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Cost-Benefit Analysis of The Implementation of Work From Home (WFH) During The Covid-19 Pandemic – A Descriptive Analysis

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Abstract

Unparalleled global events that have been associated with health and economic deterioration. To address the persistent issue, a comprehensive shutdown was implemented as a preventative strategy to mitigate the spread of COVID-19. The adoption of MCO has brought about alterations in multiple facets of human existence which have a direct impact on the economic growth including Malaysian populace. The practice of working from home (WFH) has the potential to mitigate the risk of infection by minimizing direct contact between workers and individuals who may be carriers of the virus. The findings reveal that cost contribute a lot to facilitate seamless remote work. Furthermore, this research also enables researchers to peruse literature reviews that have been reviewed by their peers, which can help them determine how many nations are preventing the spread of COVID-19 as they conduct additional research. In addition, proposals for programs and enhancements to improve the health-economic equilibrium. This paper contains suggestions and recommendations for additional research that should be explored.

Keywords : Costs, Benefit, Work from Home (WFH), COVID-19

Introduction

The year 2020 has witnessed unparalleled global events that have been associated with health and economic deterioration, which have their roots in China. The genesis of this occurrence can be traced back to the outbreak of the Coronavirus disease (COVID-19) in Wuhan, China. The initial report of this disease was made on December 27, 2019, at a hospital in Wuhan, which serves as the disease control and prevention center for the local committee. On December 31, 2019, the World Health Organization (WHO) was informed of this case, which subsequently led to the virus spreading throughout China in January 2020 (Lu, 2020). As of January 2020, the virus had disseminated extensively to over 20 nations globally (Oxford Economics, 2020). Subsequently, on March 11 of the same year, the World Health Organization (WHO) proclaimed COVID-19 a worldwide pandemic (Alam et al., 2020). According to Zellweger (2020), the aforementioned occurrence persisted and subsequently led to the global dissemination of the virus by March and April 2020, thereby instilling apprehension and ambiguity. To address the persistent issue, a comprehensive shutdown was implemented as a preventative strategy to mitigate the spread of COVID-19. This measure involved social distancing in Wuhan, despite causing unprecedented economic disruption. (Matrajt & Leung, 2020; Balasa, 2020; Musinguzi & Asamoah, 2020). According to Yuan et al. (2020), this particular measure is regarded as a novel standard for policies aimed at preventing epidemics. Furthermore, the implementation of traffic limitations and self-quarantine protocols on a national scale in Wuhan, Beijing, and Shanghai proved effective in mitigating the transmission of COVID-19 across China (Yuan et al., 2020; Oxford Economics,

2020). Similarly, nearly all nations across the globe have implemented the requisite measures to mitigate the impact of the COVID-19 pandemic (Atalan, 2020). The adoption of the lockdown policy as a crucial measure and approach to curbing the transmission of COVID-19 has been influenced by China's experience.

Nevertheless, the implementation of closure measures to contain the transmission of the virus has had a negative impact on the economy. According to Ayittey et al (2020), the COVID-19 pandemic has caused significant disruptions to global trade, supply chains, financial markets, and business operations. Nicola et al (2020) have reported that the COVID-19 pandemic has had a negative impact on various industries and economic sectors, including but not limited to agriculture, petroleum and oil, manufacturing, education, finance, healthcare, pharmaceuticals, hospitality, tourism, aviation, real estate and housing, sports, information technology, media, research and development, and the food sector. The COVID-19 outbreak has resulted in a worldwide public health emergency and a decline in economic and labor market conditions. Numerous governments across the globe have implemented lockdown protocols as a means of mitigating the transmission of the virus, albeit at the cost of impeding economic advancement (World Bank, 2020). According to the International Labor Organization (ILO, 2020a), the implementation of shutdowns and associated business disruptions, travel limitations, school closures, and other containment measures has significantly affected workers and enterprises.

