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**THE IMPACT OF COVID-19 PANDEMIC ON LABOR
MARKET PERSPECTIVES FOR MANAGEMENT
UNDERGRADUATES: NEW MODELS OF
EMPLOYABILITY CAPITAL DEVELOPMENT**

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Introduction. COVID-19 is a worldwide epidemic that impacts all aspects of human life. Social distancing was an essential action to prevent from COVID-19 virus. For this reason, collective activities were prohibited in many countries including Sri Lanka. Education is one of the main collective activities in the world. As such, it is relevant to test the influence of COVID-19 on graduate employability skills. However, it is difficult to find COVID-19 impact on graduate employability skills in the Sri Lankan context.

Aim and tasks. The main objective of this paper was to identify the effect of the COVID-19 pandemic on the graduate employability capital of state universities' management undergraduates in Sri Lanka and the significant level of that factor.

Results. Based on the literature review, the COVID-19 pandemic affected five factors human capital, identity capital, cultural capital, social capital, and psychological capital identified as graduate employability capital factors or not. The methods of the study were to use the analysis of quantitative data. To achieve this goal, an online survey of 377 university students was conducted. The obtained selective results in the context of the COVID-19 pandemic showed significant positive shifts in the employment processes of university graduates. This positive impact, according to the results of the regression analysis, was provided by the following types of capital: social, human, psychological, cultural, and identity, the values of which ranged from 91.4 percent to 95.8 percent. Among all types of capital, human and psychological capital had the most significant impact on student mobility.

Conclusions. The conducted studies show the importance of the online educational system in the universities of Sri Lanka. The use of available resources can significantly improve the existing infrastructure of online education and help increase the level of competence and professionalism of the teaching staff and university students. The introduction of the proposed online educational programs and courses will not only improve the quality of services provided but will also increase the revenue side of the university budget.

Keywords: COVID-19, employability capital, graduate employability, labor market.

1. Introduction.

Graduate employability identifies as an important concept from both economic and individual perspectives. Graduation employability is a major concern for the majority of higher education institutions around the world (Nghia et al., 2020). Most universities are under pressure from their stakeholders to provide measurable outcomes of employability, and most often to meet the learning outcome standards required by different accrediting bodies (Jackson, 2016; Mia et al., 2018). Employability capital refers to the set of personal resources or capital that may impact individuals' employability (Trevor, 2001). Graduate employability can be identified as the ability of a graduate to get and stay in the job and to be able to adapt to the needs of the industry (Suleman, 2016; Gangahagedara et al., 2021; Rudenko et al., 2021). Graduate employability also is known as the willingness to work combined with an individual's work ethic, entrepreneurial knowledge, creativity and innovation, interpersonal and thinking skills, and learning skills (Rothwell, Arnold, 2007; Van der Heijden et al., 2009; Crossman and Clarke, 2010).

Globally, higher education is progressively shifting from knowledge transfer toward a more practical and employment-focused curriculum that prepares students for professional careers (Martin et al., 2000; Moore and Morton, 2017; Horban et al., 2022). Therefore, graduates can easily enter the labor market more than other people because they get good knowledge and experience within the university and industrial training before they work.

Education is one of the most critical sectors influenced by the COVID-19 pandemic across the globe (Hui et al., 2020). What concerns the sphere of education, most governments were obliged to shut down educational institutions, including primary and secondary schools, universities, higher education institutes, and other public and private institutions for a time in order to prevent the social spread of the virus. It is estimated that more than 1.5 billion scientists and students across the world have been affected by the closing of schools, universities, and other educational establishments because of COVID-19 (Hettiarachchi et al., 2021).

The COVID-19 pandemic reduces the opportunity for youth skills development and shrinks the employment opportunities for upcoming fresh graduates (Shahriar et al., 2021; Rudenko et al., 2021).

According to Tomlinson's (2017) graduate employability theory, graduates' employability capital has five dimensions: human capital, social capital, cultural capital, identity capital, and psychological capital. The graduate capital model is a novel way of thinking about graduate employability that addresses the difficulties of easing graduates' transition and early career management. The capital types described here are viewed as essential resources that provide individuals with benefits and advantages. These resources include a variety of human, social, cultural, identity, and psycho-social qualities that graduates get through formal and informal encounters (Tomlinson, 2017).

