

Determinants of Mental Health among Academicians at Malaysian Public Higher Education Institutions: A Conceptual Paper

Siti Rosnita Sakarji*

*Faculty of Business and Management,
UiTM Cawangan Kelantan, Machang Campus
rosnita507@uitm.edu.my*

Abdul Kadir Othman

*Institute of Business Excellence,
UiTM Cawangan Selangor, Shah Alam Campus*

Ayu Kamareenna Abdullah Thani

*Faculty of Business and Management,
UiTM Cawangan Kelantan, Machang Campus*

Nurhidayah Rosely

*Faculty of Business and Management,
UiTM Cawangan Kelantan, Machang Campus*

Raja Mayang Delima Mohd Beta

*Faculty of Business and Management,
UiTM Cawangan Negeri Sembilan, Seremban Campus*

Nurbarirah Ahmad

*Faculty of Business and Management,
UiTM Cawangan Melaka, Alor Gajah Campus*

Abstract

Purpose: This study aimed to identify the influence of job demands on academicians' mental health in selected public universities in Malaysia.

Findings: This study examined the effects of job demand on academics' mental health in Malaysian public universities using the JD-R model. Given that employee happiness was strongly correlated with mental health, it is crucial to pay a particular attention to how job demands can lead to stressful life events and other detrimental outcomes

Research limitations/implications: This study may bring to the developing guidelines for workload management, implementing mental health support programs, and creating a more supportive work environment. The comparison across institutions can be done and may lead to the interdisciplinary collaboration which can offer comprehensive insights and solutions. However, some research implications and limitations associated with this study such as the sampling bias, self-reported data, as this study is a cross-sectional design and Findings from a specific study may not be fully generalizable to all academicians due to differences in disciplines, institutions, and cultural contexts.

Practical implications: Studying the influence of job demand on the mental health of academicians has several practical implications, both for individuals working in academia and for institutions and policymakers as it increased awareness and self-care among academicians, allowing early intervention implementation, improving workplace policies, reducing stigma, improving employee's productivity, expansion of research in this topic, and many more. It can lead to improved mental well-being, productivity, and the overall quality of education and research in academia.

Originality/value: Focusing on public universities in Malaysia adds a unique contextual dimension to the study. Malaysia has its own educational system, cultural factors, and socioeconomic conditions that can influence job demands and mental health in distinct ways compared to studies conducted in other countries. It can provide insights specific to the Malaysian context, inform policy decisions, enhance the work environment, and ultimately contribute to the well-being of both academicians and students in the Malaysian higher education system.

Keywords: Job demands, mental health, online learning, academicians, sustainable development goal

Introduction

The World Health Organization (WHO) (2022) defined mental health as "a state of mental well-being that enables people to cope with the stresses of life, realize their abilities, learn well and work well, and contribute to their community". Mental health refers to a range of experiences, from excellent mental health to mental disease. Positive mental health is more than the absence of mental disease; it is the presence of congruent abilities, habits, and capacities that allow an individual to effectively adapt to their surroundings (Nicholls et al., 2022). The World Health Organisation projects an 18 million health professional shortage by 2030, primarily in low-and lower-middle-income nations. However, countries at all stages of socioeconomic development encounter varied degrees of difficulty in their workforce education, employment, deployment, retention, and performance (Søvold et al., 2021). In addition to the medical and economic ramifications, it is critical to examine the psychological aspects and factors associated with mental health in the workplace (Giorgi et al., 2020). It has been well proven that the work environment, work organization, and job-related behaviors may all have an impact on workers' mental health and psychological well-being (Giorgi et al., 2020).

