

Work-Family Conflict and Mental Health among Low-Income Earners: Gender Differences

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ABSTRACT

An increase of 0.3 million low-income households in Malaysia is found to encounter personal and work stressors. Work-family conflict is one of the work stressors that lead to mental health problems, particularly among low-income households. Prevention of low-income earners' mental health problems stemming from inter-role conflicts is a great challenge for public health. Thus, the research aims to assess the level of work-family conflict dimensions, including time-based war, strain-based conflict, and behavior-based conflict, and the level of three mental health dimensions of stress, anxiety and depression. Also, this study aims to examine the gender differences in work-family competition and mental health among low-income earners. A total of 265 low-income earners from eight Local Authorities in Johor, Malaysia participated as the respondents of this study. The Work-family Conflict Scale (WFCS) and Depression, Anxiety and Stress Scale (DASS-21) were adapted in collecting the data. These two instruments have satisfactory reliability. The result of the study found that behavior-based conflict was the most prevalent of work-family conflict dimensions compared to strain-based war and time-based conflict. Meanwhile, most low-income earners experienced higher stress levels when assessing mental health status. Besides, analysis using the independent t-test demonstrated that no gender differences existed in both work-family conflict and mental health. The findings indicate that equal treatment of tackling inter-role conflict for both genders is required to help the low-income earners to reduce their mental health issues.

Keywords: Work-family Conflict, Mental Health, Low-income Earners, Gender Differences, t-test, Cross-tabulation Analysis.

1. INTRODUCTION

Employees in many organizations may now work and operate their businesses regardless of place and time which is in line with the COVID-19 outbreak in which employees are required to work from home. The growing use of portable digital technology in this modern era has led to increasingly blurred boundaries as non-work hours during weekends or vacations are consumed with work matters including responding to phone calls, texts and emails [1]. According to a survey [2], Malaysia employees work for 15 hours on average per week which is more significant than Hong Kong, Australia and also Singapore, 51% of them reported experiencing at least one dimension of workrelated stress and 53% of their sleep fewer than seven hours every night. Due to the work stressors, the role responsibility is impaired by the interference of the employment role in meeting the needs of personal life and family [3]. The issue of inter-role conflict between work and family interfaces results in low employee engagement in the task they are allocated, increase mental health issues, increase the likelihood of employee turnover and decrease job satisfaction and life satisfaction among employees [4]–[6]. Workfamily conflict is the fast-evolving field of research, especially in light of the recent health crises in the composition of family and work interfaces.

According to research [7], excessive levels of work-family conflict might affect an employee's emotional state. Previous research findings have also found a positive correlation between work-family conflict and mental health issues [8]–[10]. The overcommitment issues including rising job demands with a new standard of working pattern compel the employees to complete the work duties irrespective of time or location which eventually results in the emergence of a poor emotional state [8]. Similar results from Hao et al. [11] also indicated that the employees developed depressive symptoms as a result of work matters that interfered with their personal lives. In addition, Malaysian employees have also been discovered to be in poor emotional condition,



such as stress, burnout and excessive emotional exhaustion [12]–[14]. If the flexible nature of work is applied, it assists in the formation of a harmonious life both within and outside of the workplace by following boundary control recommended by Wepfer et al. [15]. Scientific evidence from research findings of both local and global perspectives clearly demonstrated that employees' mental health was impaired when they encountered conflict in their work and personal life interfaces. Thus, work-family war is seen to be the risk factor that influences the mental health of low-income earners working at Johor Local Authorities. However, work-family conflict and mental health area have not been clearly explored in Malaysia especially among low-income earners which urge the researchers to examine the gender differences of low-income earners' work-family conflict and mental health working in public sectors.

Following the underlying issues of work-family conflict and mental health among low-income earners, four objectives were developed in this study including (1) to assess the level of work-family conflict among low-income earners; (2) to assess the prevalence of mental health among low-income earners; (3) to examine the differences of the work-family conflict level between male and female among Malaysian low-income earners and; (4) to examine the differences of mental health level between male and female among low-income earners.

2. LITERATURE REVIEW

2.1. Work-family Conflict

Greenhaus and Beutell [3] conceptualized the term work-family conflict as the degree of role responsibilities incompatibility between work and family interfaces in which involvement in the work role makes participation in the family role become more complex. Three types of inter-role conflicts have been developed [3] consisting of time-based strife (i.e., the total time by the employment role hinders the capability of meeting the demands of the family role), strain-based conflict (i.e., the experience of strain, fatigue, pressure, worry or dissatisfaction at work that affects the performance as the family role) and behavior-based conflict (i.e., employees' essential specific behaviors, expectations and rules when performing jobs that are incompatible with family demands). This study included these three forms of inter-role conflicts from work interface toward family interface in examining the difference of work-family conflict between male and female low-income earners.

2.2. Mental Health

Mental health is defined as the emotional symptom experience in the sense of psychological distress responses including physiological changes [16]. Meanwhile, Altaf et al. [17] referred to mental health as an emotional disturbance caused by circumstances in which there is a feeling of inadequate personal resources to meet contextual demands effectively. Based on Lovibond and Lovibond [18], mental health can be categorized into three negative emotional states comprising of stress, anxiety and depression. Stress is characterized as a response triggered when there is a mismatch of demands and resources, as well as autonomy [19]. Stress levels are likely to elevate when there is an external stimulus such as high demands or a frequently changing environment, although this relies on the individual's capacity to adjust to a new circumstance [20], [21]. Next, anxiety is referred to as a cognitive mechanism that prepares the brain for any potential risk in the future [22] and aligns with a definition from Swift et al. [23] who described anxiety as an emotional state that may be either positive affect or negative affect, serving to protect the body from perceived dangers or heightening arousal in a negative way. For the term definition, Leng et al. [24] characterized depression when there are both psychological and physical issues present. The symptoms of depression include low energy, loss of interest and pleasure, poor self-worth, bad mood and feels guilty. As many researchers across disciplines have used these three emotional states to measure employees' mental health, this study also employed stress, anxiety and depression by looking at their impact in the low-income earners in Malaysian setting.