Similar to numerous other nations, Malaysia is also susceptible to the COVID-19 pandemic. On January 23, 2020, the National Crisis Preparedness and Response Centre (CPRC) under the Malaysian Ministry of Health (KKM) received three case reports. These reports pertained to suspected travellers from China who were believed to have contracted the coronavirus. Two of the cases were reported in Sabah, while the other was reported in Selangor. On January 25, 2020, the initial confirmed case of COVID-19 in Malaysia was documented. The patient in question had previously travelled to Singapore from January 16 to 22, 2020, where they participated in a meeting with an international delegation that included individuals from China. The patient was diagnosed with the virus on January 29, 2020. The rapid spread of the COVID-19 epidemic in Malaysia persisted as a consequence of the initial case. As of the end of February, the tally of COVID-19 instances had reached a total of 25. As of March 16, 2020, the cumulative number of individuals impacted had risen to 428, with a daily increase of 190 new cases. This represents the initial occurrence of a three-digit figure in the reporting of new cases of COVID-19 since January 2020. The Malaysian government enforced the Movement Control Order (MCO) on March 18, 2020, in response to the highly contagious and lethal nature of the COVID-19 coronavirus, as noted by (Shah et al., 2020).

Numerous measures have been implemented globally to curb the transmission of the virus, in line with the recommendations of the World Health Organization (WHO). On March 16, 2020, Tan Sri Muhyiddin Yassin, who held the position of 8th Prime Minister at the time, delivered a formal address via live television broadcast. During this speech, he announced the implementation of a movement control order (MCO) under the Infectious Disease Prevention and Control Act of 1988. The Movement Control Order (MCO) has been implemented and is currently in force from the 18th of March 2020 until the 31st of August 2020. The government is implementing measures aimed at mitigating the spread of infections. In order to mitigate the spread of the virus, a comprehensive nationwide lockdown was implemented (Tang, 2020). Throughout the period of closure, domestic flights to all airports have been suspended, and international flights have been prohibited in order to restrict the entry of foreign tourists

and visitors to the country. Additionally, stay-at-home orders have been implemented, mass gatherings and public events have been limited, and there is a nationwide ban on mass gatherings during religious activities, sports, social, and cultural events. Interstate travel has also been prohibited, and travel within the state is limited to a specific number of kilometres. Furthermore, schools, higher education institutions, and workplaces have been closed.

The adoption of MCO has brought about alterations in multiple facets of human existence. The mandatory sectors of the Malaysian economy, education, and health, are faced with the challenge of overcoming cross-state and district restrictions, which have a direct impact on the economic growth of the Malaysian populace. On the occasion of Labor Day on May 1, 2020, Tan Sri Muhyiddin Yassin, the 8th Prime Minister of Malaysia, conveyed through a special message that the country incurred a daily loss of RM 2.4 billion during the implementation of the Movement Control Order (MCO). The Malaysian government has adopted a strategy of reopening the economic sector while simultaneously implementing the practice of working from home (WFH) in order to mitigate the escalation of losses and facilitate the restoration of the economy in alignment with global standards. The implementation of the Movement Control Order (MCO) in Malaysia has led to the widespread adoption of the working from home (WFH) concept. The concept of working from Home (WFH) refers to the practice of employees conducting their work activities from designated premises, such as their personal residences or rural dwellings, without the need to physically commute to a centralized office location. This is made possible through the utilization of information and communication technology systems. The implementation of a remote work system necessitates a significant degree of accountability and dedication from both employers and employees in order to guarantee the uninterrupted operation of business activities and the preservation of employment opportunities.

The practice of working from home (WFH) has the potential to mitigate the risk of infection by minimizing direct contact between workers and individuals who may be carriers of the virus. Working from home (WFH) can facilitate social distancing, which has the potential to disrupt the transmission network of COVID-19 and serve as a control measure. The practice of remote work has been implemented since the mid-1970s as a cost-saving measure for companies. The implementation of a work-from-home (WFH) policy eliminates the need for the company to construct a physical office, thereby reducing associated expenses such as electricity bills, maintenance costs, security fees, and other related facilities. Initially, employers exhibited limited enthusiasm towards implementing work-from-home (WFH) policies due to the requisite investment in technology and management necessary to facilitate such policies. However, the contemporary work environment has undergone a transformation, and exigent circumstances such as the COVID-19 pandemic have rendered WFH policies a ubiquitous practice. Consequently, companies are compelled to adopt WFH policies in accordance with the prevailing situation. Certain companies possess prior experience in executing the work-from-home (WFH) policy for their workforce, while others have intentions to implement the WFH policy in exigent circumstances. Hence, the work-from-home (WFH) policy represents a novel encounter for the majority of employees who have undergone its adoption amid the COVID-19 outbreak in Malaysia.

