. The impact on the worlds' economy is immense, and it has changed the strategies of businesses everywhere. Social media has gained more attraction, and mostly it has become a major source of information. Research needs to be conducted to understand the impact of people's opinion written on social media on the behaviour of the stock market. Twitter has attracted researchers for studying public sentiments. In this paper, we have applied sentiment analysis and supervised machine learning principles to the tweets extracted from Twitter and analysed the correlation between stock market movements of a company and sentiments in tweets. Results indicate that there is a correlation between positive and negative tweets on COVID-19 on stock market behaviour.

Keywords - COVID-19, sentiment analysis, natural language processing, machine learning

1. INTRODUCTION

The world has been grappling with COVID-19 (Novel Corona Viral Decease) disease ever since news about it and the positive cases for the disease thereof hit the stands. The impact of the outbreak has been so huge that it has been compared to dreaded epidemics and pandemics of the past like 'The Great Influenza' (Spanish flu of 1918), or the Black Death (a form of bubonic plague). Traditionally, the government

and public health authorities (PHAs) relied on websites, news media, print press, and television as main platforms for the dissemination of pandemic-related news and information to the public. In contrast to the 2003 SARS and 2009 H1N1 pandemic, present-day media landscapes worldwide have evolved significantly, with a greater presence of social media and alternative local and overseas media outlets (Raamkumar *et al*, 2020). This was greatly affected since many countries were locked down around the world, and the mainstream of information dissemination was digital media, including social media.

With the emergence of social media, information on public opinions and feelings have become abundant. With the increased number of users in social media it has been used in various applications and has become a tool for making decisions for marketing and opinion analysis. Previous studies show that financial market movements largely depend on news, current events, and product releasesm (Pagolu *et al*, 2017). As of 2020, Twitter has 330 million monthly active users and 145 million active daily users. Twitter has a huge impact on news and reporting, and 90% of Twitter users of America uses Twitter as the source of breaking news, and 93% believe that Twitter is the best channel for brand marketing.

In this paper, I have contributed to the field of sentiment analysis of Twitter data. The name

'Sentiment Analysis' suggests an analysis of emotions such as anger, joy, love, positive, negative, and it has been used in various applications. But mainly sentiment analysis refers to analysing an opinion or feelings about something using data like text and determine whether it is negative or positive. Sentiment analysis has been traditionally tackled as a classification task (supervised learning) where the user decides which classification algorithm to use (Ruz *et al*, 2020). The main objective of the study is to conduct a sentiment analysis on tweets refereeing to COVID-19 pandemic disease posted on Twitter social media application. Then the results were compared with the stock market behaviour of the country.

2. APPROACH

In the process of analysing sentiments of Twitter data, I have streamed a set of tweets based on a geographical location under the search words 'covid19' OR 'corona' using the Natural Language Toolkit (NLTK) package for Natural Language Processing (NLP) with different data cleaning methods. A Twitter developer API was used for the above purpose, and this requires a valid use case to be implemented with twitter data, and in general, it takes few days for the approval by Twitter. Then a model was trained using pre-classified tweets and used the model to classify the set of streamed tweets into positive and negative sentiments. The tweets streaming was conducted for multiple consecutive days to understand the pattern. The data was visualised and analysed against stock market data for the same dates to understand the behaviour of the stock market with the sentiment values of tweets.

3. DATA DESCRIPTION

Twitter is a microblogging social media application that allows users to post real time posts known as tweets. A tweet can contain a maximum of 140 characters in length. As the nature of social media contents tweet can be composed of icons which express some emotions which are known as emoticons, users can use any abbreviated texts which does not follow language vocabulary and use @ symbol (atentions) to refer into some other twitter account for making

the accounts attention. Further social media users are using hash tags (#) for marking topics to increase the visibility of the tweet. Twitter API support to stream data based on the geographical location but has a limitation of streaming based on the country as the user location due to the lack of explicit location information in the majority of tweets. And therefore, tweets were selected from the geographic center of contiguous Sri Lanka with the radius of 175 miles. In Sri Lanka we have 182,000 active twitter accounts and this is among 10.1 million internet users and 6.40 million social media users in Sri Lanka as per January 2020. Among all social media users, Twitter is used by 5.07%, and the majority is using Facebook, and it is 82.21%. Twitter API allowed to download historical tweets only for seven days back, and therefore I could download tweets starting from 04th June 2020 and onwards.

4. DATA PRE-PROCESSING

Since the text in social media is unstructured and in row format, text needs to be cleaned before starting for analysis. cleaning of data will require to perform a series of tasks such as removing of duplicates, hyperlinks, hash tags, atentions, unnecessary whitespaces. These tasks were performed using the following techniques using natural language toolkit (NLTK) in python programming language.

