PERCEIVED SOCIAL SUPPORT, WORK STRESS, AND WORK-LIFE BALANCE AS THE PREDICTORS OF JOB SATISFACTION AMONG WORKING ADULTS IN MALAYSIA

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A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE BACHELOR OF SOCIAL SCIENCE (HONS) PSYCHOLOGY FACULTY OF ARTS AND SOCIAL SCIENCE UNIVERSITI TUNKU ABDUL RAHMAN

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A Study of Perceived Social Support, Work Stress, and Work-Life Balance as the Predictors of Job Satisfaction among Working Adults in Malaysia

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APPROVAL FORM

This research paper attached here to, entitled "Perceived Social Support, Work Stress and Work-Life Balance as the Predictors of Job Satisfaction among Working Adults in Malaysia" prepared and submitted by Kong Jing See, Liew Zi Yi and Mark Ng Jun Qi in partial fulfilment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

Sanggari Date: 1st September 2025

Supervisor

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Abstract

This research explores the associations between perceived social support, work stress, work-life balance, and job satisfaction among working adults in Malaysia, addressing a local research gap in the application of established occupational and organisational psychology theories in non-Western contexts. A quantitative, cross-sectional design was employed, utilising purposive and snowball sampling to recruit 452 participants from diverse occupational backgrounds. The findings revealed a significant positive correlation between perceived social support and job satisfaction, a significant negative correlation between work stress and job satisfaction, and a significant positive correlation between work-life balance and job satisfaction.

Keywords: perceived social support, work stress, work-life balance, job satisfaction, Malaysian working adults

Subject area: HD6951-6957.5 Industrial sociology. Social conditions of labor

Declaration

We declare that the material contained in this paper is the end result of our own work and that due acknowledgement has been given in the bibliography and references to ALL sources, be they printed, electronic, or personal.

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Abbreviations

CMV	Common-method Variance
BSSS	Berlin Social Support Scales
ERI	Effort-Reward Imbalance
HTFT	Herzberg's Two-Factor Theory
JD-R	Job Demands-Resources
JS	Job Satisfaction
JSS	Job Satisfaction Scale
MSPSS	Multidimensional Scale of Perceived Social Support
MSQ	Minnesota Satisfaction Questionnaire
PSS	Perceived Social Support
SET	Social Exchange Theory
SST	Social Support Theory
WFB	Work-Family Balance
WLB	Work-life Balance
WLBQ	Work-life Balance Self-Assessment Scale
WRSQ	Work-Related Stress Questionnaire

WS Work Stress

Chapter 1

Introduction

1.1 Background of Study

Fast urban development and economic expansion in Malaysia have changed the nature of labor, posing problems for working persons' job satisfaction and general well-being. Working in a fast-paced, competitive atmosphere, the nation's heterogeneous workforce, shaped by its own cultural diversity, can complicate workplace interactions due to varying expectations and values (Ghani et al., 2020). On the other hand, increasing levels of stress brought on by globalization and the changing nature of work frequently have a detrimental effect on job satisfaction (Ahmad & Omar, 2017). Achieving work-life balance is also still a problem, especially in cities where employees face additional difficulties due to high living expenses and lengthy commutes (Yusoff et al., 2021).

The evolution of work-life balance, job satisfaction, perceived social support, and work stress among working adults has undergone significant changes, particularly following the COVID-19 pandemic and the implementation of the Movement Control Order (MCO). This transformation highlights a shift in work culture, with a growing emphasis on well-being and the need for clearer boundaries between professional and personal life (Allen et al., 2020; Greenhaus & Allen, 2011). Prior to the MCO, a predominant culture of workaholism was observed and reported among many employees. Furthermore, there was a strong cultural expectation that employees should prioritize work above personal well-being, especially among professional sectors, often leading to long working hours, high stress, and a blurred distinction between work and personal life (Maslach & Leiter, 2016). This lack of work-life balance resulted in detrimental effects on both physical and mental health, contributing to burnout and decreased job satisfaction (Schaufeli & Bakker, 2004). Many employees did not

have the autonomy or flexibility to manage their schedules, and work often encroached upon personal time, negatively impacting family relationships and social interactions (Kabat-Zinn, 1990). Despite these challenges, the professional culture at the time largely reinforced the expectation of constant availability and productivity (Greenhaus & Allen, 2011).

The onset of the COVID-19 pandemic and the subsequent MCO marked a significant turning point in the way work is structured and approached. While remote work initially posed challenges such as difficulties in maintaining a clear separation between professional and personal responsibilities, it also allowed for greater flexibility and autonomy (Chung et al., 2020). This shift provided employees with an opportunity to reassess their work habits and prioritize personal well-being (Beauregard & Henry, 2009).

As remote working became more widespread, there was a noticeable shift toward the preference for more structured workdays. Employees increasingly sought to establish defined boundaries, favoring a clear distinction between work time and personal time (Cushen & Thompson, 2018). This shift in work patterns was accompanied by an enhanced focus on job satisfaction, as employees began to recognize the importance of work-life balance and the role it played in their overall well-being (Rothbard, 2001). Workers began to value the ability to manage their time effectively, ensuring that their work did not intrude upon their personal lives (Greenhaus & Allen, 2011).

Moreover, the pandemic underscored the importance of perceived social support. Many employees reported feeling greater support from their families, colleagues, and organizations during this period of upheaval (Bakker et al., 2020). Organizations that proactively offered mental health resources, virtual team-building activities, and flexible work arrangements saw an improvement in employee morale and job satisfaction (Weiss et al., 2020). This period also saw a heightened awareness of the need for support systems, both

within the workplace and beyond, to navigate the challenges of remote work (Golden & Veiga, 2005). According to research, perceived social support may provide emotional, instrumental, and informational support. The term “social support” describes the different forms of assistance and support that a person can obtain from social connections (Wu et al., 2020; Huang et al., 2021). For instance, when a person is under stress or hardship, they might perceive the positive impact of friends, family, and other colleagues. Employees are better equipped to handle work demands and experience less stress when they are given the support they need, which makes people feel loved, respected, cared for, and valued (Acoba, 2024). Thus, research highlighted that job satisfaction and perceived social support are positively correlated. Nevertheless, it’s also important to point out the fact that work relates to the need for social connection, which implies that people require interpersonal relationships in addition to meeting survival needs (Garmendia et al., 2023). Therefore, positive social support can benefit workers and organizations in a number of ways. Such include fostering strengthened relationships, enhancing personal performance, and lessening the adverse consequences of stressful situations.

However, the transition to remote work was not without its stressors. The blurring of personal and professional boundaries led to heightened work stress for some employees, particularly those balancing home responsibilities with work demands (Chung et al., 2020). Work stress refers to an unpleasant emotional and physiological reaction that arises when an individual feels under pressure by their workplace or when the demands of their job responsibilities are beyond their competence, needs, and resources (Giao et al., 2020; Huang et al., 2021). High job expectations, time constraints, and disagreements at work diminish motivation and lead to burnout, which in turn will affect job satisfaction. This further reveals the negative effect between work stress and job satisfaction. In addition, stress-related emotions such as anxiety and depression not only lower job satisfaction but also make

workers more likely to quit their current jobs (Jaafar, 2021). However, job stress affects not just the individual worker but also the organization since low job satisfaction among workers results in less productivity and job adaptation as well as more unfavorable negative feedback. Hence, the isolation associated with remote work and the absence of face-to-face interactions created a sense of disconnection for some, leading to stress and burnout (Lund et al., 2020). The shift to remote work also presented new challenges for those who experienced workload increases or lacked the necessary tools to effectively perform their tasks in a home environment (Tavares, 2017).

In the aftermath of the pandemic, there has been a marked shift in the way employees approach work-life balance. The experience of remote working has led many individuals to prioritize defined work hours and personal time, preferring to work efficiently within set timeframes and disconnect when the workday concludes (Meyer et al., 2021). This growing preference for structured work hours has contributed to a broader societal and organizational focus on employee well-being, with an increasing number of organizations adopting flexible and hybrid work models (Baker et al., 2020).

This shift has had a positive impact on job satisfaction, as employees now recognize the value of having time for personal activities, self-care, and family engagement which is linked to increased productivity and intrinsic motivation among employees (Jaafar, 2021; Garmendia et al., 2023). It also reflects on how a person would respond and what they should expect from their employment in order to achieve high job satisfaction (Jia et al., 2020). Furthermore, people's subjective opinions about their jobs and other parts of them, including the positive emotional state that results from living up to one's job ideals, can be used to indicate job satisfaction. Additionally, research has revealed that job satisfaction comprises

several factors, including satisfaction with the work itself, relationships with coworkers, compensation, and opportunities for advancement (Liu et al., 2022).

