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**HOW MUCH STRESS IS TOO MUCH? ODL IMPLICATIONS ON
WORKING MOTHERS**

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Abstract

The COVID-19 pandemic has impacted many organizations worldwide because it necessitates the use of cutting-edge technology and requires employees to work from home. This preliminary study aims to establish whether ODL contributes towards perceived stress among working mothers and also to explore on the potential stressors of ODL among working mothers well being. Following a thorough literature review, the researchers discovered that COVID-19 has had a significant impact on Malaysia's higher education sector. Working mothers are primarily affected by stress in terms of their physical and psychological well-being because they must care for their families whilst also caring for themselves. It is anticipated that the perceived stress level and the relationship between perceived stress and well-being will be determined using a questionnaire-based assessment. To produce a more robust result, the findings of this research will be analyzed by using SPSS26.0. The literature review also provided general information about stressors experienced by working mothers, the implications of a stressful situation experienced by working mothers, and the coping strategies to help them overcome the stress. This research has provided a strong foundation for future research in the respective body of knowledge.

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1. Introduction

COVID-19 disease emerged in December 2019 and has affected people worldwide. Since most countries have implemented strict precautions to prevent the virus from spreading, daily human activities are interrupted. Malaysia is one of the countries that has been affected by COVID-19. The first case of COVID-19 was discovered in January 2020 and has continued to spread rapidly every week (Mat et al., 2020; Rampal & Liew, 2020). COVID-19 has impacted all economic sectors in Malaysia, including higher education. Furthermore, changes in the higher education sector, such as school and campus closures, social distancing, isolation, quarantine, and a shift in learning styles, have significantly impacted students and lecturers.

Even though the Malaysian Ministry of Higher Education (MOHE) has taken preventive measures to raise public awareness about COVID-19 among students and academicians, the increase in positive cases has necessitated strict operating procedures guidelines to ensure the safety and health quality of university communities. Furthermore, since the government has urged campus closures and movement restrictions, physical learning has suffered, prompting the university to opt for online learning to ensure an ongoing learning process. Online learning was carried out with the help of electronic devices such as computers, laptops, mobile phones, and internet access. Students were given two options for online learning, which is synchronous or asynchronous, based on the suitability and agreement of both the lecturer and the students (Algahtani, 2011). Asynchronous online learning refers to the interaction between lecturers and students before or after the class via emails and discussions, whereas synchronous online learning refers to direct communication between lecturers and students during the class via videoconference and chatroom.

When Malaysia's Ministry of Higher Education completely replaced physical learning with online learning, it created unprecedented challenges. Many institutions and businesses have been forced to work from home due to COVID-19 (Rigotti et al., 2020). Shifting from working in the office to a home setting has created work-life stress, including role stress, role overload in balancing work-life balance, and family issues (Bolger et al., 1989; Duxbury et al., 2018). Besides that, past studies discovered that disease outbreaks impacted individual mental health and well-being (AlAteeq et al., 2020). It was reported that professions such as nursing, psychology, teaching, social work, and even librarianship posed as high-stress occupations that cause workplace stress and burnout in both employees and organizations (Wood et al., 2020).

1.1. Open distance learning (ODL)

The education sector is one of the economic sectors that COVID-19 has impacted, resulting in a complete shift in the student's learning methods. Throughout the pandemic, the Malaysian education system has made online learning a mandatory teaching method alternative to the traditional method. Previously, ODL courses were offered to students who enrolled in the part-time mode to help them balance competing priorities such as work, home, and school. However, all educational institutions have currently enforced online learning as a teaching method throughout the pandemic, replacing the previous physical teaching method.

During the pandemic, the concept of ODL has been the fastest-growing field of education (Sufian et al., 2020). Furthermore, as Internet-based information technology advances, the significant impact of ODL on all education delivery systems is growing rapidly (Bates, 1995; Bosch, 1997; Bradley & Yates, 2000). The ODL system is a teaching method used by teachers and students who cannot physically attend class, and it is applicable to be used by school-age children to youth. The ODL systems provide a significant level of openness and flexibility in terms of access, curriculum, and structure (Ghosh et al., 2012). Besides, with ODL systems, the learner has the most control over the time, place, and pace of education. The ODL system comprises several components, including the system's mission or goal, learning techniques, learning strategies, learning materials and resources, communication and interaction between educator and learner, and support and delivery systems (Ghosh et al., 2012).