Accordingly, the purpose of this study is to provide empirical evidence about the impact of the COVID-19 pandemic on changes in the costs and benefits of working from home (WFH) during the lockdown. This study generally has an objective, namely, to identify and list all types of costs or expenses involved during the implementation of WFH. This research is also important because it enables researchers to read literature reviews that have been peer-

reviewed, which can help them acquire a better understanding of the measures implemented by numerous nations to prevent the spread of COVID-19, among other things, as they conduct additional research. In addition, suggestions for programs and enhancements that might be put into place to create a more favourable balance between health and economy. Additionally, there are suggestions and recommendations for additional research in this paper that should be taken into account.

Literature Reviews

The literature review reveals that the diverse lockdown measures implemented by numerous nations to curb the transmission of COVID-19 have had a significant impact on the labor market and the economy. Numerous scholarly investigations have demonstrated that employment is impacted by regulatory measures, with outcomes that vary depending on the configuration and status of the national economy. Siti Khaireena and Abu Zarrin (2021), posit that the variation in the prevalence and mortality rates of COVID-19 across different countries is attributable to the unique circumstances surrounding the pandemic. Notably, countries such as China, Italy, and the United States (US) have recorded a disproportionately high number of infections and fatalities. According to statistics released by the Malaysian Ministry of Health, there is a consistent upward trend in the number of infection cases, surpassing the number of patients who have recovered. According to Juranek et al (2020), the implementation of closure measures has a negative impact on short-term labor market performance. The investigation conducted in the Nordic countries revealed a significant surge in the unemployment rate in Norway, Denmark, and Finland during the initial weeks of 2020. According to the study conducted by Shuai et al (2020), the outbreak of COVID-19 has led to a decline in labor demand, particularly impacting the younger workforce employed in the leisure and hospitality industries (Gould & Kassa, 2020). Pouliakas and Branka (2020); Fana et al (2020) have demonstrated that the impact of the epidemic on the labor market in European Union (EU) countries has been particularly severe for vulnerable groups. These groups include women, non-indigenous individuals, self-employed and temporary workers, as well as low-educated and low-paid workers in microenterprises. Consistent with research conducted by the International Labour Organization and the Organization for Economic Co-operation and Development in 2020, it was discovered that the outbreak of COVID-19 and the subsequent implementation of lockdown measures resulted in an unparalleled decline in employment within developed nations. The labor markets in Japan and Korea experienced a decrease in employment of 8–9%, while Australia witnessed a decline of 10% in total hours worked. In contrast, the Canadian and United States (US) markets observed a significant rise in unemployment rates.

The current global pandemic has had indirect impacts on multiple sectors, including health, safety, and the economy in various countries. Kong and Prinz (2020), conducted a study in the United States (US) and discovered that the closure of schools, bars, and restaurants, non-essential businesses, stay-at-home requirements, and the prohibition of mass gatherings contributed to less than 13% of the rise in unemployment. Kikuchi et al (2020) conducted a study in Japan and discovered that the impact of the epidemic was not limited to regular workers but also extended to young individuals and women who were employed in social and inflexible work settings. According to Ghose (2020), the economic shutdown in India resulted in the displacement of a significant number of workers, including 32 million permanent informal workers, 89 million casual workers, and 107 million self-employed workers. The majority of these workers belong to the low-income bracket and

possess limited educational qualifications. The implementation of the Movement Control Order (MCO) in Malaysia had a significant impact on the labor market, resulting in a rise in unemployment rates from 3.2% in Q4 2019 to 3.5% in Q1 2020 and eventually reaching 5.1% in Q2 2020, as reported by the Department of Statistics Malaysia (DOSM) in 2020. The data reveals a notable rise in the number of unemployed individuals, which escalated from 512 thousand during the fourth quarter of 2019 to 547 thousand in the first quarter of 2020 and further surged to 792 thousand in the second quarter of 2020. According to the survey conducted by the Department of Statistics Malaysia (DOSM), nearly half (46.6%) of self-employed individuals experienced job loss as a result of the Movement Control Order (MCO).