A clearer work-life boundaries have been associated with improved mental health, enhanced productivity, and greater job satisfaction (Chung et al., 2020). In terms of high job satisfaction, it can not only encourage employees to strictly perform their responsibilities while striving to strengthen their relationships with coworkers, but it may also effectively minimize the mental stress related to work, which will contribute to better job performance (Huang et al., 2021). As a result, work happiness and performance are positively correlated where higher levels of satisfaction typically translate into better performance. Low job satisfaction among working people can be caused by a number of circumstances, for example, job satisfaction may be impacted by work-life balance, stress at work, and perceived social support. Stress levels and job satisfaction have gone up as a result of the increasing demands of contemporary workplaces and the challenges of juggling work and personal obligations. Many workers struggle to balance their personal and professional obligations, which is made worse by competitive workplaces and the evolving nature of work as a result of globalization and technology breakthroughs (Greenhaus & Allen, 2011). Prolonged exposure to these pressures often results in burnout, reduced productivity, and dissatisfaction with one's job, impacting overall well-being (Maslach et al., 2001). Organizations that have embraced this shift and implemented policies supporting work-life balance, mental health initiatives, and flexible working arrangements have seen increased employee engagement and retention (Collins et al., 2020).

In conclusion, the COVID-19 pandemic has played a pivotal role in reshaping the work-life landscape. The transition from a culture of workaholism to a more balanced approach, where work is confined to designated hours and personal time is respected, has led

to an increased focus on mental health and well-being. As a result, job satisfaction has improved, and employees are more likely to feel engaged and productive in environments that prioritize balance and support (Allen et al., 2020; Maslach & Leiter, 2016). This study also aims to investigate how job satisfaction among Malaysian working people is impacted by perceived social support, work stress, and work-life balance. The goal of the research is to better understand these elements in order to provide insightful analysis and useful suggestions for enhancing workplace well-being. The results may aid companies in creating plans to improve employee support, raise job satisfaction, and create a more wholesome workplace. This research may help shape future procedures and policies that put employees' mental and emotional health first, which would benefit both businesses and people by increasing work-life balance, lowering stress levels, and increasing productivity.

1.2 Problem Statement

Job satisfaction is a critical factor influencing employee performance, mental health, and organizational success. However, research highlights alarmingly low levels of job satisfaction among Malaysian workers, with 41% dissatisfied with their jobs (PwC, 2022) and Malaysia ranking the lowest in job satisfaction among Asian countries (Hays Asia, 2020). Several factors, such as low salaries, long working hours, and insufficient support systems, contribute to this issue, exacerbating challenges like poor mental health, high turnover rates, and reduced productivity. Notably, 53% of Malaysian employees experience work-related stress, and 29% face mental health issues (Chua, 2020), while only a small proportion are aware of workplace well-being interventions.

Low job satisfaction has been proven to have several negative consequences for workers and employers. The most direct effect is on workers’ job performance. The importance of job satisfaction is widely acknowledged, as evidenced by plenty of research

highlighting its critical role in improving organizational performance and employee productivity (Prayudi & Komariyah, 2023; Zhang et al., 2019). Research indicates that job satisfaction directly impacts performance (Gazi et al., 2022). Conversely, satisfied workers are more inclined to display positive behavior, increasing productivity. Furthermore, the association between job satisfaction and performance underlines its considerable consequences as productive people promote organizational success and contribute to economic growth.

In addition to performance, mental health and job satisfaction are closely linked. The association between work stress and mental health problems can explain this. Studies demonstrated that poor mental health, which arises from job satisfaction, often results in burnout, substance use, and physical illness, which will affect overall employee well-being (Cao et al., 2022). According to Chua (2020), 53% of working Malaysians experience high work-related stress and a significant proportion of 29% of Malaysians in the labor force experience mental health issues. However, only 13% of employees are aware of any well-being interventions provided by their employers. Job satisfaction is crucial for adult working individuals' mental health, psychological well-being, and entire life satisfaction (Matud et al., 2024).

Moreover, employee turnover is another significant aspect influenced by job satisfaction. Higher job satisfaction is associated with lower turnover intention (Rakhmitania, 2022). This indicates that organizations with higher job satisfaction rates enjoyed excellent employee retention. The fact is that PwC's Workforce Hopes and Fears Survey 2022 also reported that almost 17% of respondents are either highly or very likely to transition to a new employer within the following year. This is because dissatisfaction will drive the workers to complain about various things like inadequate compensation, excessive workload, wrong

colleagues, a leader proficient solely in direction, and an unpleasant work environment (Mohammad et al., 2024). As time passes, they will be sure to turn over and find a satisfactory job. This is supported by a survey conducted by JobStreet (2021), which indicated that 27% of Malaysian workers committed to considering leaving their current jobs in favour of new opportunities to pursue greater job satisfaction.

Given the importance of job satisfaction, several factors, such as perceived social support, work stress, and work-life balance, have been identified as potential predictors. Initially, perceived social support has consistently demonstrated an increase in job satisfaction. Research indicates that higher levels of social support correlate with increased job satisfaction as social support addresses workers' demands for respect, emotional assistance, and self-confidence (Sigursteinsdottir & Karlsdottir, 2022). The presence of support from colleagues and supervisors increases workplace expectations and strengthens employees' commitment, resulting in higher satisfaction levels (Garmendia et al., 2023). Pinna et al. (2020) underscore the direct impact of supervisor and coworker support on job satisfaction, as employees who perceive high levels of support tend to engage more fully in their work, showing increased motivation and job commitment. Furthermore, social support can strengthen mental health, offering emotional assistance and confidence to manage workplace challenges (Eagle et al., 2018; Grey et al., 2020).

Secondly, work stress also significantly affects job satisfaction. Numerous research studies have reported that high work stress has a negative impact on job satisfaction (Dharma & Supartha, 2019; Tentama et al., 2019; Jaafar, 2021). It implies that stress can decrease workers' satisfaction when it exceeds their coping capability. However, contradictory research has found that work stress does not always result in significantly declining job satisfaction. Research by Ramlawati et al. (2020) revealed that despite experiencing high

work stress, the workers' job satisfaction remained largely unaffected. This is because the high level of employee welfare and compensation and the motivational aspect of job stress help mitigate the negative impact of stress on job satisfaction.

Ultimately, work-life balance is a crucial predictor of job satisfaction. Research consistently supports the positive relationship between work-life balance and job satisfaction (Aruldoss et al., 2021; Irawanto et al., 2021), demonstrating that employees who can balance their work and personal life tend to experience greater job satisfaction. While work-life balance was achieved, the employees felt in control of their schedules, reduced stress, improved well-being, and enhanced productivity, all of which contributed to their job satisfaction (Abdullah et al., 2022). However, many of the organizations seemed not to take it seriously. According to The Sun Daily (2024), Malaysia was ranked as the worst Asian country for poor work-life balance. This is attributed to the long working hours, excessive workloads, and insufficient staffing among Malaysia's workers. This issue was exacerbated by high economic pressures and low salaries, complicated by cultural norms that endorse long hours working.

In summary, job satisfaction is vital to employee well-being and organizational success, but it remains alarmingly low among working adults in Malaysia compared to regional and international counterparts. Perceived social support, work stress, and work-life balance are crucial predictors of job satisfaction. However, inconsistent findings on the impact of work stress and limited attention to work-life balance highlight the need for further investigation. Additionally, no study has comprehensively explored how these three factors collectively influence job satisfaction. Therefore, this study intends to focus on the relationship between perceived social support, job stress, work-life balance, and job satisfaction among working adults in Malaysia.

1.3 Significance of the Study

This study aimed to examine how job satisfaction among working people in Malaysia is predicted by perceived social support, work stress, and work-life balance. In contrast to job satisfaction, which has been extensively researched in the Western environment, the study's findings are intended to close the knowledge gap about how work-life balance, perceived social support, and work stress affect job satisfaction in Malaysia while addressing a gap where much of the research originates from Western perspectives (Wu et al., 2020; Huang et al., 2021).