Although ODL has grown in popularity due to its benefits and opportunities, it does have some limitations. Implementing fully online learning in the face of a sudden COVID-19 pandemic is difficult without encountering obstacles and challenges. Previous research has found that both academic staff and students face dual challenges when conducting ODL (Al-Baadani & Abbas, 2020; Becker et al., 2012). It has been discovered that the use of ODL as a teaching method has increased students' and educators' anxiety and stress (Azman & Abdullah, 2021). The students must quickly become acquainted with the new technology in terms of assignment and exam submission, and they are concerned about not receiving a full range of face-to-face services and a lack of confidence in adapting to the new processes (Wang & Zhao, 2020). Furthermore, some students expressed concerns about the quality of their learning experience and the availability of online repositories and paid software when working off-campus (Jalli, 2020). Other common issues they encountered included a lack of self-discipline, a lack of appropriate learning materials, and an un conducive learning environment.

The digital device impacted not only students but also academic staff when it came to learning through ODL. Since this research focuses on working mothers in academia, they discovered several limitations in conducting ODL techniques. During the MCO period, many academic staff must work extra hours because they have to plan and practice transferring content for online delivery, which takes time (Azman & Abdullah, 2021). In addition, they were subjected to an increase in workload because of the need to rewrite materials and reorganize assessment tasks, videotape lectures, and make additional efforts in reformulating formative and summative assessments, as well as find ways for students to submit their assignments and tests electronically (Azman & Abdullah, 2021). All of these must be done in a short period of time to ensure that the syllabus is completed on time. Mastering the distance teaching enforced by the COVID-19 pandemic caused problems for many educators, especially working mothers. Working mothers have been affected by the COVID-19 pandemic, which has resulted in increased of daily responsibilities and a slew of new challenges to their existing work or living arrangements. As a result, conducting this research can aid in identifying the types of stressors experienced by working women while handling ODL during COVID-19 and the potential impact of the stressor on their well-being.

1.2. Perceived stress among working mothers

Many previous researchers have focused on stress issues because it is one of the most demanding contemporary challenges for occupational safety. According to World Health Organization (WHO)

statistics, nearly half of employees are uncomfortable at work, which is associated with a negative perception of the workplace as a source of many frustrating and stressful situations. Furthermore, due to the COVID-19 pandemic, most countries have been forced to implement lockdown, which has resulted in many women working from home. Stress can be a problem for all employees, especially women, whose stress levels are double as compared of men (Abdullah et al., 2008). Stress is defined as the body's natural ability to generalize, pattern, and mobilize unconsciously (Yahaya et al., 2009). As defined by Al-Hussami (2008), occupational stress refers to the harmful physical and emotional responses due to job demands that do not match the worker's capabilities, resources, and needs. Based on Yahaya et al. (2009), occupational stress can harm employees' physical and emotional responses, affecting their job performance and well-being; meanwhile, stressors are situations or events that have the potential to influence health outcomes (Madebo et al., 2016).

Many parents, specifically working mothers, were found to be obligated to homeschool their children, necessitating the adoption of the role of a teacher in addition to their roles as parents and workers. Women were chosen as the respondents for this research because they significantly impact the future of education. As a result, determining their stress level and how it corresponds with their work-life balance is critical. Furthermore, the influence of women in this profession and their domestic responsibilities should be addressed in ways that do not jeopardize their professional careers (Berrios-Colon et al., 2020). Working mothers can be influenced by their time at home in various ways. For example, a Deloitte (2020) survey discovered that some women believe working at home gives them more free time because they don't have to commute and travel to work, whereas other women believe working at home adds extra responsibilities and commitment to their already hectic lives. Moreover, the survey found that, as compared to their caring responsibility prior to COVID-19, 75 percent of women need to focus more on caregiving responsibility (virtual schooling and family members), which nearly increased to 48 percent during the pandemic.

In addition, a study conducted by Chung et al. (2020) shows that approximately two out of every three female employees have negative experiences and nervousness when working at home during the lockdown. Moreover, the study discovered that three of four working mothers experienced more housework and childcare when working from home during the pandemic because they needed to spend more time monitoring their children's education. Furthermore, this study discovered that serious concern for the well-being of parents, particularly mothers (Arham et al., 2019), could result from lockdown be exacerbated if school or childcare centre closures are extended. It is found that the implementation of ODL in all educational sectors has resulted in adverse effects via the virtual environment and technological innovations, such as increased stress levels due to increased employee workload (Garcia-Gonzalez et al., 2020). Besides that, most employees perceived that working from home has resulted in a heavy workload, an increase in the number of hours worked, and blurring the lines between work and family life. For instance, women face a high level of stress as they must be responsible for performing family duties, and at the same time, they must care for their family while also fulfilling their office work requirements. Moreover, educators are more likely to experience stress when teaching students with minimal support from the university, college or school (Kyriacou, 2010; Pithers & Soden, 1998; Travers & Cooper, 1996).

