



AicE-Bs2022KotaKinabalu

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10th Asia-Pacific International Conference on E-B Studies
The Magellan Sutera Resort, Kota Kinabalu, Sabah, Malaysia, 07-08 Sep 2022

Impact of Flexible Working Arrangements on Millennials' Mental Health, Well-Being and Productivity during COVID-19

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Abstract

Malaysian millennials are reported to be struggling with stress and well-being issues at the workplace during the last decade. Drawing from the Self-Determination Theory, this study examines whether flexible working arrangements (FWAs) could impact millennials' mental health, well-being and productivity at the workplace. A self-administered questionnaire was distributed to 400 millennials in the services sector during the COVID-19 period. Findings revealed that FWAs influenced millennials' mental health, well-being, and productivity as millennials value job autonomy and a friendly work ecosystem as an ideal workplace. This sees a compelling case for Malaysian businesses to adopt FWAs in a more structured way in line with Sustainable Development Goal -3.

Keywords: Flexible working arrangements; mental health; well-being; millennials; productivity; SDG 3

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DOI: <https://doi.org/10.21834/ebpj.v7i21.3729>

1.0 Introduction

Millennials, referring to those born between 1981 and 1996, made up around half of the global workforce in 2020, and this figure is predicted to rise to 75% by 2025 (Dimock, 2019). More than 7 million young Malaysians made up roughly half of the country's workforce in 2019, showing a 90% labour force participation rate among millennials (Institute for Labour Market Information and Analysis, 2020).

Millennials in Malaysia are exposed to mental health difficulties at work, such as depression and anxiety, as well as lower well-being, amidst the transition into the workforce. AIA Vitality's (2019) statistics show that millennials account for 80% of employees with mental health difficulties. At the same time, the Malaysian Well-Being Index 2019 revealed a low score for the working life index, which is rated last among the four well-being subcomponents (Department of Statistics Malaysia, 2020).

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Low job control has been extensively discussed as a workplace risk factor contributing to mental health concerns and diminished well-being (World Health Organization, 2019). This is especially true for millennials, who have grown up with the social internet, which has given them tremendous power due to fast access to large amounts of data. The WHO Healthy Workplace Framework has advocated a link between excellent health, employee productivity, and a country's solid economic development (Burton, 2010). This emphasizes the importance of addressing the issue of millennials' poor mental health and well-being, as they will determine the economy's future path.

1.2 Problem of Study

The cost of lost productivity, including sickness absenteeism, presenteeism, and staff turnover due to mental health issues and reduced well-being, is staggering, at about RM 14.5 billion or 1 per cent of Malaysia's GDP in 2018. Understanding the factors involved and the interventions that can be applied to curb this issue is extremely important. Since well-being, mental health and productivity are intricately connected, implementing FWAs is expected to impact employees' productivity positively.

Millennials in Malaysia have a strong demand for FWAs, (TalentCorp, 2018), yet few organizations in Malaysia have implemented them. While 78% of millennials favour the option of FWAs, only 50% of Malaysian organizations provide FWAs in return (TalentCorp 2018). According to the Deloitte Global Millennial Survey 2019, most millennials will quit their present employment if their employers refuse to prioritize FWAs in workplace policies.

1.3 Objectives of Study

Hence, the aim of this study is two-fold:

- Firstly, to determine whether there is a relationship between demographic factors and mental health of millennials at the workplace in Malaysia; and
- Secondly, to examine the impact of FWAs on the mental health, well-being, and productivity of millennials in Malaysia.

2.0 Literature Review

2.1 Flexible Working Arrangements, Millennials and Covid 19

With the Amendments to the Employment Act 1955, which will come into force on 1st January 2023, Malaysian employees who want to work flexibly will be allowed to apply for Flexible Working Arrangements (FWA).

Flexible Working arrangements (FWAs) refer to the level of autonomy offered to employees regarding working hours, location, and manner (Sarbu, 2014).