For academic institutions, the findings can inform policies aimed at improving the well-being and satisfaction of educators and administrative staff by fostering supportive work environments and promoting work-life balance. This is particularly important as Malaysians, particularly those belonging to Generation X and Y, often exhibit low awareness of the importance of work-life balance (JobStreet 2021). This is largely attributed to cultural and societal norms that prioritize hard work and career success over personal well-being. Generation X, who are now in their peak working years, often carry the mindset of traditional work ethics, where long hours and dedication to professional commitments are seen as a measure of success. Similarly, Generation Y, also known as millennials, frequently face the dual pressure of meeting workplace demands and striving for career advancement in a competitive job market, often at the expense of their personal life. The lack of awareness and prioritization of work-life balance among these generations highlights the need for targeted interventions to foster a healthier integration of work and personal life in Malaysia (Dousin et al., 2019). By taking this as an opportunity to dive deeper into these issues, the study aims to raise awareness of the need for adaptation to emerging challenges, such as the shift toward the concept of work-life balance. Moreover, the study seeks to enrich existing literature by

exploring the interplay between social support, work stress, and work-life balance in the context of job satisfaction, particularly within Malaysia's unique cultural and organizational environment. This focus not only highlights the importance of addressing these factors but also underscores their potential to indirectly benefit students and enhance institutional performance through improved educator well-being and satisfaction. The study's findings also serve as a foundation for future research, encouraging exploration into additional predictors of job satisfaction in educational settings, such as leadership styles and organizational culture (Jaafar, 2021; Liu et al., 2022). Overall, this research underscores the importance of psychosocial factors in shaping job satisfaction, offering actionable insights for creating a more sustainable and supportive academic environment.

From a practical standpoint, this study offers insights for employers and organizations. Organizations may implement effective strategies to improve job satisfaction by having a thorough understanding of the significance represented by perceived social support, work stress, and work-life balance. For example, fostering a supportive work environment may enhance the perception of social support, and stress management strategies, including workload adjustments and wellness initiatives, can help diminish job-related stress. In this way, employers and managers may apply the findings from this study to boost employee engagement, motivation, and productivity (Hoboubi et al., 2016; Giao et al., 2020). In the same vein, fostering work-life balance by implementing flexible scheduling and family-friendly policies can greatly boost employee satisfaction, which in turn leads to increased productivity and less attrition (Hasan & Teng, 2017).

Moreover, the findings of this study will benefit the stakeholders. Whereas employees are the major focus, when organizations incorporate balanced and supporting practices, employees will have greater psychological wellness, be more satisfied with their jobs, and be

less likely to feel burned out (Kurniawaty et al., 2019). Students will also have a better grasp of the significance of workplace satisfaction, balancing personal responsibilities, prioritizing, and fulfilling their roles as a result of this study (Jaafar, 2021). In addition, this study will also help researchers since it will highlight a viewpoint on the issue that is frequently overlooked. While workplace satisfaction is an ongoing concern for employees, it may be much more subtle than most people realize and as a result (Khuong & Linh, 2020). Then, researchers and scholars will find that this study outlines the groundwork for further research into factors that influence job satisfaction, and they may consider their own approaches in light of the insight this study delivers. They will be able to evaluate themselves after reviewing this study, particularly in underrepresented or culturally diverse populations, and provide assistance to others in such circumstances.

In conclusion, the findings of this study provide valuable insights into how work-life balance, work stress, and perceived social support impact job satisfaction among working adults in Malaysia. From a broader perspective, the study not only fills gaps in the existing literature but also raises awareness about workplace well-being, highlighting its connection to mental health and quality of life. The results could inform adjustments in Malaysia's workplace structures by fostering a mutually beneficial relationship between organizational expectations and employee needs. By promoting a supportive work environment, reducing stress, and encouraging work-life balance, organizations can help employees achieve a better balance between their personal and professional lives. As a result, this can lead to a healthier, more productive workforce, enhancing the quality of life for Malaysian workers. Increased job satisfaction is associated with reduced stress, improved mental health, and a lower risk of burnout (Hasan & Teng, 2017; Kurniawaty et al., 2019).

1.4 Research Objectives

To examine the relationship between perceived social support, work stress, and work-life balance with job satisfaction among working adults in Malaysia.

1.5 Research Questions

1. Is there any significant correlation between perceived social support and job satisfaction among working adults in Malaysia?
2. Is there any significant correlation between work stress and job satisfaction among working adults in Malaysia?
3. Is there any significant correlation between work-life balance and job satisfaction among working adults in Malaysia?
4. Do perceived social support, work stress, and work-life balance predict job satisfaction among working adults in Malaysia?

1.6 Hypotheses

H1: There is a significant positive correlation between perceived social support and job satisfaction among working adults in Malaysia.

H2: There is a significant negative correlation between work stress and job satisfaction among working adults in Malaysia.

H3: There is a significant positive correlation between work-life balance and job satisfaction among working adults in Malaysia.

H4: Perceived social support, work stress, and work-life balance significantly predict job satisfaction among working adults in Malaysia.

1.7 Conceptual Definition

Perceived Social Support

Caplan (1974) pioneered the concept of social support. Social support involves the process by which individuals fulfill their fundamental social requirements, emotions, personal identity, and values through interactions with others or groups. This fundamental concept emphasizes the significance of meaningful relationships in fulfilling basic human needs. At the same time, studies address the fact that social support can improve the health and well-being of individuals (Cacciatore et al., 2021; Yıldırım et al., 2023). In the study of Ioannou et al. (2019), perceived social support is related to how people perceive friends, family members, and others as providers of material, psychological, and overall assistance in times of need. This highlights the dual significance of the availability of support systems and the individual's perception of their accessibility, reinforcing the role of social support in cultivating resilience and improving quality of life.

Work Stress

Work stress is a condition that has an impact on one's emotions, mental processes, and reasoning (Irawanto et al., 2021). There appears to be an imbalance between job demands and the available resources to fulfil the goals. It will lead to increasing negativity and dissatisfaction among employees. This imbalance between job demands and available resources will lead to work stress, making workers feel more negative and unhappy. Work stress in the present situation may produce role ambiguity, overwork, role conflict, and time tension (Kim et al., 2019).

Work-Life Balance

Afif (2019) explained ‘work-life balance’ as an artificial separation between work and life, implying that work is not part of life. This perspective suggests that rather than viewing work as separate from life, and it should be seen as an essential component of one’s overall existence. Work-life balance is reached when a sustained harmony exists between work-related obligations and other aspects of life (Marques & Berry, 2021). This reflects the current work environments, where the boundaries between professional and personal life are increasingly blurred due to remote work, digital connectivity, changing cultural norms, and the pandemic.

Job Satisfaction

Job satisfaction is a desirable emotional condition arising from an individual's evaluation of their work or experiences (Crisci et al., 2019). An employee's intrinsic, extrinsic, or general needs are evaluated based on the positive or negative experiences formed under the job or work situation (Rizkina & Mohd Mahudin, 2022). The positive or negative experiences influence this evaluation in the workplace and subsequently affect employees’ attitudes, performance, and commitment to their roles.

1.8 Operational Definition

Perceived Social Support

In this study, perceived social support is defined as the degree to which an individual believes they receive emotional and practical support from their family, friends, and significant others. It will be measured using the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al., 1990), a 12-item questionnaire that assesses support across three sources: family, friends, and a significant other. Responses are recorded on a 7-point Likert scale, ranging from 1 (very strongly disagree) to 7 (very strongly agree), with higher

scores indicating greater levels of perceived social support. Higher scores indicate greater levels of social support. Another instrument used is the Berlin Social Support Scales (BSSS) developed by Schulz and Schwarzer (2003). It is a multidimensional measure of social support that assesses perceived and received social support, protective buffering, support seeking and need for support. The BSSS consists of multiple subscales, including perceived emotional support, perceived instrumental support, received support, and protective buffering, measured using a 4-point Likert scale. Higher scores indicate greater levels of social support.

Work Stress

In this study, work stress is defined as the level of perceived stress arising from work-related factors that may increase the risk of absenteeism due to stress. It will be measured by the Work-Related Stress Questionnaire (WRSQ) (De Sio et al., 2020), a 13-item tool that assesses various aspects of work-related stress. It measures factors such as workplace, job demand, support, and unpleasant workplace. The WRSQ uses a 5-point Likert scale, with higher scores indicating greater work-related stress. It can be used to evaluate the subjective perception and exposure of workers to psychosocial risks in the workplace. Another Job Stress Scale developed by Parker and Decotiis (1983) can also be used to measure job stress across two dimensions: time stress (feelings of being under constant time pressure) and anxiety (job-related feelings of anxiety). It uses a 5-point Likert scale, where 1 = strong disagreement and 5 = strong agreement with the statements.