5. TOKENISING THE DATA

Tokenisation is the process of splitting strings into smaller parts called tokens. A token is a sequence of characters in text that serve as a unit. The streamed tweets were tokenised by splitting the text based on whitespace and punctuation marks. These tokens consisted of words, emoticons, hash tags, links and individual characters. A pre trained model named punkt was downloaded from NLTK which helps tokenising words and sentences. This model knows things such as a name may contain a period like Prof. Sara and the period does not necessarily end the sentence. The tokenisation process will split the text into tokens and these tokens may contain some special characters such as '@', '#', and '_'. These special characters are removed by using

regular expressions and these special characters are considered as noise of the data.

6. REMOVING NOISE FROM THE DATA

Noise is any part of the data which does not add meaning or information to the data. Noise pertaining in one project is different from another project. Identified noise in the tweet dataset are mainly hyperlinks, Twitter replies, and special characters mentioned in the above section. Hyperlinks in twitter are converted to a URL shortener t.co and therefore keeping them in the dataset does not give any meaning to the analysis. To remove hyperlinks, the code first searches for a substring that matches a URL starting with `http://` or `https://`, followed by letters, numbers, or special characters. Hyperlinks are removed using the regular expression `'http[s]?://(?:[a-zA-Z]|[0-9]|[$-_@.&+#!*()\]|\"(?:%[0-9a-fA-F][0-9a-fA-F])')'`. The symbol `@` is used in twitter to mention a particular user and does not provide any meaning in the analysis. The programming code uses `re` library to search `@` symbols and followed by letters, numbers, or `_`, and replaced with an empty string using regular expression `(@[A-Za-z0-9_]+)`. Though punctuation and special characters provide context to textual data the context is difficult to process. And there for punctuations and special characters are removed from the text to make the text simpler. This was done using the library `string`. Another noise in the data set is some commonly used words such as 'the', 'is', 'an', 'in', 'myself', 'yourself' etc., which is known as stop words and NLTK in python is having a list of stop words stored in 16 different languages. Stop words are downloaded from NLTK in python for the language English and eliminated from the tweets.

7. NORMALISING THE DATA

Normalisation in NLP is the process of converting words to its canonical form. The words 'speak', 'spoke', and 'speaking' are all equivalents of its verb 'speak'. Through the process of normalisation, the above mention words can be converted to the same one word 'speak' for the analysis. The two well-known techniques for normalisation are stemming and lemmatisation were used. Stemming was used to

remove affixes of a word, for example pythoning, python, pythoned, pythoner words will be converted to one-word 'python' in the pace of stemming. Lemmatisation is used in the normalisation process since lemmatisation normalise the text with the context of vocabulary and morphological analysis. Python is having a lexical database named as 'wordnet' for the English language which helps the script to determine the base word. And the 'averaged_perceptron_tagger' resource which is available in python helps to determine the context of a word in a sentence. Both resources are downloaded from NLTK. Before using lemmatiser the context of each word in the text needs to be determined and a tagging algorithm is required for assessing the relative position of a word in a sentence. The function `pos_tag` was imported for the purpose of providing a list of tokens as an argument to get the tags. Some common tags and their meanings are as: NNP: Noun, proper, singular, NN: Noun, common, singular or mass, IN: Preposition or conjunction, subordinating, VBG: Verb, gerund or present participle, VBN: Verb, past participle. After the normalisation process analysed the data to determine the frequency of most common words in the data set.

8. SENTIMENT ANALYSIS DATA PREPARATION FOR THE MODEL

Tweets with positive and negative sentiments are used to build a model by splitting the dataset into two parts in such a way that first part is used to build the model and the next part is used to test the performance of the model. Naïve Base classifier algorithm is used to classify data which is extremely fast compared with other classifiers. The model of Naïve Bayes is very easy to build and comes very much in handy while using or working with large data sets. It is known for its simplicity. Being the simplest among the analysing algorithms, its known to outperform even with highly sophisticated methods of classification (Matharasi and Senthilrajan, 2017). The Naïve Base classifier model in python requires a list of words in tweets and a python dictionary with words as keys and 'true' values. And therefore, a python function was written to convert the tweets from a list of cleaned tokens

to dictionaries with keys as the tokens and 'true' as values. Trained the data using Naïve Base classifier assigning 'Positive' and 'Negative' for relevant tweets downloaded from the available tweet corpus (twitter_samples) of NLTK in python. By default, the data contains all positive tweets followed by all negative tweets in sequence. When training the model I have shuffled the data by using random() method available in random to avoid biasing. The shuffled data was split into a ratio of 70:30 for training and testing, respectively. Since there were 10000 tweets in the shuffled dataset, 7000 tweets were used for training the model and 3000 were used for testing the model. The train() method of the Naïve Base Classifier was used to train the model and the accuracy() method to test the model on testing data. Finally, the daily filtered tweets from twitter were applied with the above tokenisation, noise removal, and classification process to analyse and plot graphs of positive, negative, and total number of tweets related to COVID-19. All share price index of Colombo Stock Exchange was downloaded for the operational days of the share market in Sri Lanka and plotted for comparison.

