The State of Employee Motivation during Covid-19 Outbreak in Sri Lankan Construction Sector

Tharaki Hettiarachchi

Department of Civil Technology, University College of Kuliyapitiya, University of Vocational Technology, Sri Lanka

Abstract: Sri Lanka has undergone numerous changes in the fields of social-economic and cultural processors during the past decades. Consequently, the Sri Lankan construction industry was subjected to rapid growth while contributing a considerable amount to the national economy. The prevailing situation under the Covid-19 pandemic exhibited challenges to almost all of the sectors of the country in attaining success. Although productivity is one of the dimensions that measure the degree of project success, achieving sufficient productivity has become challengeable due to the Covid-19 outbreak. As employee motivation is an influential factor in defining productivity, the present study becomes significant in discovering ways of enhancing construction productivity via employee motivation. The study has adopted a combination of qualitative and quantitative methodologies in attaining the study objectives. While the research population refers to construction professionals in Sri Lanka, the study sample is aimed at Quantity Surveyors in the bottom and middle managements of organizational hierarchies. The data collection was implemented via primary and secondary sources. The primary data collection was accomplished by undertaking semi-structured interviews and online questionnaire surveys while sampling the overall respondents based on the purposive sample method. The responses of the questionnaire survey were gathered in a form of a 'Likert Scale' to examine the degree of applicability on each respondent. Overall, 76.36% of primary data were recovered from the expected count while obtaining 60 responses from the questionnaire survey and 24 responses from interviews. Secondary data were obtained by reviewing sources such as research articles, journals, newspapers, books, etc. The findings suggest adopting and enhancing sixteen motivational factors in achieving greater productivity in the Sri Lankan construction sector.

Keywords: Covid-19 Pandemic; Motivation; Quantity Surveying; Sri Lanka

I. INTRODUCTION

The construction industry plays a dynamic role in a national economy based on what it grants such as roads, buildings, and dams for the production of goods and services (Akoi-Gyebi Adjei, 2009). In reference to the statistical information published by the Central Bank of Sri Lanka in 2018, the construction industry has shown a considerable increase in the growth rate during the last few decades. The development that emerged at the end of ten-year civil war resulted in generating various local and foreign investment opportunities in Sri Lanka. The projects in the

present are becoming larger and more multifaceted in form with higher numbers of investors with diverse purposes for the project who may have multi-ethnic and multi-cultural circumstances (Ofori and Toor, 2009). In achieving success, productivity becomes significant to be achieved. 'Productivity is a complex phenomenon at all levels be it individual, organized private sector or government the world over and in all spheres of human endeavor particularly in construction project delivery' (Okoh, 2015). It has also been vital in longterm growth and sustainable improvement and when associated with economic growth and development generates non-inflationary increases in wages and salaries (Mojahed, 2005). In assessing the composition of organizational productivity, 'Employee Motivation' becomes influential. Motivation and productivity are perceptions that have been subjects of massive interest among scholars and practitioners (Bawa, 2017). Thus, achieving sufficient employee motivation at workplaces has been severally challengeable during the COVID-19 outbreak. The study undertaken by Camilleri (2021) revealed that the Covid-19 pandemic has caused limiting employee motivation and also organizational productivity respectively. As Quantity Surveyors are one of the key professionals in the construction industry, the present study examines the impact of Quantity Surveyors'.

II. LITERATURE REVIEW

A. Productivity And Motivation

The workplace environment plays a crucial role in the lives of employees (Green, P, 2016). According to Vroom (1964), humans work because they trust that their commitment in work certainly brings them to a state of being more satisfied than his present status. The relationship between motivation and productivity has been revealed by worldwide scholars over many years. Maslow's hierarchy of needs, Hawthorne effect, Expectancy theory, Reinforcement theory, Adam's equity theory, Growth mindset theory, and temporal motivation theory are some of the examples that prove the defined relationship.

