

## **The Effects of Job Demands and Job Resources on Work Stress among Workers in Small and Medium Enterprises in Malaysia**

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### **Abstract**

Work stress has become one of the key challenges since the COVID-19 pandemic started. Every organisation is trying to balance job demands with job resources toward work stress. Especially for Malaysian Small and Medium Enterprises with limited resources and a heavy reliance on workers to carry out business activities. The objective of the study is to identify the factors that impact work stress on workers in Small and Medium Enterprises in Malaysia. Workload and role conflict fall under job demands. While supervisor support and co-worker support fall under job resources, A total of 463 sample sets of questionnaires to Small and Medium Enterprises workers in Malaysia have been distributed for data collection, with a total of 404 qualified questionnaires being used in the research analysis. The data is being analysed using IBM SPSS version 2.0. The methods used in the research are normality, Spearman Correlation, Kruskal-Wallis Analysis, Kruskal-Wallis Mean Rank Analysis, and Dunn Post-hoc Test Analysis in the research. The study found that workload and role conflict have a positive and significant relationship with work stress. Whereby, supervisor support has a negative significant relationship with work stress and co-worker support has a negative insignificant relationship with work stress. This research result offers useful information to Small and Medium Enterprises in Malaysia to understand more about their workers' well-being and challenges in performing the work. Furthermore, through the underpinning theory of Becker's Side-bet Theory and the causal model, management of Small and Medium Enterprises in Malaysia is able to understand the effect of the COVID-19 endemic on work stress and commitment among the workers. In conclusion, this research has validated the proposed conceptual framework and research objective. The research questions have been successfully responded to and the results from this study will be contributed to a future study on work stress.

**Keywords:** Work Stress, Workload, Role Conflict, Supervisor Support, Co-Worker Support, Covid-19, Endemic, Small And Medium Enterprises Malaysia.

## **Introduction**

This topic discusses the relevant descriptions of the study and determines the importance of the research, which focuses on investigating the relationship between job demands and job resources towards work stress and how the proposed independent and dependent variables will positively or negatively impact the performance of workers in Small and Medium Enterprises in Malaysia during the COVID-19 endemic with the examination of some basic theories and findings covering the same independent and dependent variables.

## **Problem Statement**

COVID-19 endemic has changed the economic landscape, business operations, ways of working and worker behaviour. During the COVID-19 endemic, this research would like to investigate how job demands and job resource factors affect workers in Malaysian Small and Medium Enterprises, and how this is related to work stress. According to Lee and Kao (2017), stress in the workplace is caused by the external environment, internal mental confusion, and nervousness.

Work stress has a major impact on an organisation's ability to grow and develop, and it affects workers' personal growth, development, and mental health. Work stress is a physical and emotional action that occurs when there is a gap between the needs, abilities, and resources of employment (Ehsan and Ali, 2019). Based on the research by Soelton et al (2020), human resources are always complementary to every company as a determinant of existence and play a main role in contributing towards achieving organisational goals effectively and efficiently. Work stress may be identified as a factor that will influence the stability and effectiveness of organisations.

The extent to which workload can have a negative impact on workers and may lead to stress needs to be deeply discussed. This study needs to identify the related factor to workload that will affect worker performance and its relation to work stress. According to Ashar et al (2021), unbalanced workload will result in inefficiency that will contribute to frustration, dissatisfaction, and conflicts. Too much workload will cause organisations to pay more workers with the same productivity, resulting in cost inefficiencies. The need to manage financial resources well is one of the factors that has a positive impact on the growth of a company. However, management must know the capabilities of its workers according to their skill areas and difficulties and whether an extreme workload will positively affect worker performance or just have a negative reaction.

In the COVID-19 pandemic situation, the problem of role conflict becomes bigger and can trigger the level of work stress (Komalasari et al., 2020). The pandemic causes significant variation in employment around the world, and workers experience increased job insecurity, which may be associated with lower well-being. The emotional impact of job loss is the greatest factor a worker experiences in a career (Soomro, 2022). This statement is also supported by (Rahayu & Hidayat, 2021). Whenever work stress occurs, it will dramatically change the attitudes and work behaviours of workers, which will impact the company. High role conflict tends to cause workers to easily experience work stress. To avoid worker underperformance, the company or organisations should take a more proactive approach to dealing with role conflicts. Role conflict has been considered one of the causes of stressful situations that can limit individual development, while lower levels of role conflict will lead to better quality of work and a higher lifestyle that can also be attributed to higher levels of worker commitment (Sajida & Moeljadi, 2018). The extent of the correlation between role

conflict and work stress will be discussed and translated through the questionnaire among Small and Medium Enterprises workers that has been prepared in this study to ensure its relevance during the COVID-19 endemic.

The role of workers that consider psychological safety as an example of how safe they see interactions with co-workers and supervisor support is considered a mechanism that can reduce the adverse effects of cognitive stress on turnover intention (Hebles et al., 2022). The relationship between co-workers and supervisors should be developed by the company to create a good work environment, and this role should also be emphasised among the subordinates in Small and Medium Enterprises in Malaysia. A good mechanism should be created by the company about how the relationship can be formed and ensure that the steps taken will inject enthusiasm into the workers. This problem statement is also supported by Sajida and Moeljadi (2018), who found that supervisory support as informal sources of support and initiatives had an effect on reducing negative factors in work stress. The situation is supported by the ability of supervisors to develop strategic competencies within the organisation.

### **Research Objective**

Practically, research questions are always focused on single problems or issues that can be researched using primary and secondary sources, are feasible to answer in practical time and limits, specific enough to answer completely, complex enough to develop findings on paper or thesis space, and/or society more broadly. When there is a clear objective, the researcher needs to formulate one or more questions. Both qualitative and quantitative research require research questions that will shape the research objective (RO) design.

