INFLUENCE OF WORK-LIFE BALANCE, PERCEIVED ORGANIZATIONAL SUPPORT AND JOB SATISFACTION ON EMPLOYEE ENGAGEMENT DUE TO COVID-19 PANDEMIC IN THE INDUSTRIAL SECTOR

BY

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DECLARATION

I hereby declare that:

(1) This undergraduate FYP is the end result of my own work and that due acknowledgement has been given in the references to ALL sources of information be they printed, electronic, or personal.

(2) No portion of this FYP has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) Sole contribution has been made by me in completing the FYP.

(4) The word count of this research report is **10,419**.

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DEDICATION

I would like to dedicate my FYP to my family, who have always supported and encouraged me throughout my life and during this research.

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LIST OF ABBREVIATIONS

DV	Dependent Variable
EE	Employee Engagement
E&E	Electrical and Electronics
FYP	Final Year Project
GDP	Gross Domestic Product
IV	Independent Variable
JD-R Model	Job Demand Resources Model
JS	Job Satisfaction
NRP	National Recovery Plan
POS	Perceived Organizational Support
SPSS	Statistical Package for the Social Science
UTAR	Universiti Tunku Abdul Rahman
WFH	Work From Home
WLB	Work-Life Balance

PREFACE

This research paper is submitted in partial fulfilment of the requirement for Bachelor of International Business (HONOURS). The supervisor for this research paper is Dr.Komathi a/p Munusamy. Despite the fact that this research paper was prepared entirely by the author, it is based on the comparable research conducted by others, and the sources are cited as references. "Influence of Work-Life Balance, Perceived Organizational Support and Job Satisfaction on Employee Engagement Due to Covid-19 Pandemic in the Industrial Sector" is the title of this study. This topic was chosen because of the growing tendency of work from home (WFH) due to Covid-19 pandemic. Apart from that, most of the employees mentally and physical disturbed due to unemployed and not satisfy with their job.

I aimed to analyse the relationship between employee engagement and the independent factors in this study. Work-life balance, perceived organizational support and job satisfaction are the independent variables in this study. There were many challenges and hardships encountered during the research, but they were all valuable because of the information and experiences obtained. Without a doubt, this additional information will aid in future job advancement.

ABSTRACT

This research paper's general objective is to determine the influence of employees' engagement in the industrial sector due to Covid-19 pandemic and the specific objectives is to identify the relationship between employee engagement and the three independent variables: work-life balance, perceived organizational balance and job satisfaction.

Journals and articles are used and adopted in this research for further research and to construct questionnaire. The sampling technique used in this research is snowball sampling and the sample size used is 200 respondents. To analyse the relationship between employee engagement ad the three independent variables, the researcher used SPSS software version 27.0. The analysis that was conducted in this research is descriptive analysis, Pearson correlation, Multiple regression analysis, and the test of significance. From this study, the researcher can conclude that job satisfaction has positively correlates with employee engagement, while work-life balance and perceived organizational support has a negative relationship. Apart from that, some limitations of the study: limited variables, limited information obtained from quantitative data collection method and lack of comprehension of the questionnaire questions along with some recommendation for future research: consideration of other variables, consideration of qualitative data collection method and construct a bilingual survey. Therefore, future researchers can identify the way to enhance this issue for future research.

CHAPTER 1: RESEARCH OVERVIEW

1.0 Introduction

The goal of this study is to see how the work-life balance (WLB), perceived organizational support (POS), and job satisfaction (JS) on employee engagement (EE) due to covid 19 pandemic in the industrial sector. This chapter offers a detailed introduction to this study, including the research background, research problem, research objective, research question, research significance, and conclusion.

1.1 Research Background

The global crisis, Covid 19, has a significant influence on primary sectors such as finance, manufacturing, real estate, commerce, etc. During this pandemic, numerous industries were affected; some even shut down their organization. Unemployment climbed, engagement between organization and employees was mainly impacted, inflation increased, commodities became more expensive, taxes rose etc., are examples of the pandemic.

EE is one of the most talked-about subjects in the business world. There has been much research on employee engagement published in less than ten years, along with multiple meta-analyses. The corporation's performance and competitive advantage is the primary determinant of employee engagement. (Macey et al.,2009). Indeed, it claimed that businesses with an engaged workforce have superior returns on capital, output, and customer gratification.

In his ethnographic research, the researcher (Kahn, 1990) presented the first interpretation of the psychological circumstances of direct involvement and disengagement at the workplace in the scholarly literature. According to (Kahn, 1992), employee engagement refers to 'the benefits that the organization workforces' gain from their duties; in the engagement, the people employ and present themselves physically, cognitively, and emotionally throughout work roles.'

According to employees 'desires, employees' engagement is divided into three components: cognitive engagement, physical engagement, and emotional engagement. (Harrin, 2021). Cognitive engagement refers to the employees being aware of and involved with the corporation's operational aims. The personnel understand the need to get the highest potential return on their work efforts and contribute to their most significant potential. The second type of engagement is physical engagement. Physical engagement relates to employees that engage their overall emotional and physical energy in their jobs and permit them to give more to the company. Emotionally commitment relates to a workforce's feeling of connection and trust in the company and its employees—the technique of controlling personal emotions while at work is known as emotional engagement.

When coming to EE, it has its pros and cons. The pros of employee engagement are growth in sales. (Getting Employee Engagement Right or Wrong: The Pros & Cons, 2021). Other than that, increase employee involvement. EE has grown in popularity because it will increase the commitment to businesses. Organization owners frequently include employees in decision-making because corporate leaders understand the importance of their staff. By actively attaining organization by giving an opinion and assisting in developing organizational goals, the employees will gain sturdy engagements. According to (Kokemuller, n.d.) one of the disadvantages of employee engagement is that manager and employee boundaries become unstable. Businesses have always come up with a rigid system with well-specified reporting lines to sustain balance. It is risky to allow workers to communicate ideas and discuss without forcing them to assign tasks to upper-level

managers. A Communication problem is one of the cons in the employee engagement process. Organizations might find it challenging to keep track of options; also, actions require employees to avoid harmful effects and disharmony.

WLB, POS and JS are the independent variables in this research. Work-life balance focuses on managing every individual's professional career, family commitments, and leisure activities effectively. Moreover, the shifts in globalism, the function of employment within the lives of one's has shifted too (Grzywacz & Carlson, 2007). However, it is regarded as necessary; it is still vital in enhancing personal fulfilment. Employees were looking for balance and harmony within their career and home lives, with as little friction as possible among the two. Therefore, work-life balance is one of the essential factors for the employee to succeed in both work and personal life (Pasamar & Cabrera, 2013).

Another factor influencing EE is POS refers to workers acquire a generalised view of how much the company appreciate their contributions and is concerned about their well-being, based on the organizational support theory (Eisenberger et al, 2002).Workers' perceptions of POS reflect to their belief that the firm always values and support them. Workers' cumulative experiences and attitudes inside the company, such as receiving management assistance, experiencing justice, and having comfortable working circumstances, are essential in POS. The stronger their view organizational support is, the better employees feel respected, their opinions are addressed, and employees believe the company concerned about their well-being (Kurtesis et al., 2017).

JS, in its broadest sense, JS refers to one's level of contentment with their work. Job satisfaction relates to the employee's attitudes and sentiments towards their careers. Job satisfaction has shown positive and beneficial views about the work (Dugguh et al, 2014). According to (Armstrong, 2003). Job discontent refers to poor and disadvantageous opinions about the outcome and a staff's feeling about their income, management, perks, colleague, and organization culture and environment. As per the study by (Anari, 2012), more job satisfaction reduces the need for the

workforce to explore new career opportunities by resigning from the company. The primary goal of this research was to see how jobs satisfaction influenced employee engagement.

Research of the industrial sector-top booming industry in Malaysia is the technology sector, followed by healthcare, professional services, finance and manufacturing, and the production industry. In terms of overall export, labor demand, and Gross Domestic Product (GDP), the manufacturing and production industries are crucial because it is the Malaysian economy's source of growth. From 2010 Malaysia's manufacturing industry sector had considerable economic development since there was a massive investment in economic activity.

According to the 12th Malaysia Plan (12MP) (ABDUL RASHID et al., 2021), during the year 2021-2025, Malaysia's GDP IS predicted to expand at a rate of 4.5% to 5.5%, it is expected the total export to increase 5. The labor market is likely to restore full employment. Additional states are transitioning into the remaining phases of the National Recovery Plan (NRP) and following pandemic limitations, allowing financial industries to reopen. The real work is targeted to achieve 4% in 2025. As stated in theme one, the resetting economy phase E&E goods will grow into huge industries because Malaysia's sales values depend on E&E.

1.2 Problem Statement

The primary goal of EE research is to identify the variables that motivate workers to work efficiently. EE is critical to aligning between what senior management gives and what staff demand. The purpose for this is today's businesses are most interested to understand what might genuinely engage and disengage people, especially during this global crisis. Organizations conduct employee engagement analyses regularly to establish or revise current systems and make critical changes

that will boost and maintain the productivity and performance of the workforce in the company.

Other than that, when looking through over 20 years back, according to Google Scholar, the paper related to employee engagement received very few citations. Currently has over 1,800, most of them coming in the last five years. Consequently, the engagement publications are still very young, and ten years ago were almost non-existent (Khan,1992).

Two concerns have been a plague and continue to affect employee engagement studies. First, there are many different concepts about employee engagement, and there is still a difference in opinion and understanding of what engagement genuinely represents. Academics can't even decide on a name for the construct. Several think it should be called employee engagement, whereas others claim it should be called job or work engagement (Rich et al., 2010). Besides, several methods are created to assess employee engagement, and there are still uncertainties regarding measuring engagement and the reliability of current practices.

Next, other consequences of EE in the past two years are the Covid-19 pandemics. Due to the outbreak, work from home (WFH) has been demanded in some industries in Malaysia. It has drawbacks for employee engagement. Influenza of Covid-19, Malaysians are facing a variety of emotional states especially working individuals. Furthermore, employees are expected to do their job from home.

The main problem with WFH is an 'engagement gap' between superiors and employees and co-workers communicating with the organization. Because there are no physical interaction feelings, the quantity of successful engagement will be impacted (MicroExec, 2013). According to (Go, 2016) WFH staff tends to confuse their process by failing to provide physical boundaries among professionals and family. Moreover, working from home negatively influences employees' self-esteem since they do not feel accomplished and satisfied with their job. Especially nowadays, fresh graduates and interns who newly join an organization and work

environment with high expectations and motivations face difficulties and challenges from the new duties, mainly to engage with their colleagues and superiors.

Besides, according to several surveys, the issue with Malaysian employees' values is based only on an average organization to remain with the company for three years (Lim, 2015). In a past study paper, the pattern described the high turnover rate, the overall efficiency and performance of the organization reduced, and the company has been diverted from its fundamental mission since the organization needs to hire individuals who have resigned continually.