2.3. Gender Differences in Work-family Conflict

As a result of the COVID-19 pandemic, the health crisis has shaped the construction of gender and workfamily conflict issues. Lockdowns imposed by the government have put outstanding psychological health issues on Malaysians capacities to reconcile work and family interfaces [25]. Indeed, workplace teleworking, child daycare, closures, homeschooling changed the limitations to which women and men were subjected on a daily basis in various ways, which could increase working hours, job demands, family demands, and financial difficulties [26] and subsequently results in the incompatibility of inter-role conflict between work and family pressures [3]. Work-family conflict is a bidirectional construct in which interference can occur between work toward family and between family toward work. Given the nature of inter-role conflicts arising from restriction, many researchers have called



for the necessity to investigate the impact on workfamily conflict due to pandemics [27]–[29]. Literature on the gender differences in the work-family conflict was found to be inconsistent. Female was reported to experience more significant work-family conflict [30] and were supported by Nsair and Pisczeck [31], who examined the work-to-family conflict in family sacrifice climates. The outcome revealed that female is more vulnerable to an increase of work-to-family conflict due to the job pressures in which the job demands are prioritized compared to family demands. The significant gender differences can be due to the role of the female in the family structure. As reported by Bosman [32], females spend more time at home doing housework and teaching at home, leading to a higher level of work-family conflict. However, males reported a significantly higher level of job demand and all types of work-family conflict comprising of time interference, strain interference and behavior interference than their female counterparts in a study conducted by Kengatharan [33]. Contrary to these findings, the working from home policy imposed due to pandemic increased the work-family conflict and was found to be equal for both males and females [34]. Yet studies on low-income earners during the pandemic remain sparse and rarely address the gender differences. To fill this gap, this study uniquely examines the gender differences in work-to-family conflict among low-income earners at Johor Local Authorities.

2.4. Gender Differences in Mental Health

The rise in mental health issues, particularly 4.4% of the global population reported to suffer from depressive symptoms at some point in their lives and improved measures in recent studies have revealed that it is the most common cause of disorder worldwide [35]. In the context of Malaysia's population, 4.2 million Malaysians experience a mental health issue, implying that one out of every three Malaysians is vulnerable to negative emotional symptoms [36]. A cross-national investigation of 73 countries reported the gender difference in adolescent mental health is prevalent throughout cultures with females having poorer mental health on average [37]. Based on demographics of the Malaysian publics' mental health roughly two months after the pandemic's onset, young people, notably students, females, and individuals in the poor socioeconomic background, were more prone to mental health symptoms [38]. In contrast, another research finding revealed that stress, anxiety and depression experienced by Malaysian adults during Movement Control Order (MCO) is found to be higher among males than females [25]. The situation is worsening for the low-income earners as they are experiencing a crisis as a result of poor socioeconomic positions. As

reported by Ping et al. [38], a total of 522 Malaysian adults who earn a monthly average household income lower than RM4,000 had the highest prevalence of depression (n = 199, 38.1%), anxiety (n = 244, 46.7%) and stress (n = 113, 21.6%) from moderate to highly severe level compared to higher-income individuals. The increasing mental health issues and mortality rate are caused by the changes in the economic [17], [39] and as a result of the rising economy which greater demands on everyday costs must be met [40]. This issue needs to raise more concern when the lowincome earners in Malaysia are estimated to increase their contribution to the nation's Gross National Income [41] which lead to greater job demands and also family demands as employees are forced to work from home due to the global COVID-19 outbreak. However, the examination of the gender differences in mental health, specifically among low-income earners in the context of Malaysia remains the key question. Thus, by examining the difference on mental health between male and female among low-income earners during the pandemic, this current study bridges the research gap due to the limited literature relating to specific context of this study.

3. METHODOLOGY

3.1. Research Design and Study Sample

This study employed a quantitative approach and cross-sectional study design using Google Form online survey in collecting the data. The study sample was selected among low-income earners in eight Johor Local Authorities using non-probability, convenience sampling technique. Data collection was performed during the coronavirus outbreak where the employees were currently working from home. A survey link was sent to the person in charge, particularly the Human Resource Manager of the Local Authorities through social media platforms including WhatsApp and email invitations. The survey consisting of three parts was constructed in a bilingual format of English and Malay language. A total of 265 complete responses were retrieved, demonstrating an adequate total number of respondents as the required minimum sample size of this study based on G-Power calculation was 166 [42].

3.2. Research Instruments

The nine-item Work-family Conflict Scale (WFCS) [43] was used to assess low-income earners' inter-role conflict between work and family interfaces. This scale consists of three dimensions; time-based war, strain-based conflict and behavior-based conflict with three items representing each. All things were rated using the scale of 1 (Strongly disagree) to 5 (Strongly agree). In terms of the psychometric properties, Carlson et al. [43] recorded a satisfactory Cronbach's alpha value of 0.87 for time-based



conflict, 0.85 for strain-based battle and 0.78 for behavior-based war.