Productivity is measured to be one of the mandatory sources of economic growth and competitiveness and, as such, is basic statistical information for many international appraisals and country performance assessments (Krugman. P, 1994). 'Technically, it could be said that productivity has been the long-run aim of every work organization, from the smallest to the largest work organization; the zeal to be productive is supposed to be the goal of all and sundry in the work organization' (Olatunji, et al., 2016). The findings of Nda and Fard (2013) defined productivity as what people can produce with the least effort. According to the interpretation by Tokarčíková (2013), productivity is a ratio to measure how well an organization converts input resources into goods and services. Productivity could therefore be measured as: Units of output/input or output/labor + capital + Material + others (Olatunji, A.G., et al., 2016).

Employee Motivation is the fundamental factor to benefit up the capabilities of an association (Jain, A., Gupta, B. and Bindal, M, 2019). Cole (2002) defined motivation as 'the processes, both instructive and rational which occur in an individual when seeking to satisfy perceived needs and wants. Yusoff., et al (2013) emphasized motivation as one of the most important factors in affecting human behavior and performance. In accordance with Abraham Maslow's Hierarchy of Needs Theory, humans' needs motivate employees in attaining greater productivity. The findings of Maslow (1943) revealed basic needs, psychological needs and self-fulfillment needs. As per the interpretation of Jain, A., et al (2019), motivation can be classified into the following major categories.

- I. Intrinsic Motivation
- II. Extrinsic Motivation
- III. Positive Motivation
- IV. Negative Motivation
- V. Reward-Based Motivation
- VI. Fear-Based Motivation
- VII. Achievement-Based Motivation

According to the classification, employee motivation is generally attaining via internal desires, external desires, empowerment of positivity and control of negativities by intrinsic, extrinsic, positive and negative motivation types respectively. The rest of the motivation categories are known to be minor forms as reward-based motivation encourage the employees to attain goals in order to be rewarded, fear-based motivation inspire the employees to achieve goals based on dread and achievement-based motivation stimulate employees to achieve titles, positions and roles while accomplishing organizational goals.

The 'Two Factor' theory introduced by Frederick Herzberg in 1966 is closely similar to Maslow's hierarchy of needs thus, it contained an extensive scope where individuals' inspiration was measured under several categories. According to the theory, hygiene and motivation are the two main factors that define employee satisfaction. To motivate employees, organizations should focus on supplying intrinsic or motivational factors (Robbins, 2009). The Equity theory of John Stacey Adams (1963) interprets the link between the employee's perceptions of how fairly he/she is being treated and how hard the employee is being motivated to work. According to Ibinwangi, O.J., et al (2016), the term 'Equity' is defined as the ratio between the individual's job inputs (such as effort or skill) and job rewards (such as pay or promotion). The theory implies distributive equity and procedural equity as main forms of motivation where distributive equity considers the fairness which employees experience in being rewarded while distributive equity means the fairness of organizational procedures. The Hawthorne Effect described by Henry A. Landsberger in 1950 is another noteworthy discovery that implies the need for supervision or observation in assessing employee performance. The study concluded that continue observation increase productivity. 'The Expectancy Theory' is also one of the significant discoveries developed by Victor Vroom in 1964. The explanations of Fred, C.L (2011) stressed that 'expectancy theory is more concerned with the cognitive antecedents that go into motivation and the way they relate to each other'. Accordingly, expectancy, instrumentality and valence are found to be the variables that illustrate individual variances in motivation. Fred, C.L (2011) emphasized 'Expectancy' as a person's estimate of the probability that job-related effort will result in a given level of performance, 'Instrumentality' as an individual's estimate of the probability that a given level of achieved task performance will lead to various work outcomes and 'Valence' as the strength of an employee's preference for a particular reward. Accordingly, Vroom revealed a relationship between cognitive variables as Motivation = Expectancy x Instrumentality x Valence. Productivity is a significant measure of attaining organizational success. In assessing ways of reaching higher productivity, motivation becomes influential. Hence, empowerment of employee motivation becomes a critical factor in achieving higher productivities within organizations.