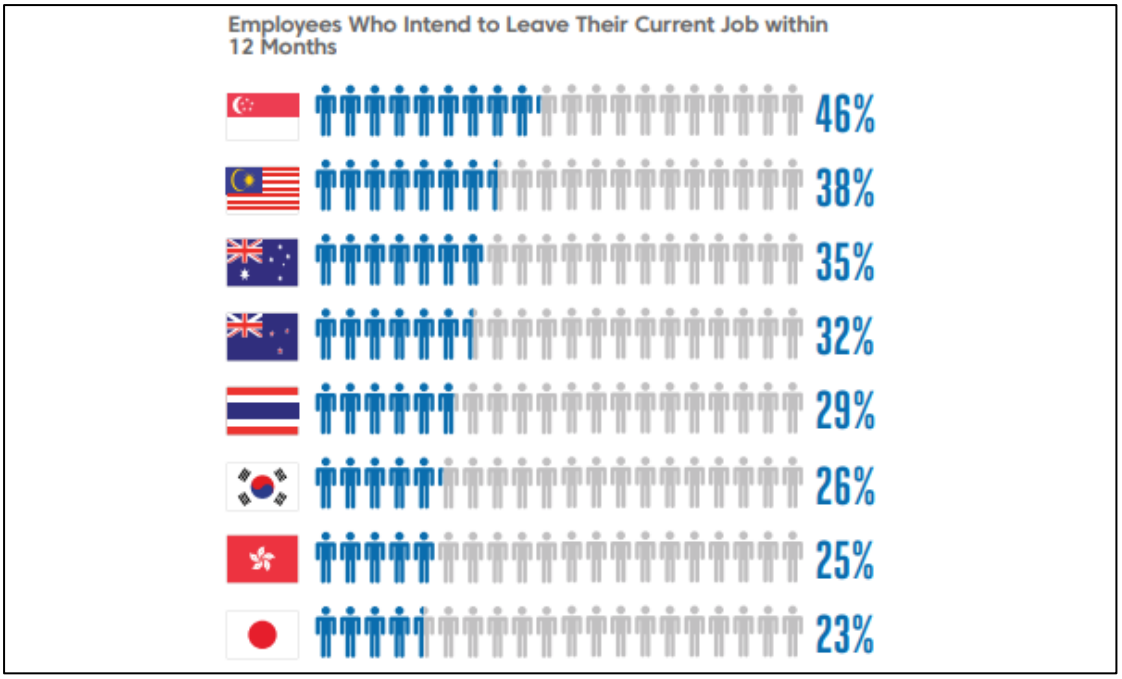


Figure 1.1: Employee Who Intend to Leave Their Current Job within 12 Months
Source: ("The Drive for the Digitally Enabled Workforce" Survey, 2018)

According to the graph above, the employee survey data by Workday and IDC shows employees in Malaysia are the second satisfied in Asia Pacific due to some factors such as, decent income level, career possibilities, and work life balance but around 38% of Malaysia employees anticipate to quit their jobs within the next year and relatively low engagement. Due to this low engagement, the industry needs to recruit new employees to replace those disengaged. Disengagement and actively disengaged will impact the industry's performance and turnover rate.

If WLB are not stable, the employee may leave the organization. According to the recent virtual poll conducted by global workplace supplier Regus, 70% of Malaysian employees are more likely to be sick because of stress According to a study including 95 nations and 20,000 top executives and organization leaders, 48% of Malaysian employees reported increasing pressure levels, and 42% claimed job issues led them to the sleeping pattern. If there is a disconnect between job and home life, it is unclear whether employees will remain or leave the organization. Even though some industrial sectors lead, for instance, the manufacturing industry, employees will still quit their jobs no matter how successful the enterprise is. Disengagement can be a significant issue for the sector's growth ('Working To Death': Recent Study Shows More Malaysians Getting Stress-Related Illnesses', 2015).

Due to the restricted decision authority offered by management, seventy per cent of the Human Resources (HR) department in Malaysia acknowledged that developing a perks policy to meet staff needs was a struggle. There is no clearly defined plan from executives for HR personnel to successfully supervise the employee benefits plan. 71% of workers surveyed by job street were unhappy with leadership and management (Ang, 2016).

According to the job street survey, Malaysia has the second most unhappy employees compared to 6 Southeast Asian nations (Hicks, 2016). When employees in Malaysia are dissatisfied with their working circumstances, they prefer to remain disengaged (Lopez, 2015). If the workforce is unhappy with their organization and job, they will leave (Hooi, 2016). According to Jobstreet's poll, unsatisfied employees, with 74%, expect to quit the company in 1 year, fifty-seven per cent intend to depart in 3 years (Boo, 2014). Malaysians focus on premium perceived well-being at work and are content with the services they receive (Malaysians Are Not Happy at Work., 2021).

WLB, POS, and JS all conduct independent studies on EE. Most researchers have focused on different sectors, and studies have steadily uncovered a wide range of industries' employee engagement conditions. This research focuses not only on the leading industries to see if the independent variables contribute to employee engagement.

1.3 Research Objectives

1.3.1 General Objective

- To determine the influence of employee engagement in the industrial sector due to the Covid 19 pandemic.

1.3.2 Specific Objectives

1. To identify the relationship between work-life balance and employee engagement in the industrial sector due to Covid 19 pandemic.

2. To identify the relationship between perceived organizational support and employee engagement in the industrial sector due to Covid 19 pandemic.

3. To identify the relationship between job satisfaction and employee engagement in the industrial sector due to Covid 19 pandemic.

1.4 Research Questions

1. What factors influence employee engagement in the industrial sector due to the Covid 19 pandemic?

2. Is there any relationship between work-life balance and employee engagement in the industrial sector due to Covid 19 pandemic?

3. Is there any relationship between perceived organizational support and employee engagement in the industrial sector due to Covid 19 pandemic?

4. Is there any relationship between job satisfaction and employee engagement in the industrial sector due to Covid 19 pandemic?

1.5 Research Significance

This research aims to understand the work-life balance, perceived organizational support, job satisfaction, and employee engagement of the industrial sectors due to the Covid 19 pandemic and mainly identify how these independent variables influence employee engagement. It provides information about workers' desire to leave based on their perception of organizational support, contentment with work, exchange connection with subordinates, and WLB in the profession.

Employee engagement research has been carried out in a variety of areas. However, there has been a lack of attention on three independent variables with employee engagement, particularly in the industrial sectors. Furthermore, employee engagement concerns have been uncovered and highlighted worldwide in the past years. Due to the pandemic, most sectors got affected, primarily when employees worked from home; they could not engage well with their organization. Consequently, this research is required to study and comprehend the influence and importance of the independent variables on employee engagement in businesses. At the same time, the findings of this research will help the top organization management become more focused and aware of their EE and the issues related to disengagement.

This study can help industrial sectors top management in a variety of ways. Understanding the effect of POS allowed management to watch their staff and keep a positive and supportive working environment to avoid losing precious human resources. Furthermore, this research gives advantages to learn about the possible implication of dissatisfied workers leaving the organization; the significance of developing a high-quality exchange interaction with the workforce to increase job quality and emotional mentality. Moreover, workers' perception of work-life balance can reduce job pressure and extend the period of working lives.

1.6 Conclusion

In summary, this chapter overview can help every industry identify the factors that need to be addressed and focus on enhancing employee engagement within their organization. In chapter 2, the researcher will discuss the literature review.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

In this chapter, the researcher will study and explain the dependent variable and independent variables. First and foremost, the researcher will present an underlying theory, a literature review for each variable. Next, the researcher will suggest a conceptual framework to depict the relationship between the independent variables and the dependent variable Following the construct hypothesis.

2.1 Underlying Theories

2.1.1 Job Demand Resources Model (JD-R model)

The JD-R model is formed by (Bakker & Demerouti, 2007) .The model comprehends forecast and describes employee burnout, job engagement, and outcomes. Work engagement and burnout were used as mediators, while organizational support are the primary outcomes. Household component and expectations affect the model's motivation and well-being. In this research the JD-R model is used as reference to form the conceptual framework.

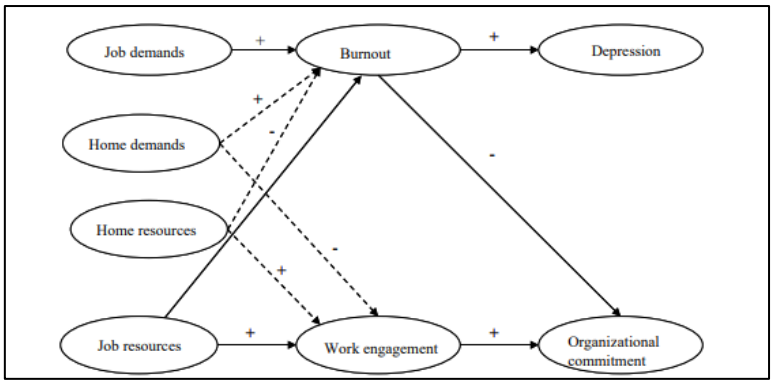


Figure 2.1: JD-R Model

Source: (Hakanen, Jari J, Schaufeli, Wilmar B.; Ahola, Kirsi, 2008)

2.2 Review of Variables

2.2.1 Employee Engagement

Employee engagement is a fascinating idea to consider. EE refers to directing people to their job performance, emotional, physical, cognitive expression (Albrecht, 2010). An engaged workforce will feel connected to their workplace and subordinates and will work effectively in their function without putting others first. Individuals' inner thoughts are at the core of engagement (Kadiresan et al., 2019). The attitude of engaged employees is more psychologically involved, aware, connected and focused in their work productivity (Kahn, 1990).

Consequently, workers' desire to commit to the company's growth is determined by their degree of engagement—however, employee engagement and disengagement are linked to psychological factors like fulfilment, security, comfort and availability (Rich et al., 2010). When employees feel a sense of caring for their co-workers, they view their employment as valuable (Ravikumar, 2013). EE is a tool to estimate a company's growth, job satisfaction and profitability (Barrick et al., 2015), (Tritch, 2003) & (Medlin & Green, 2014).

Vigour, enthusiasm and commitment are characteristics of engagement. An engaged workforce can provide additional feedback by going above and beyond in their job. Employees' passion, interest, and fulfilment for their roles in the corporation are termed engagement (Fachrunissa et al., 2014). It substantially impacts employee engagement when a workforce is treated with respect (Saks, 2006). The amount of participation has both good and bad consequences for the company. As stated by (Gonzalez-Roma et al., 2006), when employees are engaged, they are more committed to completing tasks and achieving the corporation's goals, vision, and mission.

2.2.2 Work-Life Balance

Work-life balance is one of the essential tools to evaluate employee engagement. Despite substantial scholarly and practical attention, work-life balance is imprecisely described. Work-life balance has traditionally been defined as the lack of job and personal life conflict, or risk of severe with which job interrupts with private or personal life interrupt with career. According to (Greenhaus et al., 2003), work-life balance refers to how the employee is equally engaged and happy with their job and personal life with prior theoretical interpretations.

(Marks & MacDermid, 1996) & (Clark, 2000) proposed that WLB is a worldwide evaluation work resource that meets personal life expectations, and fits the current workload because participation should be equal and optimal on both sides based on person-environment theory. Based on (Voydanoff, 2005), WLB refers to the level of an employee's performance, and fulfilling in career and home duties is consistent with the employee's lifetime objectives.