- Research Objective (RO1): To identify the relationship between workload and work stress among workers in Small and Medium Enterprises in Malaysia.
- Research Objective (RO2): To identify the relationship between role conflict and work stress among workers in Small and Medium Enterprises in Malaysia.
- Research Objective (RO3): To identify the relationship between supervisor support and work stress among workers in Small and Medium Enterprises in Malaysia.
- Research Objective (RO4): To identify the relationship between co-worker support and work stress among workers in Small and Medium Enterprises in Malaysia.

### **Research Question**

This research aims to examine the effects of job demands and job resources on work stress among workers in Small and Medium Enterprises in Malaysia. In other words, the specific objective of this research is to find the effect of independent variables on work stress in Small and Medium Enterprises in Malaysia. The factors affecting work stress are workload, role conflict, supervisor support, and co-worker support. Below, research questions (RQ) are identified:

- Research Question (RQ1): Is there a significant relationship between workload and work stress among workers in Small and Medium Enterprises in Malaysia?
- Research Question (RQ2): Is there a significant relationship between role conflict and work stress among workers in Small and Medium Enterprises in Malaysia?
- Research Question (RQ3): Is there a significant relationship between supervisor support and work stress among workers in Small and Medium Enterprises in Malaysia?

- Research Question (RQ4): Is there is a significant relationship between co-worker support and work stress among workers in Small and Medium Enterprises in Malaysia?

### Literature Review

This study applies Becker's side-bet theory and adopts the causal model to define the empirical of the study.

By reference to Becker's side-bet theory, a worker within an organisation they have dedicated to contributing to the organisation in the assigned respective role and function, is expecting they will be rewarded for their effort that they render to the organisation. This is usually cause for concern following the Malaysia agreement with the COVID-19 impact. Malaysia is now in the endemic phase where Small and Medium Enterprises are now struggling with sustainability, adopting new business models and compliance with the latest rules and regulations, and facing challenges with the latest economic constraints. In the endemic phase, workers in Small and Medium Enterprises are generally expected to do more than pre-pandemic and adapt to the new normal. This could raise concern about the satisfactory level of the reward. Further, the work stress generated from the workplace will affect the level of reward satisfaction for the worker. To address the level of satisfactory work stress, we are analysing from the angle of human philosophy, i.e., work stress and how the independent variables could affect and relate to work stress. With Becker's side-bet theory, we further examine our study by using the casual model to measure the relationship between the variables.

Underpinning theory: Becker's Side-bet Theory (1960)

Becker's side-bet theory was introduced by Becker in 1960. This theory suggests that commitment exits through the process of placing side-bets. This is better explained in the case of someone placing a bet; that person has a stake or interest that is valuable to him, something that does not initially have a relationship to his current line of business. Becker's is of the opinion that the higher the number of sides bet, the higher the commitment of the individual.

In the study by Rani et al (2020) , they tested the relationship between organisation support and worker commitment to the organisation's success. This study revealed that when a worker is making an effort, which also means that a worker is making an investment, extraneous interests are linked with the chain of activities (Becker, 1960, p.32), the form of side-bet theory is applied. When the worker is placing his effort (as bet), he invests in the organisation, expecting that there will be a reward (stake or interest) after the organisation achieves its goal. If it is not achieved, the worker might become disappointed, which will result in turnover. Figure 1 illustrates the core value of the (Becker Side-bet theory, 1984).



Figure 1 Becker Side-bet Theory

**Causal Model**

A causal model is a structural model conceptually used to describe the causal mechanism of a system. This model is used to improve study design and enables clear rules for independent variables to be taken into consideration for testing the relationship.

The causal model in the structural and mathematical model speaks for causal relationships within an individual system or population, which is used to determine the relationship and to summarise the statistical data. This model walks the researcher through the causation methodology and the relationship between the probabilities. This model also applies to discussion topics for philosophers for analysis study.

According to a study by Li et al (2019), examining the relationships between job satisfaction, organisational support, leadership, work performance, and conflict will cause a rise in turnover intention in manufacturing workers. The author applied the causal model to testify the relationship, and the result shows that there is a significant relationship between job satisfaction, organisational support, leadership, job performance, and collision toward turnover intention. Figure 2 below explains the casual model.