2019 saw a sudden outbreak of COVID-19, resulting in Malaysia's Movement Control Order (MCO) on 18th March 2020. What happened next was that most organizations were forced to adopt FWA policies that allow employees to vary work arrangements to suit their individual needs (Sofiah, A. 2022). FWAs, a relatively new work arrangement that has emerged as the workplace landscape, has changed after Covid 19.

2.2 Self-Determination Theory in The Workplace

The Self-Determination Theory by Deci et al. (2017) extensively examines the significance of autonomy as the primary psychological demand that leads to improved employee well-being and performance. Autonomy refers to the volition and willingness to engage in activities. It is related to autonomous motivation, a motivation based on the pleasure of executing a task without extrinsic rewards. FWAs promote an autonomy-friendly work environment, which is hypothesized to improve employee mental health, well-being, and productivity.

2.3 Demographic Factors and Mental Health

Studies show that demographic factors influence the mental health of millennials.

For example, throughout the life course, women generally have poorer mental health when examined in terms of symptoms of depression and anxiety. Though this continues into late life, gender differences seem to reduce with advancing age (Kiely et al., 2019). Women are more likely to be depressed because of predisposition or psychosocial circumstances. Role stress and victimization are two psychosocial factors that have enhanced women's vulnerability to depression. This is a decisive risk factor for onset, recurrence, and extended duration of mental illness among women Noble, 2005; Van Deinsen et al., 2018)

However, in terms of education and mental health, there is a mixed review. Bjelland et al. (2008) found that the effect of educational level on depression decreases as age increases, indicating a stronger association between low educational level and depression in younger people. However, Dahmann & Schnitzlein (2019) reported that mandating more incredible years of schooling may not be sufficient in and of itself in promoting population mental health.

Marital status and depression are related. The notion that married persons fare better at the workplace is not counter-intuitive, considering the benefits of the relationship, such as companionship, intimacy, mutual caring, financial stability and support (Lamb et al., 2003). This is especially true in the case of females, as they have more extensive and more robust social support networks than men,

whereas men often report their wives as their chief source of social support. Hence single, widowed and divorced females are less vulnerable to the development of depression than single males (Bulloch, 2017).

Caring responsibilities, which frequently involve sick, disabled, special needs or older adults, are also complex and time-consuming (Chai et al., 2018), which means that caregivers will be under more stress, which impacts their work and mental health.

2.4 FWAs and Mental Health

Work needs to be designed to accommodate employees' good psychological and physical health. Employees have been found to benefit from self-scheduling and employee-controlled partial/early retirement (Joyce et al., 2010). FWAs as part of workplace policies are also a significant benefit necessary to assist employees who struggle to keep their mental health in great shape (Gayed et al., 2018)

Hence, the first hypothesis is proposed:

H1: There is a positive relationship between FWAs and mental health.

2.5 FWAs and Well-Being

To define well-being, the PERMA model by Seligman (2018) is used. This model, developed in 2011, constitutes the elements of well-being and assesses positive emotions (P), task engagement (E), relationships with others (R), meaning in life (M), and achievement (A)

Atkinson & Hall (2011) found that employees perceive FWAs to make them feel happy. Mundane tasks that inhibit flows are reduced with FWAs, which assists in better employee engagement (Weideman & Hofmeyr, 2020). FWAs also become a source of understanding as people readily assume that female employees mainly practise FWAs with caring responsibilities, so they become more supportive towards each other. This study also establishes the relationship between FWAs and meaning at work. FWAs allow control over work schedules, location and methods, which may promote an active and effective pursuit of task completion.

Hence, the second hypothesis is proposed:

H2: There is a positive relationship between FWAs and well-being

2.6 FWAs and Productivity

Gajendran et al. (2015) found that teleworking improves performance by increasing autonomy. Reduced communication with coworkers, a suitable workplace at home, and the capacity to care for family members at home all contribute to the beneficial association between teleworking and productivity (Nakroien et al., 2019). Furthermore, reduced working hours have improved worker performance and productivity (Ongaki, 2019).

