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Validation of supervisor support scale and work-life balance checklist in Malay Language among Malaysian working mothers

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ABSTRACT

Working mothers burdened with work and household responsibilities face challenges with work-life balance, which could be empowered through supervisor support in the workplace. Therefore, it is vital to identify the impact of supervisor support on working mothers' work-life balance. However, available instruments to measure both constructs for the Malay-speaking Malaysian population are dearth. This study assessed the psychometric properties of the Malay version of the supervisor support scale (SS-Malay) and work-life balance checklist (WLB-Malay) and investigated the relationship between these variables among Malaysian working mothers. Using purposive sampling, 200 working mothers (M=38.80, SD=8.43) for the pilot study and 275 working mothers (M=38.33, SD=7.86) for the actual study completed either an online or printed survey consisting of demographic information, the supervisor support scale, and the work-life balance checklist. Exploratory factor analysis conducted on the pilot study data reported a two-factor structure for WLB-Malay and one factor for SS-Malay. Similarly, confirmatory factor analysis confirmed the unidimensional factor of SS-Malay, and two factors of WLB-Malay: concerned about work, and self. Reliability was established with alpha, omega, and composite reliability values of more than .70. Discriminant validity was established with correlation values of less than .90, and concurrent validity was established with significant moderation positive association between constructs. Structural equation modelling reported a satisfactory model fit for both scales and identified a positive impact of supervisor support on work-life balance among Malaysian working mothers. Accordingly, both WLB-Malay and SS-Malay are culturally fit for Malaysian working mothers.

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1. INTRODUCTION

Balancing between work and home life has been a challenge for many, particularly mothers who shoulder both work matters and home matters at the same time. Specifically in this modern era with the integration of mobile phones and the internet in the work setting, working mothers are facing difficulties in

segmenting home and work affairs. Women endure an overabundance of the burden of caring for their families while also performing their responsibilities as employees, making it challenging for them to perform both roles effectively, resulting in an unbalanced work-life [1]. Particularly, the COVID-19 pandemic and abrupt shifts in working and schooling arrangements resulted in extreme stress for working mothers, as they are forced to work longer hours to compensate for the ever-increasing number of retrenched employees [2]. Decades of research have shown that even before the pandemic hit, working mothers were challenged with problems in both family and work domains. Not an exception, Malaysian working mothers reported several underlying factors that contributed to poor work-life balance, including discrimination, limited quality time spent with children, family, and parents, lack of organisational support, unsatisfactory workplace, workplace culture, stress control, the responsibility of the employer, and workload [3]–[5]. These challenges with work-life balance have a detrimental impact on their psychological well-being [6].

In general, mothers with poor work-life balance perceive that work matters significantly limit and interfere with their roles at home including caring for children and other family members and engaging in positive interaction between mother and child. With both hands full, working mothers turn to organisations to obtain support regarding their children, such as applying for flexible working options and apprenticeships [7]. Notably, having a balanced work and family life evidently, heightened job satisfaction and performance [8], as well as general satisfaction with life [9]. Advocating for mental health, employers and organisations have taken a step ahead to provide relevant workplace policies and programmes to maintain employee's mental health and well-being (i.e., mental health leaves, mental health/counselling claims, and workshops), and physical health (i.e., providing an indoor company gymnasium and health insurance). Among the measures taken by the organisation, the role of the supervisor in managing employees' well-being should not be taken lightly, as a supervisor directly manages and communicates with subordinates regarding work-related matters.

Particularly, one of the prominent factors that influence work-life balance among working mothers in Malaysia and globally is the role of perceived support [10]–[14]. In the context of the workplace, supervisor support is a term used to measure an employee's perceptions of contributions and values by their supervisors [15]. Psychologically, a supervisor ensures employees that they are trusted, encourages self-improvement, provides clarity, and emotional support, and is transparent on work matters, resulting in positive perceptions regarding work [16]. In line with past studies, having a responsible and supportive supervisor has been shown to improve the aspects of work-life balance [17], and alleviate work-family conflicts [18] as well as workplace incivility [19]. Hence, this study focuses on the role of supervisors in maintaining the work-life balance of employees.