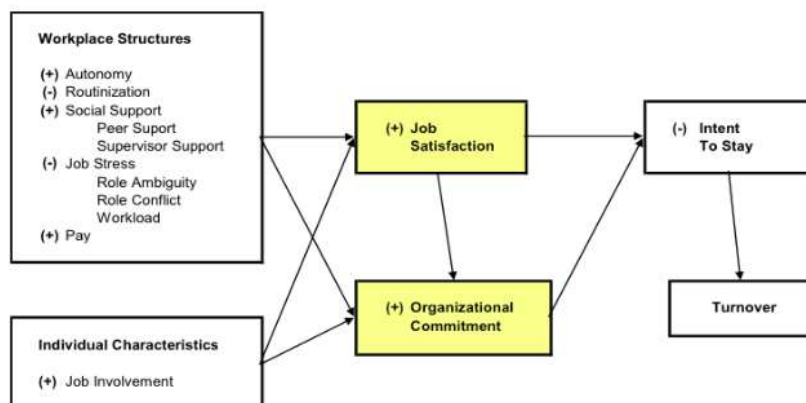


Figure 2 Causal Model

**Research Conceptual Framework**

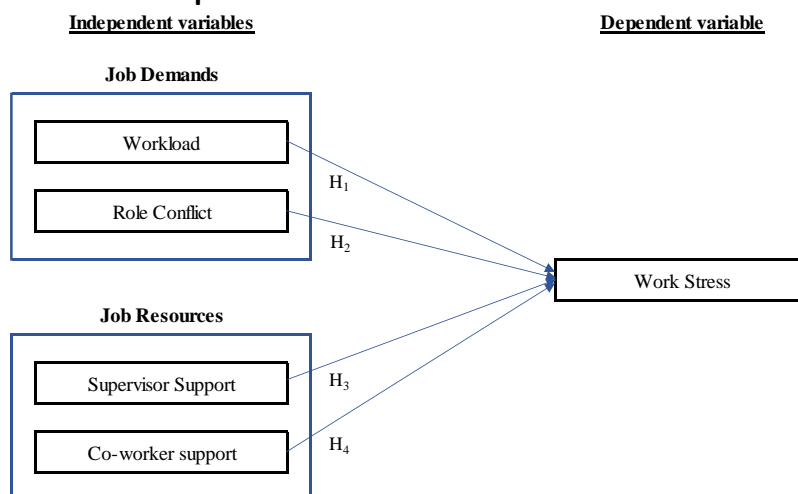


Figure 3 Conceptual framework

By using the causal model, the four hypotheses are tested to determine the existence of a significant relationship between four independent variables (the factors of job demands and job resources) and the dependent variable, which is work stress. The statements of hypothesis are as follows

- H<sub>1</sub>: There is a significant relationship between workload and work stress among workers in Small and Medium Enterprises in Malaysia
- H<sub>2</sub>: There is a significant relationship between role conflict and work stress among workers in Small and Medium Enterprises in Malaysia
- H<sub>3</sub>: There is a significant relationship between supervisor support and work stress among workers in Small and Medium Enterprises in Malaysia
- H<sub>4</sub>: There is a significant relationship between co-worker support and work stress among workers in Small and Medium Enterprises in Malaysia.

### **Research Methodology**

The research methodology is used is to investigate, analyze and provide insights and possible solutions to the overview of the research that was conducted and it details the various aspects of the study and the methods used in the analysis of the research process. Furthermore, the analysis process and results aim to provide an analysis of the literature on the effects of the work stress variable on the performance of small and medium-sized enterprises workers. It also explores the various factors that influence the performance of these workers which include utilizing the multiple methods and techniques that are commonly used in the field of data collection and analysis.

To investigate and validate the relationship between four independent variables, including workload, role conflict, supervisor support, and co-worker support variables, and just one measured dependent variable, work stress, in the context of Small and Medium Enterprises workers, this research design main focus research method would be the quantitative research method which examines the degree to which these variables influence one another.

As for finding patterns and establish causal and effect relationships between the research variables to produce a verifiable research result, the strategy of this research design are based on using quantitative research to gather and analyze raw data using primary data collection methods and various analysis techniques and to perform analysis and provide analysis result about our study issue, including the basic who, what, where, when, and how questions, it uses a variety of information data collection methods and uses particular statistical data.

The primary goal of the research would be to analyze "what" are the main independent and dependent variables that needed to be focused on in the research study and to identify the main characteristics of both the independent and dependent variables using a subset of quantitative research design, which is descriptive research design, and adhering to the conceptual research framework.

A correlation study design refers to an association between two or more variables that influences the investigation's conclusion. In these correlational research studies, we examine the effects of independent variables on the other independent variables (role conflict and workload), the effects of increasing and decreasing changes on dependent variables (work stress), and the changes to the outcome when either of the variable measures changes.

This approach lessens the need for making any assumptions when assessing the relationship between two different variables. It also offers statistical analysis techniques to confirm the



relationship between the two variables and determine whether there is a positive or negative relationship between two independent and dependent variables. The study technique described above would also be utilized to determine the root of a particular issue, in this case, the cause and effect of work stress, and to suggest a potential fix(es). Using the following methods, one of the key goals of this research design is to comprehend all the factors contributing to the issues:

- i) The first step in the study process would be to determine when the dependent variable (work stress) increases or decrease and the effect in connection to the presence of the independent factors (workload, role conflict, supervisor support, and co-worker support).
- ii) The second step is to establish the diagnosis of the problem and analysis of what is the root cause of the work stress and/or how to reduce work stress, as well as what elements are affecting the work stress variable to deteriorate or better.
- iii) The third and last step is to come up with a potential fix for the problem, including potential steps that could reduce workplace stress. When does job stress seem to lessen, and what may change the independent and dependent variables more or less have an impact on total work performance that is either positive or negative.

Based on the aforementioned research criteria, an administered questionnaires were created for this investigation and to compile the analysis result. To gather demographic and variable data important to analytic variables and supporting theory outcome and validation, this questionnaire was administered to the targeted research population of Small and Medium Enterprises workers.

The following definition or meaning of the variables in this research is explored to thoroughly measure and analyze the relationship between them: The state in which a person's job expectations or requirements do not match the worker's capacity to function successfully and may cause a negative reaction both physically and emotionally in that person is known as work stress, according to (Park, 2007).

The amount of work that must be accomplished by a person in a specific amount of time is the definition of workload (Hornby, 2005). Given that workload is a variable with a dynamic value and can alter over time, the current research intends to investigate how it affects the job performance of a worker for Small and Medium Enterprises. It is crucial to analyze this workload variable since it has the potential to change over time, impact work deadlines, interfere with a worker's personal time, and ultimately increase work stress.

Role conflict is the incompatibility between task demands and expectations and the specific worker's abilities to carry out and finish the task successfully. Using this definition from the earlier research mentioned by Rizzo et al (1970), another goal of this research is to examine how role conflict may directly impact the role description of a Small and Medium Enterprises worker and whether it can be thought of as a significant variable in influencing work stress during the COVID-19 endemic phase. Before and after COVID-19, roles for employees may have changed or expanded, which would have a substantial impact on the study's conclusions. The definition of job resources is "physical, psychological, and material resources that help an individual carry out the tasks at hand, lessen the workload and promote career advancement and growth (Bakker & Demerouti, 2007). The importance of this topic is determined by the fact that employees of Small and Medium Enterprises require personal work help at their workplaces, which in turn determines how much workplace support affects employees' ability

to execute their jobs in the context of this research subset. The two variables that will be looked at and analyzed in this study are co-worker and supervisor support in relation to job stress, particularly during the COVID-19 endemic period.