According to (Allen & Greenhaus, 2006), WLB was presented as a corporation approach instead of described as an employee's job and personal life in general. There is no substantial evidence in the literature indicating individuals want "fairness" or perhaps even "almost fairness" throughout employment and personal life. However, according to the role balancing concept, employees desire rich and comprehensive experiences in their professional and personal life. It's essential to remember that the role balancing theory concept doesn't prescribe equivalence, partly because it is debatable whether the job and personal life activities are of equivalent value and could be adequately controlled. As proposed by (Greenhaus et al., 2003), no indication has proven that employees see a balance as a transaction among job-related resources and personal life needs, conversely.

2.2.3 Perceived Organizational Support

Perceived organizational support is the second important variable that influences employee engagement. Nowadays, competitive and evolving workplace culture, characterised by work insecurity, regular replacement of workers, adds to trust issues, care for workforces and business owners' mutual well-being. Most companies are still unaware of the critical role of positive workforce connections in decreasing absences, strengthening commitment to corporate goals, and improving efficiency.

Businesses must consider people as vital factors for the good of both individuals and companies. Staff and upper-level management gain advantages from POS, is

defined as workers trusting that the company recognises one's job input and concern about personal happiness. Furthermore, according to (Shaw et al., 2013), an employee with high perceived organizational support significantly influences performance and productivity. Consequently, corporations will provide their workers with plans and practices to encourage favourable workforce perceptions and opinions about the company.

In addition, based on the POS concept, personnel appreciate perceived corporate support since it satisfies employees' requirements such as approbation, dignity and connection, as well as providing support in stressful situations. The workforce agrees with his/her work, experience strongly connected with the firm, are very inclined to regard the corporation objectives and are dedicated and devoted to the company if positive leadership and HR procedures result in significant POS (Eisenberg et al., 1997).

2.2.4 Job Satisfaction

Job satisfaction is another critical indicator of employee engagement. In this research, job satisfaction is the last variable to study. According to (Bailey et al., 2016), an individual's mindset, experience, perception of their employment, and employment perception have been linked to JS. It is commonly employed primarily in the human resources area by those who believe internal and external characteristics comprise essential in ratings (Bentley et al., 2013). As stated by (Stello, 2014), job satisfaction also refers to the pleasant emotional state due to the negative judgement of work and work experience.

Additionally, as stated by (Zablah et al., 2016), a firm job satisfaction evaluation is frequently examined, with all variables relating to individuals' thoughts regarding their employment and different parts of their job. As described by (Lumpkin & Dess, 2001), this is the degree to which individuals like or despise their work. The directory of the propensity for the practised vocation versus external chance is

contingent on the knowledge available at the moment. The researcher (Sukirno & Siengthai, 2011) provided the following concept of work satisfaction. "JS comprises workforce perceptions about how effectively their employment delivers those aspects that are viewed as significant". In organizational behaviour, it is widely acknowledged that contentment is the significant and often researched attitude—workers' opinions on the rewards acquired from their labour impact work happiness. When analysing organizational behaviour, job satisfaction is an essential component to address.

Next, there are various attributes to JS. It can be used to express one's emotions or to allude to an employee's job. Job satisfaction is divided into five elements: the task at hand, workplace environment, salary and benefits, rewards, subordinates, supervisors, and interpersonal compatibility. As previously mentioned, job satisfaction may be defined as one's level of contentment with their employment. Simply stated, job satisfaction is related to an individual's attitudes about work. Fulfilment might be advantageous in terms of a one-dimensional subjective construct representing one's intense attachment to their employment (Armstrong M. , 2003).

In a nutshell, the independent variables discussed above are linked to one another. JS is a crucial determinant in employee engagement research.

2.3 Conceptual Framework

Figure 2.1 below shows the proposed conceptual framework in this study. The conceptual framework is developed from the research objectives and questions. It depicts the relationship between the dependent variable: EE and the three IVs: WLB, POS, and JS.

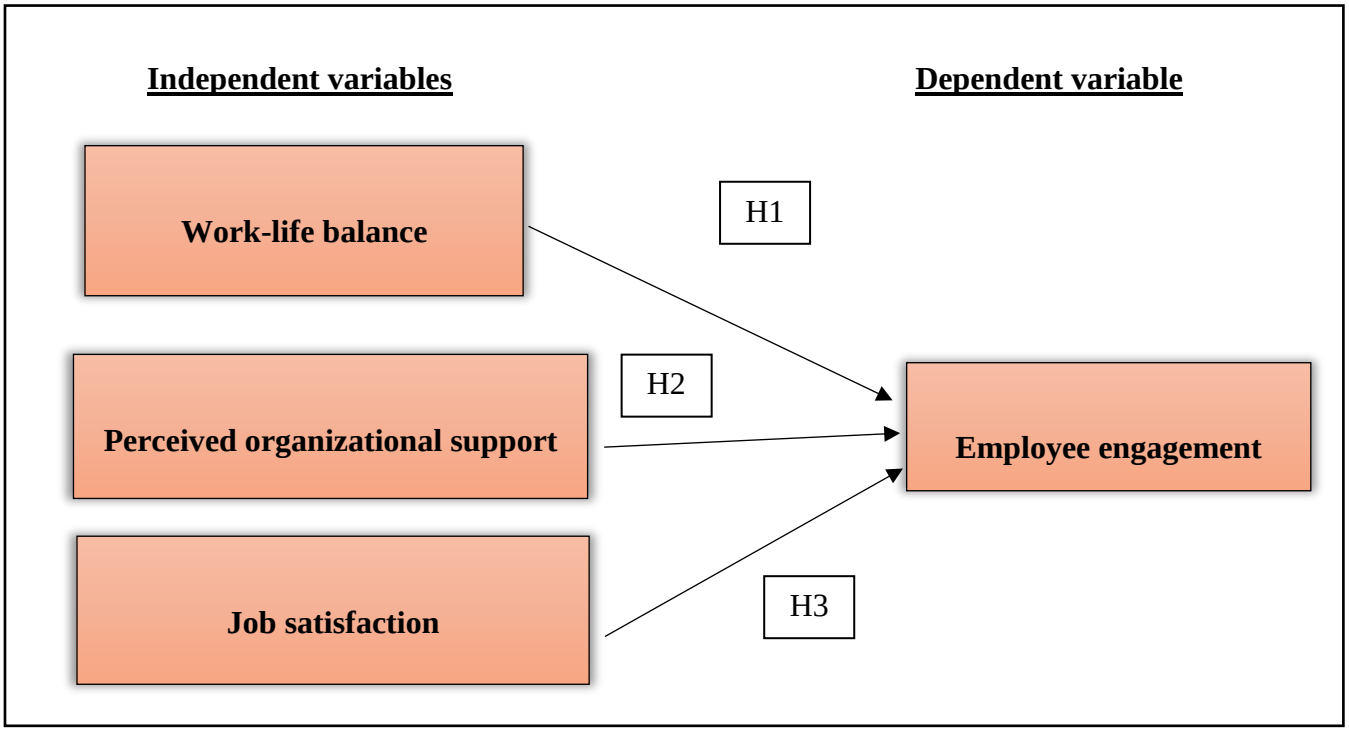


Figure 2.2: Conceptual framework
Source: Developed for the research

2.4 Hypothesis of the study

2.4.1 Relationship between work-life balance and employee engagement

According to (Verhagen & Vossen, 2011), the lower the WLB, the higher the EE in the organization because problems between job and personal life cause the workforce to change things. Employees chose to shift their work because moving from the firm is better than fixing their personal life. Consequently, a more robust work-life balance persists in a higher EE. Personnel with stable WLB would be less likely to leave the company (Ertas, 2015. Besides that, unable to contemplate their lives because they have spent excessive time and effort on their job will disengage, causing work quality to suffer the consequences of losing family support (Bandekar & Krishnan, 2015). Furthermore, if workers had a balance between job and personal, like flexible working time, employees would be content with careers and have EE.

As reported by (Martin et al., 2013), when related to WLB efforts in the firm, the current work-life balance culture was the scathing criticism of job satisfaction that will affect employee engagement. The key conclusion from the research revealed that work-life balance was directly associated with staff retention and employee engagement (Qayed Al-Emadi et al., 2015). Next, stress influenced the balance between job and family, impacting their views on job engagement. EE is more likely to improve if the company provides enough work-life balance to its staff. To improve employee engagement at work and in life, the superior and HR must make an effort to consider WLB. Meanwhile, employees intended to quit their job, not because of WLB issues but rather due to workplace stress.

H1: Work-life balance has a significant relationship with employee engagement.

2.3.2 Relationship between perceived organizational support and employee engagement

The perceived organizational support is the positive corporation features (Mowday, 1998). An employee with strong perceived organizational support is rare to leave and look for another job. (Arshadi, 2011) backed up the statement, stating that improving organizational support can reduce workers' inclinations to quit the company. Besides, concentrating on perceived corporate support is the vital predictor of employee engagement. According to (Talat Islam et al., 2013), workers' behaviour and actions are positively influenced by POS. The organizational support concept instils in workers' obligation to repay the firm. Personnel feelings of responsibility for the company and assisting them to achieve its aims may be influenced by POS; this need can have far-reaching consequences on employee engagement intentions.

(Lee et al., 2010), stated there is a relationship between POS and EE in the company. According to (Loi et al., 2010), the variable has a significant association with EE. If workers place an excellent value on the firm's genuine care, they will form a deeper bond with employees to repay favourable perceived organizational support. This was realistic to assume the high support received, the more the employee engaged. Furthermore, if a business perceives support to its workers, the staff will believe that the firm has behaved well, influencing them to remain with the firm. This statement (Joo et al., 2015), has added that POS reduced disengagement caused by stress, absenteeism, and responsibility for better value.

H2: Perceived organizational support has a significant relationship with employee engagement.

2.3.3 Relationship between job satisfaction and employee engagement

As reported by (Roshidi, 2014), job satisfaction was regarded as a critical factor in predicting employee engagement. Several studies found that job satisfaction was a significant element of employee engagement in their present work when evaluating employee engagement (Hancock et al., 2011). JS impact whether one's remained or left the company. Besides, poor JS is a sign that led to a staff disengaging. JS acted as a vibrant motivator, forcing workers to cease their mindset (Aydogdu & Asikgil, 2011) about leaving the job. According to (Huang & Su, 2016), disengagement was often less if workers were content with their job. Workers will disengage if the work is unsatisfactory, but if the work is satisfying because they receive their incentives and are treated decently, employees are scarce to disengage. Personnel might disengage from a company for various reasons, including receiving poor practices during promotion and hostility between staff and supervisors or co-workers, resulting in employee disengagement.

Job satisfaction was regarded as a crucial indicator that evaluates a staff desire to engage or disengage. An organization tends to keep their people by recognising and willing to meet their requirements while encouraging them all the time, which will eventually high EE and result in the firm becoming effective and successful. Consequently, the strong relationship between JS and EE, a worker's JS, may impact the firm's operations.

H3: Job satisfaction has a significant relationship with employee engagement.

2.5 Conclusion

The researcher studied the literature based on prior literature and constructed a conceptual framework. Additionally, the researcher covered the hypothesis between each IVs, and DV according to previous studies. In chapter 3, the researcher will analyse research methodologies.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

The research methodology is the study's processes for performing their job, such as presenting, exhibiting, and interpreting phenomena (Rajasekar S. et al., 2013). This study will focus on research design, data collection techniques, sampling design, research instrument, construct measurement, and data processing and analysis.