In Malaysia, studies on supervisor support and work-life balance among working mothers are uncommon. The rarity of studies conducted on supervisor support and work-life balance in Malaysia specifies the need to further explore these relationships among working mothers in Malaysia. Therefore, this study seeks to investigate the influence of supervisor support on Malaysian working mothers' work-life balance. From past studies in other contexts, this study predicts that supervisor support improves work-life balance among working mothers:

> *Hypothesis 1: Supervisor support significantly correlates with work-life balance among Malaysian working mothers.*

Furthermore, studies on work-life balance among working mothers are limited and not well-validated [20]. Hence, it is crucial to consider the cultural context before administering an instrument to ensure an accurate reflection of the variables to be measured. There are yet instruments to measure work-life balance and supervisor support in the Malay language which are psychometrically and culturally sound for working adults in Malaysia. This limitation raises concerns for the working mother population which is not well-versed with English Language terms. Hence, in the context of Malaysian working mothers, this study also aims to: i) assess the reliability and validity of the Supervisor Support-Malay (SS-Malay), ii) assess the reliability and validity of the WLB-Malay, and iii) to investigate the influence of supervisor support on Malaysian working mothers' work-life balance.

2. METHOD

2.1. Participant

A total of 475 respondents were recruited for Phase 1 and 2 of the study. Using purposive sampling, working mothers in Malaysia who fulfilled specific criteria were recruited through online and offline mediums. The inclusion criteria for the respondents include: i) a mother who is currently working, ii) working under an employer, iii) living in Malaysia, and iv) Malaysian nationality. Therefore, non-working

mothers and self-employed mothers were excluded from the study. The sample size was determined by Velicer and Fava [21] suggesting a minimum sample size of more than 50 for the pilot study, and the G*Power software version with a medium effect size for the actual study, yielding a minimum of 166 respondents, hence, the total of 275 respondents for actual study is more than sufficient for analysis.

2.2. Measure

The survey consisted of three sections; demographic information, the Work-Life Balance scale [22], and the supervisor support scale [16]. On the first page of the survey, participants were briefed on the research background and several ethical statements, including their agreement to participate in the survey, Then, the demographic section asked for the participants' personal background information, such as age, race, and income status. Participants were also required to answer questions on their family background information, including marriage status and number of children, and work-related information, including years of working experience, work group, and work status.

The Work-Life Balance Checklist was extracted from The Industrial Society known as the Work Foundation's manual [22] and comprises 10 unidimensional items regarding the participant's perception of their work and life matters. All items are worded on a 3-point Likert scale (1=Agree, 2=Sometimes, 3=Disagree). The minimum score for the checklist is 10 and the maximum score is 30. All items are summed up to produce the total score, with higher scores indicating a better work-life balance. The instructions for the scale are as follows: Work through this checklist and assess whether your own life is balanced. Examples of items are "I have to take work home most evenings/*Saya perlu membawa balik kerja pejabat ke rumah hampir setiap hari*", and "I often work late or at weekends to deal with paperwork without interruptions/*Saya sering bekerja lewat malam atau pada hujung minggu kerana pada waktu tersebut saya boleh bekerja tanpa gangguan*". The original instrument obtained reliability α=.66.

The supervisor support scale was utilized in a study by Baloyi *et al.* [16]. The one-dimensional scale consists of 12 statements on employees' perceptions of their supervisor. All items are positively worded on a 5-point Likert scale (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree, and 5=strongly agree). Scoring was computed by adding up all items. The minimum score for the scale is 12 and the maximum score is 60. Higher scores indicate better-perceived supervisor support. The instruction for the scale is as follows: Indicate the level of agreement with the following statements. Examples of items include "My immediate supervisor trusts me/*Penyelia saya mempercayai saya*", and "My immediate supervisor helps me to improve myself/*Penyelia saya membantu saya memperbaiki diri*". The original instrument obtained reliability α=.96.

2.3. Instrument adaptation

The instrument translation process occurred in two phases, following Sperber [23]. Firstly, the research team translated the original instruments of work-life balance and the supervisor support scale from English to Malay, yielding WLB-Malay and SS-Malay. Subsequently, two independent panels who are educators with backgrounds in the English language and with no prior knowledge of the original instrument translated the instrument from Malay to English. Then, another two independent panels who are experts in the English language cross-checked the original and back-translated instruments to identify problematic items, and finally, the research team made the necessary revisions. Both WLB-Malay and SS-Malay were finalized following a thorough review of the sentence structure and grammatical errors.