The definition of supervisor support is the aid provided to a worker at work by the direct supervisor in charge of that worker (Langford et al., 1997; Melanie, 2005). Every employee would need feedback and assistance from their immediate supervisor regarding their work responsibilities, especially during the COVID-19 endemic phase, so it is crucial to analyze this variable within the context of the research to determine whether it is one of the major contributors to work stress for a Small and Medium Enterprises employee. In order to assess whether there is a significant contribution to a reduction or increase in work stress in the Small and Medium Enterprises worker, the goal of this research is to evaluate the degree of impact and importance of this variable in contributing to the work stress variable.

Co-worker support was included as one of the variables to analyze because, for this study, it would also be a significant factor in the COVID-19 endemic period, which may significantly increase the work stress of a worker for a small or medium-sized business as social distancing policies are relaxed and employees are required to go back to the office. The dynamics of this working connection will be examined, and conclusions will be drawn following the research's objectives.

There are a total of 38 questions in the four sections of the research questionnaire. The questionnaire is divided into four sections, each of which contains a different set of questions and topics. It would include questions about the respondent's age, marital status, gender, highest educational qualification, length of employment, and job position. It would also include questions about the independent variables of supervisor and co-worker support, job demands, subset variables of the workload variable, and role conflict. Finally, it would include questions about the target demographic's personal information.

The population for this study was drawn from the workforce of Small and Medium Enterprises (SMEs), which had 7.3 million workers overall as of 2019, according to the Department of Statistics Malaysia's most recent census (DOSM, 2020). Based on Cochran's criteria, this study requires a target of 385 respondents (Cochran, 1963).

The Small and Medium Enterprises definition, which is endorsed by SMECorp Malaysia (2013) [19], is applied to any registered business that operates in the services, manufacturing, agriculture, construction, or other industries, and the determining factors of a Small and Medium Enterprises would be total employee headcount and annual sales turnover of the registered businesses. For the definition of Small and Medium Enterprises, in the manufacturing sector, the registered business is defined as a business with a sales turnover not exceeding RM50 million or the number of full-time workers not exceeding 200 persons; in the services and other sectors, the registered business is defined as a sales turnover not exceeding RM20 million or the number of full-time workers not exceeding 75 persons.

In order to verify the number of Small and Medium Enterprises workers employed in Malaysia using the data currently available from the Malaysian Department of Statistics, any information about the target unit of study was first analyzed. The process of formulating the questionnaire following the research variables being tested and starting to distribute the questionnaire to the targeted demographic of Small and Medium Enterprises workers through Google Forms began once the data was verified and justified as being relevant to the research hypotheses and objectives. After the data collection was finished, the sampled



respondents total of 463, which was more than the 385 targeted respondents as determined by Cochran's formula.

The questionnaire's overall structure and language were designed in English to ensure that the respondents could completely comprehend the questions it asked. The questionnaire was distributed to collect responses from July 5 to July 8, 2022. The Google form questionnaire was chosen because it offers extensive analysis in a short amount of time with clear research data on a sizable group of Small and Medium Enterprises employees.

With this method, the set of questions in the form of a Google Form questionnaire was e-mailed to the respondents, who were asked to read and understand the questions, reply, and then submit the questionnaire answers via email. For this research, primary data collection procedures were used, and the results would be finalized by the collection of primary data results or raw data obtained directly from the questionnaires. The questionnaire's design would be limited to a structured closed-end format with the Likert point scale assessment (5 = strongly agree, 4 = agree, 3 = uncertain, 2 = disagree, 1 = strongly disagree).

Various techniques of data analysis are used for this research when putting the raw data into a research-appropriate research structure. The main statistical analysis software, Statistical Package for Social Sciences (SPSS), created and distributed by IBM Corporation, is frequently used for research gathering purposes and generates compilations of statistical and correlation analysis data into a structured and organised form. According to the functionality of the programme, correlational and statistical tests are compared utilising a range of studies, including univariate, bivariate, and usually multivariate formats for parametric or non-parametric statistical methods (Puteh & Ong, 2017).

Measures of central frequency for sampling demographics is one method used in descriptive analysis to determine how frequently a projected outcome would occur after a particular variable has been tested or observed. In addition to the data analysis technique previously mentioned, the normality test analysis is used to confirm and establish whether the sampling data obtained from the questionnaire is drawn from a normally distributed sampling population size. This is critical because it allows the data to be used in other analysis methods, such as the Spearman correlation coefficient, which depends on the same data samples and produces results that can be trusted in further analysis relating to the hypothesis (Orcan, 2020).

The SPSS analytic tool is used in conjunction with all of the previously described methodologies. This would be an additional type of in-depth analysis that is frequently utilized to analyze the outcome data, which in our research topic involves several focused independent variables with a focused dependent variable. A positive relationship means that both the dependent and independent produce a positive (+) result when interacting with one another, whereas a negative linear relationship means that the result of the interaction between the dependent and independent is negative. The results of the reliance outcome relationship between the variables can be interpreted as either positive or negative.

The degree of the link between the measured variables is indicated by the Spearman coefficient correlation, which will result in an association between the variables that will either be a positive association or a negative association. Every variable answer point on the median straight line is the "best fit" result when a result is positive or negative, such as a positive one or a negative one. This means that any changes to the particularly targeted variable will not reduce the correlation with any other targeted pairing variable, and if any result is closer to zero, the more the changes can be seen in the variables' interaction.