Many researchers conducted their studies on employability, employability capital, the labor market, and also COVID-19 impact on the employability of undergraduates. As a new issue, it is difficult to find research on the COVID-19 pandemic and graduate employability capital in the Sri Lankan context. Therefore, researchers have identified a contextual gap. Due to the dearth of research on the COVID-19 pandemic and graduate employability capital, the present study sets forth to examine the research problem, e.g: How does the effect of COVID-19 on graduate employability capital of state universities' management undergraduates in Sri Lanka?

2. Literature review.

2.1. Employability.

Hillage and Pollard (1998) compiled a list of all prior and existing theories about employability. As a result, employability consists of four major components: assets, deployment, presentation, and situations. Despite the fact that Hillage and Pollard's (1998) employability model was useful for synthesizing thoughts about employability, it did not explain the fundamental factors of employability or their linkages.

Cotton's employability model divides skills into three categories: basic skills, higher order cognitive skills, affective skills, and attributes.

Based on findings from capability concepts, social and psychological, and ideas from the literature, a skills-plus model of employability has been given as an alternative definition of employability (Knight and Yorke, 2002; Pool and Sewell, 2007; Zhukova and Bulgakova, 2019; Tytarenko, 2021).

The USEM model is widely regarded as a significant advancement in employability research since it defined employability in terms of other dimensions including skills, topic comprehension, meta-cognition, and personal traits for the first time (Pool and Sewell, 2007; Mia et al., 2018; Lu and Ma, 2021). The career EDGE model is an alternate model that includes all of the key elements of the USEM and employability skills models while providing much-needed clarity and simplicity.

The Career EDGE model, according to Pool and Sewell (2007), provides a realistic and straightforward summary of the important aspects involved in the employability process. The model describes how five lower-order components, namely career development learning, experience, degree topic knowledge understanding and skills, generic skills, and emotional intelligence, enable students to reflect on and evaluate their experiences. Unfortunately, the Career EDGE model is limited in its uses due to its classification as a snapshot picture of employability (Smith et al., 2014; Bazaluk et al., 2018; Aldjic and Farrell, 2022).

2.2. Human capital.

Human capital is defined as the graduates' knowledge and abilities, which serve as the foundation for their labor market success. This type of capital is most closely related to skills approaches since it is concerned with what and how graduates may connect their formal education to future career outcomes. Higher education instills broader knowledge, both technical and embedded, that graduates use in higher-end professional labor. Human capital development in the form of formally acquired information through greater degrees of education and training, in essence, empowers individuals in the labor market (Tomlinson, 2017; Hilorme et al., 2019; Arsawan et al., 2020; Bantash et al., 2020; Isti'anah et al., 2022).

Becker (1993) introduced the idea of human capital, which refers to the "marginal" productive value connected to higher-level qualifications in the labor market. University-acquired human capital may be tangible and transportable in some cases, as in the case of students who have completed specialized degrees (e.g. medicine, nursing, law, accountancy). In general, higher education delivers general education rather than specialized instruction (Tomlinson, 2017).

2.3. Social capital.

In terms of graduate employability, social capital can be defined as the total of social interactions and networks that aid in mobilizing graduates' current human capital and bringing them closer to the labor market and its opportunity structures. Social capital can influence and facilitate graduates' access to and understanding of labor market possibilities, as well as their ability to capitalize on them. Graduates' ability to establish bridging experiences and extend weak links beyond the formal limits of the university has become increasingly important (Tomlinson, 2017). The notion of social capital, according to Bourdieu (1984), refers to the resources that individuals have access to as a result of their membership or affiliations to specific organizations.

2.4. Cultural capital.

Cultural capital can be defined as the development of culturally valued information, dispositions, and behaviors that are compatible with the workplaces that graduates wish to enter (Tomlinson, 2017). Bourdieu (1984; 1986) established this term by discussing the transference of such valued cultural information between people's socio-cultural milieus and the educational context in which it was validated. The difficulty with this type of capital is that it is differentiated throughout the student and graduate population, which may be reinforced by mass higher education (Tomlinson, 2017).

2.5. Identity capital.

Identity capital is referred to here as the extent of personal investment made by a graduate in their future career and employability.

This includes their ability to rely on past experiences and construct a personal story that is relevant to the employment areas they wish to enter. The ability of a graduate to establish emergent identities and then justify and perform them in the early phases of the labor market is critical (Tomlinson, 2017).