2.4. Procedure

This study employs a quantitative survey design. This study was conducted in two phases, which are Phase 1: Pilot Study and data was analysed using exploratory factor analysis (EFA), and Phase 2: Actual Study and data was analysed using structural equation modelling (SEM) which consists of confirmatory factor analysis (CFA) and path analysis. Data collection for the pilot study commenced in early November 2022 and was completed at the end of November 2022. The data were administered online and offline with the assistance of enumerators and a research assistant. The online survey was circulated through the Internet and social networking platforms including Facebook, Instagram, and communication applications such as WhatsApp. For the offline approach, enumerators were employed to distribute the printed surveys to participants who met the criteria for the study. A total of 200 data was obtained. These data were then included for EFA to assess the psychometric soundness of the instruments.

For the actual study, data collection commenced in early December 2022 and was completed at the end of December 2022. The procedure for Phase 2 followed the same route as Phase 1. Data was circulated online and offline by the research team and enumerators. Finally, a total of 275 respondents were obtained for CFA and path analysis to determine the validity of both instruments for Malaysian working mothers and how supervisor support influences Malaysian working mothers' work-life balance. These findings will be the main focus of our study in this manuscript.

2.5. Data analysis

Data analyses were conducted in three stages; EFA, CFA, and path analysis. Firstly, information regarding the development of work-life balance and supervisor support scales was not accessible at the time of research, hence data from the pilot study was analysed using EFA in the Statistical Package for the Social Sciences (SPSS) version 26 to explore the factor structure of the newly translated WLB-Malay and SS-Malay. We began by examining WLB-Malay. Prior to conducting EFA, the data was assessed for normality. The assessment of normality influences the type of extraction to be used during EFA. The EFA was conducted in several steps, including the number of factors, and type of extraction method to use. Next, the researchers used the oblique rotation method as factors are commonly related in the social science field [24]. Then, we used the most widely employed rotation technique, Varimax rotation, which is designed to reduce the number of items that have large loadings on each factor [25]. Then, we evaluated the Kaiser-Meyer-Olkin (KMO) test which is considered acceptable if above .60 and the Bartlett Test of Sphericity (BTS) value which must be significant [26]. The number of factors to be retained depended on the scree-plot obtained, and we retained items with factor loadings of more than .30. The same analysis was repeated for SS-Malay.

CFA, and path analysis are two analyses in structural equation modelling (SEM), and these analyses were conducted using the Analysis of Moment Structures (AMOS) version 24 during the actual study, to test the suitability of the model with the data and relationships between the variables. Measurement of good model fit reported a value of 5 or less for Chi-square/degree of freedom (CMIN/df), Root Mean Square Approximation (RMSEA) less than .08, incremental indices which are Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), and Normed Fit Index (NFI) values of more than .90, and Standardized Root Mean Square Residual (SRMR) of less than .08 [26]. Reliability analysis of internal consistency was run in SPSS to determine the Cronbach's Alpha value, and good reliability of the assessment model was determined by Construct Reliability (CR) and maximal Reliability (MaxR) with values more than .70, and Average Variance Extracted (AVE) values of more than .50 [27]. Discriminant validity was determined through the heterotrait-monotrait ratio of correlations (HTMT) whereby correlations between constructs should be less than the value of .90 [28]. Finally, a path analysis was conducted to test the hypothesised relationship among Malaysian working mothers.

2.6. Ethics approval

This research was conducted under the Fundamental Research Grant Scheme (code: FRGS/1/2022/SS09/UPSI/02/4; 2022-0062-106-02). This research was approved and funded by the Ministry of Higher Education Malaysia. Furthermore, this research has obtained institutional approval from the corresponding author's institution, Sultan Idris Education University (code: UPSI/PPPI/PYK/ETIKA(M)/014(643)).

3. RESULTS

3.1. Exploratory factor analysis

A total of 200 respondents were included for EFA. Respondents were between 20 to 67 years old (M=38.80, SD=8.43), majority were Malay (74.0%), in the support group work category (83.0%), working full-time (75.5%), received secondary school as highest education level (49.5%), married (63.5%), average household monthly income of less than RM 2,500 (50.0%), and have an average of 3.03 (SD=1.59) children. EFA was conducted to explore the factor structure of both measures. The data was assessed for normality and obtained both skewness and kurtosis values of between -1 and +1, indicating normality [27]. Hence, we utilised the Maximum Likelihood extraction method for normal data. Firstly, WLB-Malay was extracted with no fixed number of factors. It reported an overall Kaiser-Meyer-Olkin (KMO) value of more than .70 [29]. Specifically, KMO=.847, Barlett's test of sphericity χ^2 (45)=822.87, p<.001. The data explained a total variance of 50.18%. The rotated factor matrix showed five items in factor one and five items in factor two, all factor loadings above the cut-off score of .30 [27].