The research design and analysis required to gather the findings and results for the research topic were highlighted, and they made use of the research method and analysis necessary to do so. They also provided descriptions of the procedures involved in determining all the variables in the research topic, from planning the research design to choosing the instrument needed to measure the variables accurately.

**Research Findings**

For the research outcome, the questionnaire results were gathered and analyzed concerning the correlation and significant links between the independent factors and dependent variables as described in prior chapters to accurately identify and understand the results obtained from the sample case study questionnaire. This chapter includes results from the normality test analysis, Spearman coefficient correlation analysis, Kruskal-Wallis analysis test, and Dunn Post-hoc test. The respondent's demographic profile is presented through descriptive statistics analysis by the measuring range of frequency, which includes both frequency occurrence and percentage comparison.

The next step is to conduct observation and analysis based on data sampling with input from the SPSS tool to interpret the analysis of the result to any type of analysis techniques that were discussed earlier in the chapter to conduct research analysis and produce accurate conclusions concerning the research hypotheses that were discussed in chapter two.

Among the 463 responses, only 404 satisfy the requirements for the normality test, Spearman coefficient co-efficient analysis, Kruskal-Wallis test analysis, and Dunn post-hoc test analysis. The analysis findings, which are presented in the following paragraphs, are based on the 404 responses that complied with the requirement that they be from employees who hold any position within the company—including non-executive, executive, and manager roles—but who are not shareholders or directors.

**Demographic Analysis**

Table 1

*Gender distribution of respondent statistics*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	236	51.0	51.0	51.0
	Female	227	49.0	49.0	100.0
	Total	463	100.0	100.0	

Table 2

*Age group distribution of respondent statistics*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-25	41	8.9	8.9	8.9
	26-30	83	17.9	17.9	26.8
	31-35	94	20.3	20.3	47.1
	36-40	104	22.5	22.5	69.5
	41-45	66	14.3	14.3	83.8

	46-50	31	6.7	6.7	90.5
	51-55	31	6.7	6.7	97.2
	56-60	13	2.8	2.8	100.0
	Total	463	100.0	100.0	

Table 3  
*Relationship status distribution of respondent statistics*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	212	45.8	45.8	45.8
	Married	248	53.6	53.6	99.4
	Divorce	3	0.6	0.6	100.0
	Total	463	100.0	100.0	

Table 4  
*Years of working experience distribution of respondent statistics*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5	100	21.6	21.6	21.6
	6-10	83	17.9	17.9	39.5
	11-15	84	18.1	18.1	57.7
	16-20	84	18.1	18.1	75.8
	21-25	56	12.1	12.1	87.9
	26-30	37	8.0	8.0	95.9
	31-35	13	2.8	2.8	98.7
	36-40	4	0.9	0.9	99.6
	41-45	2	0.4	0.4	100.0
	Total	463	100.0	100.0	

Table 5  
*Job position distribution of respondent statistics*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Shareholder	12	2.6	2.6	2.6
	Director	47	10.2	10.2	12.7
	Manager	107	23.1	23.1	35.9
	Executive	148	32.0	32.0	67.8
	Non Executive	149	32.2	32.2	100.0
	Total	463	100.0	100.0	

The respondents who participated in this research are working in Small and Medium Enterprises in Malaysia. The research took into consideration gender, age, relationship status, years of working experience, and job position to provide a comprehensive response to the survey, ensuring the research is credible

The demographic analysis of the study participants provides an insightful overview of their characteristics. Out of the 463 individuals included in the analysis, 236 (51.0%) identified as male, while 227 (49.0%) identified as female. In terms of age distribution, the participants spanned a wide range. The largest age group consisted of individuals aged 31-35, with 94 participants (20.3%), closely followed by the 36-40 age group with 104 participants (22.5%). The smallest age group was 56-60, comprising only 13 participants (2.8%).

Considering relationship status, the majority of participants reported being married, accounting for 248 individuals (53.6%), while 212 (45.8%) identified as single. A small proportion of the sample, consisting of 3 participants (0.6%), reported being divorced.

When examining years of working experience, the participants exhibited diverse levels of professional tenure. The most prevalent category was individuals with 1-5 years of experience, representing 100 participants (21.6%). Following that, the 6-10 years category accounted for 83 participants (17.9%). The category with the fewest participants was individuals with 41-45 years of experience, comprising only 2 individuals (0.4%).

Regarding job positions, the sample encompassed various roles within the organization. The highest proportion was observed in the non-executive position, with 149 participants (32.2%), while the executive position closely followed with 148 participants (32.0%). The shareholder position had the smallest representation, with 12 participants (2.6%), and the director position had 47 participants (10.2%).

This detailed demographic analysis provides valuable insights into the gender distribution, age composition, relationship status, years of working experience, and job positions within the study sample. It helps researchers understand the demographic characteristics of the participants and their potential impact on the study's findings.

**Normality Analysis**

Table 6

*Analysis Result for the Tests of Normality*

Tests of Normality	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Supervisor Support	0.098	404	0.000	0.967	404	0.000
Co-worker Support	0.106	404	0.000	0.955	404	0.000
Workload	0.071	404	0.000	0.983	404	0.000
Role Conflict	0.068	404	0.000	0.987	404	0.001
Work Stress	0.055	404	0.005	0.985	404	0.000

\*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

From the normality test analysis for our research objective, it can be concluded that the Shapiro-Wilk test would be more suitable in regard to the research objective and hypotheses testing validity because the sample size responses received was 404 and more than 50 results (Mishra et al., 2019). With this result, the Shapiro-Wilk normality analysis test results show all independent variables, which include supervisor support, co-worker support, and workload, showing a 0.000 value and role conflict showing a 0.001 value ( $p < 0.05$ ), indicating non-normal data distribution. From the detailed analysis of the responses received from the questionnaire, it can be concluded that the main reason for the non-normal data distribution would be the occurrence of outliers in the response data.

