

The Effect of Work from Home on Adaptive Performance and Moderated by Humble Leadership

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Abstract

The Covid-19 pandemic has changed the norms of daily life for individuals around the world. This change causes employees to work from home (WFH). This new norm has opened up the landscape for the advantages of WFH and adapting oneself in performing tasks. In addition to the advantages of WFH, and leadership style and work autonomy also have the potential to assist employees to adapt the flexible work environment. Therefore, the purpose of the study is to examine the effect of WFH on adaptive performance among employees in Malaysia. This study examined the effects of humble leadership, and its moderating effects on the association between WFH and employees' adaptive performance. The field study was conducted in Malaysia among public and private sector employees and total 200 participants were approached. The Partial Least Square (PLS) technique was used to test the hypothesized relationships among variables. The results of this study indicated that the WFH and humble leadership influenced adaptive performance and employees who perceived high humble leadership strengthen the relationship between WFH and adaptive performance. The study sheds new light on the advantages of WFH and humble leadership on adaptive performance. The theoretical and practical implications are discussed.

Keywords: Work from Home (WFH), Adaptive Performance, Humble Leadership, Public and Private Sector, Malaysia, PLS

Introduction

The Movement Control Order (MCO) following the Covid-19 pandemic has created change in the working environment. Most organisations have launched into the Work from Home concept (WFH) to ensure the sustainability of the organisation's operations. Despite its novelty in Malaysia, it has actually been practised in several countries. In the United States, the population of employees working from home, spending at least 50 percent from the total working hours has increased from 1.8 million in 2005 to 3.9 million in 2017 (Wang et al. 2021). The new norm in the

occupational structure has left an impact on the organisation's operations, management and administration. Initially, there was a series of challenges and problems faced by employers and employees in facing the phase of WFH as the structure of WFH is different from working at the office. Adaptation to the use of the new technology, time and working environment among employees is crucial (Singh et al 2020). However, in time, the concept of WFH has become ordinary to them (Wang et al. 2021).

Malaysia has entered the transition phase of endemic in April 2022 and the working environment has reverted to the culture of working in the office physically (Astro Awani 2022). A study conducted by the United Nations Development Program (UNDP) and Talent Corporation Malaysia (TalentCorp) reveals that 80% of workers in Malaysia still go for WFH, with half of them showing preference to do so for at least three days a week (TalentCorp & UNDP 2021). In line with this demand, the Malaysian government has taken some positive steps by including Flexible Working Arrangement (FWA) in the 1955 Work Act (Revised in 2022) effective September 2022. Employees in this country are allowed to apply to their respective employers and refer to them the suitable time, day, and location to work including WFH.

Nonetheless, the application of the Act has to be delayed until January 2023 after taking into account the pleas made by the employers that most of the organisations are still reeling from the economic downturn, and are now in the recovery process (Berita Harian 2022). Additionally, organisations have to make very systematic planning and readiness in terms of the work structure design, infrastructure, as well as employees' mental and physical states when using the technology and their convenience in accessing information (Molino, Ingusci & Signore 2020; Wang et al. 2021). Organisations also lack the preparation and confidence that WFH can increase the overall organisation's performance (Nornadia 2020).

Apart from the organisation, employees also have to increase their capability in adapting to the structure of WFH. Employees' excellence in adapting to the new working environment can be measured by the adaptive performance (Park & Park 2019). Adaptive performance is interpreted as an individual's capability to adapt to a dynamic situation at work (Charbonnier-Voirin & Roussel 2012). They will achieve adaptive performance when they can adapt their behaviour to the requirements from the new working situation. (Pulakos et al. 2000). In support of employees' capabilities to adapt to the WFH structure, it also necessitates a basic mechanism such humble leadership as the moderator. Humble leadership, also termed 'down-up' leadership (Zhou & Wu 2018) is a leadership style that leans support to the employees (Zhu et al. 2019). Thus, the objective of this study is to empirically prove that WFH can increase one's adaptive performance by testing directly the relationship between WFH and the adaptive performance, and the role of humble leaders and work autonomy as the moderator to this relationship.