Work-Life Balance

In this study, work-life balance is defined as the extent to which an individual feels their work and personal life are in harmony, without one excessively interfering with the other. It will be measured using Hayman's (2005) version of the Work/Life Balance Self-

Assessment Scale. This 15-item questionnaire assesses three dimensions of work-life balance: work interference with personal life (WIPL), personal life interference with work (PLIW), and work/personal life enhancement (WPLE). Responses are recorded on a 7-point time-related scale, with higher scores indicating lower levels of work-life balance. The second instrument that can be used is the Work-Life Balance Scale, which is a 4-item questionnaire that measures an individual's subjective perception of balance between work and non-work activities (Brough et al., 2014). The scale uses a 5-point Likert scale, with higher scores indicating greater perceived work-life balance.

Job satisfaction

In this study, job satisfaction is defined as an individual's overall contentment with various aspects of their job, including compensation, opportunities for advancement, supervision, benefits, recognition, workplace procedures, coworker relationships, the nature of work, and communication. Job satisfaction can be measured using the Job Satisfaction Survey (JSS) developed by Spector (1985) and the Minnesota Satisfaction Questionnaire (MSQ) developed by Weiss et al. (1967). The JSS is a 36-item questionnaire assessing satisfaction across nine distinct dimensions. Responses are rated on a 6-point Likert scale, from "strongly disagree" to "strongly agree," with higher scores reflecting greater job satisfaction. The MSQ measures job satisfaction based on intrinsic factors (related to the job itself) and extrinsic factors (related to external rewards). It is available in both a long form (100 items) and a short form (20 items), using a 5-point Likert scale ranging from "Very Dissatisfied" to "Very Satisfied".

Chapter 2

Literature Review

2.1 Perceived Social Support

It refers to an individual's subjective belief or thoughts about the Availability and sufficiency of emotional, informational, and instrumental assistance from their social network, regardless of whether they actively receive it. This construct emphasizes the quality of support as experienced or interpreted by the individual, rather than the objective amount of support provided (Niaz, 2021). For example, support from family and significant others reduced stress levels, leading to decreased anxiety and depression while enhancing positive emotions. However, the role of friends in this dynamic was less impactful, suggesting that the type of support matters depending on the source (Poudel et al., 2020).

Social support theory explains how social relationships and interactions influence individual well-being, particularly in stressful or challenging situations. It identifies four primary types of support: emotional (care and empathy), instrumental (practical help), informational (guidance and advice), and appraisal (constructive feedback or affirmation). These forms of support collectively contribute to a person's potential to deal with stress and maintain mental and physical health (Taylor et al., 2020). According to the theory's buffering hypothesis, social support reduces the detrimental impacts of stress by offering resources and coping strategies during times of high stress. Meanwhile, the straightforward result hypothesis posits that social support enhances overall well-being, fostering feelings of security, belonging, and purpose regardless of stress levels. Sources of support can include family, friends, coworkers, or community networks (Taylor et al., 2020). This is supported by Jéssica Vieira de Souza Meira and Murat Hancer where they have found that perceived organizational support is significantly influenced by psychological empowerment,

particularly via the aspects of significance, competence, self-determination, and influence. Psychological empowerment, in turn, was positively related to service-oriented organizational citizenship behavior (through impact, self-determination, and meaning) and job engagement (through impact and meaning). Furthermore, the association between job engagement, service-oriented organizational citizenship, and perceived organizational support was partially mediated by psychological empowerment behavior.

The findings from various studies highlight both positive and negative relationships between perceived social support (PSS) and mental health outcomes. High PSS was found to significantly reduce the risk of depression and poor sleep quality, with individuals reporting high PSS having a little social support, there is a 52% reduced chance of poor sleep quality and a 63% lower chance of sadness. (De Silva et al., 2005; Kent de Grey et al., 2018). This relationship suggests that social support is a protective factor for mental wellbeing. In the context of severe mental health challenges, PSS has been shown to reduce suicidal ideation, particularly during the COVID-19. A past research on university students in Turkey found that higher PSS was associated with lower suicidal thoughts, with stress and avoidant coping acting as mediators. Cognitive reappraisal was also found to moderate the effectiveness of PSS, helping to reduce self-harming behaviors by fostering resilience and hope (Özmete & Pak, 2020). Additionally, older adults with strong PSS perceptions report lower levels of loneliness and depression, likely due to the emotional and instrumental support PSS provides, highlighting its importance in maintaining mental health during aging (Li et al., 2021).

In contrast, a significant negative connection was observed among students. PSS negatively predicted FoMO, and basic psychological needs played a mediating role in this relationship as where they would have higher wants rather than the actual needs(Wen & Ye, 2014). In another study on nurses, PSS moderate the relationship among workload and

condition of life, mitigating the adverse effects of workload on quality of life (Harandi et al., 2017). Similarly, in family caregivers, PSS was negatively connected with perceived stress and positively linked with coping resources and family functioning, showing its protective role in reducing stress and improving quality of life (Uchino, 2009). In addition, fear of COVID-19 was found to negatively predict PSS, and PSS positively predicted general self-efficacy, indicating that higher social support can buffer the negative effects of fear and increase self-efficacy (Brooks et al., 2020). These findings collectively emphasize the complex interplay between PSS and mental health outcomes, with PSS serving as both a protective factor and a moderator across various populations and contexts. Integrating PSS into mental health interventions and fostering supportive social networks are essential for improving overall well-being.

2.2 Work Stress

Work stress is becoming an increasingly significant problem in Malaysia as a result of our country's economic growth, more intricate jobs, and more vicious competition across industries. According to research by Ahsan et al. (2009), the most common causes of stress among Malaysian employees are frequently stated as an overwhelming workload, a lack of managerial support, and extended work hours. Work stress often refers to an unpleasant emotional and physiological reaction that arises when an individual feels under pressure by their workplace or when the demands of their job responsibilities are beyond their competence, needs, and resources (Giao et al., 2020; Huang et al., 2021).

JD-R describes how job requirements and available resources affect workers' performance and well-being (Bakker, 2007). The model divides work characteristics into two categories: job resources, which are elements of a job that assist employees in achieving their goals, lowering job demands, or promoting growth, such as autonomy and support from

coworkers, and job demands, which are elements of a job that call for consistent effort or skills, such as work pressure and emotional demands. While high job resources can boost engagement, job satisfaction, and performance, high job demands can cause stress, burnout, and other negative effects. It highlights how demands and resources interact and suggests that job resources might mitigate the adverse consequences of job expectations. It highlights how demands and resources interact and suggests that job resources might mitigate the adverse consequences of job expectations. Additionally, it distinguishes between two primary processes: the motivation process, where job resources promote motivation, job satisfaction, and enhanced performance, and the health impairment process, where excessive job demands result in tiredness and burnout (Bakker, 2007).

Recent studies between 2020 to 2024 have extensively applied the JD-R model to explore employee outcomes such as work engagement, burnout, and well-being. For instance, Kossek et al. (2021) used it to examine the impact of job tasks required and resources on mental health during the COVID-19 pandemic, highlighting that job resources, like social support, act as buffers against stress. Samroodh et al. (2022) focused on how job resources enhance employees' intention to stay, with psychological capital and work-life balance mediating this relationship. Additionally, Tummers and Bakker (2021) conducted a systematic review, emphasizing leadership in influencing job demands and resources, which work on employee well-being and performance. These studies reinforce the model's utility in explaining the connection between work stressors, available capital, and employee results, such as job satisfaction and retention, and suggest that enhancing resources like social support and leadership can weaken the negative effects of job demands.

While work stress can be triggered by a variety of factors, including role ambiguity, excessive workload, role conflict, time pressures, organizational shortcomings, and the job

itself, the effects can be far-reaching, and impact individuals and organizations alike (An et al., 2020). Whereas work stress affects both individuals and organizations in different ways, it can result in low job satisfaction, poor job adaptation and productivity, and unfavourable evaluations. Workplace stressors can be categorized as role-related stressors, interpersonal concerns, organizational factors, environmental conditions, and intrinsic job demands (Singh, K. 2023). The nature of the job, such as repeated tasks, mentally taxing responsibilities, or physically taxing responsibilities, might contribute to intrinsic stresses. According to studies by Kurniawaty et al. (2019), role ambiguity arises when an individual is uncertain of the specifications of their position, how to fulfill those requirements, and the means of assessment that can be used to ensure satisfactory job performance. For instance, conflicting demands from managers or unclear job requirements might lead to role ambiguity and role conflict. Then, interpersonal stress also involves tense team dynamics, bullying at work, and disagreement with coworkers or managers. Organizational shortcomings brought on by a lack of resources, job insecurity, or lack of career advancement may additionally contribute to stress worse. Also, according to research by Mvv, Dr & Babu, P. (2018) indicates that environmental factors can lead to elevated stress levels including risky working conditions, noisy environments, and inadequate ventilation.