The use of statistical analysis techniques like the Spearman coefficient correlation analysis, Kruskal-Wallis analysis test, and Dunn Post-hoc test analysis is taken into consideration due to the detection of significant outliers within the response received result and the presence of non-normal distribution data results, allowing the research findings to still assume normality within the research objective and hypotheses (Glen, 2021). The Spearman coefficient correlation analysis would then be used to assess the "strength," "direction," and "significance" of the correlation results between the independent variables and the dependent variables and to confirm the veracity of earlier hypotheses that were stated in chapter two. This analysis would be done using the non-normal distribution data result.

**Spearman Correlations Analysis**

Table 7

Analysis Result for the Spearman coefficient correlation

			Supervisor Support	Co-worker Support	Workload	Role Conflict	Work Stress
Spearman's rho	Supervisor Support	Correlation Coefficient	1.000	.519**	-.102*	-.194**	-.171**
		Sig. (2-tailed)		0.000	0.040	0.000	0.001
		N	404	404	404	404	404
	Co-worker Support	Correlation Coefficient	.519**	1.000	-0.013	-0.009	-0.037
		Sig. (2-tailed)	0.000		0.792	0.858	0.459
		N	404	404	404	404	404
	Workload	Correlation Coefficient	-.102*	-0.013	1.000	.636**	.642**
		Sig. (2-tailed)	0.040	0.792		0.000	0.000
		N	404	404	404	404	404
	Role Conflict	Correlation Coefficient	-.194**	-0.009	.636**	1.000	.612**
		Sig. (2-tailed)	0.000	0.858	0.000		0.000
		N	404	404	404	404	404
	Work Stress	Correlation Coefficient	-.171**	-0.037	.642**	.612**	1.000
		Sig. (2-tailed)	0.001	0.459	0.000	0.000	
		N	404	404	404	404	404

The analysis result shows that the work stress of Small and Medium Enterprises workers is directly impacted by the amount of workload that workers have, and the more workload the workers have to take on in their workplace, the more work stress will increase and the workers' work performance will also decrease.

Workload and work stress have a significant positive and direct relationship to one another, according to an analysis of the data findings for these variables. The correlation coefficient value for these significant values is recorded at  $p > 0.05$ . It would be regarded as a highly significant variable to the research hypothesis because the Sig (2-tailed) significance value



was  $p=0.000$  and  $p<0.05$ . In this situation, it is appropriate to accept and deem the valid hypothesis – “There is a considerable association between workload and work stress.”

When it comes to the role conflict and work stress variables, the correlation result of more than  $p>0.05$  indicates a significant positive relationship between the two variables, which is  $p < 0.05$  and would mean be a highly significant variable to the research hypothesis. This observation analysis has led to the validity and acceptance of the hypothesis that "There is a substantial association between role conflict and work stress." The analysis's findings indicate that any increase in role conflict for Small and Medium Enterprises employees will also cause them to feel more stressed at work, which could harm their productivity as a whole.

There is a significant link between the variables and the supervisor support variable, as indicated by the Sig (2-tailed) p-value is less than 0.05c (Schober & Christa, 2018). In this research context, the Sig (2-tailed) p-value is 0.001 and  $p<0.05$ , indicating a significant correlation. The conclusion of the hypothesis - "There is a significant relationship between supervisor support and work stress." can be accepted as valid in terms of the hypothesis and research objective. This result shows that both variables have a significant negative relationship with each other, and an increase in the value of the independent supervisor support variable will also decrease the value or impact of the dependent work stress variable.

When examining the co-worker support and work stress variables, the Spearman correlation result values of these two variables were a negative figure and the co-worker variable Sig (2-tailed), which indicates  $p > 0.05$  and displays the conclusion that even if the amount of co-worker support increases, it affects the work stress variable value only slightly lower, which supports the hypothesis and research objective - "There is a significant relationship between co-worker support and work stress. The results of this investigation show that co-worker assistance will have a very small effect on how stressed out employees of Small and Medium Enterprises are at work.

**Kruskal-Wallis Mean Rank Analysis**

Table 8

*Analysis Result for the Kruskal-Wallis mean rank*

Work Stress		N	Mean Rank
Supervisor Support	1.00	42	241.82
	2.00	108	226.75
	3.00	168	183.27
	4.00	70	184.56
	5.00	16	216.00
	Total	404	
Co-worker Support	1.00	42	239.07
	2.00	108	200.37
	3.00	168	189.83
	4.00	70	202.71
	5.00	16	253.00
	Total	404	
Workload	1.00	42	88.49
	2.00	108	143.78
	3.00	168	205.36
	4.00	70	318.93
	5.00	16	358.72
	Total	404	
Role Conflict	1.00	42	118.26
	2.00	108	128.21
	3.00	168	212.52
	4.00	70	303.71
	5.00	16	377.09
	Total	404	

The Kruskal-Wallis test analysis goal is to determine how different the variables are from one another in terms of research observation, which is stated to determine whether one variable has a greater influence or a greater difference on the dependent work stress variable compared to the other independent variable using the Likert point scale measurement for the mean rank values of 5.00 = strongly agree, 4.00 = agree, 3.00= uncertain, 2.00 = disagree, and 1.00 = strongly disagree.

In the non-normal distribution of responses to the questionnaire, the higher the mean values of "strongly agree" and "agree" responses to the workload and role conflict variables would suggest that most respondents chose these variables, and it would also support the claim that both workload and role conflict had a greater impact on the work stress variable than supervisor support and co-worker support variables.