3.1 Research Design

According to (Zikmund et al., 2010), the research design was a professional design with methods and processes to gather and interpret data. The quantitative and causal research design is used in this study. The business study that uses empirical evaluation, such as analysis and numerical assessment, to achieve the study goals is known as a quantitative study. A quantitative research approach investigates the conceptual IVs with DV. The quantitative research approach was applied because the data for every variable are from the questionnaire, and the source is adopted from the prior journals. Furthermore, causal research was chosen as the study design since it was utilized to investigate the cause-and-effect correlation. The researcher conducted causal research to determine the causes, which were the three IVs and the impact, which was the DV due to Covid 19 pandemic in the Industrial sector.

3.2 Data Collection Methods

Data collection is a systematic method of collecting and analysing data from various resources. The researcher can discover the solutions to the research topic, text hypothesis and assess the results using the information acquired. Data can be gathered from primary and secondary data for the data collection method (Bougie & Sekaran, 2016). Hence, in this study researcher used primary data.

3.2.1 Primary Data

Primary data refers to an original study conducted by the scholar upon particular research variables using the raw data (Bougie & Sekaran, 2016). Questionnaire, interviews etc., are the essential methods applied. In this research, a questionnaire was used through distributed in the form of Google form via social media to collect the core data. About 230 questionnaires were sent, including the pilot test. This method was chosen because it is a simple technique to acquire information from many people. The questionnaire was adapted and modified from some academic journals.

3.3 Sampling Design

Sampling design refers to dividing the larger population to conclude standard features shared by the entire population. The five parts of sampling design are the target population, sampling frame and location, sampling technique, sample size, and sampling process execution (Saunders et al., 2009)

3.3.1 Target Population

The relevant group is chosen by its distinct and visible traits, and the study must target this population (Zikmund et al., 2010). The focused population in this study are industrial sector working employees.

3.3.2 Sampling Frame and Location

The sampling frame refers to the working population and specific component sets that could be derived as a sample (Zikmund et al., 2010). In this research, the researcher does not choose any particular group to develop an acceptable sampling frame, and Malaysia is the sample location for this study.

3.3.3 Sampling Technique

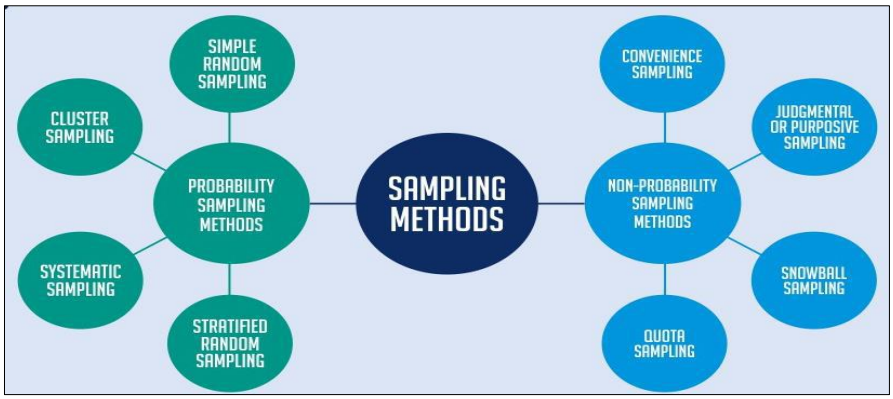


Figure 3.1: Overview of Research Sampling Method
Source: (Bhat, n.d.)

There are two sampling techniques: sampling probability and non-probability sampling approach (Zikmund et al., 2010). In this research, the researcher has chosen non probability sampling. Non-probability sampling entails making non-random selections based on the non-probability sampling methods to ease the data collection (guide, 2019). In this study, the researcher has chosen snowball sampling, one of the non-probability sampling methods. Snowballing is the practice of questionnaire respondents soliciting the audience to participate in the research. (Parker et al., 2019). The researcher adopted a snowballing method for this study since the respondents from various industrial sectors will disseminate the questionnaire to the people around them.

3.3.4 Sampling Size

The sample size is a minor component of the population. Hence, it is advised to utilize a basic rule of thumb to determine the suitable sample size, between 30 and 500 participants, unless the result is a Type II error if the sample size is more than 500. (Bougie & Sekaran, 2016). For marginally acceptable accuracy, a minimum of 100 responses are required. Thus, a sample size of 230 respondents was used in this

study. Respondents are gathered from numerous industrial sectors to obtain an accurate view.

Furthermore, a smaller sample size of 230 will reduce the time it takes to gather data (Menon et al., 2020). In this study, the researcher chose a sample size of 230 questionnaires delivered to various industrial sectors across Malaysia, but only received 205 respondents in return. In contrast, after going through the questionnaire five respondents that the researcher obtained are non-usable. According to (Prince, 2012), the non-response rate should be below 70% in social science studies. In this research, the response rate is 89% which is acceptable. Therefore, the researcher will used 200 respondents to analyse.

Response rate

$$\frac{No.of\ responses\ to\ your\ survey}{No.of\ people\ you\ sent\ the\ survey\ to} \times 100\%$$

$$\frac{205}{230} \times 100\% = 89\%$$

3.4 Research Instrument

The research instrument is a measurement method used to gather information and develop and evaluate the research method and process. This study chooses the questionnaire method as a measurement instrument since it is low-cost, simple, and allows participants to stay private.

3.4.1 Research Questionnaire

The research questions were taken from prior journals, adopted, and amended to fit the needs of this research. The researcher's details are included in this questionnaire, and the rationale for its distribution is attached. The English language is applied as the respondents are from the industrial sector. This questionnaire consists of three sections:

Sections	Items
A	Demographic profile
B	General information
C	Independent variables and dependent variable

Table 3.2: Sections in the questionnaire
Source: Developed for the research

3.4.2 Pilot Study

The pilot study is a preliminary view of a study that allows the researcher to evaluate their research process with a small group of individuals before conducting the main study. A pilot study was carried out on 30 participants before publishing the real questionnaire to ensure the questionnaire's reliability and correctness. Cronbach's Alpha Correlation was utilized to test the questions based on the pilot study results.

Constructs	Cronbach's Alpha	No. of items
Work-Life Balance	0.850	4
Perceived Organizational Support	0.915	4
Job Satisfaction	0.828	4
Employee Engagement	0.748	4

Table 3.3: Pilot test outcomes
Source: Developed for the research

Table 3.4.2 shows the Cronbach's Alpha of each IV and DV. From this pilot test results, the researcher understands that WLB and JS fall under 0.80 to 0.89, which is a good reliability level, and POS falls under ≥ 0.90 content, excellent reliability. As well as the DV fall under the 0.70 to 0.79 range, which is known as acceptable reliability. Therefore, this outcome suggests that the internal reliability is significant, indicating that the researcher can proceed with the research.

3.5 Construct Measurement

3.5.1 Origin and Construct Measurement

Variables	Source	Original questions	Modified questions
Independent variables: (WLB)	(Wu et al., 2013)	There is a good fit between my personal life and work.	My personal and professional lives are well-aligned.
	(Wu et al., 2013)	There is a good fit between my job and personal health.	My health and work are well-aligned.
	(Wu et al., 2013)	I receive support and recognition from family members.	Family members have shown their support and appreciation for me.
	(Wu et al., 2013)	I am able to do my job and not burnout.	I can execute my job without getting stressed.
(POS)	(Wu et al., 2013)	My supervisor genuinely care about me.	My upper-level management truly cares about me.
	(Wu et al., 2013)	The support staff in the organization is adequate.	The company's support personnel are adequate.
	(Wu et al., 2013)	My organization really care about my well-being.	My company is genuinely concerned about my well-being.
	(Wu et al., 2013)	My supervisor values	In making case decisions, my

		and seriously consider my opinion in case decision making.	upper-level management values and considers my input.
(JS)	(Wu et al., 2013)	In my work, I have a feeling of success and accomplishment.	I have a sense of achievement and success at work.
	(Wu et al., 2013)	I am prepared for my job because of my prior training and motivation.	With my earlier training and desire, I am well-prepared for my career.
	(Appelbaum et al., 2009)	There is a opportunity for advancement.	There is a chance to develop my career.
	(Bhaker &Tanu, 2021)	I am satisfied with my pay.	My compensation is satisfactory to me.
Dependent Variable: (EE)	(Bakker et al., 2003)	At my job, I feel strong and vigorous.	I feel powerful and energized at work.
	(Mokhtar et al., 2021)	I really throw myself into my job.	I throw my heart and soul into my work.
	(Mokhtar et al., 2021)	Sometimes I am so into my job that I lose track of time.	Sometimes I become so caught up in work that I lose sight of time.
	(Bakker et al., 2003)	I feel happy when I am working intensely.	When I am working hard, I'm happy.

Table 3.4: origin and modified question
Source: Developed for the research

3.5.2 Scale of Measurement

The measurement scale is divided into four: ordinal, nominal, ratio, and interval scales. The researcher created this questionnaire using nominal and interval scales.

Sections	Items	Scale
A	Demographic Profile	Nominal
B	General Information	Nominal
C	Independent Variables and Dependent Variable	Interval (5 Point Likert Scale)

Table 3.5: Scale of measurement
Source: Developed for the research

3.6 Data Processing

Data processing refers to a procedure involving the preparation and analysis of the findings (Zikmund et al., 2010). Various process procedures were applied, including editing, coding, tabulating, categorizing, and graphing study data.

3.6.1 Data Editing

This process involved adjusting the data, editing and amendment of the information is applied if there were any errors in the survey in this phase to ensure uniformity and readability (Zikmund et al., 2010).

3.6.2 Data Coding

Data coding is a process of summarizing the data collection. Every item in the survey is coded using 1 to 5. Data coding aims to make the entry into SPSS software easier for statistical analysis. Below is one example of data coding from this research.

Item	Coding
Male	1
Female	2

Table 3.6: Coded item

Source: Developed for the research

3.6.3 Data Transcribing

Next, coded data will be transcribed adequately into the SPSS software after being reviewed, updated and coded

3.6.4 Data Cleaning

The last process is data cleaning which refers to detecting and removing inaccuracies in data gathering caused by faulty data input. The erroneous or unrelated data will be updated or removed in the process.

3.7 Data Analysis

The most crucial part of research is the data analysis since its summaries the information gathered. The SPSS 2.0 software is used in this study as the software for analysing and processing the acquired reports.

.3.7.1 Data Descriptive

Descriptive analysis converts data from the source data to a structure that can evaluate and explain a group of variables in a scenario (Bougie & Sekaran, 2016). Descriptive statistics portray and sum up information most concise and straightforward (Zikmund et al., 2010). The descriptive analysis was used in sections A and B in this study, comprising six demographic questions and one general information question tested on a nominal scale; the researcher used pie charts and tables with a short interpretation to describe the data.

3.7.2 Reliability Analysis

Reliability analysis is how the measurements were characterized as error-free, demonstrating accuracy and uniformity to provide reliable findings (Bougie & Sekaran, 2016). Cronbach's alpha is the extensively applied method for determining the reliability coefficient (Yücel, 2012). Acceptable reliability is defined as the alpha of 0.60 or below when the correlation varied from precise zero - accurate one (Malhotra, 2010). When the alpha is close to one, the reliability coefficient is more reliable (Bougie & Sekaran, 2016).