The global scrutiny of the consequences of the pandemic-induced economic shutdown has resulted in a reduction in revenue. As per the International Labour Organization's report for 2020, there was a significant decline of 60% in the earnings of informal laborers across the globe during the initial phase of the crisis. It is anticipated that the economic disparity among workers in the informal sector will further expand. Individuals earning less than RM3,000 experience a decrease in their income. According to AON's report for 2020, a notable proportion of employees, ranging from 4% to 7%, have experienced a decline in their earnings. Furthermore, individuals whose earnings are diminished are inclined to augment their weekly expenditures. As per a study conducted by UNDP (2020) in Malaysia, individuals who earn less than RM7,000 per month and have childcare expenses experienced a surge in their expenditures during the MCO period, despite the substantial savings in transportation costs that were incurred due to remote work arrangements. Approximately 34% of employees experiencing a decrease in income have increased their weekly expenditures by an amount exceeding RM100 per week. The aggregate expenditures experienced an upward trend despite a decrease in transportation and childcare expenses. The primary contributing factor to this phenomenon is the allocation of labor expenses to remote workers who operate from home.

Moreover, the adoption of the work-from-home (WFH) policy results in escalated utility and work equipment expenses, which constitute a transfer of costs from employers to employees. Consequently, employees who encounter reduced income are susceptible to bearing the brunt of this cost shift. According to a report published by the United Nations Development Programme (UNDP) in 2020, employees incur various work-related expenses such as equipment, internet bills, and other utilities while working from home. During the movement control period, there was a notable surge in various utility expenses. Specifically, other utility expenses increased by 71%, work equipment by 49%, food by 46%, internet and mobile by 42%, and childcare by 25%. Forty percent of the participants indicated a rise in their expenditure on internet and mobile services, while 48% reported an increase in their spending on equipment in response to a decrease in their income. Employees who are subjected to reductions in their wages are especially susceptible to elevated expenditures, which could be indicative of employers encountering economic difficulties that transfer labor expenses onto their workforce.

The alteration in the working milieu and ambiance has resulted in novel modifications to the advantages of employment, encompassing working ease, contentment, stress reduction, adaptability, significance, and familial considerations. This pertains to the allocation of time between work and family responsibilities as well as its impact on work efficiency. The trend of workload escalation has been observed to be on the rise, leading to work pressure issues for individuals who are implementing the work-from-home (WFH) model. Due to the heightened demand from the economic sector, employees are

experiencing mounting levels of stress in response to novel standards and work system modifications that have an impact on their psychological and emotional well-being. The Movement Control Order (MCO) has resulted in a significant increase in working hours for individuals who exclusively work from home. When workers experience a substantial rise in their daily working hours by more than one hour, it results in a notable decline in their overall quality of life. As per the findings of a survey conducted by the United Nations Development Programme (UNDP) in 2020, it has been observed that the workforce of multinational corporations is highly susceptible to extended working hours. Nearly 50% of the employees surveyed reported an increment of over an hour in their work schedule. The alteration in the modus operandi of work has a significant influence on the welfare of employees who work remotely from their homes. The current global pandemic has had an indirect impact on multiple sectors, including health, safety, economics, and social aspects within each nation. Nevertheless, it has been observed that there is a dearth of research on the cost-benefit analysis of remote work during the period of movement control in Malaysia amidst the ongoing epidemic.