Aside from balancing work and family, another stressor faced by working mothers is the pace of work, which is centred on time pressure associated with the deadline characteristic of online university

teaching. Some classes place significant cognitive and motivational demands on students while adhering to strict deadlines because the employees' sense of time pressure to complete the task is less than the allotted time (Sun et al., 2011). As a result, they will have to work longer hours than usual and sacrifice personal and family time to meet their job demands. In terms of a lack of a schedule, the other stressors are related to the time dynamics of online teaching and teaching in general, in which the number of tasks increases dramatically in certain situations, such as an exam, double duties, and responsibilities with no extra time to deal with it. A study of female professors' motivation levels discovered that they suffer from mental overload, making work-life balance more difficult during ODL as it is more complicated than physical classes (D'Urso et al., 2019). In addition, female professors with school-age children reported that increased workload creates a role conflict for them due to the demand from both fields, and they feel forced to work late at night and on weekends (Sun et al., 2011).

Also, it is found that another source of stress for working mothers is role ambiguity. Role ambiguity refers to the overall personal and external expectations about the appropriate behaviour or role, regardless of who occupies it (Schulz, 2013). The author indicated that role ambiguity could cause employees to experience low self-esteem, increased workplace tension, depression, and fatigue. Furthermore, a study among women who work as university professors and work online discovered that a lack of interaction with their supervisor makes it difficult for them to have precise and detailed knowledge about their role's behaviour, responsibilities, and expectations. The lack of autonomy is another potential stressor contributing to stress among employees (García-González et al., 2020). It is specifically regarded as a potential risk due to the stringent scheduling in online teaching and the bureaucratization of evaluation systems. This can cause the pace of work to be imposed by the educational system rather than the workers. Aside from that, inadequate ICT training affects the perception of control and autonomy. According to Al-Fudail and Mellar (2008), employees experience technology-related stress when they believe they are not competent or knowledgeable enough to use it. The current research also looked at the stress levels and coping strategies of working mothers in higher education during the ODL. It is an essential part of this study because it demonstrates a higher vulnerability among working mothers regarding stress experiences and the consequences of stress.

1.3. The Relationship between perceived stress and well-being

Employee stressors can significantly impact the employee's well-being. Work-related stress is frequently linked to increased employee absenteeism, decreased productivity, and a high societal cost (Henderson et al., 2005). Teles et al. (2020), who conducted a study among teachers in higher education, corroborate that well-being is one of the critical aspects of the institution and student success. However, it has been discovered that previous studies have only focused on how to treat mental disorders and symptoms rather than on how to improve employee well-being (Seligman & Csikszentmihalyi, 2000). Gadermann et al. (2021), who conducted a study of 3000 Canadians, discovered that parents who take on the additional task of homeschooling tend to report good mental health since the COVID-19 pandemic. In addition, it is found that parents tend to report low well-being on the day they need to monitor their children's home school. During their children's home school, parents must juggle a new role as teachers, which increases their parenting and work demands. Seven of the ten parents polled said homeschooling is the primary source

of their stressors. It has been discovered that homeschooling is the cause of their mental health issues because they must take on the additional role of a teacher. However, a study on stress and well-being conducted by Malik et al. (2020) discovered a moderate and inverse relationship between the two variables. Thus, it contradicts the previous research findings that stress and well-being have a significant relationship. As a result, this research aims to explore further the relationship between stress and well-being by examining the perspectives of working mothers in the higher education sector. Figure 1 shows the conceptual framework of this study.

2. Conceptual Framework



Source: Conceptual framework adapted from Bharani et al. (2022)

Figure 1. Conceptual Framework

3. Problem Statement

Currently, many schools are introducing remote learning, which places a new set of responsibilities on parents to assist their children throughout the day. Overburdened responsibilities have a significant impact on the emotional well-being of working women. Most working women are feeling increased mental tension or anxiety due to the changing method of education. Dealing with ODL is a particularly stressful experience for working mothers who must combine their personal lives, job and raising children.