B. The Impact Of Motivation On Quantity Surveyors During Covid 19 Pandemic In Srilanka

Sri Lanka reported the first case in a Chinese tourist on 27th January 2020 and subsequently in a local person on 11th March 2020 (Erandi., et al., 2020). While almost all of the countries have adopted several mechanisms to overcome the negative impacts of the Covid-19 pandemic on industries, Sri Lanka has undertaken several programs such as detecting the virus, quarantine, isolation, establishing travel restrictions and empowerment of social awareness. Although the country has controlled the pandemic effectively and successfully, the number of patients were increased during March 2020. Hence, curfew was imposed on 20.03.2020 and prolonged its duration based on the degree of risk engaged at each area in the country. Although Sri Lanka has adopted several controlling mechanisms including vaccination to overcome the pandemic situation, WHO (2021) indicated 477,636 confirmed cases of Covid-19 and 10,864 deaths from 3rd of January 2020 to 4:47pm CEST to 10th of September 2021. In parallel, the economy of the nation has reached to a critical situation where

the economy contracted by 1.8 percent in the first quarter (World Bank, 2021). The explanations of Pathirana, L.P.D.S (2020) moreover emphasized the degree of drop that emerged in the Sri Lankan economy by stressing the matter of dollar shortage within the country.

The construction industry plays a vital role in a nation's economy. According to the Department of Census and Statistics (2020), the contribution of the Sri Lankan construction sector on Gross Domestic Production has contracted by 16% in 2020 due to the implications of Covid-19 outbreak. In assessing the nature of the construction industry during the prevailing pandemic situation, higher number of delays, cost over-runs, suspension and terminations, issues of cash flow and on-time payments, variances of demand and supply, decrease in productivity, and higher turnovers are evident. Consequently, employees have been impacted severally either professionally or personally. Employees have long been renowned as the organization's number one stakeholder (Men, L.R, Qin, Y.S. and Jin, J, 2021). Therefore, employee interaction becomes significant in attaining organizational goals. According to the interpretation of Kahn (1990), engagement refers to the employee's presence of physiological and physical features of implementing an organizational role. Despite the negative impacts of COVID-19 pandemic on economic, political and cultural sectors, social relationships have also been threatened. As global public health agencies such as World Health Organization (WHO) and Centre for Disease Control and Prevention (CDC) struggle to cover the epidemic, social distancing is recurrently proposed as one of the most useful preventive strategies (Banerjee, D. and Rai, M., 2020). Thus, employee engagement during the COVID-19 pandemic has become severally challengeable due to the restrictions of social interactions (Chanana, N., 2020). The resultants of the study undertaken by Banerjee, D. and Rai, M (2020) revealed humans being caused by chronic loneliness and boredom, which if long enough can have detrimental effects on physical and mental well-being. Hence, achieving an adequate state of motivation becomes significantly challengeable under the circumstances of the Covid-19 pandemic situation. Consequently, attaining greater productivity also becomes challengeable.

Quantity Surveyors play a predominant role in being a part of the construction sector. It is a profession that assures that the assets of the construction business are used to the best point of interest of society, by suggesting the most economical monetary administration for undertakings and an expense consultancy service to client, builder and planner amid the entire construction process (Yeshwanth, B.R., 2017). From the Quantity Surveyors' perspective, the disease's occurrence has directed to several influences on professional activities, including contractual arrangement regarding project time completion and suspension, project cost control, claim arrangement and negotiations, as well as project tendering (Hansen, S., et al., 2021). Hence, maintaining an adequate state of motivation becomes challengeable. In assessing the ways of enhancing employee motivation, Wolor, C.W., et al (2020) emphasized the need of paying attention to employee safety and security. A similar study undertaken by Hitka, M., et al (2021) denoted that motivation integrates and organizes the overall psychological and physical activity of an individual in the direction towards the set target. The study outcomes of Nilasari, B.M.,et al (2021) identified extrinsic motivation as the most preferred type to be adopted among employees during Covid-19 phase in order to develop and maintain employee motivation. Overall, attaining the required states of motivation is significant in enhancing and maintaining the organizational productivity.