Literature Review and Hypotheses Development

Work from Home (WFH) and Adaptive Performance

The concept of Flexible Working Arrangement (FWA) in terms of the time, location and the day was first introduced in the 1970s, and known as remote work or telecommuting (Garrett & Danziger 2007). This concept is a new alternative in the execution of work from different locations using technological aid (van Meel 2011). WFH has the potential to stay as the new work structure, despite the transition that takes place from the pandemic to the endemic phase. Thus, employees have to strive to adapt themselves to this work structure. According to Pulakos et al. (2000), employees need to be smart enough to acclimatise themselves to the rapid development of the technology, the affiliation of organisation and the restructuring (Shoss et al. 2011). This is to ensure employees' efficiency in responding to the work change effectively (Griffin & Hesketh 2003; Shoss et al. 2011). Realising the importance of the adaptability and the level of capability of the employees to adapt to the change in the work environment, researcher discussed the issue of employees' adaptive performance in their studies (Hongden 2021). Adaptive performance is a subset to work performance and it is defined as the behaviour that shows the capability to face any change (Allworth & Hesketh 1999).

Past studies have identified several positive impacts of flexible work or WFH. WFH gets to motivate the employees and increase the employees' work-life balance (Bellmann & Hubler 2020; Prasetyaningtyas et al. 2021). Work-life balance on the other hand, is able to increase work performance as employees are able to reduce the conflict between work and life, and they are able to focus on work better (Lingard et al. 2007). Also, WFH gives a positive impact to work satisfaction (Mohite & Kulkarni 2019; Prasad et al. 2020). The flexibility in choosing work hours can also determine employees' work satisfaction. (Davidescu et al., 2020), and further increase work performance (da Cruz Carvalho, Riana

& Soares 2020). The concept of WFH leans on the use of digital technology where most of the work is carried out and completed virtually using digitalisation and the Internet. The digital use during WFH requires employees to adapt to the work change and learn digital skills in carrying out their duties (Okkonen et al. 2019). The excellence of the employees in familiarising themselves to the digital technology in work affairs can be measured using adaptive performance (Park & Park 2019).

Hypothesis 1: Work from home (WFH) is positively related to adaptive performance

Humble Leadership as Moderator

The past literature on the change in organisation tends to emphasise more on leadership style as leaders act as the agent of change and become the role-model to their employees (With & Hongden 2021). The leader does not only give motivation and support to the employees so that they can undergo the process of change effectively (With & Hongden 2021), but he also helps employees grow and give great performance (Daft, 2014). The humble leadership style has attracted the attention of leadership scholars where it is seen as an effective modern leadership style to employees in functioning as an individual and as a team. Humble leadership is conceptualised as the humble attitude of leaders when interacting with their employees (Owens et al., 2013; Rego et al., 2017). Leader's humble attitude reflects his transparent personality, that he appreciates the contribution and expresses openness towards the employees' ideas (Owens et al. 2013). The empirical study outcome stresses on the inculcation and practice of humble leadership that can give some positive impacts and benefits towards the employees' wellbeing (Zhong et al. 2020) and develop employees' positive personal qualities (Rego et al. 2017). Humble leadership can also increase the resilience, work concentration and togetherness among the employees (Zhu et al. 2019). Such an attitude can contribute to improved employees' work performance, work satisfaction, involvement (Owens et al. 2013, Zhong et al. 2020) and influence their innovative behaviour (Zhou & Wu 2018).

Hypothesis 2: Humble leadership is positively related to adaptive performance.

The change in the work structure from traditional to flexible work arrangement or WFH is not an easy process of adaptation to the employees (Ipsen, Kirchner & Hansen (2020). The uncertainty during the change process increases the dependency of the employees with one another and requires the support from the leaders of the organisation (Ye 2019). Thus, leader's capability would be pivotal, as it can convince the employees in facing any changes that happen in the organisation. The importance of the support by humble leaders is proven empirically in several studies as the moderating variable that strengthens the relationship between intrinsic motivation and knowledge sharing (Al-Hawamdeh 2022) and positively moderates the direct relationship between the strength use and self-efficacy, and the indirect relationship between the strength used by thriving through self-efficacy (Ding & Chu 2020). Thus, this study expects that the humble leadership is a mechanism that consolidates the relationship between WFH and adaptive performance.