The main objective of this research is to explore whether ODL contributes to perceived stress among working women well-being and to explore the potential stressors of ODL among working women's well-being during the COVID-19 outbreaks. This research chose working mothers because pre-pandemic studies have shown that working mothers have a higher level of stress and burnout due to role overload and the impact of subjective experiences of time on work stress (Bolger et al., 1989; Del Boca et al., 2020; Feng & Savani, 2020). In addition, working mothers must fulfil their roles as wives, mothers, and wage earners while working at home. They have to manage their careers while exercising their traditional roles. It means that for a working mother, two sets of responsibilities overlap. As a result, in addition to their traditional roles, professional roles appear to be one of the major sources of stress for working women (Swathi & Reddy, 2016).

Moreover, it has been discovered that working mothers can be a victim of home and workplace stress. These women's ability to cope with and adapt to stress significantly impacts their physical and psychological well-being (Pattanaik & Worley, 2011). Bringing work into the home produces depression symptoms in women, particularly those with young children (Shepherd-Banigan et al., 2016). Kermane (2016) conducted a study comparing employed women and homemakers and found that employed women have a higher stress level than homemakers. These findings are consistent with Hamilton and Fagot's (1988) findings that working mothers have a higher stress level because, in addition to handling the role of working women, they also must handle the role of homemakers. Besides that, Hashmi (2007) found that working married women face more difficulties in their lives, such as more stress and depression, than non-working

married women. Despite previous research on the impact of perceived stress on well-being, there has been limited research conducted from the perspective of a working mother in an academic profession in managing stress in handling ODL during the COVID-19 pandemic especially within the Malaysia context. Thus, this research intends to focus on the stress felt by working mothers during home-based work using a perceived stress scale.

4. Research Questions

There are two questions to be addressed in this study:

- (1) Does ODL contribute to perceived stress among working women well-being?
- (2) What could be the potential stressors of ODL among working women well-being?

5. Purpose of Study

By looking at the perspective of our country, it is found that Malaysians' stress levels increased during Movement Control Order (MCO). It was discovered that 70 percent of respondents agreed that their level of anxiety was increased during the early COVID-19 outbreak (NST, 2020). During the outbreak, they are also experiencing stress symptoms such as fatigue, loss of appetite, headache, sweating, mood swings, and chest pain. This research focuses on working mothers since it has been discovered that women experience more stress than men. A study conducted during MCO by Perveen et al. (2020) among Malaysian males and females indicated that males feel less stress and depression than females.

Thus, the purpose of this study is two-fold. First, this research intends to explore whether ODL contributes to perceived stress among working women. Secondly, this research explores the potential stressors of ODL among working women's well-being during the COVID-19 outbreaks.

6. Research Methodology

This study is intended to be a quantitative research in which the data will be gathered by using a self-administered questionnaires. Purposive sampling will be used to collect data to ensure that specific groups are adequately represented in the study. In selecting the respondents, the researchers will choose the respondents based on criteria such as a working mother who works in a higher education institution located in Malacca. As a recent development suggests that the current research should use power analysis, G*Power will be used to determine this research's sample size (Hair et al., 2018). The questionnaires for this research will be divided into three sections. The demographic profile of the respondents will be the first section of this research. Questions about age, tenure, the number of children, and the children's ages will be asked.

The respondent's perceived stress level will be centered in the second section of the questionnaire. The perceived stress scale-10 (PSS-10) questionnaires will be used to assess respondents' stress levels. This measurement is used because it is the most widely used and validated psychological instrument for measuring stress perception. The 10-item measurement will be adapted from Cohen and Williamson's (1988) work stress scale. The third section will include questions about employee well-being. The researchers will use the original 14-item Mental Health Continuum-Short Form (MHC-SF) adapted from Keyes (2005) for this section. The questions will assess the three types of well-being: emotional, social,

and psychological. The respondents will rate the measurement item on a 6-point Likert scale for the three sections of the questionnaires.

This research will assess the instrument's goodness of measure, namely validity and reliability, before distributing the actual questionnaires. The validity test will be conducted to determine how well the instrument measures the concept; hence, this research will seek the opinion and review of the expert in the related field (Sekaran & Bougie, 2009). Furthermore, this research will conduct a pilot test to assess the instrument's consistency and ensure that it can measure the concept it is intended to measure for the reliability test (Sekaran & Bougie, 2009). The questionnaires will be distributed via online due to the social distancing restriction during COVID-19. After the data collection has been completed, the researchers will use SPSS version 26.0 to code, enter, clean, replace the missing data and analyze the frequency, descriptive results and standard deviation to attain more robust results.