Mental health issues in low-income earners were assessed by the 21-item Depression, Anxiety and Stress Scale (DASS-21) [18]. Each dimension of this scale has seven items reflecting negative emotional symptoms consisting of stress, anxiety and depression. All things were rated using a 4-point Likert scale ranging from 0 (Never), 1 (Rarely), 2 (Often) and 3 (Always). The sum score of each dimension was multiplied by two to obtain a sum score that can be classified into five levels that are normal, mild, moderate, severe and extremely severe. The internal reliability of this scale recorded a satisfactory Cronbach's alpha value of 0.90 for stress, 0.88 for anxiety and 0.89 for depression [44].

3.3. Data Analysis

Excel 2019 was used to organize the data and Statistical Package for the Social Sciences (SPSS) version 16 was used to analyze the data in order to meet the research objectives by answering four research questions. Descriptive and inferential statistics were used in analyzing the data of 265

responses. The Cronbach's alpha coefficient was calculated to measure the internal consistency and

reliability, and the Independent Samples t-test was performed to test the differences of work-to-family conflict and mental health between males and females.

4. RESEARCH FINDINGS

4.1. Demographic Profile of Respondents

Sociodemographic information socioeconomic characteristics are shown in Table 1. Participants were 265 low-income earners working at Johor Local Authorities aged between 21 to 60 years with the highest number of participants were among 31 to 35 years (n = 73, 27.5%). Male was found to be dominant in this research study with a total of 183 (69.1%) participants as compared to female (n = 82, 30.9%). Regarding marital status, the majority of them were married (n = 203, 76.6%). In term of socioeconomic status, 117 (44.2) participants reported having the highest academic attainment of Sijil Pelajaran Malaysia (SPM)/Sijil Tinggi Peperiksaan Malaysia (STPM) while out of the total sample, 76 (27%) of low-income earners reported earning net household income monthly of RM2,000 to RM2,999.

Table 1. Demographics of Respondents (n = 265)

Demographic	N	%
Age (years)		
21 – 25	27	10.2
26 – 30	61	23.0
31 – 35	73	27.5
36 – 40	42	15.8
41 – 45	14	5.3
46 - 50	23	8.7
51 - 55	20	7.5
56 – 60	5	1.9
Gender		
Male	183	69.1
Female	82	30.9
Marital Status		
Single	54	20.4
Married	203	76.6
Divorced	5	1.9
Widow/Widower	3	1.1
Education Level		
SPM/STPM	117	44.2
Malaysian Skills Certificate	29	10.9
Diploma	76	28.7
Bachelor's Degree	38	14.3
Postgraduate	5	1.9
Monthly Household Income (RM)		
< 1,000.00	7	2.6
1,000 – 1,999	70	26.4
2,000 – 2,999	76	28.7
3,000 – 3,999	54	20.4
4,000 – 4,849	58	21.9



4.2. Reliability Analysis

The most frequent used objective measure of variable reliability is Cronbach's alpha (α). Cronbach's alpha value for scale items with the acceptable degree of reliability (internal consistency) is more significant than 0.7 [45]. The reliability analysis was performed for the scores of work-family conflict and mental health using the sample study (n = 265) as indicated in

Table 2. The cumulative reliability for work-family battle and mental health recorded acceptable values of 0.91 and 0.96, respectively. Meanwhile, the dimensions of both work-family conflict and mental health range between 0.74 and 0.91, indicating adequate level of reliability of the measured items.

Table 2. Summary of Reliability Analysis

Latent Variable	Total Items	Cronbach's Alpha
Work-family Conflict	9	0.91
Time-based conflict	3	0.91
Strain-based conflict	3	0.88
Behavior-based conflict	3	0.74
Mental Health	21	0.96
Stress	7	0.88
Anxiety	7	0.87
Depression	7	0.89

4.3. Level of Work-family Conflict and Mental Health

Table 3 indicates the statistical results of mean, standard deviation, the minimum and maximum score for the nine items of the work-family conflict scale. The level of work-family conflict dimensions is measured based on mean values consisting of low (0 – 1.33), moderate (1.34 – 2.66) and high (2.67 – 4.00). The highest cumulative mean of work-family conflict dimensions was a behavior-based conflict (\overline{x} = 2.58), followed by strain-based conflict (\overline{x} = 2.46) and time-based conflict (\overline{x} = 2.37), signifying the levels of all types of work-family war were at a moderate level. Ith

the minimum score of 1 and maximum score of 5. The rank in the table below indicates the most prevalent items of work-family conflict begins with rank 1. Therefore, the three most frequently inter-role conflict between work and family interfaces reported by the respondents were "when I get home from work, I am often too frazzled to participate in family activities/responsibilities", "the behaviors I perform that make me effective at work do not help me to be a better parent and spouse" and "behavior that is effective and necessary for me at work would be counterproductive at home". The other inter-role conflict encountered by low-income earners is shown in Table 3.