Hence, the third hypothesis is proposed:

H3: There is a positive relationship between FWAs and productivity

3.0 Methodology

To achieve the two objectives, online survey questionnaires were distributed via the online platform to millennials in the services sector in Malaysia. The purposive sampling technique was adopted by selecting respondents born between 1981 and 1996. G-Power software calculated the minimum sample size as 103. However, 400 questionnaires were distributed to minimize error, and 394 were usable.

3.1 Questionnaire and Measurement

The first section of the questionnaire had demographic items to establish the respondents' profile. The variables in this study include workplace flexibility, mental health, well-being and productivity. The questionnaire was adapted from past studies. Firstly, flexibilities had three items (ter Hoeven & van Zoonen (2015); mental health dimensions had twelve items from the GH 12 Questionnaire (Gao et al., 2004); well-being based on the PERMA model had twenty-eight items, Seligman (2018); productivity dimensions, namely task performance, contextual performance and personal productivity had thirteen items (Koopmans et al., 2013). All the variables were measured using a 5-point Likert scale, where one refers to disagree strongly, and five refers to agree strongly. A pilot test was conducted, and alpha Cronbach figures were all above 0.75 (Hair et al., 2017)

3.2 Demographic Profile of Respondents

Respondents comprised 65 per cent females and 35 per cent males, predominantly Malays (90%) whose marital status is mainly single (60%). Regarding educational level, 69 per cent of the respondents possessed a bachelor's degree, 17 per cent with a master's education,

and 11 per cent currently have SPM and Diploma certificates. Most of the respondents (81%) earned RM 5000 and below, reflecting their working experience of fewer than five years.

4.0 Findings

This study employed statistical packages for social science (SPSS) and SMART- Partial Least Squares (SMART-PLS). To identify the association between demographic factors and mental health, SPSS was used. SMART-PLS was used to test the measurement and structural models using the Partial Least Squares - Structural Equating Modeling (PLS-SEM) (Hair et al., 2017).

4.1 Demographic Factors and Millennials

The first objective of the study is to determine whether there is a relationship between demographic factors and mental health of millennials at the workplace in Malaysia.

The prevalence of mental health issues varies across demographic factors (Institute for Public Health, 2015). For any intervention program to work, it is crucial to identify the targeted individuals across the population. Chi-square analysis was used to test whether there is any correlation between demographic factors and feeling depressed (Table 1).

Table1: Correlation between Demographic Factors and Mental Health

Variable	Subgroup	Feeling Depressed	%	Feeling Depressed	%	p-value
		(Yes)		(No)		
Gender	Male	92	68	44	32	0.023**
	Female	144	56	114	44	
Highest Educational Level	SPM/STPM	31	67	15	33	0.484
	Bachelor's degree	159	58	114	42	
	Postgraduate	46	61	29	39	
Marital Status	Married	82	54	87	45	0.042**
	Single	154	64	71	36	
Monthly Income	RM 3000 and below	97	62	60	38	0.353
	RM 3001- RM 5000	93	59	64	41	
	RM 5001- RM 7000	24	50	24	50	
	Above RM 7000	22	69	10	31	
Have young children below seven years old	No	178	61	114	39	0.467
	Yes	58	57	44	43	
Have caring duties	No Caring Duties	139	57	104	43	0.021**
	Young Children	54	57	41	43	
	Elderly/ Sick / Disabled/ Special Need	43	77	13	23	
Number of children	No Children	178	61	114	39	0.748
	One child	29	55	23	45	
	More than one child	29	58	21	42	

**significant at 0.05 level

As shown in Table 1, out of the seven demographic variables, three factors significantly correlate with mental health issues among millennials. The variables are gender, marital status caring duties at home.

The results revealed that males tend to be more depressed than females. Secondly, single respondents are more likely (64%) to feel depressed. Thirdly, respondents with caregiving responsibilities, mainly taking care of the elderly, sick persons, disabled persons, and persons with special needs, are reported to be more depressed (77%).

4.2 FWAs, Mental Health, Well-Being and Productivity of Millennials

To answer the second objective, the PLS-SEM technique was used.