Cronbach's Alpha	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.8 \leq \alpha < 0.9$	Good
$0.7 \leq \alpha < 0.8$	Acceptable
$0.6 \leq \alpha < 0.7$	Questionable
$0.5 \leq \alpha < 0.6$	Poor
$\alpha < 0.5$	Unacceptable

Figure 3.7: Cronbach's Alpha Table
Source: (Cronbach's Alpha Rule of Thumb | Download Table, n.d.)

3.7.3 Inferential Analysis

This study employed inferential analysis to evaluate and justify all the IVs in this study correlated with the DV.

3.7.3.1 Pearson Correlation Coefficient Analysis

The Pearson correlation coefficient refers to the quantitative metric, which shows the degree, intensity, and importance of the linear relationship between IVs and DV (Bougie & Sekaran, 2016). A number +1.0 is denoted as a positive relationship

between two variables, whereas -1.0 is a perfectly negative relationship. The Pearson correlation coefficient analysis examines the correlation between two Likert scale variables and continuous variables in section C. At the time of one-to-one testing, the analysis is the appropriate approach for analysing the correlation between IVs and DV. The researcher will test from H1 through H3.

Coefficient Rage	Strength of Association
± 0.91 to ± 1.00	Very strong
± 0.71 to ± 0.90	High
± 0.41 to ± 0.70	Moderate
± 0.21 to ± 0.40	Small but definite relationship
± 0.00 to ± 0.20	Slight, almost negligible
(Source: Hair Jnr, Money, Samouel, & Page, 2007)	

Figure 3.8: Rules of Thumb of Pearson Correlation Coefficient
Source: (Page et al., 2007)

3.7.3.2 Multiple Regression Analysis

Multiple regression analysis is a method for examining the connection between each IV and a DV. Multiple regression analysis is used to evaluate the value of a DV by using IVs. Every variable parameter is weighted, with the weights indicating its impact it has on the total forecast (Moore & Wong, 2006).

Multiple regression analysis was utilized to measure the relationship between all IVs and DV in this study.

3.8 Conclusion

The research technique utilized to perform the research design and data collection procedures are detailed in chapter three. In addition, this study uses SPSS software to analyse and evaluate the information. Consequently, the results of the data analysis will be discussed in-depth in chapter 4.

CHAPTER 4: DATA ANALYSIS

4.0 Introduction

In this chapter, the researcher has gathered data from 200 questionnaires, and the results are analysed through SPPS software. Descriptive analysis, reliability test, Person's Correlation Coefficient analysis, and multiple regression analysis is covered in this chapter. All the studies will be illustrated and interpreted graphically represented in figures, pie charts and tables.

4.1 Descriptive Analysis

In the descriptive analysis, six demographic profiles and general information of respondents gathered from sections A and B in the questionnaire will be explained.

4.1.1 Demographic Profile and General Information

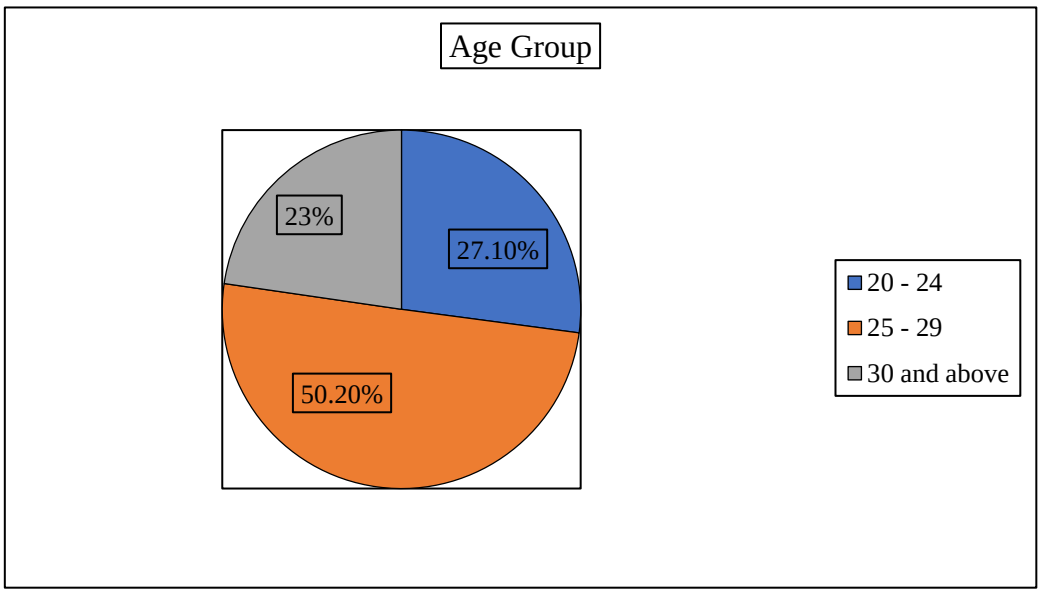
4.1.1.1 Age group

Table 4.1: Age Group

Age Group	Frequency	Percent
20 - 24	56	27.1
25 - 29	104	50.2
30 and above	47	22.7
Total	207	100.0

Source: Developed for the research

Figure 4.1: Age Group



Source: Developed for the research

According to table 4.1 and figure 4.1, three age groups of respondents filled out the questionnaire. Of 200 respondents, most respondents are between 25 – 29, with 104 respondents (50.20%) followed by the second-highest which were

ranging from 20 - 24 with 56 respondents (27.1%). Lastly, 47 respondents were from 30 and above (22.7%) the minor group of respondents among the overall respondents.

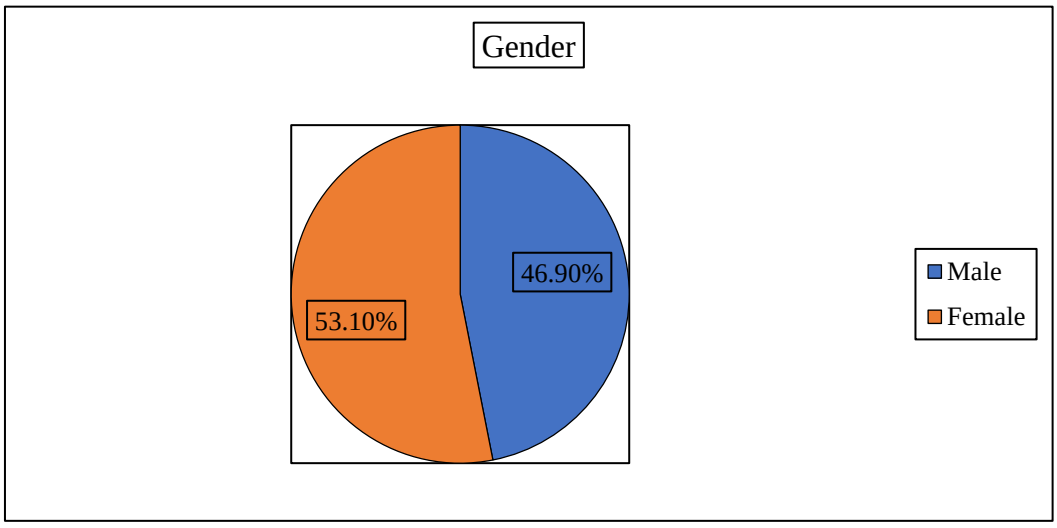
4.1.1.2 Gender

Table 4.2: Gender

Gender	Frequency	Percent
Male	97	46.9
Female	110	53.1
Total	207	100.0

Source: Developed for the research

Figure 4.2: Gender



Source: Developed for the research

Table 4.2 and figure 4.2 show that males and females are the two genders involved in this research. Of 200 respondents, 97 male responders with 46.9% and 110 female responders with 53.1%.

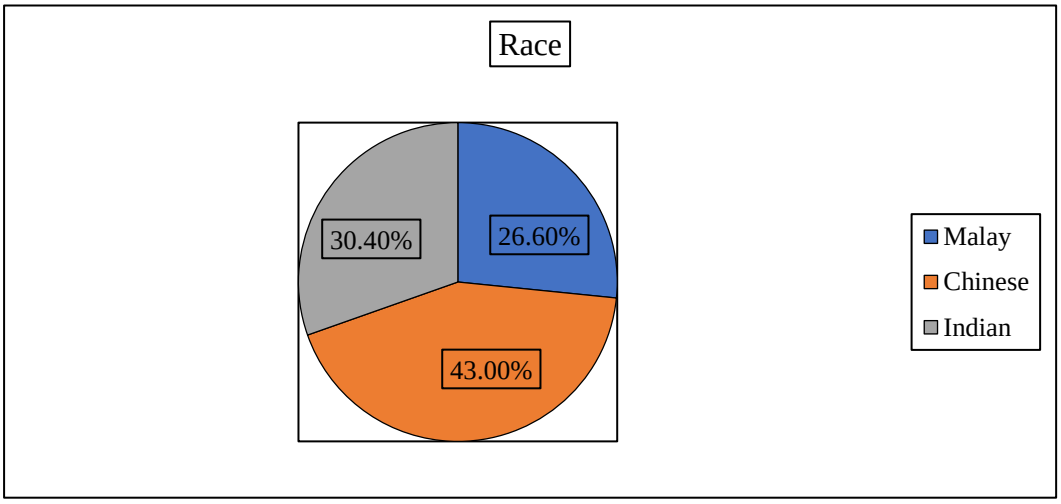
4.1.1.3 Race

Table 4.3: Race

Race	Frequency	Percent
Malay	55	26.6
Chinese	89	43.0
Indian	63	30.4
Total	207	100.0

Source: Developed for the research

Figure 4.3: Race



Source: Developed for the research

Based on table 4.3 and figure 4.3, most respondents in this research are 88 Chinese respondents (43.0%). Followed by 63 Indians respondents (30.4%) and 55 Malay respondents (26.6%) from (N=200) respondents.