There are three items showing cross-factor loadings, which are item 2, item 6, and item 9. In all cross-loading items, the loadings are not of equal strengths, as item 2 showed greater loading for factor 1 with loading=.609, whereas items 6 and 9 showed greater loadings for factor 2 with loadings=.547, and .506, respectively. The analysis was repeated for SS-Malay. Results reported KMO=.943, Barlett's test of sphericity χ^2 (66)=1519.96, p<.001, indicating sampling adequacy for further factor analyses. The data explained a total variance of 55.21%, with the scree plot showing a one-factor structure. Using maximum likelihood, not constraining the measure to any number of factors, and using the varimax rotation, the factor loadings showed values of more than .30 [27]. Table 1 reported the factor loadings of each item for both WLB-Malay and SS-Malay.

Table 1. EFA result for WLB-Malay

Construct	Item	Factor loading		KMO	Total variance (%)
		Factor 1	Factor 2		
Work-life balance	WLB1	.576	-	.847	50.18%
	WLB2	.609	.359		
	WLB3	.552	-		
	WLB4	.690	-		
	WLB5	.739	-		
	WLB6	.415	.547		
	WLB7	-	.696		
	WLB8	-	.861		
	WLB9	.400	.506		
	WLB10	-	.647		
Supervisor support	SS1	.633		.943	55.21
	SS2	.836			
	SS3	.770			
	SS4	.808			
	SS5	.766			
	SS6	.762			
	SS7	.733			
	SS8	.706			
	SS9	.586			
	SS10	.819			
	SS11	.630			
	SS12	.817			

3.2. Structural equation modelling

A total of 275 working mothers in Malaysia participated in the actual study. The majority of the participants have an average of *M*=38.33 (*SD*=7.86) years old, were Malay full-time working mothers who worked in the support work group, and obtained the highest education level of bachelor's degree and above. The participants obtained a score of *M*=22.99 (*SD*=4.85) for work-life balance, and *M*=44.09 (*SD*=9.08) for supervisor support, both slightly above average scores. Detailed information on the participants' backgrounds can be seen in Table 2.

3.3. Normality and multicollinearity testing

Before proceeding to confirmatory factor analysis, the normality and multicollinearity of the scales were tested. Results showed that the data for both work-life balance and supervisor support are normally distributed with skewness and kurtosis values between the range of -1 and +1 [27]. Inter-item correlations were below .80 for each item, and the correlation between Work-Life Balance and Supervisor Support was *r*=.291, significant at <.001, indicating no presence of multicollinearity in the data, whereby multicollinearity may be an issue if the correlation between two constructs is more than .60 [27]. After that, confirmatory factor analysis was conducted to analyse the model fit of the data, as well as construct reliability and validity to determine whether both scales adequately represent working mothers in Malaysia.

Table 2. Participants characteristic (n=275)

Demographic information	*n*	%	*M*	*SD*
Age			38.33	7.86
Race				
Malay	239	86.9		
Indian	6	2.2		
Chinese	8	2.9		
Others (East Malaysia)	22	8.0		
Work group				
Professional	105	38.2		
Support	170	61.8		
Work status				
Full-time	265	96.4		
Part-time	7	2.5		
Freelance	3	1.1		
Highest education				
None	3	1.1		
Primary school	25	9.1		
Secondary school	73	26.5		
Form 6/Matriculation/Diploma	63	22.9		
Bachelor and above	111	40.4		
Total	275	100.00		

n=Number of cases; %=Percentage; *M*=Mean; *SD*= Standard deviation.