All 13 reflective constructs in this study fulfilled the requirements, with loading values above 0.708, composite reliability (CR) was above the minimum threshold of 0.7, and AVE (Average Variance Extracted) was more significant than 0.5 (Hair et al., 2017). As a result, all constructs met the reliability and convergent validity requirements (Table 2).

Table 2 – Reflective Measurement

First Order Construct	Item	Loading	CR	AVE
Flexibilities	MethodFlexi	0.817	0.869	0.689
	TimeFlexi	0.844		
	LocationFlexi	0.828		
Autonomy	Au1_Plan	0.811	0.945	0.684
	Au2_Decide	0.819		
	Au3_Autonomy	0.826		

	Au4_PersonalJudge	0.823		
	Au5_OrderofWork	0.856		
	Au6_Method	0.841		
	Au7_Independence	0.867		
	Au8_Schedule	0.771		
Anxiety and Depression	MH1_LostSleep_Rev	0.806	0.888	0.665
	MH2_Understrain_Rev	0.808		
	MH3_Unhappy_Rev	0.868		
	MH4_UnableOverDiff_Rev	0.776		
Social Dysfunction	MH5_AbleToConc	0.783	0.910	0.629
	MH6_Playful	0.785		
	MH7_MakeDecision	0.830		
	MH8_FaceProblem	0.710		
	MH9_EnjoyActivities	0.837		
	MH10_Happy	0.807		
Loss of Confidence	MH11_LostConf_Rev	0.935	0.934	0.876
	MH12_Worthless_Rev	0.938		
Positive Emotion	PE1_Positive	0.900	0.955	0.778
	PE2_Good	0.907		
	PE3_Pleasant	0.894		
	PE4_Happy	0.914		
	PE5_Joyful	0.850		
	PE6_Contented	0.824		
Engagement	E1_MeetDemand	0.746	0.902	0.569
	E2_UnderControl	0.769		
	E3_Excitement	0.765		
	E4_StrongEmotion	0.803		
	E5_PutHeart	0.799		
	E6_ExertEnergy	0.737		
	E7_StayUntilDone	0.650		
Relationship	R1_GoodRelationship	0.886	0.877	0.549
	R2_StandByMe	0.893		
	R3_Appreciated	0.889		
	R4_Respected	0.879		
	R7_WarmRelationship	0.799		
Meaning	M1_Important	0.897	0.944	0.810
	M2_Worthwhile	0.856		
	M3_Meaningful	0.917		
	M4_Valuable	0.928		
Achievement	A1_Progressing	0.894	0.939	0.794
	A2_Achieving	0.903		
	A3_Accomplishing	0.920		
	A4_Completing	0.845		
Subjective Productivity	SP1_Quality	0.809	0.911	0.719
	SP2_ImproveProd	0.832		
	SP3_HighQuality	0.870		
	SP4_WorkEfficiently	0.878		
Task Performance	TP1_FinishOnTime	0.854	0.916	0.732
	TP2_WorkResult	0.847		
	TP3_SetPriorities	0.886		
	TP4_ManageTime	0.834		
Contextual Performance	CP1_Initiative	0.603	0.901	0.607
	CP2_ChallengingTask	0.831		
	CP3_KnowledgeUptoDate	0.857		
	CP4_SkilsUptoDate	0.828		
	CP5_SeekChallenge	0.819		
	CP6_ParticipateMeeting	0.704		

Discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio of correlations technique (Henseler et al., 2014). All the HTMT values were less than 0.85, supporting the measures' discriminant validity. The formative measurement model was assessed before path analysis was conducted. For mental health, VIF values for anxiety and depression, social dysfunction, and loss of confidence are below the threshold of 3.3 (Diamantopoulos & Siguaw, 2006). For well-being, all five first-order constructs (positive emotion, engagement, relationship, meaning, and achievement) indicated VIF below 3.3. For productivity, VIF values for personal productivity, task performance, and contextual performance indicated VIF values below 3.3. Therefore, a multicollinearity problem among first-order constructs does not exist.