According to recent studies, mental health problems are on the rise in Malaysia, particularly in the tertiary education sector (Chan et al, 2021; Halat, 2023; Idris et al, 2021; Kinman and Johnson, 2019; Mohamed et al, 2021). Higher incidences of mental health problems such as anxiety, stress, and depression among academicians have lately garnered attention from researchers and scholars and have been recorded abroad. Mental health issues are on the rise in the Asia Pacific region. Certain mental disorders and diseases are growing increasingly widespread and severe, particularly in emerging countries such as Japan, Korea, Malaysia, Singapore, and Thailand (Ministry of Health, 2020). Academicians' exposure to work stress is growing in both developed and developing nations. The role entails not just teaching but also research, publications, consultancy, and administrative duties (Hashim and Arma, 2016). The range of tasks and obligations assigned to public tertiary education staff personnel has resulted in an imbalance of work and life interaction, which has harmed their mental health (Panatik et al., 2022). Academicians are responsible for teaching and supervising students, doing research, managing academic affairs, and participating in community service.

Depression, anxiety, and stress were also found to be experienced by academicians at low and moderate levels (Suhaimi & Nasrudin, 2018).

The government's goal is to focus mental health promotion and prevention on adolescents and their parents to reduce mental health problems in Malaysia. This is in line with the National Strategic Plan for Mental Health (2020-2025), which has four main sections and eight strategies, including strengthening the mental health surveillance system and ensuring the availability and accessibility of comprehensive and quality mental health care. As a result, by identifying the factors impacting mental health among Malaysian academicians, this study will supplement previous research and fill a gap in the literature. Job demand is frequently proven to be a burden on employees' health, well-being, productivity, motivation, and job performance. The goal of this study is to examine the influence of three identified job demands: workload, role conflict, and work-life imbalance on mental health among academicians at public universities in Malaysia, using the well-known theory of Job Demand-Resource Model, which postulates a health impairment process and a motivational process.

Literature Review

Academicians' Mental Health

Prior to the global expansion, there was awareness of the rising and more complicated demands imposed on academicians. Wray and Kinman (2021), who have been tracking demands on academic-related university staff for more than 15 years, discovered a gradual increase to the point where it signals an "urgent need for action." According to research conducted in Australia and New Zealand (Lee et al., 2021; Tham & Holland, 2018), more education is associated with higher stress levels. Academicians are exposed to higher demands (e.g., workload pressure, long working hours, and role stress), low resources (e.g., control and support), and orientations towards the job (e.g., high involvement and overcommitment), making the presenteeism rate among them increased (Kinman & Wray, 2022). Despite the importance of the academic profession to higher education and its role as the backbone and asset of any institution, a limited systematic assessment of burnout in university teaching faculties has been identified (Henny et al., 2014).

Academicians in Malaysia have been the subject of several studies. Local data further supported the severity of academician burnout, and current trends suggest that Malaysia's research universities have a higher rate of burnout than private institutions (Shaiful et al., 2018). The growth of academic achievement and the dissemination of optimal quality of life depends on the academicians and students of academic institutions maintaining health in all facets of life. Yet, the participation of Malaysian academics in teaching, consultation, supervision, research, and publication activities is challenging (Che Nawi et al., 2016; Ismail & Noor, 2016).

Moreover, academicians are currently under more pressure than ever as Malaysian universities aspire to become top-tier research institutions, which makes them more susceptible to burnout. In another study, the finding indicated that the prevalence of burnout was found to be relatively higher among females than males and there was a significant statistical association found between gender and burnout (Bottiani et al., 2019b). It is supported by other researchers who highlighted that burnout has been identified as a grave public health issue in the tertiary education industry. University academicians are struggling to engage in teaching, supervision, research and publication, and many other tasks. The multi-sectoral comparison showed that the education sector had the highest ratings for burnout and the incidence of occupational stress (Kassim et al., 2020).