9. RESULTS

The accuracy of the test data was resulted as 99.5% and it is the percentage of tweets in the testing dataset for which the model was correctly able to predict the sentiment. The most informative features of the tweets are shown in the Figure.1 (Appendix 1). The model was manually tested with custom tweets and the results are shown in the Table 1 (Appendix 1). Three time series are plotted for the sentiment data of positive sentiments, negative sentiments and all covid-19 related tweets for a given particular day in the location specified. A similar time series is plotted for the behavior of Colombo Stock Exchange (CSE) of Srilanka for the same time period. The considered market indicator was All Share Price Index (ASPI). Sentiments of the tweets of the previous day was considered for the comparison of share market behavior. Starting from 04th June 2020 there is a drop of negative tweets until 08th June 2020. During the same period there is an increment of ASPI of CSE. During the period of study positive time series

and total tweets time series does not show any correlation with stock market behavior.



Figure 1. Sentiments of Daily Tweets



Figure 2: Stock Market Behavior of CSE

10. CONCLUSION AND FUTURE DIRECTIONS

I have created a model to study the sentiments of twitter data for a particular location and the model can be used to compare correlations of sentiments with other data such as stock market. The model has been used to present the sentiment analysis of twitter data related with COVID-19 generated from Srilanka and compared with the stock market behavior of the same country for the same period. Visual analysis of the time series shows that there is a correlation of sentiment data of COVID-19 with stock market behavior.

The model uses a corpus of sample tweets available in twitter, but I recommend that a corpus should be created for pandemic diseases since it has some specific words which behave unique for such a situation. For example, the word 'positive' gives a sentiment of positive under normal circumstances but under a

pandemic situation ‘positive means for positive for disease and therefore it should be a negative sentiment.

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APPENDIX

```

:( = True          Negati : Positi = 2069.8 : 1.0
:) = True          Positi : Negati = 1646.6 : 1.0
sad = True         Negati : Positi = 24.7 : 1.0
bam = True         Positi : Negati = 23.0 : 1.0
follower = True    Positi : Negati = 20.6 : 1.0
community = True   Positi : Negati = 16.3 : 1.0
followed = True    Negati : Positi = 15.4 : 1.0
ugh = True         Negati : Positi = 14.3 : 1.0
aw = True          Negati : Positi = 13.7 : 1.0
idk = True         Negati : Positi = 13.0 : 1.0
glad = True        Positi : Negati = 12.2 : 1.0
arrive = True      Positi : Negati = 12.1 : 1.0
goodnight = True   Positi : Negati = 11.0 : 1.0
miss = True        Negati : Positi = 10.8 : 1.0
welcome = True     Positi : Negati = 10.3 : 1.0
kill = True        Negati : Positi = 10.3 : 1.0
enjoy = True       Positi : Negati = 10.1 : 1.0
ago = True         Negati : Positi = 9.7 : 1.0
shame = True       Negati : Positi = 9.7 : 1.0
blog = True        Positi : Negati = 9.4 : 1.0
poor = True        Negati : Positi = 9.4 : 1.0
lovely = True      Positi : Negati = 9.0 : 1.0
:( = None         Positi : Negati = 8.9 : 1.0
invite = True      Positi : Negati = 8.3 : 1.0
thankyou = True    Positi : Negati = 8.3 : 1.0

```

Figure 3. Most Informative Features (Accuracy is 0.995)

Table 1. Custom Tweets and Generated Results

Custom Tweet	Resulted sentiment
"curfew in Srilanka is lifted from tomorrow"	Positive
"Share market force stopped due to the poor selling"	Negative
"Coronavirus Cases in Sri Lanka is currently 1846 and we are badly reaching 2000"	Negative
"The silverlining of #COVID19 was the earth getting cleaner"	Positive
"Saudi envoy in Srilanka assures full support for COVID-19 project"	Positive
"Ten coronavirus patients identified in the country yesterday"	Positive

Project is available in GitHub:
<https://github.com/chamindaw/COVID-19-Sentiment-Analysis>

Women in Hospitality: Challenges admits Covid-19 Global Pandemic

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ABSTRACT

Before the COVID, there were more than 2.3 million visitors in Sri Lanka. Travel and tourism income remained a significant contributor to the national economy. By 2022, Colombo will open more than 14 hotel projects in its pipeline to meet the growing number of passengers as per the industry strategy. Sri Lanka reported around 60% of its occupancy last year, but key indicators of Easter terrorist attacks revealed less than 2018 in April 2019. It has been predicted, for example, that 25,000-30,000 additional employees would be needed per year to accommodate for the expected rise in guest arrivals to the region, post-COVID forecast. Still, only less than 1,000 hotel management training graduates have generated annually, as per the tourism industry higher educational institute figures. It needs to build a good picture of the hotel industry to draw more women into the workforce to bridge the market's expanding labour shortage, to meet state economic objectives, more efficiently. The industry is offering equal opportunities for woman from its initiation in 1966 after the II world war and expansion in the same year with the approval of parliaments Act No. 10 of 1966.