Table 3. Mean and Standard Deviation of Each Component of Work-family Conflict

No.	Item	Mean	SD	Min.	Max.	Rank
	Time-based conflict	2.37	0.84	1	5	3
1.	My work keeps me from my family activities more than I would like. Kerja saya menjauhkan saya daripada aktiviti keluarga lebih daripada yang saya mahukan.	2.35	0.92	1	5	7
2.	The time I must devote to my job keeps me from participating equally in household responsibilities and activities. Masa yang mesti diluangkan untuk pekerjaan saya membuat saya tidak dapat sama-sama mengambil bahagian dalam tanggungjawab dan aktiviti rumah tangga.	2.35	0.93	1	5	8
3.	I have to miss family activities due to the amount of time I must spend on work responsibilities. Saya terlepas pelbagai aktiviti keluarga kerana banyak masa yang harus saya luangkan untuk tanggungjawab kerja.	2.42	0.90	1	5	5
	Strain-based conflict	2.46	0.87	1	5	2
4.	When I get home from work, I am often too frazzled to participate in family activities/ responsibilities.	2.68	0.93	1	5	1



No.	Item	Mean	SD	Min.	Max.	Rank
	Semasa saya pulang dari kerja, saya sering merasa terlalu letih untuk menyertai aktiviti / tanggungjawab keluarga.					
5.	I am often so emotionally drained when I get home from work that it prevents me from contributing to my family. Saya sering mengalami tekanan emosi ketika pulang dari kerja sehingga menghalang saya untuk memberi sumbangan kepada keluarga saya.	2.32	0.95	1	5	9
6.	Due to all the pressures at work, sometimes when I come home, I am too stressed to do the things I enjoy. Tekanan kerja yang banyak menyebabkan saya tidak dapat melakukan aktiviti yang menyeronokkamn ketika pulang ke rumah.	2.38	1.02	1	5	6
	Behavior-based conflict	2.58	0.78	1	5	1
7.	The problem-solving behaviors I use in my job are not effective in resolving problems at home. Cara penyelesaian masalah yang saya gunakan di dalam pekerjaan tidak berkesan dalam menyelesaikan masalah di rumah.	2.56	0.91	1	5	4
8.	Behavior that is effective and necessary for me at work would be counterproductive at home. Tingkah laku yang berkesan di tempat kerja tidak menjadi produktif apabila di rumah.	2.59	0.95	1	5	3
9.	The behaviors I perform that make me effective at work do not help me to be a better parent and spouse. Tingkah laku yang berkesan yang saya lakukan di tempat kerja tidak membantu saya menjadi ibu bapa dan pasangan yang lebih baik.	2.60	1.01	1	5	2

Table 4 also shows the statistical results of mean, standard deviation, the minimum and maximum score for the 21-items of self-reported DASS-21 was. Stress was recorded as the highest cumulative mean of mental health dimension ($\overline{x}=1.60$) compared to anxiety ($\overline{x}=1.51$) and depression ($\overline{x}=1.50$), indicating the respondents rated the scale between rarely and often towards stress, anxiety and depression. The minimum score of these three

negative emotional symptoms was one and the maximum score varied is 3.43 for priority, 3 for fear and 3.86 for depression. In regard to the top three mental health issues suffered by the respondents as ranked in the table below were "I was aware of dryness of my mouth", "I felt that I was rather touchy" and "I found it difficult to work up the initiative to do things". The other negative emotional symptoms encountered by low-income earners are indicated in Table 4.

Table 4. Mean and Standard Deviation of Each Component of Mental Health

No.	Item	Mean	SD	Min.	Max.	Rank
	Stress	1.60	0.51	1	3.43	1
1.	I found it hard to wind down.	1.83	0.71	1	4	2
	Saya dapati diri saya sukar merasa tenang.	1.03	0.71	1	7	2
6.	I tended to over-react to situations.					
	Saya cenderung untuk bertindak keterlaluan dalam	1.57	0.69	1	4	6
	sesuatu keadaan.					
8.	I felt that I was using a lot of nervous energy.					
	Saya merasakan banyak tenaga digunakan kerana	1.57	0.71	1	4	6
	gelisah.					
11.	I found myself getting agitated.	1.38	0.59	1	4	14
	Saya dapati diri saya semakin gelisah.	1.30	0.57	1	7	17
12.	I found it difficult to relax.	1.44	0.58	1	4	11
	Saya rasa sukar untuk bertenang.	1.77	0.50	1	7	11
14.	I was intolerant of anything that kept me from getting on					
	with what I was doing.	1.58	0.64	1	4	5
	Saya tidak dapat menahan sabar dengan perkara yang	1.56	0.04	1		3
	menghalang saya meneruskan apa yang saya lakukan.					
18.	I felt that I was rather touchy.	1.83	0.75	1	4	2



No.	Item	Mean	SD	Min.	Max.	Rank
	Saya rasa saya seorang yang mudah tersentuh.					
	Anxiety	1.51	0.48	1	3	2
2.	I was aware of dryness of my mouth.				_	
2.	Saya sedar mulut saya terasa kering.	1.85	0.73	1	4	1
4.	I experienced breathing difficulty (such as excessively rapid breathing, breathlessness in the absence of physical exertion). Saya mengalami kesukaran bernafas (contohnya bernafas terlalu cepat, tercungap-cungap walaupun tidak melakukan senaman fizikal)	1.45	0.63	1	4	10
7.	I experienced trembling (such as in the hands). Saya rasa menggeletar (contohnya pada tangan).	1.38	0.60	1	4	14
9.	I was worried about situations in which I might panic and make a fool of myself. Saya berasa bimbang dengan keadaan yang saya mungkin menjadi panik dan melakukan perkara yang membodohkan diri sendiri.	1.45	0.65	1	4	10
15.	I felt I was close to panic. Saya rasa hampir-hampir panik.	1.41	0.58	1	4	13
19.	I was aware of the action of my heart in the absence of physical exertion (such as sense of heart rate increase, heart missing a beat). Saya sedar terdapat perubahan tindakbalas jantung saya walaupun tidak melakukan aktiviti fizikal (contohnya kadar denyutan jantung bertambah, atau denyutan jantung berkurangan).	1.57	0.63	1	3	6
20.	I felt scared without any good reason. Saya berasa takut tanpa sebab yang munasabah.	1.48	0.62	1	4	8
	Depression	1.50	0.50	1	3.86	3
3.	I couldn't seem to experience any positive feeling at all. Saya tidak dapat mengalami perasaan positif sama sekali.	1.64	0.65	1	4	4
5.	I found it challenging to work up the initiative to do things. Saya sukar untuk mendapatkan semangat bagi melakukan sesuatu perkara.	1.69	0.63	1	4	3
10.	I felt that I had nothing to look forward to. Saya rasa saya tidak mempunyai apa-apa untuk diharapkan.	1.53	0.77	1	4	7
13.	I felt down-hearted and blue. Saya rasa sedih dan murung.	1.48	0.64	1	4	8
16.	I was unable to become enthusiastic about anything. Saya tidak bersemangat denga apa jua yang saya lakukan.	1.42	0.57	1	4	12
17.	I felt I wasn't worth much as a person. Saya rasa saya tidak begitu berharga sebagai seorang individu.	1.47	0.66	1	4	9
21.	I felt that life was meaningless. Saya rasa hidup ini tidak bermakna.	1.25	0.52	1	4	15