2.6. Psychological capital.

Psychological capital is a potentially significant type of capital since it is based on psychosocial resources that allow graduates to adapt and respond proactively to foreseeable job problems. The level of struggle and hardship for graduates leaving higher education has increased, and fewer graduates expect the process of obtaining employment to be simple. Graduates' adaptability is becoming increasingly necessary, not only for navigating more difficult terrain but also for overcoming problems and setbacks such as potentially extended periods of underemployment and unemployment (Fugate et al., 2004; Dovgyi et al., 2020). Furthermore, graduate employability capital is critical for defining undergraduates' level of job preparedness for entering the workforce (Svyrydenko and Yatsenko, 2019; Kurupparachchi et al., 2021; Amarathunga and Wijethunga, 2021).

According to the above review of literature, COVID-19 become a major issue in graduate employability as well as employability capital. Using the Tomlinson's (2017) Alumni Equity Model, five dependent variables were identified, and according to this study, the independent variable is the COVID-19 pandemic. Because of this pandemic, universities have moved to online learning. In order to explore this issue, the study developed a conceptual framework for their study as follows, as outlined in the methodology.

3. Methodology.

The conceptual framework of the present study can be depicted in Figure 1.

The researchers examine whether the significant impact of content and organization on student satisfaction can be identified.

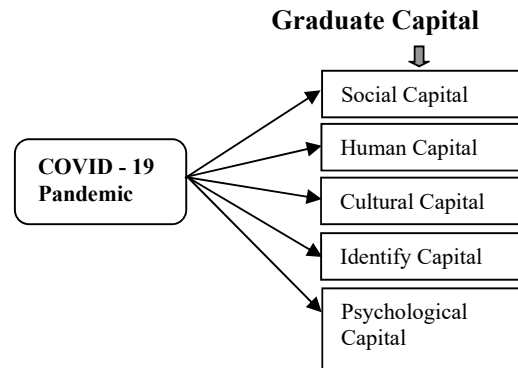


Fig. 1. Conceptual Framework.

Therefore, the research hypothesis of this variable is as follows.

H1: There is a significant impact of COVID-19 on the human capital of management undergraduates in state universities in Sri Lanka.

H2: There is a significant impact of COVID-19 on the social capital of management undergraduates in state universities in Sri Lanka.

H3: There is a significant impact of COVID-19 on the cultural capital of management undergraduates in state universities in Sri Lanka.

H4: There is a significant impact of COVID-19 on the identity capital of management undergraduates in state universities in Sri Lanka.

H5: There is a significant impact of COVID-19 on the psychological capital of management undergraduates in state universities in Sri Lanka.

In this study, researchers have collected data from state university management undergraduates in Sri Lanka. Eleven universities conduct management degree programs for undergraduates. The population of 20,000 students has been considered in this research. In this research, study researchers have picked up 377 management undergraduates representing eleven state universities using a restricted random sampling method. Morgan's table has been used to determine the sample size (Fig. 1) (Krejcie and Morgan, 1970).

4. Results.

4.1. Descriptive Analysis.

Out of the total of 377, there are 187 male management undergraduates and 190 female management undergraduates in the sample.

There were 54 First Year management undergraduates, 82 Second Year management undergraduates, 83 Third Year management undergraduates, and 158 Fourth Year management undergraduates. Figure 2 shows the structure of the case with the university representation of the undergraduates.