Job Demand-Resources Theory

According to the JD-R theory, job demands, and job resources are the two components that make up a job's characteristics, regardless of the occupation (Bakker & Demerouti, 2007; Demerouti et al., 2001). Job demands reflect the elements of the job that demand effort from people, such as work overload and role conflict, which are directly related to physical and/or mental costs (Demerouti et al., 2001). According to the JD-R theory, job demands, and job resources instigate two processes: a health impairment process and a motivational process (Rodríguez-Muñoz et al., 2014). In the health impairment process, chronic job demands exhaust employees' mental and physical resources and may lead to energy depletion (i.e., a state of exhaustion) and health problems. In the motivational process, it is assumed that job resources have motivational potential and lead to high work engagement, low cynicism, and excellent performance. The job demands-resources (JD-R) theory (Bakker & Demerouti, 2017) serves as the conceptual framework for this study since the model is suitable to explain how the experiences of academicians are individually and collectively associated with well-being outcomes. The JD-R hypothesis directly considers one of the well-being outcomes examined here (mental health) as an indicator of employees' well-being outcome (Bakker & Demerouti, 2017).

Workload and Mental Health

According to the literature, there is a strong connection between work overload and mental health (Cohen-Fraade & Donahue, 2022). It was discovered that the percentage of people in the teaching profession who have mental health issues is greater than that of the general population (Cohen-Fraade & Donahue, 2022; Truzoli et al., 2021). According to earlier studies, academicians' high levels of stress are mostly caused by their heavy workloads (MacIntyre et al., 2020). Academicians are given heavy workloads and ever more administrative obligations, with or without additional compensation, according to research by Pace et al. (2021). The researchers emphasized that, in modern higher education institutions, professors' mental health is a significant risk factor for occupational stress.

Conceptual Framework and Hypothesis Development

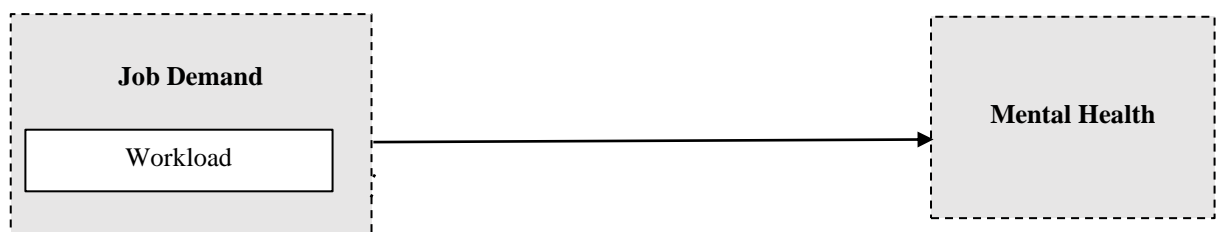


Figure 1: Conceptual Framework

Based on the previous considerations and the JD-R model assumptions, the following hypothesis was formulated:

H1: Workload has a significant influence on academics' mental health.

Discussion and Conclusion

This study examined the effects of job demand on academicians' mental health in Malaysian public universities using the JD-R model. Given that employee happiness was strongly correlated with mental health, it is crucial to pay particular attention to how job demands can lead to stressful life events and other detrimental outcomes. Academicians frequently handle a variety of duties, including teaching, research, and service, which can lead to a high workload. All these elements may result in a high workload and lengthy workweeks, which may negatively impact one's ability to manage work and personal life. When a person is asked to execute numerous roles that have various performance criteria or demand various behaviors, role conflict results. Therefore, organizations must first look at the factors that affect academicians' mental health if they hope to implement effective initiatives to stop this occurrence.

However, the local educational authorities can use the findings of this study's follow-up research to improve and expand their current programs. If the proposed predictions are correct, the empirical evidence demonstrating the JD-R model's applicability as a new mental health-specific diagnosis would be strengthened, giving academicians greater assurance in identifying and treating mental health issues that can hurt the academician's career. Despite these issues, the study's depth advances the body of knowledge on academicians' mental health and its contributing factors. Therefore, further studies are warranted to investigate the influence of job demands on employees' mental health in education sectors as it is important for individuals, society, and national development.