III. RESEARCH PROBLEM AND STUDY OBJECTIVES

The Covid-19 outbreak is the biggest challenge that mankind is facing in the 21st century (EI-Erian, 2020). Despite the negativities implied by the pandemic on nations' economy, politics and culture; social relationships are also found to be threatened by various limitations. Although the construction sector plays a vital role in being one of the economic industries, its employees experience certain changes in the field due to higher number of delays, cost over-runs, suspension and terminations, issues of cash flow and on-time payments, variances of demand and supply, decrease in productivity, and higher turnovers caused by the prevailing pandemic. As the state of employee motivation is likely to be impacted by such causes, the present study examines the degree of motivation exhibited by Quantity Surveyors under the Covid-19 pandemic in Sri Lanka.

The key objectives of the research include the following:

I. To analyze the degree of motivation exhibited by Sri Lankan quantity surveyors during the covid-19 pandemic.

II. To address ways of enhancing the motivation of Sri Lankan quantity surveyors in order to achieve project success.

IV. RESEARCH METHODOLOGY AND DATA COLLECTION

The present study has adopted a combination of qualitative and quantitative methodologies in attaining the study objectives. While the research population refers to construction professionals in Sri Lanka, the study sample is aimed at Training, Junior, Senior and Senior Charted Quantity Surveyors. The data has been collected via both primary and secondary sources. The primary data collection was attained by undertaking semi-structured interviews and online questionnaire surveys while sampling the overall respondents based on the purposive sample method. The responses of the questionnaire survey were gathered in a form of a 'Likert Scale' to examine the degree of applicability on each respondent. Accordingly, the respondents were assigned to determine the frequency of occurrence of each cause as:

Rarely (R) = 1, Sometimes (S) = 2, Moderate (M) = 3, Often (O) = 4 and Always (A) = 5. Overall, 76.36% of primary data were recovered from the expected count while obtaining 60 responses from the questionnaire survey and 24 responses from interviews. Secondary data were obtained by reviewing sources such as research articles, journals, newspapers, books, etc. In assessing the ways of data analysis, the data obtained by the questionnaire survey was analyzed by a Frequency Index (FI) while the data received via interviews were evaluated in reference to content analysis. The Frequency Index is used to rank causes of delay based on the frequency of occurrence as identified by the participants (Susmitha.,et al.,2018). Accordingly, the following equation was adopted in determining the frequency index.

Frequency index(FI) =
$$\sum_{i=1}^{5} \frac{a_i \times f_i}{H \times N}$$

i = Score of the factor ranging from "Least Effect=1" to "Highest Effect =5"

ai = Weight of the response

- fi = The frequency of the response
- H = Highest weight (i.e. 5 in this study)
- N = Total number of respondents.

In assessing the state of motivation exhibited by Sri Lankan Quantity Surveyors, the determination of motivation parameters becomes significant. Accordingly, the present study has adopted the parameters of employee motivation discovered by Al-Abbadi., et al (2019) as follows.

Work appreciation
Team cooperation
Good relationship with superiors
Good supervision
 Safe and comfortable environment
Quality of equipment
Job security
 Having fun and enjoying work

v. RESEARCH FINDINGS

The present study aims at assessing the degree of motivation exhibited by Quantity Surveyors under the Covid-19 pandemic in Sri Lanka, in order to address the ways of enhancing motivation of Sri Lankan quantity surveyors in achieving a higher productivity. Consequently, the research has adopted the 16 motivational factors discovered by Al-Abbadi.,et al (2019) to measure the level of motivation. In accordance with the analysis of the frequency index, the sequence of the following parameters was found important.