Hypothesis 3: Humble leadership will moderate the relationship between work from home (WFH) and adaptive performance

The role of humble leadership as the moderator in the relationship between WFH dan adaptive performance leans on the self-determination theory. This theory is a human motivation macro theory that has been able to be adopted across various fields including work motivation and management theories (Deci & Ryan

1985). This self-determination theory emphasises on the fact that employee performance is influenced by the motivation they have when they are working. Motivation tends to be in order when employees feel the fun and satisfaction when they are completing their tasks (Ryan et al. 2009). In this study, when employees gain the support from their humble leader, they will have the spirit and energy to do their work although there is a change in the work environment. According to this theory, the motivation is catalytic to the positive work outcome (Deci, Ryan & Olafsen 2017). Thus, the self-determination theory will justify how the humble leadership style motivates employees during WFH and how this can further increase their adaptive performance.

Research Framework

The aim of this research is to examine the relationship between WFH and adaptive performance and moderated by humble leadership. Figure 1 illustrates the proposed research framework.

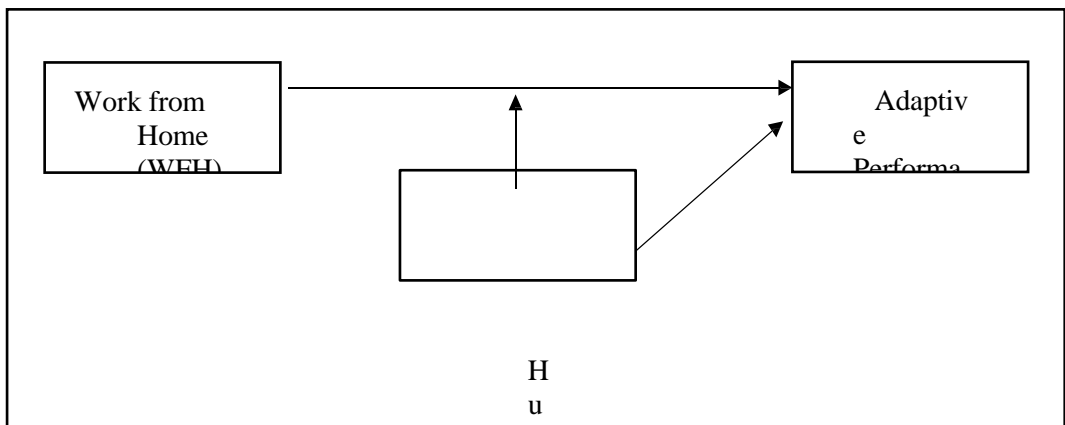


Figure 1. Research Framework

Research Methodology

Sampling and Procedures

This study has employed the quantitative approach to test the hypotheses that have been constructed based on the objectives of the study. The population of the study is employees who are working both in the public and private sectors in Klang Valley, Malaysia. Total sets of 200 questionnaires were distributed and responded. This sample size is also suitable for the use of PLS-SEM in analysing the data (Wolf et al. 2013). This study is survey research which employed self-governed questionnaire method. Questionnaire forms were distributed to employees using the simple sampling technique and the survey were conducted online using a Google Form. Majority of the respondents are female 58.5%. Meanwhile, 49.2% of respondents are

between the ages of 31 to 40 and dominated by Malay (92.5%). In terms of education, the majority of respondents (29.5%) hold their bachelor's degree and most of the respondents working with public sector (67.5%).

Measurement

All the measurement instruments used in this study were adapted from previous research (Table 1) which have been tested and validated by several researchers. The measurement instrument that was originally written in English was translated into Bahasa Malaysia to make it easier for respondents to understand the items included. However, in order to maintain the authenticity of the measurement instrument, this questionnaire has been prepared in two languages so that respondents can refer and check when answering the questionnaire. Respondents answered all the questions using a scale of 1 (strongly disagree) to 5 (strongly agree).

Table 1. Measurement Items

<i>Variables</i>	<i>Source</i>	<i>No. of Questions</i>	<i>Examples</i>
<i>Work from Home (WFH)</i>	<i>Ipsen et al. (2020)</i>	13	<i>I get time to focus on my work without interruptions from other people I get a possibility to do some other work that I would normally not have time to</i>
<i>Humble Leadership</i>	<i>Owens et al. (2013)</i>	9	<i>My supervisor admits it when they do not know how to do something</i>
			<i>My supervisor shows appreciation for the unique contributions of others</i>
<i>Adaptive Performance</i>	<i>Koopmans et al. (2013)</i>	8	<i>I was able to cope well with difficult situations and setbacks at work I easily adjusted to changes in my work</i>