4.4. Gender Differences of Work-family Conflict and Mental Health

The analysis of the independent sample t-test in examining the difference between male and female employees regarding work-family conflict and mental health is exhibited in Table 5. The mean of work-family conflict showed males ($\overline{x} = 22.30$) have greater work-family conflict than females ($\overline{x} = 22.16$) while

females ($\overline{x}=32.65$) have greater mental health issues compared to males ($\overline{x}=32.10$). However, the results reported that there was no significant difference between male and female employees for both workfamily conflict [t (263) = 0.17, p > 0.05] and mental health [t (263) = -0.41, p > 0.05]. Hence, the null hypothesis stating there is no significant difference between males and females in work-family conflict and mental health was accepted.



Table 5. Prevalence of Work-to-family Conflict Mental Health between Genders

Variables	Groups	N	Mean	SD	t	df	р
Work-to-family	Male	183	22.30	6.80	0.17	263	0.87
conflict	Female	82	22.16	5.74	0.17		0.67
Mental health	Male	183 32.10	9.47	-0.41	263	0.68	
Mental health	Female	82	32.65	10.75	-0.41	203	0.08

Note. The significant level at 0.05 level

5. DISCUSSION

This study assessed the level of work-family conflict and mental health among low-income earners and examined the experience of work-family war and mental health among male and female low-income earners at Johor Local Authorities. With respect to the first research question, behavior-based conflict was recorded as the highest level of work-family competition compared to the other types of workfamily war, i.e., strain-based conflict and time-based conflict. This can be explained through the change of routines for both work and family interfaces during the pandemic where Movement Control Order (MCO) was imposed by the Malaysian government, and employees are required to work from home. In adapting to the new normal of working and living, patterns, employees' productivity behaviors are affected, and the majority of them claimed to be still facing difficulties by the limitations of working from home [46]. This is in line with the finding of which low-income earners reported to have an issue of effective behaviors performed at work did not help them to be better parents or spouses. In contrast, timebased conflict was said to be the lowest type of workfamily conflict. Besides, the rationale of low-income earners experiencing quiet time interference is this study samples because were administrative officers who are currently working at Johor Local Authorities, which is one of the Malaysian public sectors. Public sectors employees' working hours are fixed from 8 am to 5 pm daily except for weekends which they did not have extra working hours and shift work to be fulfilled. Thus, the time allocated for work matters allowed the lowincome earners to fulfill the household responsibilities and activities.

Concerning the second research question, the most prevalent mental health issue encountered by low-income earners was stress, followed by anxiety and depression. Based on Menon [46] who reported the impact of a pandemic on the workforce, the changing of work and organizational routines, and pressures from family such as childcare had led to the experience of the stress of 67% and 58% of Malaysia population, respectively. A study on mental health issues among low-income families during COVID-19 in Malaysia conducted by Ismail et al. [47] revealed that 85% of individuals from poor economic backgrounds had moderate to extremely severe levels

of stress. As recorded in Table 4, low-income earners found difficulties to wind down and more vulnerable to touchy feelings. However, the study outcome from Ismail et al. [47] showed a contradiction in the anxiety level. Surprisingly, they found 99% of the participants reported suffering from anxiety from moderate to highly severe level, with 68% of them facing adamant anxiety level, demonstrating concern was the dominant-negative emotional symptoms experienced by the low-income earners in their study which contradicts this research finding. Furthermore, the lowest level of mental health in the current study was found to be depressed because of the more severe symptoms that affect every life aspect including, feeling, thinking and behavior [48]. Hence, lowincome earners were found to have more significant stress compared to anxiety and depression due to the changing nature of work during a pandemic.

For the third and fourth research objectives, there were no significant differences in overall work-family conflict and mental health, signifying similar experiences of general work interference to family roles and negative emotional symptoms between male and female low-income earners. On the contrary, male employees were reported to face greater job demands in which their work interfered to fulfill family responsibilities [33]. Next, despite the reported prior literature of significant differences of work-family conflict with the female having greater work interference toward family interface [30]-[32], workload due to organizational goals during pandemic did not intensify work-family conflict for female [29]. In point of fact, based on interviewees responses on working from home and work-family conflict configurations in Heloisa and Costa [29] research study, they stated that working from home brought them closer to their children and spouses, and gave them more time for physical and recreational activities. In addition, the findings on the insignificant difference in mental health among males and females provide new empirical evidence relating to the similar experience of negative emotional symptoms for both males and females in the context of low-income earners. This is due to the prior literature that reported significant gender differences on mental health issues during the health crisis, such as from Perveen et al. [25] who found the experience of stress, anxiety and depression among males significantly differed and higher than female whereas Ping et al. [38] claimed that female had a more significant level of poor mental health conditions compared to male counterparts and



was found to be significantly different across gender. These insignificant findings of gender differences can be explained through the nature of the work of the study sample. Apart from fixed working hours as public sector employees, the low-income earners also were among the administrative officers who are categorized as non-decision makers and have similar tasks and job duties [49] which only slightly led to work-family conflict and affected mental health as compared to high-income earners [50]. Therefore, this study produced unique findings where the low-income earners between males and females equally experienced work interference with family and mental health issues. The speculation based on this finding is that both men and women become primary caregivers for young children and complete household chores, although women still spend more time on both tasks.