7. Findings

Women are the essential engine of growth in any workforce. Their involvement in many industries is increasing, and their role in the academic sectors is undeniably significant. Thus, this research anticipates that ODL contributes to perceived stress among working women during COVID-19 since past research revealed that working women tend to experience more stress. According to Soman and Mohanan (2021), the home-based job situation caused by COVID-19 has put stress on working women whose children are in school, husbands are working, and elderly parents are there to take care of in the same environment. Working women's struggles with managing time to complete daily work obligations make them experience a higher level of stress than others. Consistent finding by Perveen et al. (2020) shows that working females tend to experience more depression, anxiety and stress during the MCO.

In addition, the researchers found that there are many potential stressors of ODL among working women's well-being during the COVID-19 outbreaks. For instance, Soman and Mohanan (2021), who conducted research among working women, revealed that childcare, dependent care, cooking, and working spouse are among the factors that contribute to their stress. Moreover, a study conducted by García-González et al. (2020) found nine factors contributing to stress among female professors which are quantity and complexity of information, demands on attention, time pressure, lack of schedule, role ambiguity, emotional overload, lack of autonomy, not taking breaks and low social recognition. Besides that, another author reveals that the other factors contributing to working women's stress are working hours, work flexibility, family size and family dependence (Bhuvaneshwari, 2013).

8. Implications

Covid-19 has created a particularly challenging climate for Human Resources Managers as they have to move quickly into the unknown anonymously to adapt and cope with major changes in their work (Carnevale & Hatak, 2020). Thus, this research could initiate and establish how the COVID-19 pandemic affects some working mothers and helps the organization ensures working women's continued success and advancement in their careers. It is proposed that if the organization provides a policy on flexible working options for working mothers, some may argue that working from home may result in employees having

more free time to balance their work. However, flexible working options are only effective if one's working hours and life balance can be managed without feeling guilty (Malik & Björkqvist, 2021).

Furthermore, the management, particularly the leader, must support their employees through open and supportive communication. Aly et al. (2021) recommend that the organization must provide adequate support to its employees in facing the challenges of working during the pandemic of COVID-19. In addition, the authors proposed that the organization can provide adequate resources to employees by providing adequate education and training. Besides that, the organization should demonstrate empathy by understanding working mothers' constraints or limitations to reduce their stress levels when juggling work and home responsibilities.

The organization must clarify the employee role when working from home, especially during this pandemic. They need to be informed of the expectation of the company, the goals they must achieve, the duties they need to perform, how the duties are being scheduled, and how their performance will be evaluated (García-González et al., 2020). Finally, it is believed that conducting this research can assist working mothers in adapting to home as a workplace ergonomically, physically, and mentally as a top priority. As the number of working women in the workplace is increasing in many sectors, the organization should strengthen the working mother's resources, such as developing emotional skills and encouraging healthy habits by developing and implementing a systematic approach to help them thrive during the pandemic and beyond.

9. Conclusion

To summarize, ODL can provide numerous benefits to both educators and students. Regarding their responsibility in balancing work and family responsibilities, it is critical to identify working mothers' stress levels and assess the relationship between stress and well-being in dealing with ODL. The organization needs them to continue contributing effectively to organizational goals without jeopardizing their role as mothers while working at home. This aided in gaining insight for working mothers to support them. On the other hand, working mothers require a high degree of flexibility in controlling their time and life due to office work, home responsibility, and childcare. Therefore, working mothers must have good control over their time and lives; otherwise, they will suffer from a high stress level, affecting their well-being. In addition, working mothers require strong support from their families as well as their employers. They must also manage their time effectively and have stress-coping strategies to have a positive, enjoyable, and desirable ODL learning experience.

References

- Abdullah, R., Jahan, S., & Saha, S. (2008). Occupational stress, social and family difficulties and job contentment of working women: Bangladesh perspective. *Journal Business Economic*, 3, 139-153.
- AlAteeq, D., Aljhani, S., & AlEsa, D. (2020). Perceived stress among students in virtual classrooms during the COVID-19 outbreak in KSA. *Journal of Taibah University Medical Sciences*, 15(5), 398-403. <https://doi.org/10.1016/j.jtumed.2020.07.004>
- Al-Baadani, A. A., & Abbas, M. (2020). The impact of coronavirus (Covid19) pandemic on higher education institutions (HEIs) in Yemen: Challenges and recommendations for the future. *Eur. J. Educ. Stud*, 7. <https://doi.org/10.46827/ejes.v7i7.3152>