Data Analysis

This study has employed the Partial Least Square-Structural Equation Modeling (PLS-SEM) or SmartPLS 3.0 (Ringle, Wende & Becker 2015) as the statistical tool to test the measurement model and structural model. This approach is suitable for the study since it has the ability to test a complex model with a modest sample size (Chin et al. 2003). PLS-SEM is able to explain the constructs that are modelled in the abstract manner based on more concrete dimensions (Sarstedt et al. 2019). PLS-SEM requires data analysis to be performed at two stages which are (1) to test the measurement model to examine the relationship between measuring items with independent variables and dependent variables; and (2) to test the structural model

to examine the relationship between independent variables and dependent variables (Tenenhaus, et al. 2005). Hypothesis testing for direct relationship and indirect relationship were based on the findings from the structural model. For both stages, four procedures in SmartPLS 3.0 were applied which were PLS algorithm, bootstrapping, blindfolding and PLS predict.

Results

Measurement Model Assessment

In the assessment of reflective measurement, three main assessment criteria are needed. These are internal consistency, Convergent validity and Discriminant validity. Internal consistency was determined using constructs' composite reliability (CR) values, whilst convergent validity was determined using item loadings and average variance extracted (AVE) values. As shown in Table 2, all loadings met the recommended threshold of 0.708 (Hair et al., 2011); hence, all except the items with low loadings were maintained. Additionally, if the construct met the AVE requirement of 0.5, certain items with loadings less than 0.708 were retained. Following that, all constructs had CR values more than the minimum threshold of 0.7, and all AVEs were greater than 0.5 following item deletion (Hair et al., 2011). Thus, the constructs meet the criteria for reliability and convergent validity. Next, the result indicates that all constructs exhibit sufficient or satisfactory discriminant validity as the HTMT value is below the threshold of 0.85 (Henseler, Ringle & Sarstedt 2015).

Table 2. Measurement Model for Reflective Constructs

Constructs	AVE	CR	HTMT
Adaptive Performance	0.622	0.929	< 0.85
Humble Leadership	0.513	0.863	< 0.85
Work from Home	0.563	0.920	< 0.85

Structural Model Assessment

After confirming the reliability and validity, hypotheses are tested through structural model. In the initial stage of accessing the structural model, it is important to address the lateral collinearity issue. To assess the collinearity issue, the VIF value needs to be less than 5.0 (Hair et al., 2017). The result showed that all the inner values for the independent variables are less than 5, indicating that the collinearity issue is not a concern. (Hair et al., 2017). Next, this study develops four direct hypotheses between the constructs, with one moderating hypothesis, which all hypotheses supported. In order to test the significance level, t-statistics for all paths are generated using Smart-PLS bootstrapping. Based on the assessment in Table 3, all three hypotheses have a t-value ≥ 1.645 ; thus, the significance is at a 0.05 level of significance.

Table 3. Structural path analysis

Hypotheses	Relationship	Beta	Std. Error	p value	LL	UL	Decision
H1	WFH → Adaptive Performance	0.205	0.071	0.002	0.079	0.329	Supported
H2	Humble Leadership → Adaptive Performance	0.366	0.065	0.000	0.248	0.487	Supported
H3	WFH*Humble Leadership → Adaptive Performance	0.141	0.074	0.029	0.085	0.262	Supported

The indirect relationship between Figures 2 show the result of simple slope analysis of moderating effects that support the hypothesis. In particular, adaptive performance was higher among respondents who had a high perception of their supervisor's humble leadership style compared to respondents who had a low perception.



Figure 2. Moderating effect of Humble Leadership

To assess the issue of collinearity, the VIF value should be less than 5.0 (Hair et. al., 2017). Based on the analysis carried out, all values in the variable are less than 5 where the highest value is 1.338. It shows that the issue of collinearity does not exist for the study variables (Hair et. al., 2017). Regarding the level coefficient of determination (R^2), according to Hair et al. (2011), R^2 represents the amount of variance in the endogenous construct that all exogenous constructs can explain. As shown in Table 4, the R^2 value is 39% for adaptive performance and more than the 0.26 value suggested by Cohen (1988). In addition, the effect size are also assessed by f^2 . The effect size (f^2) shows that all constructs have a small and medium magnitude effect size on adaptive performance which is the variable of working from home ($f^2=0.031$) and humble leadership ($f^2=0.187$) (Kock, 2014). Lastly, the predictive

relevance assessed by Q^2 shows that all endogenous constructs in this study had a Q^2 value larger than zero, including the adaptive performance with 0.239. This demonstrates the exogenous constructs' ability to predict the endogenous construct.