5.1. Implications

Theoretically, this present study contributes to the continuity of the previous research on the gender differences of work-family conflict and mental health specifically among low-income earners working in public sectors and allows researchers and practitioners to gain insight into the difference of the experience of work-family conflict and mental health between male and female in the context of a developing country. Practically, the study outcome can be used as a guideline in implementing behavioral and emotional interventions that focus on prioritizing between work demand and family demand, as well as emotional from mental health practitioners. screenings Furthermore, there is a need for the Public Sector Department to organize building resilience programs for low-income earners to bounce back with the challenges encountered physically and emotionally and teach effective strategies in dealing with their negative emotions, such as breathing mechanisms and mindfulness. Even though there was no significant difference in work-family conflict and mental health between males and females, programs interventions in reducing work-family friction must be performed regularly and equally between gender as it is regarded as the critical step in reducing negative emotional symptoms among low-income earners at Johor Local Authorities.

5.2. Limitations and Suggestions

This study examined the work-family conflict and mental health among low-income earners across gender. One of the limitations of this study is negative emotional symptoms, including stress, anxiety, and depression, were only measured through a self-report inventory. Thus, a diagnostic interview is recommended to be used for future studies in order to obtain more accurate negative emotional symptoms

among low-income earners. Next, the total number of male respondents (69.1%) was found to be more significant as compared to female respondents (30.9%). For that reason, future researchers are recommended to stabilize the number of respondents between males and females in order to gain a more precise analysis of gender differences. Besides, this study focused solely on low-income earners working in public sectors, restricting the understanding of the work-family conflict and mental health experienced by the other sectors. Hence, the recommendation for future research is to perform a similar study by extending to low-income earners working in varied sectors, including private sectors, in order to provide a deeper insight into their work-family experiences and mental health issues.

6. CONCLUSION

This study has addressed the effort in examining the level of work-family conflict in which behaviorbased conflict was the most prevalent inter-role conflict issue encountered by low-income earners. Besides, the examination of the level of mental health demonstrated that low-income earners experienced normal to highly severe levels, whereas anxiety and depression levels were from moderate to highly extreme levels. On top of that, the differences in workfamily conflict and mental health between male and female low-income earners have also investigated, revealing males experienced more significant work-family conflict than females, whereas females reported being more vulnerable to share mental health issues compared to males. Although the independent sample t-test showed there were no significant differences between males and females in the areas of work-family conflict and mental health among low-income earners, the findings can bridge little gender gaps in work and home interfaces in order to achieve the equitable society as presented in 11th Malaysia Plan by Malaysia government in the year 2015 pertaining the nation's five-year developmental goal [51].

AUTHORS' CONTRIBUTIONS

Conceptualization, methodology, data collection, data analysis, results and discussion, Errna Nadhirah Kamalulil. Reviewing and editing, Siti Aisyah Panatik, Junaidah Yusof, Nor Akmar Nordin, Irmwati Azman, and Noraini Rusbadrol.

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REFERENCES

- [1] A. Lahti, "The Perceived Impact of Flexible Working Hours on Work-life Balance in the Educational Sector in Finland," Aalto University, 2017.
- [2] AIA Vitality, "Malaysia's healthiest workplace," 2019. https://healthiestworkplace.aia.com/malaysia/eng/.
- [3] J. H. Greenhaus and N. J. Beutell, "Sources of conflict between work and family roles," *Acad. Manag. Rev.*, vol. 10, no. 1, p. 76, 1985, doi: 10.2307/258214.
- [4] E. M. Boyd, M. T. Sliter, S. Chatfield, E. M. Boyd, M. T. Sliter, and S. C. Double, "Double trouble: Work-family conflict and well-being for second job holders," *Community. Work Fam.*, vol. 19, no. 4, pp. 462–480, 2016, doi: 10.1080/13668803.2015.1074545.
- [5] Diana, Anis E., and Inanta I. P., "The effect of work-family conflict on job satisfaction with organizational commitment as the moderator variable," *Sys Rev Pharm*, vol. 11, no. 10, pp. 429–437, 2020.
- [6] T. S. Suifan, A. B. Abdallah, and H. Diab, "The influence of work life balance on turnover intention in private hospitals: The mediating role of work life conflict," *Eur. J. Bus. Manag.*, vol. 8, no. 20, pp. 126–139, 2016, [Online]. Available: www.iiste.org.
- [7] Nurnazirah J., Samsiah M., Zurwina S., and Fauziah N., "Work-family conflict and stress: Evidence from Malaysia," *J. Econ. Bus. Manag.*, vol. 3, no. 2, pp. 309–312, 2015, doi: 10.7763/JOEBM.2015.V3.200.
- [8] D. Kan and X. Yu, "Occupational stress, work-family conflict and depressive symptoms among chinese bank employees: The role of psychological capital," *Int. J. Environ. Res. Public Health*, vol. 13, no. 1, p. 134, 2016, doi: 10.3390/ijerph13010134.
- [9] D. A. Mata and S. Sen, "Work-family conflict and the sex difference in depression among training physicians," *JAMA Int. Med.*, vol. 177, no. 12, pp. 1766–1772, 2017, doi: 10.1001/jamainternmed.2017.5138.
- [10] E. Rabenu, A. Tziner, and G. Sharoni, "The relationship between work-family conflict, stress and work attitudes," *Int. J. Manpow.*, vol. 38, no. 8, pp. 1143–1156, 2017, doi: 10.1108/IJM-01-2014-0014.
- [11] J. Hao, D. Wu, L. Liu, X. Li, and H. Wu, "Association between work-family conflict and depressive symptoms among Chinese female nurses: The mediating and moderating role of psychological capital," *Int. J. Environ. Res. Public Health*, vol. 12, pp. 6682–6699, 2015, doi: 10.3390/ijerph120606682.
- [12] V. Boonratana and B. Gharleghi, "Determinants of the job burnout in public