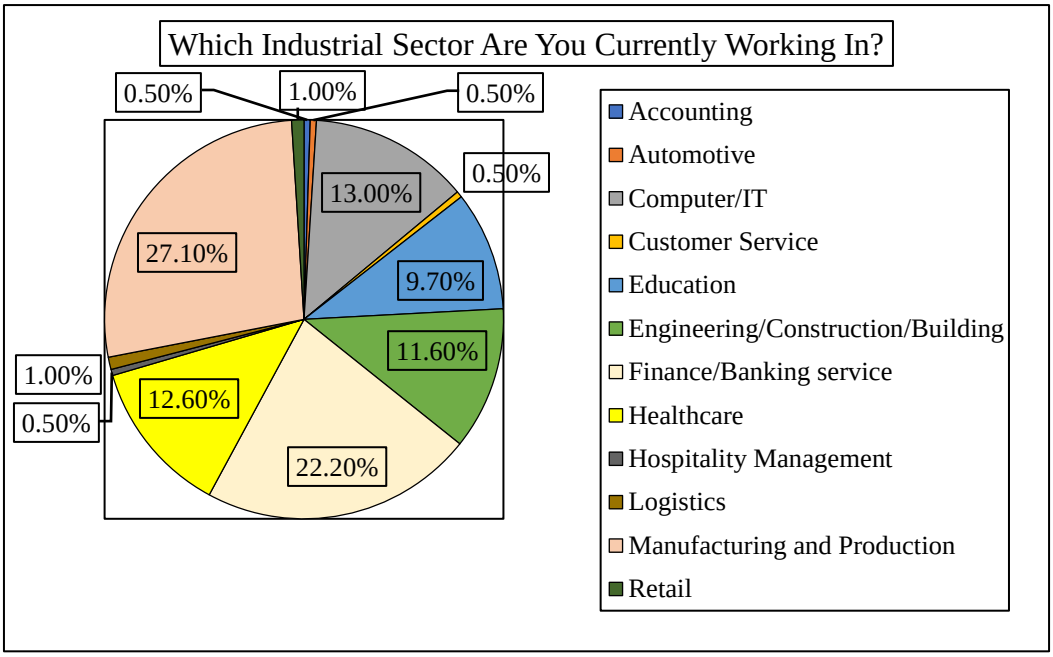
4.1.1.4 Which Industrial Sector Are You Currently Working In?

Table 4.4: Which Industrial Sector Are You Currently Working In?

Which Industrial Sector Are You Currently Working In?	Frequency	Percent
Accounting	1	0.5
Automotive	1	0.5
Computer/IT	27	13.0
Customer Service	1	0.5
Education	20	9.7
Engineering/Construction/Building	24	11.6
Finance/Banking Services	46	22.2
Healthcare	26	12.6
Hospitality Management	1	0.5
Logistics	2	1.0
Manufacturing and Production	56	27.1
Retail	2	1.0
Total	207	100.0

Source: Developed for the research

Figure 4.4 Which Industrial Sector Are You Currently Working In?



Source: Developed for the research

Table 4.4 and figure 4.4, show that twelve distinct industrial sector employees were involved in this study. The most common responder is the manufacturing and production industry, with 56 respondents (27.1%). Next, 46 respondents were from finance/banking service (22.2%). The third highest is from computer/IT with 27 respondents (13.0%) and 26 respondents from healthcare (12.6%). Besides, 24 respondents are engineering/construction/building (11.6%) of 200 respondents, 20 respondents are from the education industry (9.7%). In addition, two out of 200 respondents are from retail industry, which is the other option in the questionnaire—lastly, one respondent from accounting and automotive (0.5%). From the above table and figure, one respondent is from customer service (0.5%).

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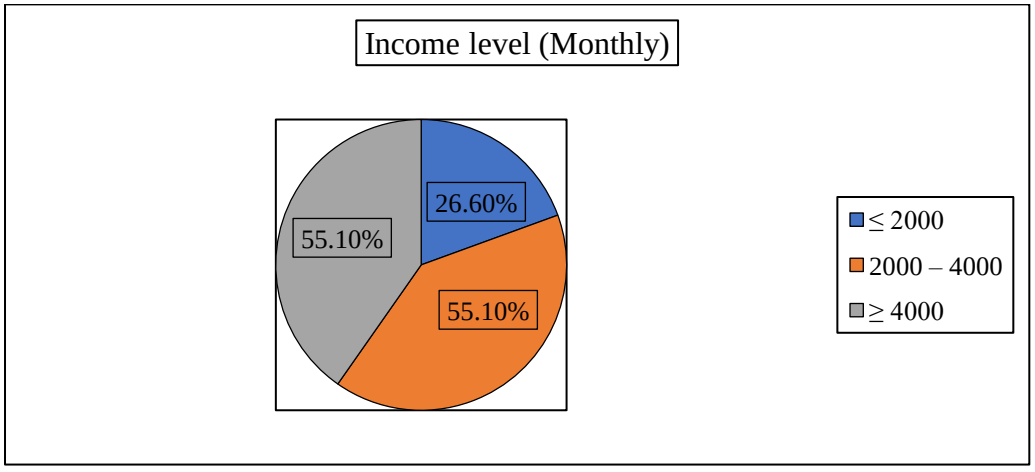
4.1.1.5 Income level (Monthly)

Table 4.5: Income level (Monthly)

Income level (Monthly)	Frequency	Percent
≤ 2000	55	26.6
2000 - 4000	114	55.1
≥ 4000	38	18.4
Total	207	100.0

Source: Developed for the research

Table 4.5: Income level (Monthly)



Source: Developed for the research

Table 4.5 and figure 4.5 depict the respondents monthly come levels. Of 200 respondents 55 respondents ≤ 2000 income level (26.6%). Next, 114 respondents earned 2000 - 4000 monthly. Lastly, 38 respondents receive a monthly income level of ≥ 4000 (18.4%).

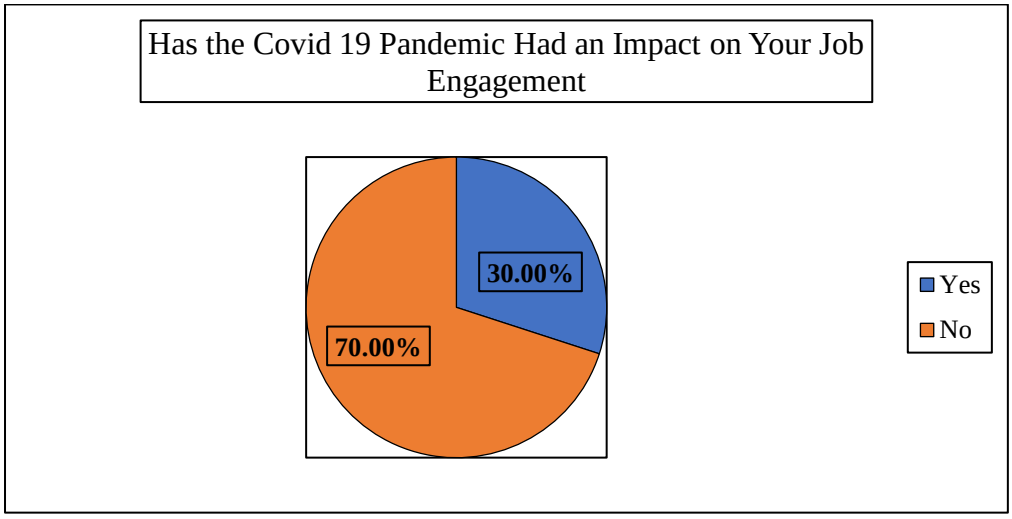
4.1.1.6 Has the Covid 19 Pandemic Had an Impact on Your Job Engagement?

Table 4.6: Has the Covid 19 Pandemic Had an Impact on Your Job Engagement?

Has the Covid 19 Pandemic Had an Impact on Your Job Engagement	Frequency	Percent
Yes	62	30.0
No	145	70.0
Total	207	100.0

Source: Developed for the research

Figure 4.6: Has the Covid 19 Pandemic Had an Impact on Your Job Engagement?



Source: Developed for the research

Table 4.6 and figure 4.6 show the general question about employee engagement due to the Covid 19 pandemic. Based on the table and figure above, most individuals of the 200 respondents, 145 respondents responded no (70%), and 62 respondents answered yes to the question (70%).

4.1.2 Central Tendencies Measurement of Construct

Table 4.7: Descriptive Statistics on Variables

Variables	Mean	Standard Deviation
Work – Life Balances	3.8080	0.74977
Perceived Organizational Support	3.5338	0.96608
Job Satisfaction	3.7947	0.82923
Employee Engagement	3.9662	0.70672

Source: Developed for the research

Table 4.7 depicts the descriptive statistics on independent variables and dependent variable of this research. The mean for each variable is quite closely based on the results. The mean of EE is the greatest (3.9662) followed by WLB (3.8080), JS (3.7947) and POS has the lowest mean of 3.5338 among the variables.

The standard deviation of POS has the highest with 0.96608. JS has the second highest standard deviation (0.82923); while WLB has the standard deviation of 0.74977. The lowest standard deviation is 0.70672 which is EE.

4.2 Reliability Analysis

Table 4.8: Reliability Statistics for Actual Research

Constructs	Cronbach's Alpha	No of items
Work – Life Balance	0.689	4
Perceived Organizational Support	0.946	4
Job Satisfaction	0.804	4
Employee Engagement	0.748	4

Source: Developed for the research

Table 4.8 show the Cronbach's Alpha of each IV and DV, which is more than 0.6. falls under acceptable. From the table, the researcher understands that WLB (0.689) fall under 0.60 to 0.69, which is a fair reliability level, POS (0.946) falls under ≥ 0.90 range, which is excellent reliability. Furthermore, JS (0.804) falls under good reliability level, 0.80 to 0.89. Lastly, the DV (0.748) falls under the 0.70 to 0.79 range, which is known as acceptable reliability.

4.3 Pearson Correlation Analysis

Table 4.9: Correlations

Correlations					
		WLB	POS	JS	EE
WLB	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	207			
POS	Pearson Correlation	.597**	1		
	Sig. (2-tailed)	.000			
	N	207	207		
JS	Pearson Correlation	.630**	.751**	1	
	Sig. (2-tailed)	.000	.000		
	N	207	207	207	
EE	Pearson Correlation	.439**	.432**	.620**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	207	207	207	207

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for the research

Table 4.9 depicts the Pearson Correlation analysis between each independent variable (WLB. POS, and JS) and the dependent variable (EE). The Pearson Correlation outcome differs from 0.439 to 0.620. All the variables have a significant level of 0.000, and they are all positively correlated.

From the results above, job satisfaction had the highest correlation to employee engagement which is 0.620; this shows that there is strong positive relationship between JS and EE. Followed by WLB and EE, it has the moderate positive relationship with a coefficient of 0.439. Lastly, the weakest relationship is

between POS and EE with coefficient of 0.432, indicating a modest positive relationship.

4.4 Multiple Linear Regression Analysis

Table 4.10: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.627[a]	.393	.384	.55458

a. Predictors: (Constant, Work-Life Balance, Perceived Organizational Support and Job Satisfaction)

b. Dependent Variable: Employee Engagement

Source: Developed for the research

Table 4.10 states the R-value is 0.627, the R square value is 0.393, and the adjusted R square value is 0.384. From the result of the R square, the researcher understands that 39.3% of the variation in the dependent variable, employee engagement is impacted by the independent variables: WLB, POS and JS. Although the 39.3% has been explained, a balance of 60.7% remains unaffected. However, the researcher understands that the independent factors in this research will still impact the dependent variable.

Table 4.11: ANOVA[a]

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.455	3	13.485	43.845	.000[b]
	Residual	62.434	203	.308		
	Total	102.888	206			

a. Dependent variable: Employee Engagement

b. Predictors: (Constant, Work-Life Balance, Perceived Organizational Support and Job Satisfaction)

Source: Developed for the research

Table 4.11 depict the F ratio is 43.845 at a p value = 0.000 significant level which is below the alpha value = 0.05. The ANOVA outcome indicates that the model utilized in this study contributed significantly to the research on the relationship between independent variables: WLB, POS and JS and dependent variable EE.