Table 4. Effect Size, R^2 and Q^2 (Stone-Geisser)

	f^2	R^2	Q^2
<i>Work from Home (WFH)</i>	0.031		
<i>Humble Leadership</i>	0.187		
<i>Adaptive Performance</i>		0.392	0.239

Similarly, the relevant prediction value of *PLSpredict* Q^2 for the adaptive performance items. The LM RMSE for all items are higher than PLS RMSE and it shows that this model has a good relevant prediction.

Discussion

The main objective of this study us to test the impact of working from home (WFH) and also the adaptive performance. It also tests the direct relationship between humble leadership style and the adaptive performance, and its role as a moderator to the relationship between WFH and adaptive performance. Based on previous works, adaptive performance can be attained when employees are capable of handling uncertain situations, capable of facing new problems and have the capability to adapt to the ongoing change in the working environment (Charbonnier-Voirin & Roussel 2012). From this study, it is found that WFH can increase the adaptive performance of employees where Hypothesis 1 is supported. In general, this outcome is consistent with several past studies that offer empirical proof revealing that flexible work arrangement, such as WFH has a direct relationship with the work-family balance and work satisfaction and then increases work performance (Bellmann & Hubler 2020; Davidescu et al., 2020; da Cruz Carvalho, Riana & Soares 2020; Popovici & Popovici 2020; Prasad et al. 2020; Prasetyaningtyas et al. 2021). Also, it can also boost the productivity of the employees (Kazekami 2020) that stems from their performance (Austin-Egole, Iheriohanma & Nwokorie 2020). More specifically, the change in the working environment in the stream of WFH concept can increase the adaptive performance of the employees when they are able to adapt to not only the use of digital technology (Okkonen et al. 2019; Park & Park 2019), but also the work structure that is different from that at the workplace.

This study outcome also gives a significant support to Hypothesis 2 and empirically proves that the employees' perception on humble leadership influences the adaptive performance of the employees. This study outcome is consistent with the works by Rego et al. (2019) and Lu (2020) which establish that humble leadership can

influence employees' adaptive performance by way of stimulating their motivation to get involved proactively in improving their work performance. Under the influence of humble leadership, employees will strive to improve themselves and increase their work performance (Lu 2020; Zhong et al. 2020). It is worth adding that the past literature also showed that the humble leadership style forms a significant relationship with several positive work outcomes such as work satisfaction, commitment towards the organisation, employees' involvement and innovative behaviour (Owens et al. 2013; Zhong et al. 2020; Zhou & Wu 2018). Humble leadership also plays a significant role as a moderator towards the relationship between WFH and adaptive performance whereby the higher the perception of the employees on the humble leadership style adopted by their supervisor, the higher the adaptive performance of the employees, automatically in support of Hypothesis 3. In this WFH situation, even though employees are not able to be physically present, or to be face-to-face with their supervisor, with the motivation and support that the humble leader offers, it will motivate them to acclimatise to any sorts of changes that take place in the working environment (Owens et al. 2013, Zhong et al. 2020). In the past literature, humble leadership also plays its part as a moderator by solidifying the direct relationships among variables (Al-Hawamdeh 2022; Ding & Chu 2020).

Conclusion

The repercussions from Covid-19 have ignited a new phenomenon in the occupational sector in Malaysia namely WFH. WFH is an increasingly accepted concept among employees and there has been a rising demand to retain WFH although the shift to endemic is taking place. The government has also given the green light on the 1955 Work Act (Revised in 2022), consenting employees to apply for flexible working arrangement from their respective organisation. However, most organisations in Malaysia are not yet ready to continue with the concept of WFH and still lack the confidence that this new working arrangement will produce positive outcomes. However, the outcome of this study has gone to show empirically that WFH can increase work performance through adaptive performance and humble leadership can strengthen the influence of WFH on adaptive performance.