1. INTRODUCTION

The diverse landscapes and natural wonders of Sri Lanka have attracted a growing number of visitors. In 2018, there were more than 2.3 million visitors, more than 2.17 million in 2017, recorded in Sri Lanka. Travel and tourism income remained a significant contributor to the national economy, and for two consecutive years,

they contributed 5.1 % to GDP in 2017 and 2018. Tourism foreign exchange in 2017 rose to 15.9% of total foreign exchange revenue. By 2022, Colombo will open more than 14 hotel projects in its pipeline to meet the growing number of passengers. However, the pipeline was constructed to supply about 2000 rooms to the luxury market and to rely less on the budgetary and medium-sized regions with around 600 rooms. In 2018, the average daily revenue of LKR 20,500 and daily revenue of LKR12,300 were reported in each bed. Sri Lanka reported around 60 % of its occupancy that year, but the key indicators of Easter terrorist attacks revealed less than 2018 in April 2019 (IPS, 2020).

This review includes a detailed history review of Sri Lanka's hospitality industry, including evaluating sectoral segments, the general environment and emerging business patterns, and the causes for women's low participation among the hospitality industry in Sri Lanka.

2. THE KEY MARKET TRENDS BEFORE-COVID-19

Sri Lanka is speedily recovering and attracting more visitors from the Easter terrorist attacks. The terrorist attacks on Easter in April 2019 resulted in a 70.8 % decrease in tourist arrivals in Sri Lanka and a smaller number of arrivals of about 37,000 registered in May 2019, creating a significant gap in the percentage change in 2018 for the same month. It succeeded, however, in bouncing back and regaining its momentum in

tourism arrivals over time. In June, the change in the share of arrivals was around 57 %, in July 46.9 %, in August 28.3 %, in September 27.2 %, in October 22.5 % and in November 9.5 %, 2019. The population accounts for approximately 20 %, 11.3 %, 10.9 %, 6.7 % and 4.7 %, respectively, of international tourists from Sri Lanka to China, the UK, Germany and Australia (Arunatilake, 2020).

3. INDUSTRY COMPETITIVE LANDSCAPE

In Sri Lanka, the hospitality sector faces tough competition from both international and local chain City hotels and resorts to resorts, boutique and other single and small-scale properties. Therefore, a distinctive aspect of the brands might be the location and architecture of the hotels. Moreover, big international and local brands such as Cinnamon, Jetwing, Aitken Spence, Hilton, Marriot are spending more on training for their workers to boost customer loyalty, sustainability measures and new experiences. Today hotels are striving to create lasting experiences for their guest in order for repeat clientele and customer loyalty. Today the spectrum of tourism activities including lodging, food, accommodation, travel is based on creating lasting experience.

3.1. Global Tourism Trends and Opportunities in Sri Lanka

People are pleased to fly around the world while enjoying different communities and lifestyles to explore global dynamics. Because some find the experience soothing, it is quickly becoming widespread for travel. It all applies to the adventure requirements of the user. The gamut of international travel is rising dramatically, and the ultimate result is the establishment of the foreign tourism and hospitality sectors.

The tourism sector is a principal service export from Sri Lanka. After foreign worker remittances and textiles and clothes, it is currently the third-highest export earner and brought in USD 4.4 billion in 2018 alone, equivalent to 4.9 % of its GDP. The sector has undergone explosive growth since the end of the armed war in 2009,

with tourist arrivals growing by around 2.8 times over the last decade; in 2018, the highest annual number of tourist arrivals of 2,333,796 have registered. In Sri Lanka, the tourism industry has shown significant improvement and expansion, notwithstanding the downturn following the terrorist attacks on Easter Sunday in April 2019. Unfortunately, the outbreak of the novel coronavirus in China, which is the source of a significant number of Sri Lankan tourists, and the subsequent revocation of visas for Chinese tourists on arrival in Sri Lanka, along with the clampdown of the Chinese government on outbound tourism, have already adversely affected the overall arrival of tourists in the area.

Nevertheless, tourism in Sri Lanka has proven to be resilient. It is recognised as a significant growth area in critical national policy articles, including Vistas of Riches and Splendour, to raise annual arrivals of tourists to seven million and foreign exchanges to 10 billion US dollars by 2025. The same paper stresses the need to economically and socially empower women in the region. Besides, increasing women's jobs would significantly decrease poverty and contribute to economic growth. Given that tourism provides direct and indirect employment, this blog discusses the main barriers to the inclusion of women in the hotel industry in Sri Lanka, and how their contribution to achieving these ambitious goals can be improved (Uresha, & Obeyesekere, 2020).