Table 4.12: Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficient	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.819	.212		8.584	.000		
	WLB	.096	.068	.102	1.406	.161	.568	1.761
	POS	-.078	.062	-.106	1.246	.214	.411	2.434
	JS	.542	. 075	.636	7.219	.000	.385	2.595

a. Dependent Variable: Employee Engagement

Source: Developed for the research

The standardized coefficient is used to identify the most significant independent variable. If a unit change in the independent variable influences the dependent variables, the unstandardized coefficient is applied. Besides, multicollinearity statistics are used to determine whether the variables are significantly correlated or intercorrelated.

Table 4.11 depict the unstandardized coefficient and standardized coefficient. Based on the unstandardized coefficients 0.096 changes in WLB when there is a unit change in EE. -0.078 changes in POS when there is a unit change in EE, and 0.542 changes in JS when there is a unit change in EE.

The multiple regression equation can be formed as below

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

Y = EE

a = Constant term, Value of Y when X become zero

X_1 = Dimension of EE

B_1 = WLB

B_2 = POS

B_3 = JS

The following is the equation for multiple linear regressions

$$EE = (1.819) + (0.096)\ (WLB) + (-0.078)\ (POS) + (0.542)\ (JS)$$

From the standardized coefficients above, JS with a beta of 0.636 is the most crucial factor affecting EE. The second significant factor influencing EE is POS with the beta of -0.106. With a beta of 0.102, WLB is the least relevant factor. The researcher can conclude that JS is the significantly influences EE.

The multicollinearity statistics among the variables above show that JS with VIF 2.595 is the most significant variable that influence EE. Followed by POS with VIF 2.434. is the second significant variable affecting EE and WLB with VIF 1.761 is the least relevant variable influencing EE.

4.4.1 Test of Significant

Hypothesis 1

H_0: Work-life balance has no relationship towards employee engagement.
$H_{1:}$ Work-life balance has a relationship towards employee engagement.

Accept H_0, 0.161 > 0.05

Table 4.12 demonstrates that the p-value of WLB is more than the significant level, indicating that H_0 is accepted, but H_1 is rejected. Therefore, the researcher can conclude no significant relationship between WLB and EE.

Hypothesis 2

H_0: Perceived organizational support has no relationship towards employee engagement.
$H_{2:}$ Perceived organizational support has a relationship towards employee engagement.

Accept H_0, 0.214 > 0.05

Based on table 4.12, the p-value of POS is more than the significant level, indicating that H_0 is accepted, but H_2 is rejected. Therefore, the researcher can conclude no significant relationship between POS and EE.

Hypothesis 3

H_0: Job satisfaction has no relationship towards employee engagement

H_3: Job satisfaction has a relationship towards employee engagement

Reject H_0, 0.000 < 0.05

Table 4.12 depict that the p-value of JS is less than the significant level, indicating that H_0 is rejected, but H_3 is accepted. Therefore, the researcher can conclude a positive relationship between JS and EE.

4.5 Conclusion

In this chapter, the researcher conducted many forms of analysis. According to the data collection of 200 respondents, the analysis findings were obtained through SPSS software. The next chapter will explain the summary, interpretations, main findings and conclusion.

CHAPTER 5: DISCUSSION AND CONCLUSION

5.0 Introduction

In this chapter findings from chapter 4 will be highlighted and discussed. Besides, the researcher will discuss the study's implications and limitations, provide recommendations for future studies, and include the conclusion.

5.1 Summary of Statistical Analyses

5.1.1 Descriptive Analysis

5.1.1.1 Demographic Profile and General Question

According to 4.1.1 the researcher has concluded all the demographic profile and general information.

From the first demographic the researcher can summarize that most respondents are between 25 – 29 (50.2%) with 104 respondents. The minor group were from 30 and above (22.7%), with 47 respondents from the demographic profile of 200 respondents.

Besides, the researcher can conclude that most respondents are 110 female respondents (53.1%), followed by male respondents (46.9%) of 97 respondents.

Next, most respondents are Chinese, with 89 respondents (43.0%). The least respondents are 55 Malays (26.6%).

From the fourth demographic profile, the researcher can conclude that the most common responders are from the manufacturing and production industry, with 56 respondents (27.1%), and the least respondent from accounting and automotive and customer service, with one respondent (0.5%).

Moreover, most respondents are with monthly income ranging from 2000 – 4000 (55.1%), while the least respondents receive a monthly income level of ≥ 4000 (18.4%).

From the table and figure 4.6, the researcher can conclude that most respondents answered no (70.0%) which means most of the employees' job engagement was not impacted due to Covid-19 pandemic.

5.1.2 Reliability Analysis

Table 5.1: Summary of Reliability Analysis

Construct	Cronbach's Alpha Coefficients
Work-Life Balance	0.689
Perceived Organizational Balance	0.946
Job Satisfaction	0.804
Employee Engagement	0.748

Source: Developed for the research

The Cronbach's Alpha of all the variables is more than 0.6 and falls under acceptable. WLB has a fair reliability level. Next, POS falls under the excellent range, JS falls under good reliability, and EE has an acceptable reliability level.

5.13 Pearson Correlation Analysis

Table 5.2: Summary of Pearson Correlation Analysis

		WLB	POS	JS
EE	Pearson Correlation	0.439	0.432	0.620
	P – Value	0.000	0.000	0.000
	Strength of Association	Moderate Positive Correlation	Moderate Positive Correlation	Strong Positive Correlation

Source: Developed for the research

From the table 5.3 the researcher can conclude that JS (0.620) has a strong positive correlation with the dependent variable.

5.13 Multiple Linear Regression Analysis

From table 4.10 the researcher can conclude that the independent variables can explain 39.3% of the variation in the dependent variable, while balance of 60.7% remain unaffected. Moreover, from table 4.11, the researcher can summarize that the hypothesis is supported since the independent variables significantly influence the dependent variable. While from table 4.12, the researcher can summarize that JS is the most significant variable that influences EE. From the multicollinearity statistics among the variable, JS with VIF 2.595 is the most significant variable that influences EE.

5.2 Discussion of Major Findings

Table 5.3: Major Findings on Hypothesis Testing

No	Hypothesis	Significant Level	Conclusion
H_1	There is a positive significant relationship between work-life balance and employee engagement.	$\beta = 0.102$ $P = 0.161 > 0.05$	Not supported
H_2	There is a positive significant relationship between perceived organizational support and employee engagement.	$\beta = -0.106$ $P = 0.214 > 0.05$	Not supported
H_3	There is a positive significant relationship between job satisfaction and employee engagement.	$\beta = 0.636$ $P = 0.000 < 0.05$	Supported

Source: Developed for the research

The outcome indicates that JS, WLB, and POS are the most vital factors affecting EE due to the Covid-19 pandemic in the industrial sector.

5.2.1 Relationship between work-life balance and employee engagement

Table 5.3 outcome indicate that the p-value = 0.161 is more than the alpha value = 0.05. The researcher can conclude a negative relationship between WLB and EE.

Furthermore, the outcome in table 4.9 depicts the relationship between WLB and EE as a moderate positive relationship coefficient: 0.439.

The outcome is constant (Rothbard, 2001). A positive relationship between WLB and EE were explained using accumulation/enrichment of resource views, including role enrichment and COR findings (Conservation of resources). According to the role enhancement approach (Rothbard, 2001), positive role-related behaviours or emotional reactions to one position can enhance an employee's participation in other duties. Besides, as stated by (Marais et al.,2014) having a great thought about one's employment position in the organization might motivate the individual to have positive emotions about WLB and EE characteristics.

Furthermore, the COR approach, employee engagement also appears to influence work role resources growth, resulting in WLB enhancement. According to COR approach, EE and WLB elements can mutually reinforce each other (Chen, 2012). Based on the JD-R approach, high job resources will promote EE. Family related resources such as, family atmosphere play an essential part in improving EE and WLB (Demerouti, 2007).

From the empirical studies by (Greenhaus & Beutell, 1985); (Rothbard, 2001), the negative relationship between WLB and EE is due to the stress/loss viewpoint. That states numerous work and personal priorities are unhealthy, resulting in negative responses due to an imbalance of time and energy with a heavy workload.

An employee who has dual duties at the company and at home: work-family imbalances, suffers problems moving from one commitment to another, resulting in employee disengagement from work (Montgomery, 2003). Moreover, high expectations, like role stress, burnout and emotional exhaustion from family duties could harm EE (Opie, 2013).

5.2.2 Relationship between perceived organizational support and employee engagement

Table 5.3 outcome indicate that the p-value = 0.214 is more than the alpha value = 0.05. The researcher can conclude a negative relationship between POS and EE.

Besides, the result in table 4.9 indicates the relationship between POS and EE as a moderate positive relationship coefficient: 0.432.

The result is constant with the empirical studies, POS has a positive relationship with EE in cross-sectional and longitudinal (Caesens et al., 2015); (Kinnunen et al., 2008). Furthermore, researcher argue that POS significantly promotes EE at the job (Anna et al., 2018) The JD-R hypothesis (Bakker & Demerouti, 2007) states that work- related resources stimulate a motivational process that improves EE because of intrinsic and extrinsic motivation. Besides, POS has positive relationship with EE because the job resources can boost employee internal motivation to provide opportunities for self-development and improving the possibility of achieving significant job objectives. Personnel think the organization recognizes one's efforts and value them. Therefore, POS meets one's socio emotional needs so that it can

enhance EE. According to the findings of (Anna et al., 2018), low POS will reflect negative a relationship on EE through self-efficacy was substantial.

5.2.3 Relationship between job satisfaction and employee engagement

Table 5.3 outcome indicate that the p-value = 0.000 is less than the alpha value = 0.05. The researcher can conclude a positive relationship between JS and EE.

From the table 4.9 shows the relationship between JS and EE as a strong positive relationship coefficient: 0.620.

According to past studies, the relationship between JS and EE is positive. The positive relationship can be referred to as the type of employment as the first aspect of JS. As stated in the previous study, the features of a work influence one's emotional situation which influences behavior in work. According to the research, more engaged employees feel their professions to be psychologically significant (Kahn, 1990) (May et al., 2004) In the previous EE research, attractive job features contribute to better EE (Saks & Schaufeli et al., 2008). However, as previously said, employment is assessed as total JS, that is favorably related to EE (Saks et al., 2011) (Tims et al., 2013)

5.3 Implications of the study

5.3.1 Work-Life Balance

According to the results, WLB and EE have a negative and positive relationship so it is suggested that the management of an organization should have a deeper understanding of the relationship between WLB and EE to apply methods that perceive things holistically instead of two distinct entities. Management should incorporate a variety of strategies (Peeters et al., 2009).For instance, management can establish a family day that provides flexible working hours for all the employees to allocate more happy time with their families. Besides, organizations can offer personal family counselling support to assist staff in dealing with any approaching concerns they might face like, relationship, children or related family matters. Moreover, management can offer virtual and offline courses, seminars or trainings to assist employees to enhance self-esteem and develop the skills needed to interact effectively with their families (Chan et al., 2017).