- sector employees in Malaysia," *Int. J. Bus. Manag.*, vol. 10, no. 6, pp. 208–215, 2015, doi: 10.5539/ijbm.v10n6p208.
- [13] Khairun Nisa K. and Dewi A. S., "Examining facets of emotional exhaustion in the Malaysian service industry," *Int. J. Bus. Manag.*, vol. 7, no. 4, pp. 82–95, 2016.
- [14] E. J. Khoo, S. Aldubai, K. Ganasegeran, B. X. E. Lee, Nurul A. Z., and K. K. Tan, "Emotional exhaustion is associated with work related stressors: Across-sectional multicenter study in Malaysian public hospitals," *Arch Argent Pediatr*, vol. 115, no. 3, pp. 212–219, 2017.
- [15] A. G. Wepfer, T. D. Allen, R. Brauchli, G. J. Jenny, and G. F. Bauer, "Work-life boundaries and well-being: Does work-to-life integration impair well-being through lack of recovery?," *J. Bus. Psychol.*, vol. 33, no. 6, pp. 727–740, 2018, doi: 10.1007/s10869-017-9520-y.
- [16] M. Lobel and C. Dunkel-schetter, "Conceptualizing stress to study effects on health: Environmental, perceptual and emotional components," *Anxiety Res.*, vol. 3, pp. 213–230, 1990.
- [17] M. Altaf, S. Noushad, S. Ahmed, S. Z. Azher, and S. M. Tahir, "Emotional stress estimation in general population," *Int. J. Endorsing Heal. Sci. Res.*, vol. 2, no. 1, pp. 34–37, 2014, doi: 10.29052/ijehsr.v2.i1.2014.34-37.
- [18] S. H. Lovibond and P. F. Lovibond, *Manual for the depression, anxiety and stress scales*, 2nd ed. Sydney: Psychology Foundation of Australia, 1995.
- [19] R. S. Lal and A. P. Singh, "Does job stress play any role in work motivation of university clerical employees?," *Int. Res. J. Soc. Sci.*, vol. 4, no. 11, pp. 7–11, 2015.
- [20] G. Butler, "Definitions of stress," Occas. Pap. R. Coll. Gen. Pract., vol. 61, no. 1, pp. 1–5, 1993
- [21] G. N. Marshall, L. M. Davis, and C. D. Sherbourne, *Stress and health: Definitions and concepts*. 1992.
- [22] D. H. Barlow, Anxiety and its disorders: The nature and treatment of anxiety and panic. Guilford Press, 2004.
- [23] P. Swift, E. Cyhlarova, I. Goldie, and C. O'Sulli, "Living with anxiety: Understanding the role and impact of anxiety in our lives," 2014.
- [24] C. S. Leng, F. D. Hutagalung, and L. P. Li, "A review of depression and its research studies in Malaysia," *Int. J. Educ.*, vol. 2, no. 4, pp. 40–55, 2017.
- [25] A. Perveen *et al.*, "The comparison of depression, anxiety, stress, and coping strategies among Malaysian male and female during COVID-19 movement control period,"



- *Int. J. Acad. Res. Bus. Soc. Sci.*, vol. 10, no. 7, pp. 487–496, 2020, doi: 10.6007/IJARBSS/v10-i7/7451.
- [26] R. Talha, "Kajian kes impak perintah kawalan pergerakan kepada penduduk malaysia," 2020. [Online]. Available: https://www.dosm.gov.my/v1/uploads/files/6_Newsletter/Newsletter 2020/DOSM_BPPD_1-2020_Siri-17.pdf.
- [27] M. Sedaroglu, "Determinants of work-family conflict in the context of the COVID-19 pandemic," *Psychol. Educ. Sci.*, vol. 1, pp. 20–34, 2021.
- [28] M. Yorulmaz, "Supervisor support and turnover intentions of yacht captains: The role of work–family conflict and psychological resilience during the COVID-19 pandemic," *Int. Jorunal Contemp. Hosp.*, vol. 3, no. 5, pp. 1554–1570, 2021, doi: 10.1108/IJCHM-07-2020-0788.
- [29] A. N. A. Heloísa and D. A. Costa, "Women in home office during the COVID-19 pandemic and the work-family conflict configurations," *J. Bus. Manag.*, vol. 60, no. 6, pp. 388–399, 2020, doi: http://dx.doi.org/10.1590/S0034-759020200603.
- [30] M. C. Zurlo, F. Vallone, and A. P. Smith, "Work–family conflict and psychophysical health conditions of nurses: Gender differences and moderating variables," *Japan J. Nurs. Sci.*, vol. 17, no. 3, 2020, doi: 10.1111/jjns.12324.
- [31] V. Nsair and M. Piszczek, "Gender matters: The effects of gender and segmentation preferences on work-to-family conflict in family sacrifice climates," *J. Occup. Organ. Psychol.*, vol. 94, no. 3, pp. 509–530, 2021, doi: 10.1111/joop.12361.
- [32] S. K. Bosman, "Working from home during a pandemic and its effect on gender equality: Work-family conflict and work-family guilt among working parents," University Utrecht, 2021.
- [33] N. Kengatharan, "Shouldering a double burden: The cultural stigma of the dogma of gender role ideology and its impact on workfamily conflict," *J. Adv. Manag. Res.*, vol. 17, no. 5, pp. 651–667, 2020, doi: 10.1108/JAMR-03-2020-0033.
- [34] T. V. D. Lippe and Z. Lippenyi, "Beyond formal access: Organizational context, working from home, and work–family conflict of men and women in European workplaces," *Soc. Indic. Res.*, vol. 151, no. 2, pp. 383–402, 2020, doi: 10.1007/s11205-018-1993-1
- [35] World Health Organization, Depression and other common mental disorders: Global health estimates. 2017.
- [36] Ministry of Health Malaysia, "Mental health