Methodology

The objective of this investigation is to assess the cost-benefit implications of adopting a work-from-home (WFH) policy in response to the COVID-19 pandemic. The study employs a quantitative methodology to ascertain the various costs and expenses incurred in the implementation of work-from-home (WFH) arrangements, alongside the diverse economic benefits and corresponding measurement techniques for each benefit arising from WFH implementation amidst the pandemic. This study was conducted with a random selection of employees who engage in remote work in Malaysia. The study's sample size comprised 410 participants. The study aims to survey individuals within the age range of 18 to 60 who are employed in diverse sectors, including private, government, and self-employment.

The study employed convenience sampling methodology, which was facilitated by the JotForm platform. The present research questionnaire comprises three sections that assess various costs and expenses incurred in the course of implementing work-from-home arrangements during the COVID-19 pandemic. The data were obtained through the utilization of semantic scale questions developed by Osgood et al. (1957), wherein the respondents were asked to indicate their level of agreement on a scale ranging from 1 (indicating strong disagreement) to 7 (indicating strong agreement). The quantitative data obtained from this study was analyzed using the Statistical Package for Social Science (SPSS). The purpose of collecting the data is to provide support for research-related information. The present study employs a descriptive analysis approach, utilizing frequency, mean, and standard deviation measures to assess the cost-benefit implications of remote work arrangements amidst the COVID-19 pandemic. Ultimately, a comprehensive investigation can be concluded to effectively address all of the study's objectives.

Result and Discussion

This descriptive analysis covers the costs involved during WFH, namely workspace, technology facilities and technical equipment, support and communication as well as costs.

Workspace

The workspace descriptive analysis encompasses six distinct items. The workspace's mean value was determined to be 3.83, with a corresponding standard deviation of 1.38. This

demonstrates that the expense associated with the workspace is minimal. It is imperative that officers engaged in remote work possess the necessary equipment to effectively carry out their duties, including specialized tables and chairs, adequate lighting, and tools conducive to seamless remote work. The initial item, pertaining to the possession of a designated workspace at home, exhibits a mean value of 4.36 and a standard deviation of 2.11. This finding indicates that a majority of the participants possess a designated area within their residence for conducting work-related activities. The provision of available workspace offers a cost-saving advantage to the participants. Regarding item 2, the statistical analysis indicates that the mean value obtained for "I share a workspace with a partner" was 3.26, with a corresponding standard deviation of 2.31. This indicates that the participant possesses an exclusive workspace alongside their partner, thereby obviating the need for workspace rental fees. A subset of the participants reported co-occupying a workspace with a colleague. Moreover, it is noteworthy that item 3, pertaining to the sharing of living space with other family members, yields a mean score of 3.34 and a standard deviation of 2.23. The majority of participants refrain from sharing their workspace with family members due to the availability of individualized workstations. This results in a decrease in expenses for the establishment of communal work areas among relatives. The fourth variable in the dataset pertains to the sharing of a workspace with a roommate. The corresponding mean and standard deviation values for this variable are 2.99 and 2.18, respectively. A limited proportion of the participants cohabited with roommates while working from home, according to the survey data. This results in significant savings in terms of workspace expenditures for the participants. The fifth item, pertaining to the adequacy of physical conditions in the home environment (including adjustable desks and chairs, sufficient light, quietness, monitors, etc.), has a mean value of 4.02 and a standard deviation of 2.21. The data indicates that certain participants lack a conducive working environment, necessitating personal expenditure on essential items such as desks, chairs, and monitors, among others. The sixth item in the dataset, which has a mean of 5.02 and a standard deviation of 1.89, pertains to the experience of neck pain during remote work arrangements, which may be attributed to reduced physical activity. A significant number of participants report experiencing neck discomfort while working from home. This results in supplementary expenses for the individual receiving treatment. To summarize, the expenses associated with the workspace are limited to those pertaining to the physical surroundings and healthcare interventions necessitated by sedentary behaviour. Consequently, the adoption of remote work arrangements can be facilitated by the relatively low expenses associated with establishing a home office, which primarily entail the costs of addressing any potential ergonomic issues that may arise, such as neck pain.