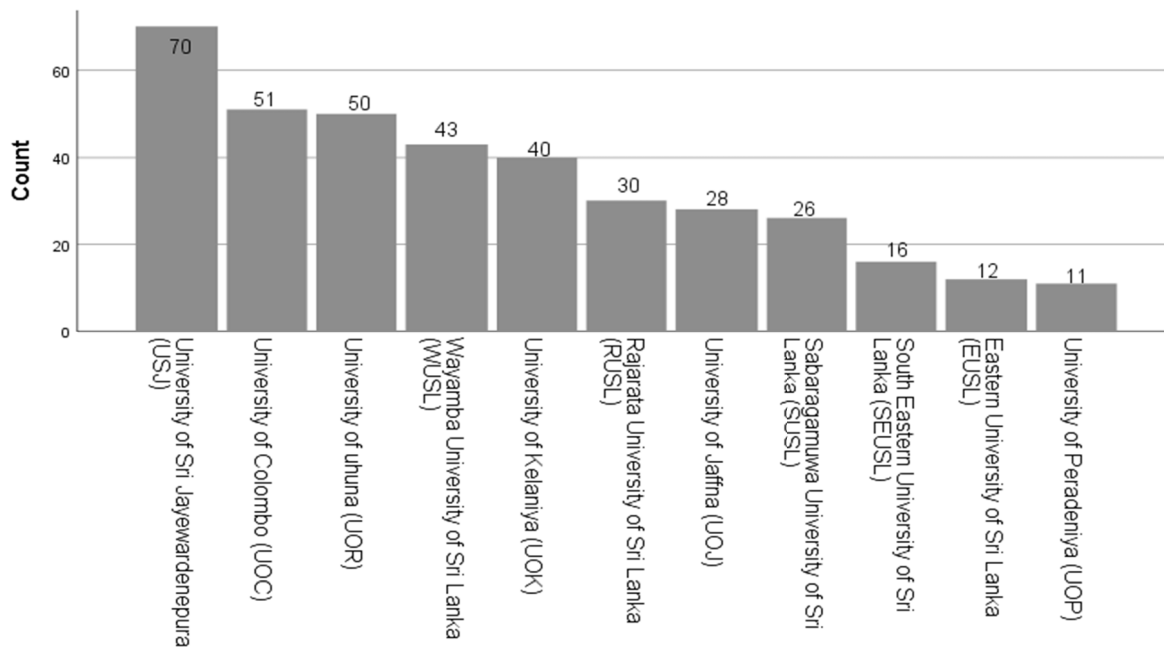


Fig. 2. Structure of the case with the university representation of the undergraduates.

4.2. Regression Analysis between COVID-19 and Human Capital.

The impact of COVID-19 on the graduates' level of human capital has been analyzed through simple regression and simple regression analysis. The results of the simple regression analysis are depicted in Table 1. According to the regression results, the R square

is 0.958 which means that 95.8 percent of the variance of human capital is explained by the COVID-19 pandemic. This positive impact is highly significant (sig. value-0.000) and this value is less than 0.01. Thus, it is possible to accept the alternative hypothesis e.i. "There is a positive and significant impact of COVID-19 pandemic on human capital".

Table 1. Regression analysis between COVID-19 and Human Capital.

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
Constant	0.191	0.053		3.598	0.000
COVID-19	0.972	0.015	0.958	64.387	0.000

4.3. Regression Analysis between COVID-19 and Social Capital.

A simple regression test was performed to measure the impact of COVID-19 on the level of social capital of the undergraduate and Table 2 shows the results of the test. According to the regression results, the R square is 0.950 which means that 95 percent of the variance in

social capital is explained by the COVID-19 pandemic. This positive impact is highly significant (sig. value - 0.000) and this value is less than 0.01. Thus, it is possible to accept the alternative hypothesis i.e. "There is a positive and significant impact of COVID-19 pandemic on social capital".

Table 2. Regression analysis between COVID-19 and Social Capital.

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
Constant	0.145	0.039		3.704	0.000
COVID-19	0.938	0.011	0.974	84.076	0.000

4.4. Regression Analysis between COVID-19 and Cultural Capital.

A simple regression test was performed to measure the impact of COVID-19 on the level of the cultural capital of the undergraduate and Table 3 shows the results of the test. According to the regression results, the R square is 0.914 which means that 91.4 percent of the variance in

cultural capital is explained by the COVID-19 pandemic. This positive impact is highly significant (sig. value - 0.000) and this value is less than 0.01. Thus, it is possible to accept the alternative hypothesis i.e. "There is a positive and significant impact of COVID-19 pandemic on cultural capital".

Table 3. Regression analysis between COVID-19 and Cultural Capital.

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
Constant	0.209	0.054		3.854	0.000
COVID-19	0.975	0.015	0.956	64.082	0.000

4.5. Regression Analysis between COVID-19 and Identity Capital.

The findings of a simple regression test that was used to assess how COVID-19 affected the undergraduates' level of identity capital are shown in Table 4. According to the regression results, the R square is 0.940 which means that

94 percent of the variance in identity capital is explained by the COVID-19 pandemic. This positive impact is highly significant (sig. value - 0.000) and this value is less than 0.01. Thus, it is possible to accept the alternative hypothesis i.e. "There is a positive and significant impact of COVID-19 pandemic on identity capital".

Table 4. Regression analysis between COVID-19 and Identity Capital.