5.3.2 Perceived Organizational Support

POS is an essential organizational resource to increase EE. Effective communication between supervisors' and employees by providing positive responses, updating workers regarding the changes in the corporate plans and providing support and encouraging employees' POS. Besides, effective communication might become an HR policy, and managers have a clear idea to leverage the benefits of EE in their workplace (Neves & Einserberger, 2012). Furthermore, additional components of supervisors' supporting practices like interactional justice and courteous behavior, have been strongly linked to workers' POS (Kurtesis et al., 2017) (Rhoades & Eisenberger, 2002) and hence should be fostered.

5.3.3 Job Satisfaction

According to (Tepayakul & Rinthaisong, 2018) JS is significantly tied to EE. An organization must understand the correlation between both entities to maintain talented employees for the maintenance of a comprehensive detailed strategic plan to increase JS to achieve EE. Corporate must also perform tools to assess employee JS. Additionally, EE has become a concern of the organization's rapid expansion and dynamic nature. By offering high intrinsic motivating elements like, acknowledgement and so on, JS must be sustained at an optimal level to remain engaged with employees working at different positions (Garg et al., 2017).

5.4 Limitation of the Study

5.4.1 Limited Variables

There are some limitations of the research The variables in this research only focused on three variables: WLB, POS and JS. The R-square from table 4.10 is 0.393 indicating that the three IVs only contribute 39.3% to EE. Other factors also influence EE.

5.4.2 Limited Information Obtained from Quantitative Data Collection Method

Information collected from the quantitative data collected method is limited. Since researcher distributed the questionnaire via social media the researcher could not receive true responses because it is hard to gather honest opinions from the respondents. Since employee engagement is a most talked about subject, the employee is likely to have a more personal viewpoint and feedback. Since this method is insufficient for respondents to disclose their opinion, as this may cause a negative relationship between WLB and EE, and POS and EE in this research.

5.4.3 Lack of Comprehension of The Questionnaire Questions

Another drawback is a lack of comprehension of questionnaire questions. The researcher distributed the survey via social media platforms. Due to that, the researcher could not resolve any questions the participants had about the survey. Besides, some respondents could not answer it correctly because they did not understand some of the questions. Thus, it may have impacted the accuracy and reliability of the survey.

5.5 Recommendation for Future Research

5.5.1 Consideration of Other Variables

Table 4.10 R-square shows a moderate relationship between the IVs and DV. Future research could include additional variables like, psychological climates, transformational leadership factor and demographic factor that have a stronger connection to influencing the DV and build a strong relationship in the future research.

5.5.2 Consideration of Qualitative Data Collection Method

In future studies, it is also suggested to use qualitative data collection method such as, one-to-one interview or focus groups. The reason is that utilizing qualitative data collection method in research can improve the researcher's results and significant findings on the research issue. The qualitative method helps this research acquire more distinct and accurate opinions and information.

5.5.3 Construct a Bilingual Survey

It would be more acceptable to create a survey in both English and Bahasa Malaysia because not all the employees are fluent and can understand English, so it is recommended to use bilingual questionnaire to avoid difficulties in understanding. If the question is hard to understand, participants may not answer the question honestly, and some may not answer the questionnaire. Therefore, creating a bilingual questionnaire may ease the answering process and get good and reliable outcomes.

5.6 Conclusion

In summary, this research analysed and studied three variables of EE. The researcher can conclude that JS has a positive relationship with EE, and WLB and POS has insignificant relationship with EE. Besides, these studies can be referenced for future studies and this research will be helpful for industrial sectors in a variety of methods.

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APPENDIX I: QUESTIONNAIRE

UNIVERSITI TUNKU ABDUL RAHMAN

FACULTY OF ACCOUNTANCY AND MANAGEMENT

BACHELOR OF INTERNATIONAL BUSINESS (HONS)

RESEARCH PROJECT

TITLE OF RESEARCH

The influence of work-life balance (WLB), perceived organizational support (POS) and job satisfaction (JS) on employee engagement (EE) due to Covid 19 pandemic in the industrial sector.

Dear respondent,
My name is Kalaivani A/P Veelayutham. I am an undergraduate student of Bachelor of International Business (Hons) from Universiti Tunku Abdul Rahman (UTAR). I am currently conducting my Final Year Project (FYP) about "The influence of work-life balance (WLB), perceived organizational support (POS) and job satisfaction (JS) on employee engagement (EE) due to Covid 19 pandemic in the industrial sector" The objective of this survey is to study and analyse the factors that influence employee engagement in the industrial sector due to Covid 19.

This questionnaire consists of three sections. Section A will be the demographic questions while Section B will be the personal question and Section C will be the independent variables and dependent variable of the research. Kindly answer ALL questions in ALL sections. Your responses will keep in PRIVATE and CONFIDENIAL and used solely for academic purpose. Your participation is highly appreciated. Thank you for your cooperation.

Sincerely,

Kalaivani Veelayutham kkalaivani12@1utar.my

Section A: Demographic

Direction: Please provide the following information about yourself by putting a tick (✓) on your answer for each question below

1. Age group

□ 20-24

□ 25-29

□ 30 and above

2. Gender

□ Male

□ Female

3. Race

□ Malay

□ Chinese

□ Indian

Others: _____

4. Which industrial sector are you currently working in?

□ Manufacturing and Production

□ Finance/Banking services

□ Computer/IT

□ Engineering/Construction/Building

□ Healthcare

□ Education

Others: _____

5. Income level (Monthly)

□ ≤ 2000

□ 2000 – 4000

□ ≥ 4000

6. Working experience

□ ≤ 1 year

□ 1 – 3 years

□ ≥ 3 years

Section B: General Question

Direction: Please provide the following information about your experience by putting a tick (✓) on your answer for the question below.

1. Has the Covid 19 pandemic had an impact on your job engagement?

□ Yes

□ No

Section C: Independent Variables and Dependent Variable

Direction: This section is to study the factors influencing employee engagement in the industrial sector due to Covid 19 pandemic. You are given 5 choices of answer ranging from **1 (Strongly Disagree) to 5 (Strongly Agree).** Tick (✓) only ONE option for each statement below

1	2	3	4	5
Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

Independent Variable

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Work-Life Balance (WLB)					
1. There is a good fit between my personal life and work.					
2. There is a good fit between my job and personal health.					
3. I receive support and recognition from family members					
4. I am able to do my job and not burnout.					

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Perceived Organizational Support (POS)					
1. My supervisor genuinely care about me					
2. The support staff in the organization is adequate.					
3.. My organization really care about my well-being.					
4. My supervisor values and seriously consider my opinion in case decision making.					

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Job Satisfaction (JS)					
1. In my work, I have a feeling of success and accomplishment					
2. I am prepared for my job because of my prior training and motivation.					
3. There is a opportunity for advancement.					
4. I am satisfied with my pay.					

Dependent Variable

Direction: This section is to study the employee engagement in the industrial sector due to Covid 19 pandemic. You are given 5 choices of answer ranging from **1 (Strongly Disagree) to 5 (Strongly Agree).** Tick (✓) only ONE option for each statement below

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Employee Engagement (EE)					
1. At my job, I feel strong and vigorous.					
2. I really throw myself into my job.					
3. Sometimes I am so into my job that I lose track of time.					
4. I feel happy when I am working intensely.					

APPENDIX II: SPSS OUTPUT

Pilot Test – Reliability Statistics

Work-Life Balance

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.850	.850	4

Perceived Organizational Support

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.915	.915	4

Job Satisfaction

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.828	.837	4

Employee Engagement

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.748	.767	4

Respondents Demographic Profile and General Information

Age Group

Frequency Table

Age group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-24	56	27.1	27.1	27.1
	25-29	104	50.2	50.2	77.3
	30 and above	47	22.7	22.7	100.0
	Total	207	100.0	100.0	

Gender

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	97	46.9	46.9	46.9
	Male	110	53.1	53.1	100.0
	Total	207	100.0	100.0	

Race

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chinese	55	26.6	26.6	26.6
	Indian	89	43.0	43.0	69.6
	Malay	63	30.4	30.4	100.0
	Total	207	100.0	100.0	

Which industrial sector are you currently working in?

Which industrial sector are you currently working?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Accounting	1	.5	.5	.5
	Automotive	1	.5	.5	1.0
	Computer/IT	27	13.0	13.0	14.0
	Customer Service	1	.5	.5	14.5
	Education	20	9.7	9.7	24.2
	Engineering/Construction/ Building	24	11.6	11.6	35.7
	Finance/Banking services	46	22.2	22.2	58.0
	Healthcare	26	12.6	12.6	70.5
	Hospitality Management	1	.5	.5	71.0
	Logistics	2	1.0	1.0	72.0
	Manufacturing and Production	56	27.1	27.1	99.0
	Retail	2	1.0	1.0	100.0
	Total	207	100.0	100.0	

Income Level (Monthly)

Income level (monthly)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	≤ 2000	55	26.6	26.6	26.6
	≥ 4000	38	18.4	18.4	44.9
	2000 – 4000	114	55.1	55.1	100.0
	Total	207	100.0	100.0	

Working Experiences

Working experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	≤ 1 year	78	37.7	37.7	37.7
	≥ 3 years	47	22.7	22.7	60.4
	1 – 3 years	82	39.6	39.6	100.0
	Total	207	100.0	100.0	

Has the Covid-19 pandemic had an impact on your job engagement?

Has the Covid 19 epidemic had an impact on your job engagement?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	62	30.0	30.0	30.0
	Yes	145	70.0	70.0	100.0
	Total	207	100.0	100.0	

Central Tendency Measurement of Construct

Frequencies

Statistics

		IV1	IV2	IV3	DV
N	Valid	207	207	207	207
	Missing	0	0	0	0
Mean		3.8080	3.5338	3.7947	3.9662
Std. Deviation		.74977	.96608	.82923	.70672
Range		4.00	4.00	3.75	2.75
Minimum		1.00	1.00	1.25	2.25
Maximum		5.00	5.00	5.00	5.00

Reliability Analysis

Work-Life Balance

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.689	.700	4

Perceived Organizational Support

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.946	.947	4

Job Satisfaction

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.804	.804	4

Employee Engagement

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.748	.748	4

Pearson Correlation Analysis

Correlations

		IV1	IV2	IV3	DV
IV1	Pearson Correlation	1	.597**	.630**	.439**
	Sig. (2-tailed)		.000	.000	.000
	N	207	207	207	207
IV2	Pearson Correlation	.597**	1	.751**	.432**
	Sig. (2-tailed)	.000		.000	.000
	N	207	207	207	207
IV3	Pearson Correlation	.630**	.751**	1	.620**
	Sig. (2-tailed)	.000	.000		.000
	N	207	207	207	207
DV	Pearson Correlation	.439**	.432**	.620**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	207	207	207	207

**. Correlation is significant at the 0.01 level (2-tailed).

Multiple Linear Regression Analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.627[a]	.393	.384	.55458	.393	43.845	3	203	.000

a. Predictors: (Constant), IV3, IV1, IV2

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.455	3	13.485	43.845	.000[b]
	Residual	62.434	203	.308		
	Total	102.888	206			

a. Dependent Variable: DV

b. Predictors: (Constant), IV3, IV1, IV2

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.819	.212		8.584	.000		
	IV1	.096	.068	.102	1.406	.161	.568	1.761
	IV2	-.078	.062	-.106	-1.246	.214	.411	2.434
	IV3	.542	.075	.636	7.219	.000	.385	2.595

a. Dependent Variable: DV