Technology Facilities and Technical Equipment

The analysis of technological facilities and technical equipment encompasses six distinct items. The sample's mean value for the expenses incurred on technology facilities and technical equipment is 4.79, with a corresponding standard deviation of 1.19. The initial element, "I accomplish all tasks remotely utilizing information technology resources," exhibits a mean score of 5.68 and a standard deviation of 1.41. Based on the data, it can be inferred that Responded is demonstrating a proactive approach towards completing office tasks remotely while also leveraging the latest technological advancements and equipment available. The second item pertains to the utilization of information technology facilities that are exclusive to the user and not shared with other family members or spouses. The mean

score obtained for this item is 4.85, with a corresponding standard deviation of 1.88. The phenomenon of specialized allocation of technological resources among spouses or family members is readily apparent in the context of remote work, as it serves to mitigate any potential disruptions that may arise while fulfilling professional obligations. The third item on the list pertains to the ease of working from home, which is attributed to the constant availability of technical support. The respondents exhibit agreement when the resulting mean value is 4.31 and the corresponding standard deviation is 1.91. The technical proficiency of the IT team can be effectively utilized for the utilization and operation of technological infrastructure and equipment. The fourth element pertains to the provision of computer facilities to all employees during the work-from-home (WFH) arrangement. This factor has a mean score of 3.39 and a standard deviation of 2.22. Respondents will allocate a significant budget towards the implementation of work-from-home arrangements in order to acquire advanced technological amenities and utilize state-of-the-art technical apparatus. The subsequent element pertains to the availability of requisite tools and technical equipment, such as a computer, monitor, mouse, and keyboard, to facilitate work during the work-from-home (WFH) arrangement. The mean score for this item is 5.4, with a corresponding standard deviation of 1.62. The participants expressed consensus regarding the significance of fundamental technological infrastructure and amenities, as well as specialized equipment, in facilitating remote work. The final component pertaining to technological infrastructure and technical apparatus is expressed as "overall, I possess all the requisite equipment to perform my duties in accordance with typical standards, akin to those of an office setting." This statement is accompanied by a mean value of 5.1 and a standard deviation of 1.77. The participants expressed their concurrence with possessing the fundamental tools necessary to conduct work from home. Given sufficient technological infrastructure and technical resources, remote work arrangements can be effectively executed.

Support and Communication

The support and communication descriptive analysis comprises a total of seven items. The arithmetic average of the data set is 4.14, while the degree of variability or dispersion from the mean is represented by the standard deviation of 1.11. This finding indicates that there is a level of inter-employee support and communication in the context of remote work. The initial variable, "during work from home (WFH), I am assisted by a caregiver to attend to my child," yielded a mean score of 2.31 and a standard deviation of 1.93. The majority of participants are responsible for the care of their own offspring without any assistance from domestic staff. The second item pertains to the effectiveness of the communication system between the company and its employees during the work-from-home (WFH) period. The mean score for this item was 4.51, with a standard deviation of 1.64. Direct assistance and effective communication from the organization can facilitate the implementation of work-from-home arrangements for the employee. The third variable pertains to the provision of work-from-home tips by the company during remote work arrangements. The mean and standard deviation of this variable are 4.25 and 1.66, respectively. The employer offers guidance pertaining to working from home in order to facilitate optimal work performance for the employee. The fourth item pertains to the provision of online training by the company during the work-from-home (WFH) period, specifically on the topics of cyber fraud management and safeguarding of the company's personal data. The mean score for this item is 4.11, with a corresponding standard deviation of 1.91. The provision of communication aid and support within an organization has the potential to mitigate the risk of cyber fraud and

enhance the management of the company's sensitive information. Amidst the work-from-home (WFH) arrangement, the company has evidently provided adequate support and communication. In relation to the fifth item of the survey, which pertains to the frequency of communication with friends, superiors, and colleagues during WFH, the obtained mean score is 4.78 with a standard deviation of 1.37. The camaraderie and interpersonal communication among peers and co-workers prove advantageous in the context of remote work. The sixth item pertains to the provision of adequate support by the company to its employees during remote work arrangements. The resulting mean score for this item is 4.61, with a corresponding standard deviation of 1.55. The responses indicate a positive perception of the cooperative nature and supportive environment fostered by both employers and employees during the work-from-home setup. The final element pertains to the ability to proficiently accomplish all office-related tasks from the comfort of one's home without being interrupted by domestic matters. The mean score for this item is 4.42, with a standard deviation of 1.71. The respondent carries out their work-from-home duties in a professional manner, with no disruption from their domestic environment. Thus, the successful execution of remote work arrangements necessitates the provision of adequate support and effective communication among employees, employers, colleagues, and all relevant stakeholders.