Co-Author Contribution

There is no conflict of interest in this article. The fieldwork was completed, a literature review was written, and the entire paper was written by authors 1 and 2. Author 3 wrote the section on research methodology and will key in the data. Together, authors 4 and 5 will do the statistical analysis, assess the findings, and write the conclusions and suggestions based on the findings.

Acknowledgments

The authors have cordially valued the support and encouragement received from Universiti Teknologi MARA Kelantan, Shah Alam, Negeri Sembilan and Melaka Campus. The authors appreciate the dedication and perseverance of team members in making sure this publication becomes a reality.

References

- Baker, C. N., Peele, H., Daniels, M., Saybe, M., Whalen, K., Overstreet, S., & The New Orleans, T. I. S. L. C. (2021). The experience of COVID-19 and its impact on teachers' mental health, coping, and teaching. *School Psychology Review*, 50(4), 491–504. <https://doi.org/10.1080/2372966X.2020.1855473>
- Bakker, A. B., & de Vries, J. D. (2021). Job Demands–Resources theory and self-regulation: new explanations and remedies for job burnout. *Anxiety, Stress and Coping*, 34(1), 1–21. <https://doi.org/10.1080/10615806.2020.1797695>
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Boström, M., Björklund, C., Bergström, G., Nybergh, L., Elinder, L. S., Stigmar, K., Wåhlin, C., Jensen, I., & Kwak, L. (2020). Health and work environment among female and male Swedish elementary school teachers—A cross-sectional study. *International Journal of Environmental Research and Public Health*, 17(1), 1–17. <https://doi.org/10.3390/ijerph17010227>
- Bottiani, J. H., Duran, C. A. K., Pas, E. T., & Bradshaw, C. P. (2019a). Teacher stress and burnout in urban middle schools: Associations with job demands, resources, and effective classroom practices. *Journal of School Psychology*, 77(October), 36–51. <https://doi.org/10.1016/j.jsp.2019.10.002>
- Bottiani, J. H., Duran, C. A. K., Pas, E. T., & Bradshaw, C. P. (2019b). Teacher stress and burnout in urban middle schools: Associations with job demands, resources, and effective classroom practices. *Journal of School Psychology*, 77, 36–51. <https://doi.org/10.1016/j.jsp.2019.10.002>
- Burić, I., & Kim, L. E. (2020). Teacher self-efficacy, instructional quality, and student motivational beliefs: An multilevel structural equation modeling analysis. *Learning and Instruction*, 101302. <https://doi.org/10.1016/j.learninstruc.2019.101302>
- Burke, R. J., & Greenglass, E. R. (2001). Hospital restructuring, work-family conflict and psychological burnout among nursing staff. *Psychology & Health*, 16(5), 583-594.
- Burke, R. J., & Greenglass, E. (1993). Work stress, role conflict, social support, and psychological burnout among teachers. *Psychological Reports*, 73(2), 371–380. <https://doi.org/10.2466/pr0.1993.73.2.371>
- Chan, C. M. H., Ng, S. L., In, S., Wee, L. H., & Siau, C. S. (2021). Predictors of psychological distress and mental health resource utilization among employees in Malaysia. *International journal of environmental research and public health*, 18(1), 314.
- Che Nawi, N., Ismail, M., Ibrahim, M. A. H., Raston, N. A., Zamzamin, Z. Z., & Jaini, A. (2016). Job satisfaction among academic and non-academic staff in public universities in Malaysia: A review. *International Journal of Business and Management*, 11(9), 148. <https://doi.org/10.5539/ijbm.v11n9p148>
- Chirico, F., Sharma, M., Zaffina, S., & Magnavita, N. (2020). Spirituality and prayer on teacher stress and burnout in an italian cohort: A pilot, before-after controlled study. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02933>
- Cohen-Fraade, S., & Donahue, M. (2022). The impact of COVID-19 on teachers' mental health. *Journal for Multicultural Education*, 16(1), 18–29. <https://doi.org/10.1108/JME-08-2021-0131>
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512.