- Al-Fudail, M., & Mellar, H. (2008). Investigating teacher stress when using technology. *Computers & Education*, 51(3), 1103–1110. <https://doi.org/10.1016/j.compedu.2007.11.004>
- Algahtani, A. F. (2011). *Evaluating the effectiveness of the e-learning experience in some universities in Saudi Arabia from male students' perceptions*. Durham theses, Durham University. <http://etheses.dur.ac.uk/3215/>
- Al-Hussami, M. (2008). A study of nurses' job satisfaction: The relationship to organizational commitment, perceived organizational support, transactional leadership, transformational leadership, and level of education. *European Journal of Scientific Research*, 22(2), 286–295.
- Aly, H. M., Nemr, N. A., Kishk, R. M., & bakr Elsaid, N. M. A. (2021). Stress, anxiety and depression among healthcare workers facing COVID-19 pandemic in Egypt: a cross-sectional online-based study. *BMJ open*, 11(4), e045281. <https://doi.org/10.1136/bmjopen-2020-045281>
- Arham, A. F., Norizan, N. S., Ridzuan, A. R., Alwi, S. N. N. N., & Arham, A. F. (2019). Work-life conflicts among women in Malaysia: A Preliminary Study. *International Journal of Academic Research in Business and Social Sciences*, 9(9), 614–623. <https://doi.org/10.6007/IJARBSS/v9-i9/6337>
- Azman, N., & Abdullah, D. (2021). A critical analysis of Malaysian higher education institutions' response towards Covid-19: sustaining academic program delivery. *Journal of Sustainability Science and Management*, 16(1), 70-96. <https://doi.org/10.46754/jssm.2021.01.008>
- Bates, A. W. (1995). *Technology, open learning and distance education*. Routledge.
- Becker, S., Bryman, A., & Ferguson, H. (Eds.). (2012). *Understanding research for social policy and social work: themes, methods and approaches*. Bristol University Press. <https://doi.org/10.2307/j.ctt1t892hf>
- Berrios-Colon, E., Huggins, C., Soliman, S., Senhaji-Tomza, B., & Hidayat, L. (2020). A pilot assessment on perceived stress among working pharmacist moms. *Journal of the American Pharmacists Association*, 60(2), 379-383. <https://doi.org/10.1016/j.japh.2019.10.001>
- Bharani, R., Dhivyadharshini, G., Priyanga, A., Iswariya, K., & Joys, J. (2022). A Study on Perceived Stress and Mental Well-Being Among Medical College Students. *Journal of Positive School Psychology*, 6(3), 5746–5752. <https://www.journalppw.com/index.php/jjsp/article/view/3266/2125>
- Bhuvaneshwari, M. (2013). A case study on psychological and physical stress undergone by married working women. *IOSR Journal of Business and Management*, 14(16), 38-44. <https://doi.org/10.9790/487X-1463844>
- Bolger, N., DeLongis, A., Kessler, R. C., & Wethington, E. (1989). The contagion of stress across multiple roles. *Journal of Marriage and the Family*, 51(1), 175-183. <https://doi.org/10.2307/352378>
- Bosch, A. (1997). *Interactive radio for instruction: Twenty three years of improving educational quality. Educational Training Technology Notes Series 2*. Washington, D.C., World Bank.
- Bradley, J., & Yates, C. (Eds.). (2000). *Basic education at a distance, world review of distance education and learning*. Routledge Falmer.
- Carnevale, J. B., & Hatak, I. (2020). Employee adjustment and well-being in the era of COVID-19: Implications for human resource management. *Journal of Business Research*, 116, 183–187. <https://doi.org/10.1016/j.jbusres.2020.05.037>
- Chung, H., Birkett, H., Forbes, S., & Seo, H. (2020). Working from home and the division of housework and childcare among dual earner couples during the pandemic in the UK. <https://doi.org/10.31235/osf.io/4esf7>
- Cohen, S., & Williamson, G. (1988). *Perceived stress in a probability sample of the U.S.* In S. Spacapan, & S. Oskamp, (Eds.), *The social psychology of health: Claremont Symposium on Applied Social Psychology*. Sage.
- Del Boca, D., Oggero, N., Profeta, P., & Rossi, M. (2020). Women's and men's work, housework and childcare, before and during COVID-19. *Review of Economics of the Household*, 18(4), 1001-1017. <https://doi.org/10.1007/s11150-020-09502-1>
- Deloitte. (2020). *Understanding the pandemic's impact on working women: How employers can act now to prevent a setback in achieving gender parity in the workplace*. <https://www2.deloitte.com/global/en/pages/about-deloitte/articles/understanding-the-pandemics-impact-on-working-women.html>
- D'Urso, G., Petruccioli, I., Costantino, V., Zappulla, C., & Pace, U. (2019). The role of moral disengagement and cognitive distortions toward children among sex offenders. *Psychiatry, Psychology and Law*, 26(3), 414–422. <https://doi.org/10.1080/13218719.2018.1506718>