4.2.1 Partial Least Square - Structural Equation Modeling: Structural Model

Before evaluating the structural model, the collinearity issue was first assessed to rule out common method bias. The occurrence of VIF greater than 3.3 indicates pathological collinearity, and a model may be contaminated with common method bias (Kock, 2015). The VIF values in the model are 1.147 to 2.517, which do not indicate any lateral collinearity issues in this model. Hence, the model can be considered free of common method bias.

Following this, the path-coefficient was assessed to examine the significance of hypotheses using the bootstrap re-sampling technique (5000 re-sample). Based on the results in Table 3, all three direct relationship hypotheses were supported. The results illustrated that flexibility exhibited a positive relationship with mental health ($\beta=0.144$, $t=2.053$, $p<0.005$), well-being ($\beta=0.285$, $t=6.242$, $p<0.005$) and productivity ($\beta=0.173$, $t=3.302$, $p<0.005$) thus H1, H2, and H3 were supported.

Table 3: Path Coefficient Assessment

	Beta	SE	t- value	p-value	LL	UL	R2	F2	Decision
Flexibilities -> Mental Health	0.144	0.079	2.053	0.020	0.069	0.243	0.021	0.021	Supported
Flexibilities -> Productivity	0.173	0.048	3.302	0.000	0.107	0.274	0.030	0.031	Supported
Flexibilities -> Well-Being	0.285	0.052	6.242	0.000	0.230	0.380	0.081	0.088	Supported

The coefficient of determination, R2, is 0.021 for the 'mental health endogenous latent variable. This means that 'flexibility' explains 2 per cent of the variance in 'mental health. For 'well-being', R2 is 0.081, which means that 'flexibility' explains 8 per cent of the variance in 'well-being'. Finally, R2 is 0.030 for 'productivity', which means that 'flexibility' explains 3 per cent of the variance in 'productivity'. Flexibility at the workplace affects all three independent variables, but the predictive power for values between 0.02 to 0.13 indicates a weak power (Cohen, 1988). Hence flexibility has a weak predictive power over mental health, well-being, and productivity.

Lastly, predictive relevance was evaluated using Stone-Geisser's Q² (Geisser 1974; Stone 1974). The Q² values for mental health (0.006), well-being (0.038), and productivity (0.011) are larger than 0, thus indicating the model's predictive relevance and validity. All hypotheses H1, H2, and H3 are supported, and results reveal that FWAs positively and significantly influence the mental health, well-being and productivity of millennials in Malaysia.

5.0 Discussion

The study shows that gender, marital status and caring duties significantly affect millennials' mental health. It also reveals the impact of FWAs on millennials' mental health, well-being and productivity.

5.1 Demographic Factors on Mental Health

Firstly, male respondents are more likely than female respondents to be depressed (68%). The sex difference framework and the masked depression framework both argue that men may have different manifestations of depression symptoms (or masked symptoms) despite being equally impacted by depression (Addis, 2008).

Second, single people seem to be more prone to be depressed. This could be due to unmarried people being most affected in a living circumstance where company and assistance are most cherished. Marriage has a buffering effect that promotes endurance in unfavourable life circumstances, such as the death of a loved one or severe sickness. This could also reflect the effect of living alone during a pandemic, where one may struggle to cope with the social isolation policy that prevents social gatherings and activities, resulting in depression.

Third, caregivers responsible for the care of elderly, sick, disabled, or special-needs people have been reported to have greater depression symptoms. Caregivers have no control over the symptoms of the care recipients. This may produce stress among caregivers because the effort expended does not correspond to the reward (i.e., the condition of care recipients), perhaps leading to depression if the scenario persists.

5.2 FWAs and Mental Health

FWAs allow employees to choose the time, location, and working technique they choose, up to a certain extent.

Despite their reputation as invisible illnesses, mental health disorders are comparable to physical illnesses because patients must visit professionals frequently to improve their situations. FWAs are the second most common type of workplace adjustment made by companies to help employees with mental disorders, according to McDowell & Fossey (2014).