- issues in Malaysia," Malaysia, 2016. [Online]. Available: file:///C:/Users/ASUS/Downloads/KENYAT
- AAN AKHBAR YBMK Kesihatan Mental 28 September 2016.pdf.
- [37] O. L. K. Campbell, D. Bann, and P. Patalay, "The gender gap in adolescent mental health: A cross-national investigation of 566,829 adolescents across 73 countries," *SSM Popul. Heal.*, vol. 13, p. 100742, 2021, doi: 10.1016/j.ssmph.2021.100742.
- [38] L. Ping *et al.*, "Escalating progression of mental health disorders during the COVID-19 pandemic: Evidence from a nationwide survey," *PLoS One*, vol. 16, no. 3, pp. 1–14, 2021, doi: 10.1371/journal.pone.0248916.
- [39] A. Macintyre, D. Ferris, B. Gonçalves, and N. Quinn, "What has economics got to do with it? The impact of socioeconomic factors on mental health and the case for collective action," *Palgrave Commun.*, vol. 4, no. 1, pp. 1–5, 2018, doi: 10.1057/s41599-018-0063-2.
- [40] M. Dackehag, L. Ellegård, U.-G. Gerdtham, and T. Nilsson, "Day-to-day living expenses and mental health," *Work. Pap.*, vol. 19, pp. 1–35, 2016.
- [41] Corporate Malaysia, "B40 group to contribute 20% of GNI," Malaysia, 2017. [Online]. Available: https://themalaysianreserve.com/2017/04/03/b40-group-to-contribute-20-of-gni/.
- [42] E. Erdfelder, F. Faul, and A. Buchner, "G*Power: A general power analysis program," *Behav. Res. Methods, Instruments, Comput.*, vol. 28, no. 1, pp. 1–11, 1996, doi: 10.3758/BF03203630.
- [43] D. S. Carlson, K. M. Kacmar, and L. J. Williams, "Construction and initial validation of a multidimensional measure of workfamily conflict," *J. Vocat. Behav.*, vol. 56, no. 2, pp. 249–276, 2000, doi: 10.1006/jvbe.1999.1713.
- [44] J. A. González-Rivera, O. M. Pagán-Torres, and E. M. Pérez-Torres, "Depression, Anxiety and Stress Scales (DASS-21): Construct validity problem in Hispanics," *Eur. J. Investig. Heal. Psychol. Educ.*, vol. 10, no. 1, pp. 375–389, 2020, doi: 10.3390/ejihpe10010028.
- [45] J. F. Hair, C. M. Ringle, and M. Sarstedt, "PLS-SEM: Indeed a silver bullet," *J. Mark. Theory Pract.*, vol. 19, no. 2, pp. 139–152, 2011, doi: 10.2753/MTP1069-6679190202.
- [46] A. Menon, "Press Release: Pandemic's impact on Malaysian Workforce: 28-Country Ipsos Survey for the World Economic Forum," 2021. [Online]. Available: https://www.ipsos.com/sites/default/files/ct/news/documents/2021-

01/ipsos_malaysia_press_release_-



- _pandemics_impact_on_malaysian_workforc e_-_200121_final.pdf.
- [47] R. Nurul *et al.*, "Depression, anxiety and stress level among low-income family during COVID-19 pandemic in Malaysia," *J. Leg. Ethical Regul. Issues*, vol. 24, no. 1, pp. 1–5, 2021.
- [48] K. P. S. Kumar, S. Srivastava, S. Paswan, and A. S. Dutta, "Depression Symptoms, causes, medications and therapies," *Pharma Innov.*, vol. 1, no. 3, pp. 41–55, 2012.
- [49] K. L. Goh and N. P. Tey, "Personal income in Malaysia: Distribution and differentials," *Econ. Bulltein*, vol. 38, no. 2, pp. 973–982, 2019
- [50] Health and Safety Executive, "Work-related stress, anxiety or depression statistics in Great Britain, 2020," Britain, 2020. [Online]. Available: http://www.hse.gov.uk/statistics/lfs/index.ht m.
- [51] Prime Minister Department, "Eleventh Malaysia Plan 2016-2020: Anchoring Growth on People," 2015. doi: 10.1007/s10934-016-0189-9.
- [52] G. Hofstede, *Culture's Consequences: International Differences in Work-related Values*, 2nd ed. United States of America:
 SAGE Publications, 1984.