4. LOW PARTICIPATION OF WOMEN AMONG THE HOTEL WORKFORCES

Given its rising significance, the tourism industry in Sri Lanka and its development face many restrictions, including a severe shortage of qualified human capital. It has been predicted, for example, that 25,000-30,000 additional workers would be needed per year to accommodate for the expected rise in guest arrivals to the region. Still, only less than 1,000 hotel training graduates have generated annually. In this regard, the National Policy System seeks to raise the number of employees from 388,487 to up to one million, thus developing technical and higher educational institutes for tourism training in the major tourist

sites and promoting desirable skills development courses (IPS, 2020).

Women are highly under-represented in Sri Lanka tourism work force, with women, accounting for less than 10 % of the tourism formal working population, relative to 54 % internationally, compared to the sizeable female representation in the tourism industry worldwide, with some regional variations. In particular, in individual nations, such as Mexico, South Korea and South Africa, jobs in the sector are far greater than in the rest of the economy. Moreover, in Sri Lanka, female enrolment in hotel schools is disturbingly insufficient. In the sense of a rising sector and the country's still low female labour force participation rate, these numbers do not forecast well, which 33.6 % compared to 73 % for male employees. Male employees exceeded women in all occupational groups within the hospitality field of Sri Lanka, except for guest relations and front office employees and a certain amount of marketing functions. Thus, attracting more women into the sector would help solve the increasing lack of human resources, which is a crucial barrier to its development (Ramalu, & Janadari, 2020).

4.1. Why are Women Losing Industry Opportunities?

The strong presence of women in the global tourism industry has begun to several encouraging variables, such as ease of entry due to less focus on structured education and preparation, greater emphasis on personality and hospitality expertise and the availability of part-time jobs. In Sri Lanka, though, it seems that societal expectations, values, and biases are holding women away from the industry. Despite the reality that hotels are searching for more female personnel, women are better employers than male employees due to many reasons.

Industry occupations are perceived to be socially unsuitable for women, especially single women. They are frequently related to illegal activity such as prostitution, drugs, safety problems (sexual harassment) and health problems (sexually transmitted diseases), stereotypes perpetuated by the media. Consequently, parents

and husbands have prevented their children and their partners, particularly female children, from pursuing a hotel industry career. According to a World Bank survey on women's involvement in the Sri Lankan labour force, 85% of respondents said that women are likely to abandon their tourism work after marriage. Studies often illustrate other factors that have prevented women and young people from pursuing work opportunities in Sri Lankan hotels. However, these involve degrading job titles in the industry, such as 'bell boy' relative to more dignified titles and types of jobs in rival industries; favourable international jobs and self-employment opportunities elsewhere in the country; weak English command; low wages and poor career development prospects; lack of job protection and public sector retirement benefits; Women's involvement is often influenced by the unequal distribution of vocational training centres in the world since they are less inclined to participate in and move programmes further from home than others. In this regard, it is promising that the government has recognised the need to set up more technical and higher educational institutes for tourism training throughout the world (Ruiz-Palomo, León-Gómez, & García-Lopera, 2020).

5. HOW TO INCREASE WOMEN'S PARTICIPATION

It needs to build a good picture of the hotel industry to draw more women into the workforce to bridge the market's expanding labour shortage. Global awareness-building and recruiting programmes with strong community engagement in rural areas, aimed at educating the public about the working practices, history and essence of hotel work, should be carried out to overcome the misconception associated with hotel workers, employees, hotel organisations, and the government. The industry also needs to involve the media in collaboration with the government to resolve the myths regarding open employment and occupational protection, whilst emphasising the significance of the sector and its contribution to the economy. Around the same period, as part of the training/curriculum, hotels and hotel schools, technical institutes, higher educational institutes must include English and other

languages and collaborate with high schools to recruit young people into internships/work placements. Although women in the industry are poor, there are more women in tourism management than in other sectors of the economy, such as ICT, tea and commercial agriculture. In this sense, to draw more women into the industry, as well as counter gender norms, they need to be held up as role models. Supporting employee professional growth and offering regular preparation, mentoring, and promotions can also be prioritised to attract and promote women step up the ladder and support facilities such as housing and childcare to resolve hotel work climate issues. A stronger emphasis on the advancement of human capital within the hotel sector will go a long way in growing women's involvement, while at the same time promoting the growth potential of the industry to meet government objectives as per the post-COVID-19 strategy.

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A Study on the Effect of Psychological Resilience on Covid-19 Stressors of Academics in Higher Education Sector in Sri Lanka

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ABSTRACT

This study is focused on understanding the effect of psychological resilience on covid-19 stressors of academics in higher education sector in Sri Lanka. Analyzing the data of 65 academics in Sri Lankan higher education sector, this study explores how organizational drivers and personal drivers of psychological resilience has impacted the Covid-19 stressors such as anxiety and depression. Significant associations were identified via the Pearson's Correlation and findings suggest that there is a negative correlation between personal drivers and Covid-19 stressors, whereas there is a positive correlation between organizational drivers of psychological resilience and Covid-19 stressors. The findings of the study highlight valuable insights on the effect of psychological resilience on Covid-19 stressors, where the study emphasizes that having organizational drivers would not be sufficient in mitigating the Covid-19 stressors and thereby, it is significant for an individual to possess strong personal drivers as well.