While working hours significantly impact the mental health of employees, the favourable influence of FWAs on employee mental health, such as perceived control over the work environment and good social interaction, such as reduced work-family conflict and improved supervisor-co-worker relationship quality, could be explained by a positive psychological perception (Gajendran & Harrison, 2015).

In conclusion, a positive and significant relationship between FWAs and mental health is in line with past studies discussed above.

5.3 FWAs and Well-Being

Well-being is characterized using the PERMA model, which is categorized into five subgroups, namely positive emotion (P), engagement (E), relationship (R), meaning (M), and achievement (A)(Seligman, 2018).

Atkinson and Hall (2011) found that FWAs make employees happy. This is because employees perceive FWAs as a form of employee appreciation from their companies.

Secondly, according to Brummelhuis et al. (2012), the engagement of those workers with FWAs should increase when tedious and unproductive activities surrounding physical meetings are replaced with online meetings and email.

Teasdale (2013) found that the practice of FWAs has become a source of understanding, particularly for female employees with caring responsibilities. Overall, FWAs improve the quality of employees' relationships with their families, friends, and coworkers.

Employees' well-being is also influenced by their sense of meaning. The link between FWAs and meaning has received minimal attention in the literature. Employees would not be imprisoned in unneeded job pressure with FWAs, resulting in a deeper grasp of work motivations or life.

In conclusion, there is a positive and significant relationship between FWAs and well-being, which is in line with past studies discussed above.

5.4 FWAs and Productivity

Hoornweg et al. (2017) claim that high-intensity telecommuting improves work performance. Reduced communication with employees, a suitable workspace at home, and the ability to care for family members at home contributed to this. Furthermore, FWAs were linked to contextual performance.

Employees will opt to work during their most productive hours, according to Berkery et al. (2017), if they are allowed flexibility in when and where they work.

Hence, there is a positive and significant relationship between FWAs and productivity, consistent with past studies.

Using the self-determination theory, the study shows that FWAs give millennials more job autonomy, resulting in improved mental health, well-being and productivity. This translates to "an employee who feels better will work better".

6.0 Conclusion

Two interesting findings have emerged from this study. Firstly, gender, marital status and caring duties significantly affect millennials' mental health. Secondly, FWAs have a positive and significant influence on millennials' mental health, well-being and productivity. Millennials value job autonomy and a friendly work ecosystem as an ideal workplace.

The findings of this study have two policy implications.

Firstly, as FWAs have been shown to improve the mental health, well-being, and productivity of millennials in Malaysia, more companies should offer them at work. The amendment to the Employment Act (1955), which allows FWA to be implemented by all organizations, is a good start. However, one must wait and see to what extent it will be implemented successfully. The findings provide a compelling case for businesses to adopt FWAs into their workplace rules.

Secondly, the difficulty of being a caregiver has been well-documented in the past literature, particularly for caregivers with work responsibilities. It is suggested that the government provide an incentive to hire trained assistants, thus alleviating some of the caregivers' burden.

7.0 Limitation and Direction for Future Research

As the research progresses, COVID-19 has impacted the world, changing the dynamic in the workplace. Despite justification during the data collection, many respondents equated FWA as working from home.

This study took a quantitative strategy; future research can look at a qualitative, in-depth approach and explore how Millennials lead to better work-life balance.

Acknowledgements

Funding for this research is supported by the Fundamental Research Grant Scheme (FRGS) by the Ministry of Education, Malaysia (FRGS/1/2019/SS08/UiTM/02/6) and Universiti Teknologi MARA (UiTM).

We acknowledge SEGi University, Kota Damansara, for supporting the researcher's conference participation.

Paper Contribution to Related Field of Study

As the services sector accounts for more than 54 per cent of Malaysia's labour force, this study's results can guide the adoption of FWAs to increase national productivity, which aligns with the United Nations' third Sustainable Development Goal, where well-being is one of its primary goals.

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