Cost

The descriptive analysis of costs comprises eleven components. The sample's mean cost is 5.68, with a corresponding standard deviation of 0.99. This demonstrates that there are changes in costs associated with remote work. The initial element pertains to the fact that "amidst the work-from-home arrangement, there was a reduction in expenses for automobile fuel," resulting in an average of 6.32 and a standard deviation of 1. During the period of remote work, the participant remained confined to their residence and refrained from commuting to their workplace, thereby indicating their endorsement of the initial proposition. The second item pertains to the cost-saving aspect of eating out during the Work From Home (WFH) setup. It garnered a mean score of 6.05 and a standard deviation of 1.32. The act of recording savings can be facilitated by individuals who respond to the practice of working from home, as it reduces the expenses incurred from dining out. The third variable, which pertains to the ability to save commuting time from home to office during work-from-home arrangements, yielded a mean score of 6.37 and a standard deviation of 1.02. The work-from-home (WFH) arrangement has the potential to generate cost savings, particularly with regard to commuting expenses. The fourth item on the list pertains to the potential cost savings associated with working from home, specifically in relation to childcare expenses. The mean score for this item is 4.97, with a corresponding standard deviation of 2.26. Amidst the work-from-home (WFH) arrangement, the individual in question will be required to allocate their time between professional obligations and parental responsibilities, thereby necessitating a division of the expenses incurred for childcare. The fifth variable pertains to the amount of quality time spent with family during the work-from-home (WFH) period. The mean value for this variable is 5.89, with a standard deviation of 1.47. The survey participants concurred that working from home affords families valuable time together. The sixth variable, pertaining to the increase in electricity utility charges during the work-from-home period, has a calculated mean of 5.98 and a standard deviation of 1.23. The utilization of electrical and electronic devices during remote work operations may result in escalated utility expenses for individuals. The seventh variable in the dataset pertains to the financial benefits of working from home, specifically the cost savings associated with tolls, parking, and car maintenance.

The corresponding mean and standard deviation for this variable are 5.90 and 1.4, respectively. Amidst the work-from-home (WFH) paradigm, the physical presence of the respondent is confined to their residential abode, thereby leading to a decrease in vehicular usage. This, in turn, results in a reduction of expenses incurred on parking and transportation. Similarly, the eighth item pertaining to the potential cost savings on public transportation during remote work exhibits a mean of 5.96 and a standard deviation of 1.36. The ninth item in the sequence of data pertains to the observation that working hours tend to increase during the work-from-home (WFH) period. The corresponding statistical measures for this item are a mean of 5.55 and a standard deviation of 1.58. The data indicates that while working from home, a majority of the participants are required to work additional hours beyond their regular work schedule in order to fulfill their job responsibilities. The tenth element pertains to the provision of software installation by the company during the Work-From-Home (WFH) setup. The software includes a firewall for safeguarding against cyber threats, Endpoint Detection and Response (EDR) software, and antivirus software that can detect malicious code and ransomware in real-time. The mean and standard deviation of this provision are 4.09 and 1.58, respectively. The company bears the expense of implementing cybersecurity software to safeguard its confidential data and privacy information against cyber threats. The final element, pertaining to the need for upgrading the high-speed internet plan for oneself and other family members during the work-from-home period, yielded a mean value of 5.36 and a standard deviation of 1.87. Individuals who work remotely may experience financial expenses associated with upgrading their internet plans in order to maintain optimal productivity while working from home. In summary, there are various expenses that must be borne to facilitate seamless remote work. Consequently, the adoption of telecommuting can be executed due to the reduction in expenses related to meals, commuting, parking fees, and tolls. This confers numerous advantages to individuals who operate remotely from their residences.