This study has contributed to the wealth of knowledge by giving several implications theoretically and practically. A more flexible work structure in terms of the working location and hours also the use of digital technology in the concept of WFH has been able to increase the adaptive performance of the employees. This discovery also serves as a testament to the importance of the humble leadership style in strengthening the relationship between WFH and adaptive performance. Past studies have shown that humble leadership can increase work performance when employees are at the office physically. Nonetheless, this study proves that the humble leadership style also increases work performance when employees work

from home. This is in tandem with the self-determination theory where the perception about humble leadership can motivate the employees to adapt to the new work environment. Other than that, the study outcome can help organisations to prepare for the execution of the flexible working arrangement, or WFH. Organisations have to make some detailed planning encompassing work structure design, mental and physical preparation of the employees with regard to the skills of technology use and the facility of accessing information in the organisation. It also needs to instil the humble leadership style that can support the employees during WFH and further boost their work performance.

That said, our study here is not deprived of its limitations. First of all, this study deploys a non- probability sampling method with a small sample size, which is 200 respondents. Thus, generalising the study outcome for the entire study population would be imprecise. Future studies need to pay more attention to certain sectors that stress more on practicing WFH and on using the random sampling method with a larger sample size. Secondly, this study uses questions based on the respondents' own perceptions and feelings, so it would be difficult to evaluate if they are not answered by the respondents themselves. However, future studies can obtain data from multiple sources by using multi-tiered analysis such as getting feedback from the employers. Next, this study only uses basic mechanism in the form of moderator. Future works may need to expand the basic mechanism by testing the role of various variables that can serve as the mediator and the moderator so that greater practical contributions can be offered, so that organisations can make better preparation when dealing with new work structure demands, such as flexible working arrangement and gig economy.

References

- [1] Al-Hawamdeh, N. 2022. Investigating the moderating effect of humble leadership behaviour on motivational factors and knowledge-sharing intentions: evidence from Jordanian public organisations. *VINE Journal of Information and Knowledge Management Systems*.
- [2] [/doi.org/10.1108/VJIKMS-07-2021-0111](https://doi.org/10.1108/VJIKMS-07-2021-0111).
- [3] Allworth, E. & Hesketh, B. 1999. Construct-oriented biodata: Capturing change-related and contextually relevant future performance. *International Journal of Selection and Assessment*, 7(2): 97-111.
- [4] Astro Awani 20 April 2022
- [5] Austin-Egole, I. S., Iheriohanma, E. B. J., & Nwokorie, C. 2020. Flexible working arrangements and organizational performance: An overview. *IOSR Journal of Humanities and Social Science*, 25(5): 50-59.
- [6] Bellmann, L., & Hübler, O. 2020. Working from home, job satisfaction and work-life balance – robust or heterogeneous links? *International Journal of Manpower*, 42(3): 424-441

- [7] Berita Harian 26 Ogos 2022
- [8] Charbonnier-Voirin, A. & Roussel, P. 2012. Adaptive performance: A new scale to measure individual performance in organizations. *Canadian Journal of Administrative Sciences*, 29(3): 280-293.
- [9] Chin, W. W. 2010. How to Write up and Report PLS Analysis. Dlm. Vinzi, V.E., Chin, W. W., Henseler, J. & Wang, H (pnyt). *Handbook of Partial Least Squares: Concepts, Methods and Applications*. Hlm. 655-690 Berlin Heidelberg: Springer-Verlag.
- [10] da Cruz Carvalho, A., Riana, I. G., & Soares, A. D. C. 2020. Motivation on job satisfaction and employee performance. *International research journal of management, IT and Social Sciences*, 7(5): 13-23.
- [11] Daft, R. L. 2014. *The leadership experience*. Cengage Learning.
- [12] Davidescu, A. A. M., Apostu, S. A., Paul, A., & Casuneanu, I. 2020. Work flexibility, job satisfaction, and job performance among Romanian employees-Implications for sustainable human resource management. *Sustainability*, 12(15): 6068
- [13] Deci E.L. & Ryan R.M. 1985. *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Press.
- [14] Deci, E.L., Ryan, R.M. & Olafsen, A.H. 2017. Self-determination theory in work organizations: The state of a science. *The Annual Review of Organizational Psychology and Organizational Behavior*. 4: 19-43.
- [15] Ding, H., & Chu, X. 2020. Employee strengths use and thriving at work: The roles of self-efficacy and perceived humble leadership. *Journal of Personnel Psychology*, 19(4), 197.
- [16] Garrett, R. K. & Danziger, J. N. 2007. Which Telework? Defining And Testing A Taxonomy of Technology- Mediated Work At A Distance. *Social Science Computer Review*, 25(1): 27-47.
- [17] Griffin, B. & Hesketh, B. 2003. Adaptable behaviours for successful work and career adjustment.
- [18] *Australian Journal of Psychology*, 55: 65-73.
- [19] Hair, J. F., Ringle, C. M., & Sarstedt, M. 2011. PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice* 19(2): 139-152.
- [20] Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M. and Thiele, K.O. 2017, Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5): 616-632.
- [21] Henseler, J., Ringle, C. M., & Sarstedt, M. 2015. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science* 43(1): 115-135.
- [22] Hogden, L. S. 2021. A study of adaptive performance: Facilitating for adaptive behavior through transformational leadership and psychological safety during covid-19. Master's thesis, Handelshoyskolen.