Keywords - Covid-19, psychological resilience, anxiety, depression, Covid-19 stressors

1. INTRODUCTION

World Health Organization announced the Covid-19 as a pandemic and a threat to all the individuals around the globe in March 2020. As per the statistics, it was reported that there were 9 million confirmed cases and half a million deaths approximately from 204 countries (Arora et al., 2020). As per the studies, the lockdown,

isolation, social distancing, travel restrictions etc. that were declared with the Covid-19 outbreak led to psychological stressors like anxiety, depression, frustration and post-traumatic disorder (Salman et al., 2021) (Woon et al., 2020), where in this study's focus is given on anxiety and depression. A survey carried out in Italy stated that quarter of individuals had anxiety and depression (Serralta et al., 2020). According to the World Health Organization (2020), there is an increase in women and child abuse and attempts of suicide with the declaration of Covid-19, which proves the fact that the pandemic has a major impact on the mental health of individuals. The outbreak of Covid-19 pandemic had a major negative physiological, psychological and emotional impact on individuals (Roy et al., 2020), that makes psychological resilience a need for everyone to encounter the negative effects that would occur.

Resilience can be identified as the ability of an individual to be flexible and adapt to the changes or crisis situations (Portuguez Castro & Gómez Zermelo, 2020). A few studies state that the students and other university workers are psychologically affected due to the outbreak of Covid-19, making it vital for the existence of psychological resilience to encounter anxiety and depression (Covid-19 stressors).

Researchers have conducted studies on the impact that Covid-19 pandemic had on the mental health of children, teenagers, adults, health workers (Javed et al., 2020). It is identified

that the pandemic had a negative impact on the education and mental health of individuals. Further, a few studies states that there is a psychological impact on the students and the academia with the closure of universities, change of delivery mechanisms and other services to students (Serralta et al., 2020). But the attempts taken to analyze how PR impacts the CS of academics in the higher education sector in Sri Lanka is scarce. This gap in the literature creates a solid ground to study the impact that psychological resilience has on the CS of the academics.

Considering the higher education sector, with the Covid-19 outbreak the lecture delivery mechanisms were changed to digital context and exposure to uncertainties in operations and performance is high (Arora et al., 2020). These shifts have a drastic impact on anxiety and depression levels of individuals. These situations created a need for finding strategies to encounter such situations which can be either personal or organizational. But less studies have been conducted to analyze how such factors of PR have acted as a driver to fluctuate these levels of anxiety and depression of the academics in the higher education sector.

In this context, the interest was drawn to analyze whether PR has an impact on CS like anxiety and depression of the academic staff of the higher education sector in Sri Lanka. This study is undertaken to cater that theoretical, contextual and industrial gap by conducting a research that focuses on 'To what extent the Psychological Resilience has affected Covid-19 stressors of Academics in the Higher Education Sector Sri Lanka'. The ultimate objective of this research study is to analyze the effect of psychological resilience on Covid-19 stressors (anxiety and depression) of academics of the higher education sector.

2.LITERATURE REVIEW

As declared by the World Health Organization, Covid-19 is regarded as a pandemic situation which has a huge negative impact and has affected people worldwide in different sectors (Portuguez Castro & Gómez Zermeño, 2020). It

is identified that this global crisis had an impact on the educational sector with the imposition of lockdown that led to closure of universities and transformation to virtual learning platforms (Serralta et al., 2020).

There are various psychological disorders that are amplified with the Covid-19 outbreak such as anxiety, fear, depression, stigmatization, panic and loneliness that affect mental health, while having an ultimate impact on psychological resilience (Hiremath et al., 2020). Studies have stated that the Covid-19 outbreak has led to various Covid-19 stressors such as anxiety, stigmatization, depression, fear and frustration (Woon et al., 2020). In this research, Focus is given to anxiety and depression.

The change in the daily routines and way of working that resulted with Covid-19 outbreak led people to have a feeling of anxiety that is identified as a state of worry and nervousness together with uncomfortable feeling on uncertainties (Mahendran et al., 2020). As stated by Sam Vaknin (2019), it is accompanied with symptoms that are physical like sweating, high blood pressure and tensed muscle tone. Studies have frequently identified that anxiety and depression are closely associated.

Depression is an uncomfortable feeling that involves physical and mental state of a person, while impacting the behaviors of the individual. A depressed person would seem to be less energetic, hopeless and might even have suicidal thoughts. According to the World Health Organization (2020), with the outbreak of the Covid-19, surveys have proven that the suicide rates have increased, which can be identified as a result of depression. Different factors such as lack of social support, lower social status, unemployment, losses in economic conditions, fear spread via social media, financial strains have led people towards depression (Bueno-notivol et al., 2021).