Estimated Meal Costs and Utility Costs

A descriptive analysis was employed to examine the estimated meal costs and utility costs incurred during the implementation of work-from-home (WFH) arrangements. On average, the anticipated daily expenditure on food prior to working from home (WFH) is RM32.15, with a corresponding standard deviation of 35.31. Prior to the implementation of work-from-home policies, the minimum cost of daily sustenance was recorded at RM10, while the maximum expenditure reached RM300. Amidst the work-from-home (WFH) arrangement, the mean daily expenditure on sustenance was calculated to be RM36.78, with a corresponding standard deviation of 55.96. The upper limit for daily meal expenses is RM300, while the lower limit is RM0. No food allowance is provided when residing with parents and siblings. On average, the projected expenditure for monthly meals during office hours is RM414.13, with a corresponding standard deviation of 299.09. The monthly expenditure on sustenance within the office environment ranges from a minimum of RM10 to a maximum of RM2000. Regarding utility expenses, the mean estimation prior to remote work is RM178.96, accompanied by a standard deviation of 302.46. The minimum and maximum costs incurred per month are RM15 and RM2000, respectively. On average, the anticipated utility expenses incurred during Work-From-Home (WFH) are RM264.72, with a standard deviation of 305.82. The minimum cost recorded is RM20, while the maximum cost is RM2300 per month. This phenomenon can be attributed to the fact that individuals are confined to their homes or places of residence while implementing the work-from-home policy.

Conclusion

The diverse lockdown measures implemented have yielded distinct outcomes regarding the extent of COVID-19 transmission and economic impact. Consequently, it is inevitable to encounter trade-offs between the health and labor market domains. From a public health standpoint, implementing social distancing and lockdown measures are effective strategies for mitigating the transmission of the virus. Numerous nations have implemented exceptional measures that have demonstrated efficacy in mitigating and constraining the transmission of the virus by governmental entities.

In order to ensure economic sustainability, a responsible governing body that adheres to principles of effective governance will promptly implement and participate in economic stimulus initiatives during periods of shutdown. This will involve extending assistance to impacted businesses, employers, employees, and the general public through the provision of cash and liquidity support. In the Malaysian context, the government has injected over RM290 billion into the economy via four economic stimulus packages. Apart from the provision of government stimulus packages, government agencies can assist policymakers in formulating prospective policies aimed at safeguarding the labor market and the consequent economy. Additionally, these agencies can suggest policies that will ensure the well-being of workers who have been adversely affected and have lost their jobs.

An evaluation of the different closure measures that impact the labor market and economy is crucial from a policy standpoint. This assessment should be based on evidence to guarantee the efficiency and durability of the chosen approaches. This research offers significant and pertinent insights for policymakers to comprehend the extent of each shutdown measure and develop economic recovery initiatives. Furthermore, the present study has demonstrated that measures such as limitations on mass gatherings, constraints on global mobility, prohibitions on communal gatherings, shutdowns of educational institutions and business establishments, and the adoption of telecommuting arrangements have exerted a collective influence. The varying impact of closure phases on employment necessitates the implementation of targeted interventions tailored to each specific phase.

Hence, in order to enhance the efficacy of policy-making, the analysis furnished in this study may prove inadequate in terms of encompassing and integrating measures. In order to enhance the government's crisis management capabilities, it is crucial to obtain high-quality and timely data on a country's economic conditions and labor market. The acquisition of such data is crucial for comprehending, monitoring, administering, and alleviating labor market and economic circumstances influenced by both pandemic and non-pandemic outcomes. It is recommended that health-economic models incorporate socio-demographic indicators, such as the occupational characteristics of individuals who have been infected on a daily basis, in addition to administrative labor market data. The aforementioned approach would facilitate policymakers and healthcare agencies in obtaining a more all-encompassing understanding and outlook of the epidemic, thereby enabling them to suggest efficacious micro-level tactics for health and economic consequences.

Conflicts of Interest

The authors declare that they have no conflicts of interest to report regarding the present study.

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