No.	Parameter	FI	Rank
R 1	Lack of Personal Growth/Career improvement	0.733	1
R 2	Lack of Decision making ability	0.727	2
R 3	Lack of fun and enjoying work	0.720	3
R 4	Lack of Job security	0.717	4
R 5	Lack of Work appreciation	0.710	5
R 6	Lack of Rewards	0.697	6
R 7	Lack of Quality of equipment	0.610	7
R 8	Lack of Good supervision	0.603	8
R 9	Lack of responsibility	0.600	9
R 10	In-decentness and dis-respectfulness of job	0.500	10
R 11	Lack of Good relationship with your superiors	0.497	11
R 12	Insufficient Pay amount	0.467	12
R 13	Lack of Safe and comfortable environment	0.453	13
R 14	Challenging tasks	0.400	14
R 15	Payment delays	0.363	15
R 16	Lack of Team cooperation	0.343	16

Table 01: The Sequence of Motivation Parameters according to the Frequency Index Analysis

According to the analysis of frequency index, lack of personal growth is found to be one of the factors which most of the Quantity Surveyors experience, as a majority of construction organizations were not able to overcome the financial crisis, higher turnover, and employee participation due to social distancing and travel regulations during the Covid-19 pandemic. The degree of decision-making ability in organizations during the pandemic situation is revealed comparatively less, as most of the bottom and middle level employees stressed the fact that superiors do not integrate or consider their needs and suggestions in decision making. The third factor, lack of fun and enjoyment emphasized the critical conditions which quantity surveyors undergo during the pandemic. Accordingly, the quantity surveyors at the bottom and middle management levels of the organizations have undergone a greater pressure due to the following causes.

- Higher authorization of top management.
- Higher workload due to the limited number of employees caused by turnover.
- In-secureness due to the pandemic.
- Lack of team works and inadequateness in sharing responsibilities.
- On-site accommodation and travel restrictions.
- Limited communication opportunities and minimum coordination.
- Limited holidays on weekends.
- Lack of appreciation.

The following interviewee's response emphasizes the state of motivation of Sri Lankan quantity surveyors during the Covid-19 pandemic.

"Unlike most of the employees privileged by working from

home, construction employees had to attend work as it was a compulsory service. The life seems like walking on the edge of a knife as we either had to choose the life or career. In there, career became important as life would be nothing without a career, and finance. It's not funny at all".

Beside the danger and risk of being impacted by the Covid-19, the employees have also been severally stressed by the leadership styles exhibited by superiors. The authorization of superiors did not help the employees to contribute their best to the organizations. The study findings also reveal inadequate responsibility and teamwork experienced by quantity surveyors as supervisors' role followed proceeding through orders in handling the limited human resources during the pandemic. Job security is an essential one that empowers employee motivation. Thus, the findings illustrate that quantity surveyors have not experienced an adequate amount of job security during the pandemic. Since the economy of Sri Lanka became a crisis, the construction industry including other sectors have faced issues in financing. While some of the construction firms were bankrupted, most of the construction employees have undergone higher turnovers, terminations, and suspensions. Consequently, job security has become a leading issue that impacts employee motivation. Although the present study examined if appreciation exhibits during the pandemic, appreciation is found not adopted not only during the pandemic, but also within previous practices as well. As most of the superiors expected a work-oriented culture, employees used to be treated with minimum appreciation. When it comes to special conditions such as a pandemic situation, employee trust and motivation decrease severely. Most of the responses indicated that they are disappointed because their organization does not appreciate their work or presence at work under a huge risk due to the pandemic. Rewarding is one of a system of improving motivation. Besides the general situations, the prevailing pandemic may stress the necessity of rewarding employees to overcome fears. Thus, the study reveals that quantity surveyors are not subjected to any kind of reward during the Covid-19 epidemic. Sometimes, their salaries were even deducted as the companies could not overcome financial crises. Similarly, quantity surveyors are revealed not being treated with quality equipment as even the basics such as laptops, masks and sanitizers are not received.

In assessing the nature of the employee-employer relationship during the pandemic, inadequate supervision and are discovered to be challengeable. The results indicated that most of the superiors/ supervisors assign works without concerning the reliability under the current epidemic. For example, some of the quantity surveyors were assigned to attend the company daily, although their work does not require physical presence. While it does not seem safe enough during a dreadful pandemic to reach via public transportation and socially integrate, most of the quantity surveyors have been diagnosed by Covid-19 virus in attaining such demands. This emphasizes

- a. Quantity surveyors have found their occupation as an indecent and disrespectful one as most of their scope is utilized not only to specific roles but also on extra roles such as site supervision.
- b. Quantity surveyors exposed themselves for being treated disrespectfully due to workplace stress, higher authorization, less freedom and lack of rewards.