- Dicke, T., Stebner, F., Linninger, C., Kunter, M., & Leutner, D. (2018). A longitudinal study of teachers' occupational well-being: Applying the job demands-resources model. *Journal of Occupational Health Psychology, 23*(2), 262–277. <https://doi.org/10.1037/ocp0000070>
- Fiorilli, C., Benevene, P., De Stasio, S., Buonomo, I., Romano, L., Pepe, A., & Addimando, L. (2019). Teachers' burnout: The role of trait emotional intelligence and social support. *Frontiers in Psychology, 10*. <https://doi.org/10.3389/fpsyg.2019.02743>
- Freire, T., & Ferreira, G. (2018). Health-related quality of life of adolescents: Relations with positive and negative psychological dimensions. *International Journal of Adolescence and Youth, 23*(1), 11–24. <https://doi.org/10.1080/02673843.2016.1262268>
- Giorgi, G., Lecca, L. I., Alessio, F., Finstad, G. L., Bondanini, G., Lulli, L. G., ... & Mucci, N. (2020). COVID-19-related mental health effects in the workplace: a narrative review. *International journal of environmental research and public health, 17*(21), 7857.
- Giorgi, G.; Lecca, L.I.; Leon-Perez, J.M.; Pignata, S.; Topa, G.; Mucci, N. Emerging Issues in Occupational Disease: Mental Health in the Aging Working Population and Cognitive Impairment—A Narrative Review. *Biomed Res. Int.* 2020, 2020, 1742123.
- Henny, J., Anita, A. R., Hayati, K. S., & Rampal, L. (2014). Prevalence of burnout and its associated factors among faculty academicians. *Malaysian Journal of Medicine and Health Sciences, 10*(1), 51–59.
- Idris, F., Zulkipli, I. N., Abdul-Mumin, K. H., Ahmad, S. R., Mitha, S., Rahman, H. A., ... & Naing, L. (2021). Academic experiences, physical and mental health impact of COVID-19 pandemic on students and lecturers in health care education. *BMC medical education, 21*, 1-13.
- Isa, K., Hanim, W., Wan, N., Paim, L., Alavi, K., & Shah, J. (2021). Kelaziman punca tekanan pensyarah di universiti awam Malaysia. *E-BANGI: Jurnal Sains Sosial Dan Kemanusiaan, 18*(SI) (2), 84–97.
- Ismail, N. H., & Noor, A. (2016). Occupational stress and its associated factors among academicians. *Malaysian Journal of Public Health Medicine, 16*(1), 81–91.
- Karkkola, P., Kuittinen, M., & Hintsala, T. (2019). Role clarity, role conflict, and vitality at work: The role of the basic needs. *Scandinavian Journal of Psychology, 60*(5), 456–463. <https://doi.org/10.1111/sjop.12550>
- Kassim, M. S. A., Ismail, R., Mohd Yusoff, H., & Ismail, N. H. (2020). How do academicians cope with occupational stressors to alleviate burnout? The experience of a research university. *Journal of Public Mental Health, 19*(1), 35–45. <https://doi.org/10.1108/JPMH-03-2019-0032>
- Kinman, G., & Wray, S. (2022). Better than watching daytime TV: sickness presenteeism in UK academics. *Studies in Higher Education, 47*(8), 1724–1735. <https://doi.org/10.1080/03075079.2021.1957813>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*(3), 607–610. <https://doi.org/10.1177/001316447003000308>
- Li, Y., Li, Y., & Castaño, G. (2020a). The impact of teaching-research conflict on job burnout among university teachers: An integrated model. *International Journal of Conflict Management, 31*(1), 76–90. <https://doi.org/10.1108/IJCMA-05-2019-0080>
- Li, Y., Li, Y., & Castaño, G. (2020b). The impact of teaching-research conflict on job burnout among university teachers: An integrated model. *International Journal of Conflict Management, 31*(1), 76–90. <https://doi.org/10.1108/IJCMA-05-2019-0080>