- [23] Ipsen, C, Kirchner, K, & Hansen, J.P. 2020. Experiences of working from home in times of COVID-19 international survey conduct the first months of the national lockdowns March-May, 2020. *DTU Library*. doi.org/10.11581/dtu:00000085
- [24] Kazekami, S. 2020. Mechanisms to improve labor productivity by performing telework.
- [25] *Telecommunications Policy*, 44(2): 101868.
- [26] Kock, N. 2014. Stable P value calculation methods in PLS-SEM. *Laredo, TX: ScriptWarp Systems*, 1- 15.
- [27] Koopmans, L., Bernaards, C., Hildebrandt, V., van Buuren, S., van der Beek, A.J. & de Vet, H.C.W 2013. Development of an individual work performance questionnaire. *International Journal of Productivity and Performance Management*, 62(1): 6–28.
- [28] Lingard, H., Brown, K., Bradley, L., Bailey, C., & Townsend, K. 2007. Improving employees' work- life balance in the construction industry: Project alliance case study. *Journal of Construction Engineering and Management*, 133(10): 807–815.
- [29] Lu, J. G., Brockner, J., Vardi, Y., & Weitz, E. 2017. The dark side of experiencing job autonomy: Unethical behavior. *Journal of Experimental Social Psychology*, 73: 222–234.
- [30] Mohite, M. D., & Kulkarni, R. V. 2019. Job satisfaction Factors of Employee in Virtual Workplace: Review. *International Journal of Trend in Scientific Research and Development*, Special Issue- FIIIPM2019): 38–42.
- [31] Molino, M., Ingusci, E., Signore, F., Manuti, A., Giancaspro, M. L., Russo, V., ... & Cortese, C. G. 2020. Wellbeing costs of technology use during Covid-19 remote working: An investigation using the Italian translation of the technostress creators scale. *Sustainability*, 12(15): 5911.
- [32] Nornadia, O. 2020. *Perintah Kawalan Pergerakan (PKP): Kesedaran dan kesediaan penjawat awam bekerja secara dalam talian dalam Varia Ranah: Sorotan Ilmiah Perkhidmatan Awam*. Jilid I & II. Putrajaya: Bahagian Penyelidikan, Perancangan dan Dasar, Jabatan Perkhidmatan Awam. 469-488.
- [33] Okkonen, J., Vuori, V. & Palvalin, M. 2019. Digitalization Changing Work: Employees' view on the benefits and hindrances. *International Conference on Information Technology & Systems*, 165-176 Springer, Cham.
- [34] Owens, B.P., Johnson, M.D. & Mitchell, T.R. 2013. Expressed humility in organizations: Implications for performance, teams, and leadership. *Organization Science*, 24: 1517-1538.
- [35] Park, S. & Park, S. 2019. Employee Adaptive Performance and Its Antecedents: Review and Synthesis.
- [36] *Human Resource Development Review*, 18(3): 294–324.