The Covid-19 epidemic has severely threatened the Sri Lankan economy. Consequently, a majority of sectors including small and medium scale businesses failed apart. Similarly, the construction industry was negatively impacted due to delays, cost over-runs, suspension and terminations, issues of cash flow, variances of demand and supply and higher turnovers. The resultants impacted the number of employees' monthly payments and payment sequence. Although a majority of employees receive on-time payments up to the present, most of them stressed the matter of inadequateness of the payment in comparison to the risks they undergo within the pandemic.

The respondent's reviews on challenges faced by them can be classified into two as managerial challenges and safety challenges. While managerial constraints refer to the above factors such as authorization, lack of workplace freedom, inadequate personal growth, etc.; safety is found to be the most influential challenge. Although safety precautions were taken by construction companies, employees stressed the matter of its effectiveness as they were exposed to a wider range of risks in transporting in public services, consuming common washrooms and common dining areas, maintaining social distance at limited workspaces (at least one meter) and isolation. Some respondents claimed that they did not receive sufficient basic health needs such as sanitization, proper masks, etc. The factors have driven employee motivation to a critical extent.

VI. CONCLUSION

The Covid-19 outbreak has impacted almost all sectors including the construction industry. Hence, attaining higher productivity has become challengeable as construction employees have undergone numerous changes such as delays, cost over-runs, suspension and terminations, issues of cash flow and on-time payments, variances of demand and supply and higher turnovers. As employee motivation is a measure of productivity, such changes are found to threaten employee motivation in the construction sector. Consequently, attaining productivity becomes demanding. Hence, the present study

has evaluated the nature of motivation exhibited by Sri Lankan quantity surveyors during the covid-19 pandemic. In assessing the study outcomes, parameters of employee motivation discovered by Al-Abbadi.,et al (2019) are found exhibited by Sri Lankan quantity surveyors up to a greater extent. According to the Frequency Index (FI) analysis; personal development opportunities, decision making abilities, fun and enjoyment at work, job security, work appreciation, rewards, quality of equipment, effective supervision, responsibility, decentness or respectfulness of the occupation, effective relationships with superiors, amount of payments, safe and comfortable environment, on-time payments and team cooperation respectively range from highest to least in challenging the state of motivation during the pandemic. Quantity surveyors are also revealed to be undergoing both managerial and safety constraints during the pandemic. As the findings implied the negativities of Quantity Surveyors' state of motivation, paying considerable attention to motivation becomes noteworthy. The study suggests construction organizations adopt effective managerial principles to attain greater productivities via employee motivation while empowering the government to consider employee's needs in decision making.