3.4. Common method variance

This study uses only one source of data collection method, which is the survey. Hence, the data collection method may produce a common method bias that might lead to measurement error [30]. This study takes into account methodological strategies to minimize common method bias as suggested by Jordan and Troth [31], such as introducing different measures of Likert scales (5-point Likert scale for supervisor support, and 3-point Likert scale for work-life balance) for each construct, providing a clear and concise research information sheet prior to conducting the survey, and using a short and simple survey questions for easier understanding. Additionally, a statistical strategy was also conducted to test for common method bias. The Harman's Single-Factor Test was conducted in SPSS and shows a 30.49% variance, which is less than the 50.0% suggested by the test to assume the presence of common method variance. Thus, we report no common method bias in this study [30].

3.5. Confirmatory factor analysis

The measurement model in AMOS was evaluated in terms of internal consistency reliability, convergent validity, concurrent validity, and discriminant validity. Model 1 reported a Chi-square of $\chi 2$ (206)=818.52, p=.00, and incremental indices all reported below .90, indicating a poor fit of data. Thus, modification was required to improve the model fit of both scales. Firstly, factor loadings, also known as the standardized regression weights for supervisor support structure were between the range of .599 to .787, while work-life balance items were .591 to .718 for factor 1, and from .619 to .710 for factor 2, all values exceeded the .50 cut-off for CFA, indicating acceptable factor loadings [32]. No items were needed for deletion, and modification indices were referred to for model modification. The modification indices showed several correlated residuals between the items for both structures.

The model was revised by adjusting for covariate interactions between the items, and model fit estimations were repeated. The revised measurement model showed great improvements for all model fit measures, therefore, the one-factor structure for both work-life balance and supervisor support were confirmed and supported, adequately fitting the data. It is important to note that modifications of the model resulted in lower factor loadings due to correlated residuals between the items. Accordingly, one item in WLB-Malay factor 1 obtained a factor loading of .465 for item 4. However, the loadings are still closer to the cut-off values of .50, indicating acceptable factor loadings when rounded up. Hence, the researcher decided to retain the indicator. Table 3 shows the summary of model fit before and after modification.

Table 3. Model fit summary for the measurement model

Model	Item	CMIN(*df*)	CFI	TLI	NFI	SRMR	RMSEA	CMIN/*df*
1	22	818.519 (206)	.800	.776	.752	.071	.104	3.973
2[a]	22	438.589 (195)	.921	.906	.867	.060	.068	2.249

[a] final model with 11 errors of covariance

3.6. Reliability and validity of WLB-Malay and SS-Malay

Further testing of the model was conducted to determine its reliability and validity. Construct reliability was established as CR and MaxR both were above .70. The AVE values for supervisor support, and two factors of work-life balance were slightly less than .50. Noteworthy, although AVE is less than .50, validity is established when CR is more than .70 [33]. Meanwhile, Malhotra and Dash [34] asserted that reliability and validity can be established through CR values alone, as AVE is often a stricter measure of validity. Following these two suggestions, we concluded that the convergent validity of the model was established.

Likewise, the heterotrait-monotrait ratio of correlations (HTMT) reported acceptable correlations between work-life balance factors 1 and 2 (r=.775), between work-life balance factor 1 and supervisor support (r=.265), and between work-life balance factor 2 and supervisor support (r=.349), further confirming discriminant validity [28]. Therefore, the results confirmed the reliability and validity of these constructs. Additionally, Cronbach's alpha and MacDonald's omega were calculated to identify the reliability of both instruments, representing good reliability values. Finally, concurrent validity was established, with significant moderate positive correlations between both factors of WLB-Malay and SS-Malay (r=.291). Table 4 shows the loadings, reliability, and validity values for the revised model.

3.7. Structural equation modelling

The measurement model was transformed into a structural model to examine the hypothesised theoretical association between supervisor support and work-life balance among working mothers. The coefficient of determination, symbolized by the R^2 values, and path coefficients, denoted by the β values, were the parameters used to determine the extent to which the data supported the hypothesised relationships.

In general, supervisor support significantly influences factor 1 of working mothers' work-life balance (β=.330, p<0.001) explaining a total 12% variance, and between supervisor support and factor 2 of work-life balance (β=.369, p<0.001). Thus, the finding of this study supports the hypothesised relationship. Table 5 shows the detailed results of this analysis.