- [37] Popovici, V. & Popovici, A.L. 2020. Remote work revolution: Current opportunities and challenges for organizations. *Ovidius University Annals, Economic Sciences Series*, 20, 468-472
- [38] Prasad, K.D.V., Mangipudi, M.R., Vaidya, R.W. & Muralidhar, B. 2020. Organizational climate, opportunities, challenges and psychological wellbeing of the remote working employees during COVID-19 Pandemic: A general linear model approach with reference to information technology industry in Hyderabad. *International Journal of Advanced Research in Engineering and Technology*, 11(4): 372-389.
- [39] Prasetyaningtyas, S. W., Heryanto, C., Nurfauzi, N. F., & Tanjung, S. B. 2021. The effect of work from home on employee productivity in banking industry. *Jurnal Aplikasi Manajemen*, 19(3).
- [40] Pulakos, E.D., Arad, S., Donovan, M.A. & Plamondon, K.E. 2000. Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology*, 85(4): 612– 624.
- [41] Rego, A., Owens, B., Yam, K.C.S., Bluhm, D., Cunha, M.P., Silard, A., Gonçalves, L., Martins, M., Simpson, A.V., Liu, W., 2017. Leader humility and team performance: Exploring the mediating mechanisms of team PsyCap and task allocation effectiveness. *Journal of Management*, 45(3): 1009- 1033.
- [42] Ringle, C. M., Wende, S., and Becker, J.-M. 2015. "SmartPLS 3." Boenningstedt: SmartPLS GmbH, <http://www.smartpls.com>
- [43] Ryan, R.M., Williams G.C., Patrick, H. & Deci, E.L. 2009. Self-determination theory and physical activity: The dynamics of motivation in development and wellness. *Hellenic Journal of Psychology*. 6: 107-124.
- [44] Saragih, S. 2011. The Effects of Job Autonomy on Work Outcomes: Self Efficacy as an Intervening Variable. *International Research Journal of Business Studies*, 4(3): 203–215.
- [45] Sarstedt, M., Hair Jr, J.F., Cheah, J.H., Becker, J.M. & Ringle, C.M. 2019. How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal*, 27(3): 197-211.
- [46] Shoss, M.K., Witt, L.A. & Vera, D. 2011. When does adaptive performance lead to higher task performance? *Journal of Organizational Behavior*, 33(7): 910-924.
- [47] Singh M. K., Kumar V., Ahmad T. 2020. Impact of Covid-19 pandemic on working culture: exploratory research among information technology (IT) professionals in Bengaluru, Karnataka (India). *Journal of Xi'an University of Architecture & Technology*, 12(5): 3176-3184.
- [48] TalentCorp-UNDP 2021. *Making Flexible Work, Work: Towards Better and More Inclusive Work-Life Practices*, www.talentcorp.my/TC-UNDP_FWAs_Making-Flexible-Work-Work_2021
- [49] Tenenhaus, M., Esposito Vinzi, V., Chatelin, Y. & Lauro, C. 2005. PLS path modelling. *Computational Statistics and Data Analysis*, 48(1): 15-205.

- [50] Tremblay, M. A., Blanchard, C. M., Taylor, S., Pelletier, L. G., & Villeneuve, M. 2009. Work Extrinsic and Intrinsic Motivation Scale: Its value for organizational psychology research. *Canadian Journal of Behavioural Science*, 41(4): 213.
- [51] van Meel, J. 2011. The origins of new ways of working: Office concepts in the 1970s. *Facilities*, 29: 357–67.
- [52] Wang B., Liu Y., Qian J., Parker S. K. 2021. Achieving effective remote working during the COVID- 19 pandemic: A work design perspective. *Applied psychology*, 70(1): 16-59.
- [53] Wolf, E. J., Harrington, K. M., Clark, S. L. & Miller, M. W. 2013. Sample Size Requirements for Structural Equation Models: An Evaluation of Power, Bias, and Solution Propriety. *Educational and Psychological Measurement*. doi:10.1177/0013164413495237
- [54] Ye, L. 2019. Corporate purpose performance as a driver of employee engagement: The mediating role of transformational leadership and job resources. Doctoral dissertation, Universität St. Gallen.
- [55] Zhong, J., Zhang, L., Li, P. & Zhang, D. Z. 2020. Can leader humility enhance employee wellbeing? The mediating role of employee humility. *Leadership & Organization Development Journal*, 41 No. 1: 19-36.
- [56] Zhou, F. & Wu, Y. J. 2018. How humble leadership fosters employee innovation behavior: A two-way perspective on the leader-employee interaction. *Leadership & Organization Development Journal*, 39(3): 375-387.
- [57] Zhu, Y., Zhang, S. & Shen, Y. 2019. Humble leadership and employee resilience: Exploring the mediating mechanism of work-related promotion focus and perceived insider identity. *Frontiers in Psychology*, 10: 673.