Work-life is one of the crucial parts of our daily life and can bring us a lot of stress. The majority of people generally focus their time on work-related responsibilities due to the competitive nature of the workplace while ignoring the stressors that impact both their work and personal lives. According to NIOSH, a variety of detrimental effects on employees may arise when employees are exposed to chronic workplace stress such as decreased productivity, diminished mental and physical health, and higher absenteeism. Additionally, it may compel an individual to depart from their normal working condition when their physical or mental health deteriorates due to prolonged stress (Trivellas et al., 2013).

Furthermore, employees experiencing high levels of work stress often find it challenging to derive satisfaction from their jobs, which can negatively impact their attitudes and behaviors (Jaafar, 2021). As people are frequently concerned more about what comes out of their work, which can even influence how they deal with other people. Also, they may become dissatisfied and worn out when they face problems at work, which could result in a lack of motivated attitude and engagement towards their work and affect the company in some way such as a reduction in productivity and increase in turnover (Khuong & Linh, 2020). This indicates that individuals who are under a greater level of work stress might not be pleased in their organization since they are not content with their job. Therefore, it's important that both employers and employees understand stress and the factors that contribute to all of its negative effects.

Moderate levels of work stress, often referred to as "eustress," can have positive effects on employees. When managed effectively, work stress can enhance motivation, improve job performance, and increase productivity. It can also foster personal and professional growth by encouraging employees to develop stronger problem-solving and coping skills. This type of stress can help individuals stay focused, meet deadlines, and adapt to challenges, leading to greater job satisfaction and a sense of accomplishment (Lundberg, 2017). Additionally, research has shown that work stress can promote resilience, enabling employees to bounce back more effectively from difficult situations (Kabat-Zinn, 2013).

However, excessive or chronic work stress can have detrimental effects. Prolonged stress can lead to burnout, anxiety, and physical health issues, including hypertension, sleep disturbances, and weakened immune function (Schaufeli & Bakker, 2004). High levels of stress may also decrease job satisfaction and reduce overall well-being, making it harder for employees to manage their work-life balance (Cohen & Wills, 1985). Furthermore, constant

stress can contribute to emotional exhaustion, disengagement, and lower productivity, ultimately undermining both individual health and organizational success (Maslach et al., 2001).

2.3 Work-Life Balance

It refers to the dynamic relationship between the work and non-work domains that allows people to devote their time and energy to both efficiently. The concept originated post-World War II, gaining popularity as women increasingly entered the workforce while managing household responsibilities (Kelliher et al., 2019). This dual role requires balancing work and personal life, establishing a framework for worldwide discussion on work-life balance policy.

Between 2020 and 2024, various studies using the JD-R model have explored WLB and its impact on employee well-being. Research among the accounting industry has found that work-life balance programs (WLBPs), when effectively utilized, buffer the effects of high job demands by leveraging work resources such as autonomy and supervisor support, thereby improving organizational outcomes (Jiang et al., 2021). A study in the hospitality industry emphasized the role of job resources like flexible working hours in improving job satisfaction and reducing stress, enhancing work engagement (Yoo & Kim, 2022). In the IT sector, leadership support and organizational resources were key to improving work-life balance, helping employees cope with job demands (Urbach et al., 2021). Research in healthcare demonstrated that job demands, like long working hours, negatively affected work-life balance, but social support resources alleviated these effects (Yu et al., 2021). Lastly, a study on employee retention in a global corporate setting showed that work-life balance, mediated by psychological capital, positively influenced engagement and reduced turnover intentions (Meyer et al., 2023).

A study by Hossain et al. (2018) revealed that Generation Y (Millennials) offers a unique perspective on work-life balance. Unlike earlier generations, they value not just time spent on work and personal life but also the autonomy to arrange their job. They value flexibility in work arrangements, believing productivity should not be determined by where and when people work as long as outcomes are achieved. A healthy balance between work and personal life helps employees manage stress better, resulting in increased job satisfaction and overall well-being. Working adults with a good life and working balance will have experience, greater engagement at work, higher levels of productivity, and increased motivation (Greenhaus & Allen, 2011). Additionally, it fosters better physical and mental health by reducing burnout and improving sleep quality, leading to lower absenteeism and fewer health-related issues (Frone, 2003). Employees with adequate work-life balance also tend to have stronger relationships with family and friends, which enhances emotional support and life happiness (Kossek & Ozeki, 2023).

A poor work-life balance can have significant negative effects. Employees struggling to balance work and personal life may experience heightened stress, anxiety, and burnout, which can lead to lower job satisfaction and disengagement (Allen et al., 2020). The inability to manage both work and personal responsibilities can also result in a negative impact on family relationships, with employees facing difficulties in maintaining social connections (Greenhaus & Powell, 2024). Additionally, those with poor work-life balance may suffer from physical health issues such as chronic fatigue, cardiovascular problems, and sleep disorders, which further contribute to declining work performance and general well-being (Carlson et al., 2021).

2.4 Job Satisfaction

Job satisfaction describes employees' feelings about their employment and includes various internal and external elements that influence workplace experiences (Wyrwa & Kaźmierczyk, 2020). The literature on job satisfaction encompasses several critical views. These viewpoints highlight the complexities of job satisfaction as a phenomenon influenced by several causes that must be carefully identified and measured.

Herzberg's Two-Factor Theory suggests that both intrinsic and extrinsic factors, including responsibility, growth, recognition, and achievement, influence job satisfaction. These motivators enhance job satisfaction when present, while hygiene factors, such as salary and working conditions, prevent dissatisfaction when adequately addressed (Herzberg, 1968). Dziuba et al. (2020) support this view, highlighting that individual criteria for job satisfaction vary depending on personal expectations and professional circumstances. Key factors such as management style, compensation, working hours, schedules, benefits, stress levels, and workplace flexibility all substantially influenced employees' satisfaction views. For example, a helpful and adaptable management style can boost staff morale, but inflexible systems might lead to unhappiness.

Regional differences in job satisfaction factors are also noticeable. In Asia, salary and compensation are frequently highlighted as crucial elements, indicating a preference for financial stability in job satisfaction. In contrast, research in Europe and North America emphasises working circumstances, implying a larger focus on workplace culture and environment (Deng et al., 2024). These inequalities highlight the importance of context-sensitive policies and management practices that include regional and cultural variances.

Similarly, occupational differences highlight the difficulty of job satisfaction. Employees in management and professional professions report the highest satisfaction levels

attributed to increased autonomy and perceived worth in their roles. In contrast, clerical support workers, machine operators, and those in elementary professions report lower satisfaction, showing differences in working experiences across job categories (Andrade & Westover, 2019). By studying these disparities, our study can have a better understanding and enhance job satisfaction in Malaysia regardless of occupational types and levels.

2.5 Perceived Social Support and Job Satisfaction

PSS significantly influences Job Satisfaction (JS) among employees. PSS is defined as the belief that emotional, instrumental, or social support is available from various sources, including colleagues, supervisors, family, or friends. It acts as an emotional buffer, mitigating the adverse effects of workplace stress and enhancing feelings of being valued, which directly contributes to higher job satisfaction (Cohen & Wills, 1985). Furthermore, PSS fosters motivation by creating a sense of belonging and aligning employees with organizational goals, which enhances engagement and satisfaction (Bakker & Demerouti, 2007).

JD-R Model emphasizes PSS as a resource that reduces job demands and supports overall well-being. Empirical research consistently shows a positive correlation between PSS and JS, indicating that supportive environments decrease burnout and foster both intrinsic (job role) and extrinsic (recognition, work-life balance) satisfaction (Rhoades & Eisenberger, 2002). In the Malaysian context, cultural values such as collectivism and strong interpersonal ties amplify PSS's impact, with workplace and familial support playing vital roles in shaping employees' satisfaction and mental health (Hofstede, 1980; Isa et al., 2016).

Nonetheless, Demerouti et al. (2020) demonstrated employees with higher PSS experienced lesser burnout and higher job happiness, especially when faced with high job demands. Similarly, Van den Tooren and De Jonge (2021) found that the availability of social support positively correlated with job satisfaction, especially in high-pressure environments,

as it helped employees manage their stress more effectively. Furthermore, Koopman et al. (2022) highlighted that social support improves emotional well-being and job involvement, which can help in building higher happiness levels. The JD-R model suggests that PSS provides not only emotional support but also practical assistance, enhancing employees' ability to manage job demands effectively. Furthermore, studies have highlighted that social support acts as a critical resource in reducing burnout and increasing job satisfaction, especially in high-stress occupations like healthcare (Demerouti et al., 2020). This reinforces the idea that a balance between job demands and PSS, is essential for fostering job satisfaction in the workplace.