VII. RECCOMENDATIONS

The study outcomes are evident that the Sri Lankan Quantity Surveyor's state of motivation is not attaining its required levels during the Covid-19 pandemic. As lack of personal growth ranked top in the Frequency Index, the study undertaking online recommends workshops, career development programs and training/induction programs to address the professional needs. The second major, decision making shall not be limited to the upper levels of organizational hierarchy but also integrate employees including quantity surveyors at other management levels as well. As most of the decisions are not reliable in the absence of employee needs, integrating quantity surveyors' perspectives in decision making is important. Feed backing, supervision and effective coordination can be adapted accordingly. The nature of the relationship which quantity surveyors exhibit with their superiors is also considered as one of the similar facts that impacts motivation. The evaluation exposed that superiors' decisions have not considered quantity surveyors' needs although they have a good relationship in between. For example, some quantity surveyors had been diagnosed by the Covid-19 virus during the times they had to attend work although the work scope did not require physical presence. Hence, the study suggests considering quantity surveyors' needs, challenges and possibilities in decision making by superiors. In assessing the third factor, quantity surveyors are found to be demotivated with no fun and enjoyment at work. According to the stated causes such as higher authorization, lack of appreciation and lack of communication, the research recommends adopting an effective leadership style to superiors' role. The leadership style shall be specifically defined based on the organizational climate during the Covid-19 pandemic in Sri Lanka. As workplaces become not enjoyable due to lack of teamwork and huge workload, the top management of organizations shall share the responsibilities of employees while utilizing human resources to achieve a higher motivation. In assessing the next factor, the study revealed that quantity surveyors experience inadequate job security due to higher turnovers, terminations, and suspensions based on the financial status of companies. In accomplishing high job security, the governments' role is similarly important as the organizations' role. Accordingly, the government shall maintain the productivity of the supply chain of the country by empowering local small and minor scale businesses. Adopting a business finance guarantee scheme, wage subsidy extensions and alternative job opportunities such as online occupations are some of the suggestions to enhance job security. Rewarding is another significant fact that impacts the degree of employee motivation. As majority of the quantity surveyors obtain no rewards during the pandemic, some do not even receive their basic needs such as workplace safe equipment. Hence, the study suggests construction companies pay considerable attention to a rewarding system in order to empower motivation. As majority of the companies experience minimum profits, losses and financial crises, a non-financial rewarding system would suit the best during the pandemic. Thus, ensuring on-time pay and adequate pay is still required to be maintained. In there, the government's ability to empower the finance of employees becomes vital by the means of above stated strategies. The employee's perspective on their occupation is discovered being threatened based on the circumstances that quantity surveyors undergo during the Covid-19 pandemic. As the research outcomes revealed that quantity surveyors consider their occupation as an indecent/ disrespectful one due to the role they had to play and implications of improper management criteria, the present study suggests expanding or specifying quantity surveyors' role into an advanced scope while adopting an employeefriendly management mechanism. Since employee health and safety become a critical fact during the pandemic situation, ensuring its effectiveness has also been found to be influential. Accordingly, the study suggests implementing proper health and safety measures and providing essential health and safety needs where it is possible. It is also important to adopt alternative resolutions such as allowing employees to work from home or residing employees on-site while providing sufficient facilities and freedom whenever there are common risks and hazards.

VIII. LIMITATIONS AND FURTHER STUDY DIRECTIONS

The scope of the study is limited to the evaluation of quantity surveyors' state of motivation during the Covid-19 pandemic. Hence, further studies can be undertaken to measure the state of motivation of other professionals as well. As analysis of

data was based on a Frequency Analysis, the research focuses the frequency of responses in major. To extent the scope of the analysis, other analytical measures can be adopted.

IX. REFERENCES

- [1] Akoi-Gyebi Adjei, E., 2009. Motivational strategies to improve productivity in the construction industry in Ghana (Doctoral dissertation).
- [2] Al-Abbadi, G.M.D. and Agyekum-Mensah, G., 2019. The effects of motivational factors on construction professionals productivity in Jordan. International Journal of Construction Management, pp.1-12.
- [3] Banerjee, D. And Rai, M., 2020. Social isolation in Covid-19: The impact of loneliness.
- [4] Bawa, M.A., 2017. Employee motivation and productivity: a review of literature and implications for management practice. International Journal of Economics, Commerce and Management, 12, pp.662-673.
- [5] Camilleri, M.A., 2021. The Employees' State of Mind during COVID-19: A Self-Determination Theory Perspective. Sustainability, 13(7), p.3634.
- [6] Chanana, N., 2020. Employee engagement practices during COVID-19 lockdown. Journal of Public Affairs, p.e2508.
- [7] Cole, G.A (2002). Management: Theory and practice. London: TJ International
- [8] Department of Census and Statics (2020), Ministry of Finance, Economy and Policy Development, National Accounts of Sri Lanka.
- [9] Erandi, K.K.W.H., Mahasinghe, A.C., Perera, S.S.N. and Jayasinghe, S., 2020. Effectiveness of the strategies implemented in Sri Lanka for controlling the COVID-19 outbreak. Journal of Applied Mathematics.
- [10] Fred, C.L., 2011. Expectancy theory of motivation: Motivating by altering expectations. International Jonrnal of Management, Business, and Administration, 15(1), pp.1-6.
- [11] Green, P., 2016. The perceived influence on organizational productivity: a perspective of a public entity. Problems & perspectives in management (Print).
- [12] Hansen, S., Rostiyanti, S.F., Rizaldi, R. And Andjarwati, C., 2021. Quantity Surveyors' Response to the COVID-19 Outbreak: A Mixed Method Approach. In Journal of the Civil Engineering Forum (Vol. 1000, No. 1000).
- [13] Hitka, M., Štarchoň, P., Caha, Z., Lorincová, S. And Sedliačiková, M., 2021. The global health pandemic and its impact on the motivation of employees in micro and small enterprises: a case study in the Slovak Republic. Economic Research-Ekonomska Istraživanja, pp.1-21.
- [14] Ibinwangi, O.J. and Comfort, C.N.,2016. Reiko International Journal of Business and Finance Vol. 8 no 4 June.
- [15] Jain, A., Gupta, B. And Bindal, M., 2019. A study of employee motivation in organization. International Journal of Engineering and Management Research (IJEMR), 9(6), pp.65-68.
- [16] Kenny S, V., 2019. Employee productivity and organizational