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
Constant	0.152	0.040		3.773	0.000
COVID-19	0.883	0.012	0.970	76.645	0.000

4.6. Regression Analysis between COVID-19 and Psychological Capital.

The effects of COVID-19 on the undergraduate's level of psychological capital were assessed using a simple regression test, the

findings of which are shown in Table 5. According to the regression results, the R square is 0.954 which means that 95.4 percent of the variance in psychological capital is explained by the COVID-19 pandemic.

Table 5. Regression analysis between COVID-19 and Psychological Capital.

Model	Unstandardized Coefficient		Standardized Coefficient	t	Sig.
	B	Std. Error	Beta		
Constant	0.143	0.036		3.954	0.000
COVID-19	0.908	0.010	0.977	87.743	0.000

This positive impact is highly significant (sig. value - 0.000) and this value is less than 0.01. Thus, it is possible to accept the alternative hypothesis i.e. "There is a positive and significant impact of the COVID-19 pandemic on psychological capital".

5. Discussion.

The COVID-19 pandemic was having a favorable influence on human capital, according to the results of a regression analysis. R square is 0.958, indicating that the COVID-19 epidemic explains 95.8 percent of the variance in human capital. Individual productivity rises as the education level rises, which improves job performance (Amarathunga, 2018).

According to testing results, the COVID-19 pandemic had a good impact on social capital. R square is 0.950, indicating that the COVID-19 epidemic explains 95.0 percent of the variance in social capital. It is also mentioned that the results on high readiness to join internship and graduate employability programs during lockdown may be related to students' perceptions of

future work chances. Graduates have understood that skill enhancement programs such as internships and Graduate employability programs would eventually provide them with additional value in embracing the challenges of obtaining a job after graduation (Kamaruddin et al., 2021).

According to the results of the regression study, the COVID-19 pandemic had a beneficial impact on cultural capital. R square is 0.914, indicating that the COVID-19 epidemic explains 91.4 percent of the variance in cultural capital. According to Kamaruddin et al. (2021), students who have an internship in rural areas have a stronger view that COVID-19 will have a substantial impact on their future employment prospects than students in the capital city and city. Possibly this occurred because the economic downturn caused by COVID-19 is having a greater impact on rural areas.

The pandemic of COVID-19 was discovered to have a favorable impact on identity capital. R square is 0.940, indicating that the COVID-19 epidemic explains 94.0 percent of the variance in identity capital.

Past research has found that students who spend more heavily on their jobs have a higher level of identity capital (Tomlinson, 2017). Jackson (2016) explores the significance of the informal dimension of the university experience for work-related identity, focusing on students' interactions with higher education's different experiential offers.

The COVID-19 epidemic was determined to have a favorable impact on psychological capital based on the results of a regression study. R square is 0.954, indicating that the COVID-19 pandemic explains 95.4 percent of the variance in psychological capital. Psychological capital is a potentially significant type of capital since it is based on psychosocial resources that allow graduates to adapt and respond proactively to foreseeable job problems (Tomlinson, 2017).

6. Conclusions.

The problem of this research was to assess how the COVID-19 pandemic affected the graduate employability capital of state universities' management undergraduates in the case of Sri Lanka. Based on the empirical findings, a conceptual framework is developed to test the impact of the COVID-19 pandemic on graduate employability capital. Accordingly, researchers have collected responses from 377 management undergraduates to conclude. The conducted studies confirmed the assumption regarding the positive impact of the COVID-19 pandemic on various aspects of the formation and subsequent the graduate employability capital.

The other graduate employability capitals are also affected by the COVID-19 pandemic. Accordingly, students, universities, and also organizations can give priority to the cultural capital more than other capitals. The system of university education, in the conditions of the current crisis, requires the formation and implementation of a new model of continuous work of universities.

It is also required to pay attention to the improvement of the existing and the development of promising infrastructure for the continuous education of students, incl. and online. This will significantly reduce the time spent by students within the walls of universities, and, accordingly, increase the time for online learning. As part of the proposed system of online education, it is required to focus management efforts on improving the potential of universities, including improving the skills of administration staff, departments and students.

Further studies will be able to do for another county or focus on other universities and any departments, Examine the impact of the COVID-19 pandemic on graduate employability capital by considering the other employability capital factors, Investigate the reasons for the decline the graduate employability capital during this pandemic period, and Investigate the best solutions for how to reduce that impact of COVID-19 pandemic on graduates employability when they are entered to the labor market.

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