The validity of the strength and relationship between supervisor support, co-worker support, workload, and role conflict to work stress variables were also tested using Dunn's Post-hoc test analysis about the Kruskal-Wallis test analysis result. A significance P-value of 0.05 and above is crucial in determining whether a null hypothesis is accepted or rejected. As there is a less than 5% chance that the stated hypothesis is true or, more likely, that the results are regarded as random events, the significance-value (Sig.) is less than 0.05, which often implies considerable proof against the null hypothesis.

The significance of the Kruskal-Wallis test result under the Chi-Square statistic's p-value (Asymp. sig.) Because a value of less than 0.05 (5%), which provides stronger evidence against the hypotheses being tested and has better conditions to be accepted as legitimate, is not considered to be a normal significant difference value.

The divergence in distribution results may be the outcome of theories relating to human psychology and behaviour. As a result, it cannot be exactly predicted. The p-value of the Chi-Square statistic (Asymp. sig.) value of the variable may be influenced by other factors if it is lower than 0.05. Other unidentified independent or external variables that are not covered by the specific research criteria may have limitations.

Using the results of the Kruskal-Wallis test analysis, the validity of the strength and association between the variables measuring work stress and the workload, role conflict, and co-worker support was also examined. An important factor in deciding whether to accept or reject a null hypothesis is a significance P-value of 0.05 and above. The significance-value (Sig.) is less than 0.05, which frequently denotes strong evidence against the null hypothesis since there is a less than 5% chance that the stated hypothesis is correct or, more likely, that the data are treated as random events.

**Hypotheses Testing**

**Interpretations of the significance of variables between using Dunn Post-hoc test analysis**

Table 9

*Analysis Result for the Dunn Post-hoc test*

	Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
1	The distribution of Supervisor Support is the same across categories of Work Stress.	Independent-Samples Kruskal-Wallis Test	0.042	Reject the null hypothesis.
2	The distribution of Co-worker Support is the same across categories of Work Stress.	Independent-Samples Kruskal-Wallis Test	0.083	Retain the null hypothesis.
3	The distribution of Workload is the same across categories of Work Stress.	Independent-Samples Kruskal-Wallis Test	0.000	Reject the null hypothesis.
4	The distribution of Role Conflict is the same across categories of Work Stress.	Independent-Samples Kruskal-Wallis Test	0.000	Reject the null hypothesis.

In relation to the Kruskal-Wallis test analysis result, Dunn's Post-hoc test analysis was also used to test the validity of the strength and relationship between supervisor support, co-worker support, workload, and role conflict to work stress variable and the significance P-value of 0.05 and above is important in determining whether a null hypothesis is accepted or rejected. The interpretation of the significance-value (Sig.) is less than 0.05, which normally indicates substantial proof against the null hypothesis, as there is less than a 5% possibility that the hypothesis stated is valid or more likely that the results are considered random outcomes. Furthermore, if the significant value is below the value of significance (normally  $p > 0.05$ ), the null hypothesis can be accepted, but this does not conclude that there is a 95% probability that the null hypothesis is true, only that it is dissimilar to other null variable hypothesis that is being analysed within the same research environment (McLeod, 2019). Seeing the test analysis result of Dunn's Post-hoc as above, it can be concluded that the distribution of workload, role conflict and supervisor support variable is significantly different across categories of work with the sig value for the workload stating 0.000 value, role conflict stating 0.000 value and supervisor support stating 0.042 value which is  $p < 0.05$ , meaning that null hypothesis can be rejected. The co-worker support variable would be the only variable to have distribution that is the same across categories of work stress and the null hypothesis should be retained as the significant value for co-worker support is 0.083 which is  $p > 0.05$ .

### **Overall Research Results**

The research hypotheses that had developed were thoroughly examined utilizing descriptive statistics analysis, normality test analysis findings, Spearman coefficient correlation analysis, Kruskal-Wallis analysis test, and Dunn Post-hoc test. The analyses of the independent and dependent variables reveal a positive and significant association between the workload and role conflict and the dependent work stress variable. The results of the research demonstrate a negative significant association between co-worker and supervisor support variables and a negative insignificant relationship between these variables and work stress.

The findings show that workload and role conflict are the factors that positively affect job stress among employees in Small and Medium Enterprises. Workplaces at Small and Medium Enterprises may experience less of the effects of work stress due to incremental improvements in supervisor and employee support variables.

### **Conclusion**

Based on the results, we conclude that work stress levels among workers in Small and Medium Enterprises in Malaysia mainly come from workload and role conflict. Both are being testified to by the causal model where it affects job satisfaction and organisation commitment. Ultimately, it might lead to higher turnover intention. Based on Becker's Side Bet Theory, with more work stress, Small and Medium Enterprises workers might put less into side bets, which leads to less commitment to the work.

The second objective of the research is to determine the effect of supervisor support and co-worker support on work stress. The research shows that supervisor support will contribute to less work stress significantly and co-worker support will reduce work stress insignificantly. Based on the causal model in chapter two, more supervisor support will lead to better job satisfaction and more commitment to the organisation. Where else, co-worker support has less impact on reducing work stress.

Future Study on the research findings presented, several opportunities and research directions emerge. These areas can provide valuable insights into further understanding the relationships between various factors and work stress in the context of Small and Medium Enterprises (SMEs). Here are some potential areas for future study:

**Longitudinal Research:** Conducting longitudinal studies to examine the dynamic nature of the relationships between supervisor support, co-worker support, workload, role conflict, and work stress over an extended period. Longitudinal research allows for a better understanding of how these variables interact and change over time, providing insights into the long-term effects on work stress and identifying potential causal relationships.

**Qualitative Studies:** Supplementing the quantitative findings with qualitative research methods such as interviews or focus groups can provide a deeper understanding of the underlying mechanisms and subjective experiences related to work stress in SMEs. Qualitative studies can capture individual perspectives, shed light on contextual factors, and uncover additional factors that may influence work stress.