2.6 Work Stress and Job Satisfaction

Job satisfaction is the outcome of a combination of environmental, physiological, and psychological factors that contribute to an individual's job satisfaction (Jaafar, 2021). When work stress serves as a motivation, it eliminates boredom and tedium by fostering creativeness and a sense of fulfillment. On the other hand, stress causes dislike and a lack of job satisfaction when it turns into an undesirable aspect (Abdirahman et al., 2020; Ogunola 2022). Thus, work stress is the mental and physical strain arising from a job's demands beyond a person's resources or ability to deal with (Jaafar, 2021). From this standpoint, the study supports the earlier finding that employees' both favourable and adverse opinions about their job make up their level of job satisfaction. Given the significant relationship between work stress and job satisfaction, employees' perceptions and experiences of their job positions can be significantly impacted by their level of stress. Research suggests that occupational stress should be considered as factors that strongly influence job satisfaction.

Bakker and Demerouti (2020) demonstrated that employees facing high job demands and low resources experience higher stress and lower satisfaction, as they are unable to meet

the expectations set by their roles. On the other hand, when job resources such as social support and autonomy are high, they help employees cope with stress more effectively, leading to higher job satisfaction (Bakker, 2021). Employees who experience excessive work stress may get dissatisfied and impoverished, which may have a detrimental effect on their overall sense of job satisfaction. High stress levels can make it harder for employees to take pleasure in their jobs or make them feel unmotivated, which makes them less enthusiastic about their duties and commitments (Khuong & Linh, 2020). For example, employees may find it challenging to navigate the workplace and eventually experience a decline in job satisfaction if they are confronted with persistent uncertainty, excessive expectations, or interpersonal conflicts (Huang et al., 2021). Moreover, studies have found that work stress can be buffered by perceived social support. In a study by Riaz et al. (2021), peer support was shown to moderate the relationship between work stress and job satisfaction. Employees who received more support from colleagues or supervisors reported lesser stress and higher job happiness, reinforcing the importance of social resources in the JD-R framework.

In addition, research by Wu et al. (2020) has shown that job satisfaction, employee loyalty, and work stress are highly correlated. Chronic stress can also hinder an employee's ability to obtain intrinsic rewards from their jobs, such as the feeling of accomplishment, a sense of purpose, or personal development. Over time, this may eventually cause them to become less involved, loyal, and dedicated to the organization. Furthermore, prolonged periods of intense stress at work frequently diminish job satisfaction, which can result in disengagement, discontent, and even burnout (Dousin et al., 2019; Susanto et al. 2022). For example, employees who feel overburdened by their tasks may start doubting the worth of their work and lose faith in their own abilities, which could further diminish job satisfaction. This discontent frequently affects other aspects of life, thus increasing stress and creating a vicious cycle. Employee dissatisfaction and disengagement diminish the likelihood that they

will be passionate about their job, which can impede team performance and organizational growth, ultimately resulting in underperforming organizations. The more an organization can remove stress from the workplace, foster positive work attitudes, and establish the ideal environment for job satisfaction, the more it will be able to achieve its goal of high productivity and efficiency (Trivellas et al., 2013). Given all those who spend plenty of time at work, the atmosphere at the workplace can have a significant impact on a person's life. Also, chronically stressed employees may also be less resilient and adaptable, which makes it difficult for them to handle changes or barriers at work.

In order to lower work stress and improve employee's job satisfaction, it is crucial to strike a balance between high job demands and sufficient resources (Tummers & Bakker, 2021). Employee satisfaction and fulfillment may be negatively impacted by high job demands, such as position uncertainty, low and non-growing salary and time constraints.

2.7 Work-Life Balance and Job Satisfaction

Work-life balance has become a crucial factor influencing job satisfaction, mainly due to evolving workplace dynamics and employee expectations. Multiple studies have investigated the impact of work-life balance on job satisfaction in various contexts and professions, particularly in healthcare, academia, and multinational organisations. Research consistently reveals a significant positive correlation between work-life balance and job satisfaction. Hasan and Teng (2017) indicated that attaining a work-life balance improves job satisfaction and recommended the implementation of work-life balance policies to engage employees and recruit top talent. Irawanto et al. (2021) similarly discovered that sustaining an appropriate work-life balance positively correlates with job satisfaction, underscoring the significance of balance in enhancing workplace experiences. Aruldoss et al. (2022) stated that

successful work-life balance techniques, including flexible working hours and supportive supervision, improve employee motivation and productivity, increasing job satisfaction.

The impact of work-life balance on job satisfaction is particularly significant in high-stress occupations like healthcare. Flexible work arrangements and supportive supervision are essential for enhancing work-life balance among doctors and nurses, thus boosting job satisfaction (Aruldoss et al., 2022). The adoption of healthcare technology, financial limitations, and workplace stress have adversely impacted the work-life balance for Malaysian nurses. Working hours, work pressure, and workplace culture were recognised as essential factors affecting job satisfaction in this setting (Yusli et al., 2023).

In the Malaysian academic sector, work-family balance (WFB) correlates positively with job satisfaction. Work-family conflict (W to FC) and family-to-work conflict (F to WC) adversely impact job satisfaction, suggesting that unresolved tensions between work and family commitments lower overall job satisfaction (Omar et al., 2021). Consequently, adaptable work regulations and nurturing cultures are crucial to ease these tensions and improve satisfaction.

Within Malaysian multinational firms, work-life balance significantly correlates with job satisfaction among Millennials, especially during the COVID-19 epidemic (Yusli et al., 2023). Millennials prioritise quality of life over financial benefits, reflecting a generational change in career goals relative to past generations. Employers must respond to this demand for equilibrium to enhance satisfaction and retention within this demographic.

The COVID-19 pandemic and subsequent implementation of work-from-home alternatives underline the significance of work-life balance in job satisfaction. Harini et al. (2021) discovered that remote work enabled employees to allocate additional time to their

families, enhancing job satisfaction. This discovery highlights the value of flexible work arrangements to improve employee well-being and productivity post-pandemic.

The literature emphasizes the importance of integrating work-life balance policies into organizational practices to enhance job satisfaction. Initiatives such as family-friendly policies, flexible working hours, and wellness programs were found to improve employee engagement and satisfaction (Bin Saleh, 2015). These policies are particularly relevant in industries with high workloads and stress levels, such as healthcare and academia, where work-life balance practices directly impact retention and performance.

2.8 Perceived Social Support, Work Stress, Work-Life Balance and Job Satisfaction

A balance between work and life has become a crucial factor influencing job satisfaction, mainly due to evolving workplace dynamics and employee expectations. Multiple studies have learnt about the impact of it in various contexts and professions, particularly in healthcare, academia, and multinational organisations. Studies regularly show that job satisfaction and work-life balance are positively correlated. Hasan and Teng (2017) indicated that attaining a work-life balance improves job satisfaction and recommended the implementation of work-life balance policies to engage employees and recruit top talent. Irawanto et al. (2021) similarly discovered that sustaining an appropriate work-life balance positively correlates with job satisfaction, underscoring the significance of balance in enhancing workplace experiences. Aruldoss et al. (2022) stated that successful work-life balance techniques, including flexible working hours and supportive supervision, improve employee motivation and productivity, increasing job satisfaction.

Work-life balance (WLB) and job happiness have a complicated connection, but the Job Demands-Resources (JD-R) model provides a useful explanation. According to the JD-R model, job resources—like autonomy and social support—act as buffers that enhance WLB

and job satisfaction, while job demands—like workload and time constraints—have a detrimental effect on both. Stress and decreased job satisfaction are caused by a poor work-life balance, which is exacerbated by high job expectations including long hours and pressure(Demerouti & Bakker, 2020). Conversely, job resources such as flexible work arrangements and supportive leadership play a crucial role in enhancing WLB, thus boosting job satisfaction (Bakker et al., 2021). Studies indicate that flexible work arrangements and supportive supervision are essential for improving WLB among healthcare workers, such as doctors and nurses, which will enhance job satisfaction (Aruldoss et al., 2022). However, challenges such as healthcare technology adoption, financial limitations, and workplace stress have negatively affected WLB for Malaysian nurses, underscoring the importance of addressing work hours, work pressure, and workplace culture to improve job satisfaction (Yusli et al., 2023).