- Duxbury, L., Stevenson, M., & Higgins, C. (2018). Too much to do, too little time: Role overload and stress in a multi-role environment. *International Journal of Stress Management*, 25(3), 250–266. <https://doi.org/10.1037/str0000062>
- Feng, Z., & Savani, K. (2020). Covid-19 created a gender gap in perceived work productivity and job satisfaction: Implications for dual-career parents working from home. *Gender in Management: An International Journal*, 35(7/8), 719-736. <https://doi.org/10.1108/GM-07-2020-0202>
- Gadermann, A. C., Thomson, K. C., Richardson, C. G., Gagné, M., McAuliffe, C., Hirani, S., & Jenkins, E. (2021). Examining the impacts of the COVID-19 pandemic on family mental health in Canada: findings from a national cross-sectional study. *BMJ open*, 11(1), e042871. <https://doi.org/10.1136/bmjopen-2020-042871>
- García-González, M. A., Torrano, F., & Garcia-Gonzalez, G. (2020). Analysis of stress factors for female professors at online universities. *International Journal of Environmental Research and Public Health*, 17(8), 2958. <https://doi.org/10.3390/ijerph17082958>
- Ghosh, S., Nath, J., Agarwal, S., & Nath, A. (2012). Open and distance learning (ODL) education system: past, present and future—a systematic study of an alternative education system. *Journal of Global Research in Computer Science*, 3(4).
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2018). *Advanced Issues in Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Sage.
- Hamilton, S., & Fagot, B. I. (1988). Chronic stress and coping styles: A comparison of male and female undergraduates. *Journal of Personality and Social Psychology*, 55(5), 819–823. <https://doi.org/10.1037/0022-3514.55.5.819>
- Hashmi, H. A. (2007). Marital Adjustment, Stress and Depression among Working and Non-Working Married Women. *Internet Journal of Medical Update*, 2(1), 17-24. <https://doi.org/10.4314/ijmu.v2i1.39843>
- Henderson, M., Glozier, N., & Elliott, K. H. (2005). Long term sickness absence. *BMJ*, 330, 802-803. <https://doi.org/10.1136/bmj.330.7495.802>
- Jalli, N. (2020). *Commentary: E-learning sees no smooth sailing in Malaysia and Indonesia*. <https://www.channelnewsasia.com/news/commentary/coronavirus-covid-19-malaysia-indonesiaschool-e-learning-online-12616944>
- Kermane, M. M. (2016). A psychological study on stress among employed women and housewives and its management through progressive muscular relaxation technique (PMRT) and mindfulness breathing, Kermane. *Journal of Psychology & Psychotherapy*, 6(1), 244.
- Keyes, C. L. M. (2005). Mental illness and/or mental health? Investigating axioms of the complete state model of health. *Journal of Consulting and Clinical Psychology*, 73, 539–548. <https://doi.org/10.1037/0022-006X.73.3.539>
- Kyriacou, C. (2010). Teacher stress: Directions for future research. *Educational Review*, 53, 27-35. <https://doi.org/10.1080/00131910120033628>
- Madebo, W. E., Yose, T. T., & Tesfaye, M. S. (2016). Assessment of perceived stress level and associated factors among health science students at debre birehane university, North Shoa Zone of Amhara Region, Ethiopia, Health Care. *Current Reviews*, 4(2), 1-9. <https://doi.org/10.4172/2375-4273.1000166>
- Malik, M., Saidin, N., Abd Wab, R., & Nordin, N. (2020). Investigating the relationship between stress and psychological well-being among foundation students of UiTM. *International Journal of Academic Research in Business and Social Sciences*, 10(14), 93-101. <https://doi.org/10.6007/IJARBS/v10-i14/7366>
- Malik, N. A., & Björkqvist, K. (2021). An evidence-based framework for reducing occupational stress and burnout in Pakistani universities. *Asian Journal of University Education*, 17(1), 19-32. <https://doi.org/10.24191/ajue.v17i1.12623>
- Mat, N. F. C., Edinur, H. A., Razab, M. K. A. A., & Safuan, S. (2020). A single mass gathering resulted in massive transmission of COVID-19 infections in Malaysia with further international spread. *Journal of Travel Medicine*, 27(3), 1–4.
- NST (2020). *Study finds Malaysians' stress levels went up during MCO*. <https://www.nst.com.my/opinion/columnists/2020/07/608039/study-finds-malaysians-stress-levels-went-during-mco>