Table 4. Reliability and validity for the measurement model

Construct	Item	Loading	AVE	CR	MaxR(H)	Alpha (α)	Omega (ω)
Supervisor support	SS1	.608	.487	.919	.923	.924	.924
	SS2	.703					
	SS3	.682					
	SS4	.745					
	SS5	.723					
	SS6	.796					
	SS7	.744					
	SS8	.692					
	SS9	.623					
	SS10	.754					
	SS11	.590					
	SS12	.683					
Work-life balance factor 1	WLB1	.605	.354	.728	.746	.793	.793
	WLB2	.634					
	WLB3	.524					
	WLB4	.465					
	WLB5	.714					
Work-life balance factor 2	WLB6	.630	.421	.784	.787	.784	.786
	WLB7	.616					
	WLB8	.623					
	WLB9	.659					
	WLB10	.713					

Table 5. Association between supervisor support and work-life balance

Hypothesis testing	Estimate β	*S.E.*	*C.R.*	p
Work-life balance factor 1 <--- Supervisor support	.330	.079	3.911	<0.001
Work-life balance factor 2 <--- Supervisor support	.369	.075	4.671	<0.001

S.E.=Standard Error; *C.R.*=Critical Ratio; *p*=p-value

4. DISCUSSION

There are three main objectives of this study. Firstly, this study investigates the psychometric properties of the SS-Malay and secondly, it investigates the psychometric properties of the WLB–Malay. Lastly, it identifies the influence of supervisor support on Malaysian working mothers' work-life balance. The result in EFA showed two factors extracted for WLB-Malay as opposed to the literature which utilized a unidimensional factor of work-life balance [35]–[37]. The items were divided into equal halves, the first five for factor 1, and the latter five items for factor 2. Cross-loadings appeared for three items which are item 2, item 6, and item 9. Each item was loaded stronger for either one factor, and hence, was applied to the stronger factors for CFA. Specifically, items 1 to 5 loaded for factor 1, while items 6 to 10 loaded for factor 2. Confirmatory factor analysis confirms the two factors of WLB-Malay and the unidimensional factor of SS-Malay. The reliability and validity of both instruments were also established. Upon further investigation, we named the first factor of WLB-Malay "concern about work" as the items revolve around work-related matters, and the second factor "self" as the items revolve around the components of self, such as relationships, health, control, and family. Whereas for SS-Malay, the result reported a one-factor structure, similar to the original paper by Baloyi *et al.* [16].

These instruments have supported their cultural appropriateness for Malaysian working mothers, as evidenced by the satisfactory model fit, composite reliability and discriminant validity. Overall, the model supports the psychometric properties of these instruments, however, there are concerns regarding the AVE value for the work-life balance scale. Notably, the usage of AVE can be regarded as too strict, and convergent validity can be established using CR values alone [34]. Another opinion suggests that reliability can be established once the CR value exceeds .70 [33]. Due to the high value of CR for the work-life balance scale, hence, this study concludes that construct validity is established.

As evidenced by all three measures of reliability (Cronbach's Alpha, Composite reliability, and MacDonald's omega), the WLB-Malay and SS-Malay are considered reliable and valid for the Malaysian working mothers' context. The reliability of WLB-Malay is greater than the original instrument's reliability

[38], and comparable to other past studies across different contexts [35]–[37]. Similarly, the SS-Malay has a slightly lower reliability value than the original instrument [16]. Surprisingly, we did not find any study replicating the use of the supervisor support scale from Baloyi and colleagues in other studies, presumably owing to being a newly published article, thus, no comparison on other reliability values can be done. Yet, the reliability value for SS-Malay is equivalent to the original instrument, indicating that SS-Malay is a reliable and valid instrument for working mothers in Malaysia.

In addition, supervisor support significantly predicts work-life balance among Malaysian working mothers, as evidenced in the path analyses between the two constructs. Thus, hypothesis 1 is supported. Our finding on the significant relationship between supervisor support and work-life balance showed support for the convergent validity of both WLB-Malay and SS-Malay and is in line with previous studies showing similar outcomes [12], [17], [39]. Notably, our finding is similar to another study among Malaysian adults combining both female and male workers [40].

A supervisor is perceived as an agent of the organisation, and accordingly, support received from the supervisor is professed as support received from the organisation itself [41]. Hence, obtaining support from a supervisor instils favourable feelings in employees, such as a sense of belonging, feeling appreciated, and acknowledged, as indicative through Maslow's third level of hierarchy of needs [42]. Employees may experience supervisor support in the form of words of encouragement, counsel, and condolence. These actions constitute the supervisor as attentive, helpful, and supportive while also enhancing the employee's sense of importance and worth. These pleasant feelings create an ideal and conducive work atmosphere that reduces job stress and improves work-life balance.