**Intervention Studies:** Designing and implementing interventions aimed at reducing work stress in SMEs. Intervention studies can explore the effectiveness of various strategies such as stress management programs, organizational interventions, and support systems in mitigating work stress and improving employee well-being. Assessing the impact of these interventions can provide valuable insights into practical solutions for addressing work stress in SMEs.

**Cross-Cultural Studies:** Conducting cross-cultural studies to investigate the influence of cultural factors on work stress in SMEs. Comparing different cultural contexts can help identify cultural-specific factors that contribute to work stress and understand how cultural values and norms shape individuals' experiences and responses to work stress.

**Technology and Work Stress:** Investigating the role of technology in work stress within the SME context. With the rapid advancement of technology and its increasing integration into work environments, exploring the effects of digitalization, remote work, and technology-related stressors on work stress can provide valuable insights for managing and mitigating work stress in the digital age.

**Leadership Styles and Work Stress:** Examining the influence of leadership styles on work stress in SMEs. Investigating different leadership styles, such as transformational leadership, transactional leadership, or laissez-faire leadership, and their impact on work stress can help identify effective leadership approaches for reducing work stress and fostering a supportive work environment.

**Employee Well-being:** Exploring the broader dimensions of employee well-being beyond work stress. Investigating factors such as job satisfaction, work-life balance, engagement, and resilience can provide a comprehensive understanding of employees' overall well-being and its relationship with work stress in SMEs.

**Comparative Studies:** Conducting comparative studies between SMEs and larger organizations to examine the unique challenges and stressors faced by SME employees. Comparing the factors contributing to work stress in different organizational contexts can help identify specific stressors and develop targeted interventions tailored to the needs of SME employees.

**Multi-level Analysis:** Employing multi-level analysis to examine work stress from both individual and organizational perspectives. Investigating the influence of organizational factors, such as organizational culture, support systems, and work environment, on individual work stress can provide a comprehensive understanding of the complex interactions between micro and macro-level factors.

**Employee Resilience and Coping Strategies:** Investigating the role of individual resilience and coping strategies in moderating the relationship between work stress and employee well-being. Understanding how employees cope with work stress and identifying effective resilience-building strategies can contribute to the development of interventions and support systems for enhancing employee well-being.

By exploring these future research directions, scholars and practitioners can further advance our understanding of work stress in SMEs and develop evidence-based strategies to effectively manage and mitigate work stress, ultimately promoting healthier work environments and improving employee well-being.

Limitations of study contribute valuable insights into the relationships between supervisor support, co-worker support, workload, role conflict, and work stress in Small and Medium Enterprises (SMEs), there are several limitations that should be acknowledged:

**Sample Characteristics:** The findings of this study are based on a specific sample of SME employees, which may limit the generalizability of the results to other industries, organizational contexts, or geographical regions. Further research with larger and more diverse samples is needed to enhance the external validity of the findings.

**Cross-Sectional Design:** The study adopted a cross-sectional design, which only captures data at a single point in time. This limits the ability to establish causal relationships between the variables under investigation. Future studies employing longitudinal designs would provide a more robust understanding of the temporal dynamics and causal effects of the variables on work stress.

**Self-Report Measures:** The study relied on self-report measures for assessing variables such as supervisor support, co-worker support, workload, role conflict, and work stress. Self-report measures are subject to potential biases, such as social desirability or memory recall biases, which may impact the accuracy of the reported data. Future studies could incorporate objective measures or multiple data sources to enhance the validity of the findings.

**Common Method Bias:** Due to the use of self-report measures for all variables, common method bias may be present, which can inflate the relationships between variables. While



efforts were made to minimize this bias through anonymity and confidentiality assurances, future studies could adopt alternative data collection methods or utilize statistical techniques to control for common method variance.

**Limited Control Variables:** The current study focused on a specific set of variables related to supervisor support, co-worker support, workload, role conflict, and work stress. Other factors, such as individual differences (e.g., personality traits) or organizational factors (e.g., organizational climate), were not included in the analysis. Future research should consider incorporating additional control variables to provide a more comprehensive understanding of the factors influencing work stress in SMEs.

**Self-Selection Bias:** The participation in the study was voluntary, which may introduce self-selection bias. Employees who experience higher levels of work stress or are more motivated to participate may have been more likely to respond to the survey, potentially affecting the representativeness of the sample and generalizability of the findings.

**Single-Source Data:** All data for this study were collected from a single source (employees), which may lead to common method bias and limit the ability to capture the full organizational context. Future studies could consider gathering data from multiple sources, such as supervisors or objective organizational records, to provide a more comprehensive picture of the work environment.

**Work Stress Measures:** Work stress was measured using self-report scales, which rely on individuals' subjective perceptions of stress. While self-report measures are commonly used in research, they may not fully capture the physiological or behavioral manifestations of work stress. Incorporating physiological or objective measures of stress in future studies can provide a more comprehensive assessment of work stress.

**Potential Reverse Causality:** The study focused on the influence of supervisor support, co-worker support, workload, and role conflict on work stress. However, it is also possible that work stress may influence employees' perceptions of support and workload. Future studies could explore the bidirectional relationships between these variables to gain a more nuanced understanding of the dynamics involved.

**Contextual Factors:** The study did not extensively examine specific contextual factors that may impact the relationships between variables, such as industry type, organizational size, or cultural factors. Exploring the moderating effects of these contextual factors can provide a more nuanced understanding of the relationships between supervisor support, co-worker support, workload, role conflict, and work stress.

By acknowledging these limitations, future studies can address these gaps and refine our understanding of work stress in SMEs, leading to more robust and comprehensive insights that can inform interventions and strategies for promoting employee well-being in these organizational settings.

In conclusion, this research has validated the proposed conceptual framework and research objective. The research questions have been successfully responded to. The results from this study will be contributed to a future study on work stress.

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