In other sectors, such as academia, work-family balance (WFB) has been shown to correlate positively with job happiness. Job fulfillment has been found to be significantly hampered by work-family conflict and family-to-work conflict, particularly when employees face unresolved tensions between their professional and personal lives (Omar et al., 2021). In Malaysian multinational firms, the work-life balance of Millennials, especially during the COVID-19 pandemic, has become crucial to their job satisfaction. Millennials' growing emphasis on quality of life over financial compensation requires employers to adapt to these needs to improve satisfaction and retention (Yusli et al., 2023).

Furthermore, the need for work-life balance for job satisfaction has been further underscored by the pandemic and the growth of remote employment. Employee job satisfaction has increased as a result of being able to spend more time with their family through remote work. This change emphasizes how crucial flexible work schedules are to

enhancing post-pandemic job satisfaction and employee well-being (Harini et al., 2021). In conclusion, flexible work arrangements and organizational support are crucial for fostering job happiness in a variety of sectors. The JD-R model also explains how job demands and resources affect work-life balance and job satisfaction.

Perceived social support (PSS) from supervisors, colleagues, and family members plays a critical role in mitigating work-related stress. Studies show that employees with high levels of PSS report lower stress levels, as they feel supported emotionally and practically. Social support helps individuals cope with demanding workloads and stressful situations, buffering the adverse effects of stress on mental and physical health (Liu et al., 2021). In addition, work-life balance (WLB) is closely tied to both job satisfaction and stress levels. Employees who perceive better balance between work and personal life are generally more satisfied with their jobs and experience lower stress. Supportive organizational cultures, including flexible work arrangements and family-friendly policies, play a significant role in enhancing WLB. This balance not only improves job satisfaction but also boosts productivity and reduces turnover (Uddin et al., 2020).

It can be applied in the scenario of a supportive supervisor who can enhance an employee's ability to manage both work and life responsibilities, leading to greater satisfaction and reduced stress. Research suggests that when employees feel their supervisors value and support their WLB, they are more likely to engage positively at work and feel fulfilled in their roles especially in the digital age, online social support has emerged as an important aspect, especially for remote workers. Virtual communication platforms provide opportunities to foster relationships and reduce feelings of isolation, contributing to better stress management and job satisfaction.

Organizations aiming to improve these outcomes should invest in fostering a culture of support, promoting flexible policies, and offering resources that address employees' needs comprehensively. This integrated approach can lead to healthier, more satisfied, and more productive workforces.

2.9 Theoretical Framework

Herzberg's Two-Factor Theory

HTFT may be used to investigate the link between job satisfaction, work-life balance, perceived social support, and work stress. This theory states that both intrinsic and extrinsic aspects, such as responsibility, development, acknowledgment, and achievement, can influence job satisfaction and dissatisfaction (Herzberg, 1968). According to HTFT, motivational factors and hygiene factors are the two types of factors that influence a person's level of job satisfaction and motivation. While the lack of hygiene factors results in job dissatisfaction, motivational factors boost job satisfaction (Herzberg, 1968). Each of this study's predictors can be categorized into either of these categories, which reflects how they influence job satisfaction. For organizations, this theory's application can be significant since it reveals what motivates employees and how to inspire them.

When discussing hygiene factors in HTFT, it refers to those factors that relate to the primary needs of employees that are important in preventing job dissatisfaction and ensuring a comfortable working environment (Herzberg, 1968; Alrawahi et al., 2020). Economic considerations, working conditions, job security, and assistance are a few examples. These factors pertain to the appreciation of the rewards that employees gain from their effort, and if any of the aforementioned factors are unfavourable, it may lead to employee dissatisfaction (Tan, 2013).Motivational elements, on the other hand, are associated with employees' secondary demands, in contrast to hygienic concerns. Self-actualization, recognition, and

professional development are a few of them. The development of these elements increases work satisfaction and employee engagement. This is because it enables workers to use their skills and knowledge to achieve significant objectives, become well-known at work, and receive recognition, all of which have a favourable impact on employees' motivation (Galanakis & Peramatzis, 2022). Recent studies have highlighted the significant role of hygiene factors, as described in Herzberg's Two-Factor Theory, in influencing perceived social support, work stress, work-life balance, and job satisfaction across various industries. In the healthcare sector, for example, hygiene factors like clear communication, job stability, and adequate resources contribute to higher perceived social support, reducing stress and promoting job satisfaction (Harini et al., 2021). Similarly, inadequate hygiene factors such as poor pay and lack of support have been linked to increased work stress, while improving conditions can help alleviate this pressure. In Malaysian multinational firms, enhancing hygiene factors like salary, work conditions, and supervisory support was found to reduce work stress and enhance job satisfaction (Yusli et al., 2023). Furthermore, hygiene factors such as flexible work arrangements are crucial in improving work-life balance, especially for Millennials, where such factors were associated with better balance and higher job satisfaction during the pandemic (Yusli et al., 2023). These findings demonstrate that addressing hygiene factors can significantly reduce stress, improve work-life balance, and enhance job satisfaction, thus fostering a more supportive and productive work environment.

Perceived social support complies with HTFT's definitions of motivational factors that are important in dealing with more advanced psychological needs and boosting job satisfaction (Herzberg, 1968). Social support, which includes support from coworkers, managers, or family members, provides both instrumental and emotional resources that contribute to a sense of belonging, appreciation, and comfort at work (Alrawahi et al., 2020). Particularly in Malaysia, where collectivist values can intensify the influence of supportive

connections, such forms of support can boost intrinsic motivation, employee resilience, and contribute to a positive organizational culture (Sumari et al., 2019). For example, despite work-related challenges, an individual is more likely to have a sense of accomplishment and job satisfaction if he or she feels supported by his coworkers while working on a challenging task (B. Lee et al., 2022). Research by Andersson (2017) shows that employees with higher overall satisfaction usually have great relationships with their managers and co-workers, have fascinating and challenging work, and have high levels of responsibility. By meeting their basic psychological needs, organizational commitment and supervisors' recognition of their contributions also boost job satisfaction (Galanakis & Peramatzis, 2022). Thus, this further demonstrates that perceived social support is a crucial motivational factor that elevates satisfaction by meeting basic emotional and interpersonal needs.

On the other hand, work stress is categorized as a hygiene factor by HTFT, stating that lowering stress prevents dissatisfaction (Herzberg, 1968). By ensuring a minimum level of satisfaction, hygiene factors serve as crucial for sustaining employee motivation (Tan, 2013). When all of the factors are fulfilled, dissatisfaction can be avoided. At the same time, hygiene factors offer employees a sense of security and stability whereby they can focus on attaining job satisfaction. Nevertheless, the lack or insufficiency of the factors may result in significant dissatisfaction and interfere with overall work motivation (Rai et al., 2021). In addition, when a candidate's job competency aligns with the tasks required of him, job satisfaction can also be attained. On the contrary, a negative work condition that diminishes job satisfaction might be triggered by demanding tasks, role ambiguity, or intense work pressure brought on by interpersonal conflicts (Rai et al., 2021). For example, an employee may feel overburdened and dissatisfied with their position if they are continuously confronted with uncontrollable deadlines or ambiguous expectations. While reducing job expectations or offering additional resources can help reduce dissatisfaction, it often does not turn into better

job satisfaction (Bexheti & Bexheti, 2016). This distinction emphasizes how work stress functions as a hygiene factor and the need to preserve baseline job satisfaction levels.

HTFT motivational factors are also closely associated with work-life balance since it promotes well-being and personal fulfillment, both of which are strongly associated to job happiness. Employees are more well-pleased with their jobs when they have the autonomy to perform their duties whenever and wherever they like in their personal space away from the office and possess the capacity to successfully balance their personal and professional obligations. (Yadav, 2022). In addition, maintaining relationships, pursuing personal development, and completing family obligations are all made possible by achieving this balance, which eventually boosts their intrinsic motivation and job satisfaction while also having a beneficial influence on organizational productivity (Galanakis & Peramatzis, 2022). On the other hand, inefficiencies may arise when the conventional working hours system fails to consider individual variances (Yadav, 2022). For example, after finishing their task, one might waste time by stay sitting in the office. Thus, flexible work schedules enable employees to restructure their schedules and spend more time with their families, which improves their overall well-being and commitment to the organization. At the same time, work-life balance also acts as a hygiene factor by reducing dissatisfaction due to overwork or conflict between professional and personal responsibilities (Herzberg, 1968). As a combination of motivational factors as well as hygiene factors, work-life balance encourages employees to be fully engaged in their work while reducing the risk of feeling overwhelmed. When employees experience a healthy balance, they feel empowered and motivated to engage in their work, which in turn will increase job satisfaction (Rai et al., 2021).