Interestingly, a study in India demonstrated that supervisor support has no significant effect on work-family conflict, but significantly improved work-family enrichment [43]. It is important to note that while Indian is one of the three largest ethnicities in Malaysia, the majority of the respondents in this study is of the Malay ethnicity, hence, the difference in findings. In Malaysia, some companies have the majority of Malay employees, while others have majorities of Indian and Chinese employees. Therefore, future studies may opt to compare this relationship among different ethnicities and make comparisons for a better understanding of their effects and recommendations for improvements for workplaces that contain a majority of specific ethnicities. Furthermore, studies on different ethnicities may provide significant findings on the importance of work-life balance and their perceptions toward supervisor support in the workplace.

Lastly, our study strengthens the work-family border theory [44], asserting that supervisors (border-keepers) have significant influence over the work-life balance of the working mothers (border-crossers) and that high perceived supervisor support helps working mothers attain better work-life balance. This study supports the theory by identifying the impact of supervisor support on work-life balance from the perspective of working mothers. In many instances, family issues were brought up during working hours, which imposed conflicts within working mothers on which domain to prioritise (family domain vs work domain). In this case, the supervisor plays an important role in reducing the conflict among the working mother to help achieve a state of balance. Integration, as indicated in the work-family border theory occurs when there is high flexibility and blending which allows the working mothers to integrate work into the family domain without jeopardising the other and vice versa [44]. Supervisors that allow flexibility in working conditions (i.e., venue, time, workload, deadline) reduce conflicts among the mothers whenever issues from the other domain arise, as mothers can immediately shift their priority to what is important and urgent at the moment, and come back to the task at hand, later, improving their overall work-life balance.

Our findings provide significant contributions to the advancement of work-life balance and supervisor support studies in Malaysia, by identifying the significant effects of supervisor support on work-life balance among Malaysian working mothers. Furthermore, our findings are important for Malaysian working mothers, and their respective supervisors and organisations on ways to enhance work-life balance. Respective organisations could also use this study as a support to provide regular training for supervisors on strengthening knowledge in employee support and well-being, particularly for female employees who are burdened with dual responsibilities at home and in the workplace. Noteworthy, to the best of our knowledge, this study is the first study to translate the Supervisor Support scale [16] and Work-Life Balance Checklist [22] and validate it within the Malaysian context. Due to its satisfactory reliability and validity among working mothers, this instrument has the potential to be applied to other working females, including married and non-married females, and mothers and non-mothers in Malaysia.

It is important to note that this study is limited in a number of ways. Firstly, our sample consists of only working mothers, hence, findings are restricted only to working mothers. Administering the WLB-Malay and SS-Malay to other Malaysian populations is still debatable. To widen the usage of these instruments, further validation is required such as among the overall working adult population, as well as working elders. Besides that, the majority of the participants are those from the support workgroup, Malay race, and full-time employees. Future studies could expand the reliability and validity of these instruments

across other workgroups, races, and work statuses for a more comprehensive assessment. Next, this study uses only self-report instruments and is prone to common method biases. Although we have taken extra precaution procedural measures and statistical measures to minimize the bias, we acknowledge the risks of bias with self-report measures and urge future researchers to validate these instruments using different approaches (i.e., supervisor report, peer rating, and observation) to increase the validity of the instruments. Lastly, we found a two-factor structure for WLB-Malay, as opposed to a unidimensional structure used by past literature. Future studies may validate WLB-Malay among other populations to identify similarities or differences in the factor structure of the instrument.

5. CONCLUSION

In conclusion, this study supported the reliability and validity of the SS-Malay and the WLB-Malay for measuring the interrelated nature of Malaysian working mothers' supervisor support and work-life balance. With that, the WLB-Malay and SS-Malay are reliable, valid, and culturally suited to be administered within the working mother's context, and presumably within the context of all working adults in Malaysia. In addition, the results revealed a significant influence of supervisor support on work-life balance among working mothers, enlightens employers and supervisors to empower working mothers on their work-life balance status which will result in better overall mental health and well-being for the mothers, and improved work performance and workplace productivity for the company.

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