According to K. Burcu and D Canh (2020), it is important that resilience exists in order to get back to the normal life by getting rid of a challenging life situation. The approach that would be used by people to regain their normal

state would be different from one another. Simply, resilience can be identified as the ability of an individual to be flexible and adapt to the changes or crisis situations (Portuguez Castro & Gómez Zermelo, 2020). Resilience not only states that individuals are being adaptive and surviving, it also states the growth and development of individuals (Jakovljevic, 2018).

The outbreak of Covid-19 pandemic had a major negative physiological, psychological and emotional impact on individuals (Roy et al., 2020), that makes resilience a need for everyone to encounter the negative effects that would occur. A few studies state that the students and other university workers are psychologically affected due to the outbreak of Covid-19, making it vital for psychological resilience. The ability of individuals to recover and regain their normal life is identified as psychological resilience (Satici & Kayis, 2020). Simply, it is the recovery of a person from negative emotional states.

Studies have found that there are two dimensions of PR, which are identified as interpersonal dimensions and intrinsic dimensions. According to Jakovljevic, M. (2018), the relation of an individual to his/her internal world is identified as intrinsic dimension and the relation of an individual to other people is known as interpersonal dimension. The author studied the effect of PR on CS by considering these two dimensions of PR as personal drivers (intrinsic dimension) and organizational drivers (interpersonal dimension).

Psychological resilience is vital in lowering the negative psychological effects that have resulted due to the pandemic (Burcu & Derya, 2020). The outbreak has created a digital shift in the educational sector, closure of universities, giving rise to uncertainties that ultimately led towards the rise of CS (Arora et al., 2020). Some Covid-19 stressors such as anxiety and depression negatively impacted the mental health of individuals in various fields including education and health (Kumar & Nayar, 2020), making it a need to have psychological resilience. Prior studies were conducted on PR and those studies state that PR has a correlation with various factors such as happiness, mental health,

psychological well-being and depression (Burcu & Derya, 2020). It is identified that PR is negatively correlated with depression (Burcu & Derya, 2020), which was identified as one of the CS (Woon et al., 2020).

Thus, this study has been undertaken to discover the effect of PD and OD of psychological resilience on CS such as anxiety and depression of the academia in the higher education sector of Sri Lanka.

Hypothesis

H0: OD has no significant relationship with CS

H1: OD has a significant relationship with CS

H0: PD has no significant relationship with CS

H2: PD has a significant relationship with CS

3. RESEARCH METHODOLOGY

To find out the effect of PR on CS of academics with the Covid-19 outbreak, a quantitative study is conducted as limited prior research was conducted on this topic. The study conducted is deductive and uses the academia of the Sri Lankan higher education sector as the unit of analysis. Primary data would be collected via the conduct of a survey, which is a semi-structured questionnaire with fixed-alternative questions. A cross-sectional study using the survey would be administered to the respondents via electronic interviewing method. The target population is the academics of the higher education sector in the western province, Sri Lanka. A probabilistic sampling technique, which is stratified sampling technique is adopted considering the availability of respondents at the right place at the right time and the sample size is 65. The data gathered would be analysed using the IBM SPSS software, which is a statistical analysis tool used to analyse quantitative data.

4. DATA ANALYSIS

4.1. Factor Reliability Analysis

Table 3. Factor Reliability Analysis

Variable	Cronbach's Alpha	Decision Rule	Comment about the reliability
Covid-19 Stressors	0.832	0.832 > 0.7	Reliable
Organizational Drivers	0.819	0.819 > 0.7	Reliable
Personal Drivers	0.915	0.915 > 0.7	Reliable

Source: Results from SPSS Statistical Software

As per the statistics, the independent variables (OD and PD) and dependent variable (CS) have a Cronbach's alpha value above 0.7, which derives that the variables are reliable.

4.2. Descriptive Statistics

As per the descriptive statistics, majority of the academics (53.8%) are in between 25-30 years and 34 respondents are females and 31 respondents are males. Out of the 65 academics, most of the academics work in private universities (66.2%) and majority of the academics belong to the Faculty of Business (67.7%). Further, the survey showed that 22 academics out of the 65 academics are currently employed as lecturers, 19 academics as temporary lecturers, 13 academics as senior lecturer grade II, 6 academics as senior lecturer grade I, 4 as teaching assistants and 1 as a tutor. Moreover, results show that most of the academics have a working experience of 1 year to 5 years (44.6%).

4.3. Correlation

Table 4. Pearson Correlation

	OD	CS	PD
OD	1		
Pearson Correlation			

	Sig. (2-tailed)			
N	65			
Pearson Correlation	.303*	1		
CS	Sig. (2-tailed)	.014		
N	65	65		
Pearson Correlation	.137	-.344**	1	
PD	Sig. (2-tailed)	.278	.005	
N	65	65	65	

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Results from SPSS Statistical Software

As per the statistics, the p-values are below 0.05, that derives that the variables are statistically significant. According to the Pearson correlation, there is a moderate positive relationship of 0.303 between CS and OD, whereas there is a moderate negative relationship of -0.344 between CS and PD.