- MacIntyre, P. D., Gregersen, T., & Mercer, S. (2020). Language teachers' coping strategies during the Covid-19 conversion to online teaching: Correlations with stress, wellbeing, and negative emotions. *The System*, 94. <https://doi.org/10.1016/j.system.2020.102352>
- Mohamed, S., Nikmat, A., Hashim, N. A., Shuib, N., & Raduan, N. J. N. (2021). Burnout and Its Relationship to Psychological Distress and Job Satisfaction among Academicians and Non-Academicians in Malaysia. *International Journal of Higher Education*, 10(1), 85-92.
- Miguel, C., Castro, L., Marques dos Santos, J. P., Serrão, C., & Duarte, I. (2021). Impact of COVID-19 on medicine lecturers' mental health and emergency remote teaching challenges. *International Journal of Environmental Research and Public Health*, 18(13), 6792-6810.
- Minihan, E., Adamis, D., Dunleavy, M., Martin, A., Gavin, B., & McNicholas, F. (2022). International Journal of Educational Research Open COVID-19 related occupational stress in teachers in Ireland. *International Journal of Educational Research Open*, 3(December 2021), 100114. <https://doi.org/10.1016/j.ijedro.2021.100114>
- Montgomery, A. J., Peeters, M. C. W., Schaufeli, W. B., & Ouden, M. Den. (2003). Work-home interference among newspaper managers: Its relationship with burnout and engagement. *Anxiety, Stress & Coping*, 16(2), 195–211. <https://doi.org/10.1080/10615806.2003.10382973>
- Mukosolu, O., Ibrahim, F., Rampal, L., & Ibrahim, N. (2015). Prevalence of job stress and its associated factors among Universiti Putra Malaysia staff. *Malaysian Journal of Medicine and Health Sciences*, 11(1), 27–38.
- Mweshi, G. K., & Sakyi, K. (2020). Application of sampling methods for the research design. *Archives of Business Research*, 8(11), 180–193. <https://doi.org/10.14738/abr.811.9042>
- Newton, J., & Megan, S. (2020). Relationships between burnout, turnover intention, job satisfaction, job demands, and job resources for mental health personnel in an Australian mental health service. *BMC Health Services Research*, 19(1), 1–11. <https://bmchealthservres.biomedcentral.com/articles/10.1186/s12913-018-3841-z>
- Nicholls, H., Nicholls, M., Tekin, S., Lamb, D., & Billings, J. (2022). The impact of working in academia on researchers' mental health and well-being: A systematic review and qualitative meta-synthesis. *Plos One*, 17(5), e0268890. <https://doi.org/10.1371/journal.pone.0268890>
- Pace, F., D'Urso, G., Zappulla, C., & Pace, U. (2021). The relation between workload and personal well-being among university professors. *Current Psychology*, 40(7), 3417–3424. <https://doi.org/10.1007/s12144-019-00294-x>
- Pogere, E. F., López-Sangil, M. C., García-Señorán, M. M., & González, A. (2019). Teachers' job stressors and coping strategies: Their structural relationships with emotional exhaustion and autonomy support. *Teaching and Teacher Education*, 85, 269–280. <https://doi.org/10.1016/j.tate.2019.07.001>
- Prado-Gascó, V., Gómez-Domínguez, M. T., Soto-Rubio, A., Díaz-Rodríguez, L., & Navarro-Mateu, D. (2020). Stay at home and teach: A comparative study of psychosocial risks between Spain and Mexico during the Pandemic. *Frontiers in Psychology*, 11(September), 1–12. <https://doi.org/10.3389/fpsyg.2020.566900>
- Ratanasiripong, P., Ratanasiripong, N. T., Nungdanjark, W., Thongthammarat, Y., & Toyama, S. (2022). Mental health and burnout among teachers in Thailand. *Journal of Health Research*, 36(3), 404–416. <https://doi.org/10.1108/JHR-05-2020-0181>