- Pattanaik, J. K., & Worley, V. B. (2011). *Job expectation, adjustment, and coping mechanisms among women in two police forces in India*. Esquire IPES/DCAF Working Paper No 31. https://www.researchgate.net/publication/228509101_Job_Expectation_Adjustment_and_Coping_Mechanisms_among_Women_in_Two_Police_Forces_in_India
- Perveen, A., Motevalli, S., Hamzah, H., Ramlee, F., Olagoke, S. M., & Othman, A. (2020). Comparison of depression, anxiety, stress, and coping strategies among Malaysian male and female during COVID-19 movement control period. *International Journal of Academic Research in Business and Social Sciences*, 10(7), 487–496. <https://doi.org/10.6007/IJARBS/v10-i7/7451>
- Pithers, R. T., & Soden, R. (1998). Scottish and Australian teacher stress and strain: A comparative study. *British Journal of Educational Psychology*, 68, 269-279. <https://doi.org/10.1111/j.2044-8279.1998.tb01289.x>
- Rampal, L., & Liew, B. S. (2020). Coronavirus disease (COVID-19) pandemic. *Medical Journal of Malaysia*, 75(2), 95–97.
- Rigotti, T., Cuyper, N. D., & Sekiguchi, T. (2020). The corona crisis: What can we learn from earlier studies in applied psychology? *Applied psychology: An international review*, 0(0), 1–6. <https://doi.org/10.1111/apps.12265>
- Schulz, J. (2013). The impact of role conflict, role ambiguity and organizational climate on the job satisfaction of academic staff in research-intensive universities in the UK. *Higher Education Research and Development*, 32(3), 464-478. <https://doi.org/10.1080/07294360.2012.680209>
- Sekaran, U., & Bougie, R. (2009). *Research Methods for Business: A Skill-Building Approach* (5th ed.). John Wiley and Sons Inc.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology an introduction. *American Psychological Association*, 55(1), 5-14. <https://doi.org/10.1037/0003-066X.55.1.5>
- Shepherd-Banigan, M., Bell, J. F., Basu, A., Booth-LaForce, C., & Harris, J. R. (2016). Workplace stress and working from home influence depressive symptoms among employed women with young children. *International Journal of Behavioral Medicine*, 23(1), 102-111. <https://doi.org/10.1007/s12529-015-9482-2>
- Soman, S., & Mohanan, D. (2021). Home-based work and stress in the pandemic period: a case of working women in Kerala. *IIM Ranchi Journal of Management Studies*, 1(2), 160-174. <https://doi.org/10.1108/IRJMS-07-2021-0034>
- Sufian, S. A., Nordin, N. A., Tauji, S. N., & Nasir, K. M. (2020). The impact of COVID-19 on the Malaysian Education System. *International Journal of Academic Research in Progressive Education and Development*, 9(2), 764-774. <https://doi.org/10.6007/IJARPED/v9-i2/7659>
- Sun, W., Wu, H., & Wang, L. (2011). Occupational stress and its related factors among university teachers in China. *Journal of Occupational Health*, 53(4), 280-6. <https://doi.org/10.1539/joh.10-0058-OA>
- Swathi, V., & Reddy, M. S. (2016). Stress among working women: A literature review. *International Journal of Computational Engineering & Management*, 19(4).
- Teles, R., Valle, A., Rodríguez, S., Piñeiro, I., & Regueiro, B. (2020). Perceived stress and indicators of burnout in teachers at Portuguese Higher Education Institutions (HEI). *International Journal Environmental Research Public Health*, 17, 3248. <https://doi.org/10.3390/ijerph17093248>
- Travers, C. J., & Cooper, C. L. (1996). *Teachers under pressure: Stress in the teaching profession*. Routledge.
- Wang, C., & Zhao, H. (2020). The impact of COVID-19 on anxiety in Chinese university students. *Frontiers in Psychology*, 11, 1168. <https://doi.org/10.3389/fpsyg.2020.01168>
- Wood, B., Guimaraes, A., Holm, C., Hayes, S., & Brooks, K. (2020). Academic librarian burnout: A survey using the Copenhagen burnout inventory (CBI). *Journal of Library Administration*, 60(5), 512–531. <https://doi.org/10.1080/01930826.2020.1729622>
- Yahaya, A., Yahaya, N., Arshad, K., Ismail, J., Jaalam, S., & Zakariya, Z. (2009). Occupational stress and its effects towards the organization management. *Journal of Social Sciences*, 5(4), 390-397. <https://doi.org/10.3844/jssp.2009.390.397>