4.4. Regression

Table 3. Model Summary of Regression Analysis

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.493 ^a	.243	.219	.54074

a. Predictors: (Constant), OD, PD

Source: Results from SPSS Statistical Software

The R² value shows that 24.3% of total variation in the CS can be explained by the psychological resilience derived via OD and PD.

Table 4. ANOVA Table
ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	5.817	2	2.909	9.948	.000 ^b
1 Residual	18.129	62	.292		
Total	23.946	64			

a. Dependent Variable: CS

b. Predictors: (Constant), OD, PD

Source: Results from SPSS Statistical Software

According to the statistics, the p-value is 0.000, which is less than 0.05. This shows that the regression model is statistically significant. Accordingly, the regression model shows a good fit for the data.

Table 5. Coefficients
Coefficients^a

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
(Constant)	2.934	.422		
1 PD	-.286	.081	-.392	
OD	.305	.095	.357	

a. Dependent Variable: CS

Source: Results from SPSS Statistical Software

According to the statistics, the p-values are below 0.05, which derives that the two

independent variables have a statistically significant relationship with CS. The results show that the OD has a positive relationship with CS whereas, PD has a negative relationship with CS.

Further, the results show that a unit change in PD would lead CS to change by 0.286 in the opposite direction and a unit change in OD will have a positive impact of 0.305 on CS.

Below derived is the linear regression model according to the results;

$$CS = 2.934 + (-0.286 \times PD) + (0.305 \times OD)$$

4.5. Results of the Hypothesis

Table 6. Hypothesis Results

H1	OD have a significant relationship with CS	Accepted
H2	PD have a significant relationship with CS	Accepted

5.FINDING AND DISCUSSION

The Pearson correlation emphasizes that the OD and PD of psychological resilience is significantly associated in influencing the CS, but the variable of OD highlights a positive impact on CS and PD emphasizes a negative impact on CS. Previous studies have emphasized that PR and CS like depression has a moderate negative correlation (Burcu & Derya, 2020), which is grounded by the study conducted, where personal drivers of psychological resilience as a core element in determining the level of CS has a moderate negative correlation of 0.344 in between them. PD as an independent variable highlights the strong character of an individual, where the person is more flexible and adaptive, has a good mental health and has a mindset that can easily recover from challenging situations. The study proves that having strong personal drivers is likely to bring down the level of CS such as anxiety and depression.

But in the context of higher education sector in Sri Lanka during the pandemic, findings derive that OD of psychological resilience has a moderate positive correlation of 0.303 with the

CS, stating a contradictory argument to the prior studies conducted (Burcu & Derya, 2020). OD as an independent variable highlights the training, counselling and support given by the organization during the Covid-19 outbreak. It involves the accommodation, transportation and sanitation facilities provided by the entity. Further, the organizational drivers emphasize the limited fluctuations in remuneration and the job security during the pandemic. As per the findings, the existence of OD has a significant impact on Covid-19 stressors, but it is positive. This emphasizes that the prevalence of OD is not enough to lower the CS and instead it should be accumulated with other factors such as the personal factors.

6. CONCLUSION AND RECOMMENDATIONS

Studies had documented that Covid-19 outbreak set forth to numerous CS such as anxiety, depression, stigmatization and frustration (Woon et al., 2020). Prior research was conducted on the impact of PR on such stressors (Burcu & Derya, 2020). To mitigate the level of CS, various psychological resilience strategies can be used which can be either organizational or personal. The main objective of this study is to investigate the effect of organizational and personal drivers of PR on CS such as anxiety and depression. According to the Pearson correlation, the two independent variables identified have a significant association with CS, where OD has a positive correlation and PD has a negative correlation with CS. The review of the level of Covid-19 stressors in the academics of the higher education sector in Sri Lanka highlighted that having organizational drivers would not lower the covid-19 stressors, instead it has a positive relationship in between. But, the personal drivers, where an individual possessing a strong character, would have an opposite impact on CS. The study states that higher the PD, the lower would be the CS.

Therefore, it is recommended that individuals enhance their PD by building up a strong character that is flexible, adaptive and mentally healthy in order to mitigate the CS. Because the prevalence of OD would be insufficient to

encounter CS if it is not accompanied with strong personal drivers.

Moreover, further research could be recommended to understand the other CS that may have an impact due to psychological resilience. Also, further studies can be suggested to identify other variables of psychological resilience that would act as stimulates to have an effect on Covid-19 stressors.

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NOMENCLATURE

CS	<i>Covid-19 Stressors</i>
PR	<i>Psychological Resilience</i>
PD	<i>Personal Drivers</i>
OD	<i>Organizational Drivers</i>

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