performance: A theoretical perspective.

- [17] Krugman, P., 1994. Defining and measuring productivity. The Age of diminishing Expectations.
- [18] Men, L.R., Qin, Y.S. and Jin, J., 2021. Fostering Employee Trust via Effective Supervisory Communication during the COVID-19 Pandemic: Through the Lens of Motivating Language Theory. International Journal of Business Communication, p.23294884211020491.
- [19] Nda, M.M. & Fard, R.Y. (2013). The Impact of Employee Training and Development on Employee Productivity, Global Journal of Commerce & Management Perspective, 2 (6), pp. 91-93.
- [20] Nilasari, B.M., Nisfiannoor, M. And Devinta, F.R.M., 2021. Changes in Motivation That Affect Employee Performance during the Covid 19 Pandemic. Jurnal Aplikasi Manajemen, 19(2).
- [21] Okarčíková, E. (2013). Measurement of Highly Qualified Employees Productivity, Annals of Dunarea de Jos
- [22] Okoh, D.N.M.S.O., 2015. Productivity improvement in construction project delivery. Civil and Environmental Research ISSN, pp.2224-5790.
- [23] Olatunji, A.G., Lawal, E.E., Badmus, A.I. and Tejideen, T.O., 2016. Motivation as a determinant of employees' productivity: A study of Communication Network Support Service Limited (CNSSL), Ilorin'. Abuja Journal of Business and Management Sciences, 2(5), pp.103-112.
- [24] Pathirana, L.P.D.S., 2020. Effect of COVID-19 and Strategic Response: A Review on Sri Lankan Construction Industry. SSRG International Journal of Economics and Management Studies, 7, pp.73-77.
- [25] Susmitha, R.S., Raja, K.H. and Asadi, S.S., 2018. A Statistical Approach for Ranking of Factors Impacting the Timeline of Residential Construction Projects Using Important Index Method (IMPI). International Journal of Civil Engineering and Technology, 9(5), pp.1075-83.
- [26] Tokarčíková, E. (2013). Measurement of Highly Qualified Employees Productivity, Annals of Dunarea de Jos University of Galati, 3, pp. 5-10
- [27] University of Galati, 3, pp. 5-10.
- [28] Vroom, A. H. (1964). Work and Motivation. New York: John Wiley and Sons.
- [29] Wolor, C.W., Susita, D. And Martono, S., 2020. How to Maintain Employee Motivation Amid The Covid-19 Virus Pandemic. International Journal of Economics & Business Administration (IJEBA), 8(4), pp.78-86.
- [30] World Bank, 2021. Sri Lanka Development Update 2021: Economic and Poverty Impact of COVID-19.
- [31] Yeshwanth, B.R., 2017. Modern Quantity Surveying-A complete package adding values to projects. Yeshwanth Babu Reddy, Australia, p.3.
- [32] Yusoff, W.F.W., Kian, T.S. and Idris, M.T.M., 2013. Herzberg's two factors theory on work motivation: does its work for todays environment. Global journal of commerce and Management, 2(5), pp.18-2.