- Razami, H. H., & Ibrahim, R. (2021). Distance education during COVID-19 Pandemic: The perceptions and preference of university students in Malaysia towards online learning. *International Journal of Advanced Computer Science and Applications*, 12(4), 118–126. <https://doi.org/10.14569/IJACSA.2021.0120416>
- Rembli, S. N. A., Ripain, N., & Abdul Ghani, M. (2020). Tekanan pekerjaan dan kesehatan mental guru. *Proceedings of the 7 Th International Conference on Management and Muamalah 2020 (ICoMM 2020)*, 2020(ICoMM), 412–419.
- Rodríguez-Muñoz, A., Sanz-Vergel, A. I., Demerouti, E., & Bakker, A. B. (2014). Engaged at work and happy at home: A spillover–crossover model. *Journal of Happiness Studies*, 15(2), 271–283. <https://doi.org/10.1007/s10902-013-9421-3>
- Sandmeier, A., Baeriswyl, S., Krause, A., & Muehlhausen, J. (2022). Work until you drop: Effects of work overload, prolonging working hours, and autonomy need satisfaction on exhaustion in teachers. *Teaching and Teacher Education*, 118, 103843. <https://doi.org/10.1016/j.tate.2022.103843>
- Shaiful, M., Kassim, A. Bin, Ismail, A., & Ismail, R. (2018). A review of occupational stress prevalence and its predictors among selected working populations in Malaysia. *Malaysian Journal of Public Health Medicine*, 18(2), 1–6.
- Skaalvik, E. M., & Skaalvik, S. (2020). Teacher burnout: relations between dimensions of burnout, perceived school context, job satisfaction and motivation for teaching. A longitudinal study. *Teachers and Teaching: Theory and Practice*, 26(7–8), 602–616. <https://doi.org/10.1080/13540602.2021.1913404>
- Søvdold, L. E., Naslund, J. A., Kousoulis, A. A., Saxena, S., Qoronfleh, M. W., Grobler, C., & Münter, L. (2021). Prioritizing the mental health and well-being of healthcare workers: an urgent global public health priority. *Frontiers in public health*, 9, 679397.
- Sutarto, A. P. (2021). Work from home: Indonesian employees ' mental well-being and productivity during the COVID-19 pandemic. <https://doi.org/10.1108/IJWHM-08-2020-0152>
- Truzoli, R., Pirola, V., & Conte, S. (2021). The impact of risk and protective factors on online teaching experience in high school Italian teachers during the COVID-19 pandemic. *Journal of Computer Assisted Learning*, 37(4), 940–952. <https://doi.org/10.1111/jcal.12533>
- Tuah, N. H., & Mohammad, W. M. R. (2023). Kesan tekanan terhadap kesehatan mental guru Bahasa Melayu sekolah rendah luar bandar selepas pandemik COVID-19 (The impact of stress on the mental health of rural primary school Malay Language teachers after the COVID-19 pandemic). *Jurnal Dunia Pendidikan*, 5(1), 98-112.
- Vital-López, L., García-García, R., Rodríguez-Reséndiz, J., Paredes-García, W. J., Zamora-Antuñano, M. A., Oluyomi-Elufisan, T., ... & Cruz-Pérez, M. A. (2022). The impacts of COVID-19 on technological and polytechnic university teachers. *Sustainability*, 14(8), 4593-4620.
- Woranetipo, S., & Chavanovanich, J. (2021). Three-way interactions of workload, social support and coping strategy on job burnout. *Journal of Behavioral Science*, 16(1), 58–72.
- Xu, L. (2019). Teacher–researcher role conflict and burnout among Chinese university teachers: a job demand-resources model perspective. *Studies in Higher Education*, 44(6), 903–919. <https://doi.org/10.1080/03075079.2017.1399261>
- World mental health report: Transforming mental health for All. Geneva: World Health Organization; 2022. License: CC BY-NC-SA 3.0 IGO.