Social Exchange Theory (SET)

Homans (1958) and Blau (1964) established the SET model, which highlights the significance of reciprocal ties in social interactions. In the workplace, employees exchange their time, effort, and loyalty for various organizational resources, such as social support from colleagues and supervisors. Perceived social support that the feeling that employees are emotionally and instrumentally supported by their peers and managers, which acts as a key resource that employees reciprocate with greater job satisfaction, engagement, and performance. Employees who perceive strong support are more likely to feel valued, which directly enhances their satisfaction with their work environment (Cropanzano & Mitchell, 2005). In Malaysia, where interpersonal relationships are highly valued due to the collectivist culture, social support is particularly crucial in fostering a positive work environment and preventing dissatisfaction.

Recent studies highlight the importance of Social Exchange Theory (SET) in explaining the relationships between perceived social support, work stress, work-life balance, and job satisfaction. According to SET, employees who receive a stronger social support in their work environment will have a higher job satisfaction, as they feel valued by their organization, which mitigates the negative effects of stress and enhances performance (Bakker et al., 2021; Kanten & Kanten, 2020). Furthermore, when employees perceive a reciprocal relationship with their employer—one characterized by support and open communication—work stress tends to have less of a negative impact on job satisfaction, as support from colleagues and supervisors alleviates stress (Ng et al., 2020; Rhoades & Eisenberger, 2021). Work-life balance, when supported by flexible work policies such as remote work or flexible hours, significantly enhances job satisfaction. These policies not only

foster a sense of reciprocity but also reduce work-life conflict, leading to better employee engagement and satisfaction (Harris et al., 2021; Bakker & Demerouti, 2020).

Moreover, SET posits that perceived organizational support buffers against the adverse effects of work stress and work-life conflict. Aruldoss et al. (2022) found that employees who felt supported by their organization reported lower levels of work stress and greater satisfaction with their work-life balance. This support fosters an environment of reciprocity where employees feel motivated to engage with their work and remain loyal to the organization. Additionally, in high-stress industries like healthcare, social support not only boosts job satisfaction but also contributes to higher employee retention rates, as workers perceive their organization's investment in their well-being (Yusli et al., 2023; Harini et al., 2021).

Job Demand-Resources Model (JD-R)

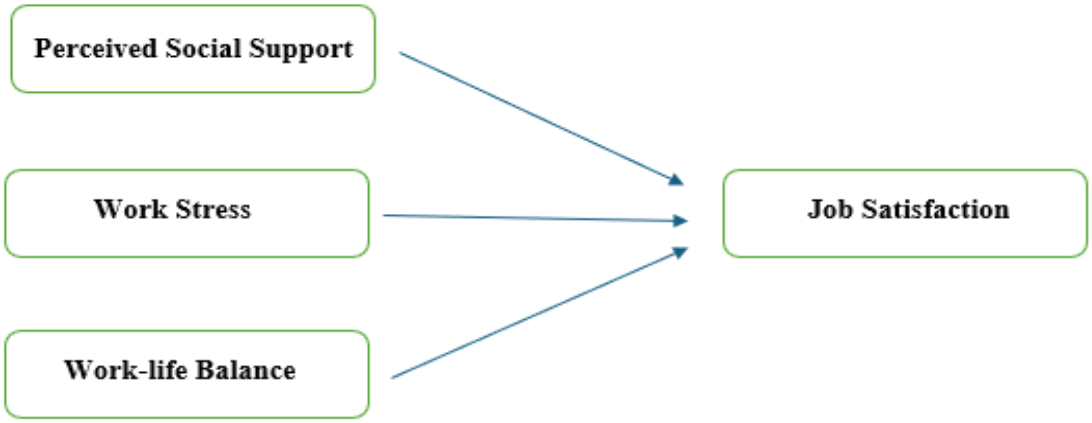
JD-R model (Demerouti et al., 2001) offers another lens through which to investigate the connection between these variables and job satisfaction. According to this model, work stress and work-life balance are critical factors influencing job satisfaction. Work stress, a job demand, refers to the pressure and challenges employees face in the workplace, which, when excessive, can lead to burnout and decreased satisfaction.Work-life balance, on the other hand, is a tool used in the workplace to assist staff in juggling the conflicting demands of their personal and professional lives, therefore reducing the harmful consequences of stress. According to the JD-R model, employees are more prone to suffer from burnout and job dissatisfaction when job demands, such stress, surpass workplace resources, like support and balance. However, workers may mitigate the negative impacts of stress and promote greater levels of job satisfaction if they have access to enough social support and a reasonable work-life balance. (Bakker et al., 2004).

The JD-R Model highlights PSS as a tool that promotes general well-being and lessens work demands. Empirical research consistently shows a positive correlation between PSS and JS, indicating that supportive environments decrease burnout and foster both intrinsic (job role) and extrinsic (recognition, work-life balance) satisfaction (Rhoades & Eisenberger, 2002). According to SET, employees are motivated by the exchange of resources, such as emotional and instrumental support from their organization, which impacts their overall satisfaction. When employees obtain more social support from management and coworkers, they feel valued, leading to enhanced job satisfaction (Bakker & Demerouti, 2020). Social support acts as a resource that buffers against work stress by providing emotional relief and practical assistance, ultimately reducing burnout and fostering satisfaction in the workplace.

Furthermore, social support can be a pivotal factor in improving work-life balance. Employees who perceive that their employers offer flexibility and understanding in managing personal and professional responsibilities feel a sense of reciprocal loyalty, which in turn enhances their overall job satisfaction (Bakker et al., 2021). In organizations where work-life balance is prioritized through policies such as flexible hours or remote work, employees are more likely to feel positive about their work environment, which strengthens their job satisfaction. In a study conducted on employees in Egyptian resorts, work stress was found to spill over into personal lives, affecting job satisfaction. However, perceived social support helped mitigate this impact, reinforcing the JD-R model's suggestion that resources (like support systems) can buffer the effects of high job demands on job satisfaction (Jeske & Calvard, 2022). In the Malaysian context, cultural values such as collectivism and strong interpersonal ties amplify PSS's impact, with workplace and familial support playing vital roles in shaping employees' satisfaction and mental health (Hofstede, 1980; Isa et al., 2016).

2.10 Conceptual Framework

Figure 2.1



Conceptual Framework of Perceived Social Support, Work Stress, and Work-Life Balance as the predictors of Job Satisfaction

The conceptual framework is proposed based on the theories mentioned in the theoretical framework. Perceived social support, work stress, and work-life balance are the three independent variables in the present study, while job satisfaction is the dependent variable. It is grounded with the JD-R Model, SET, and HTFT model to comprehensively explore the dynamics of these variables.

High levels of stress at work are known to drain workers' energy and psychological reserves, resulting in burnout and decreased job satisfaction, according to the JD-R Model. Conversely, job resources like PSS and a healthy work-life balance act as buffers that mitigate the adverse effects of stress, thus enhancing job satisfaction. These resources foster engagement and resilience, which are critical for sustaining workplace satisfaction (Bakker & Demerouti, 2017; Yusli et al., 2023).

The SET framework supports the role of PSS in shaping job satisfaction. This theory posits that employees who receive emotional, instrumental, or informational support from their social network perceive a reciprocal obligation to maintain a positive relationship with their organization. This exchange enhances their sense of belonging and reduces stress, contributing to job satisfaction (Cropanzano & Mitchell, 2005). Furthermore, supportive environments help balance work and personal life, improving overall satisfaction (Harini et al., 2021; Omar et al., 2021).

HTFT uses motivators (like recognition, PSS) and hygiene factors (like work stress, workplace regulations) to explain job happiness. While poor work-life balance and high stress function as dissatisfiers that diminish job satisfaction, supportive supervision and flexibility act as motivators, fostering higher job satisfaction. The theory emphasizes the importance of addressing both sets of factors to achieve a holistic improvement in employee well-being (Aruldoss et al., 2022; Malik et al., 2023).

Reducing work-related stress is greatly aided by perceived social support (PSS) from family, coworkers, and superiors. According to studies, workers who experience high PSS report less stress because they feel both practically and emotionally supported. Social support protects people's mental and physical health from the negative impacts of stress by assisting them in managing demanding workloads and stressful situations (Liu et al., 2021). Furthermore, there is a strong correlation between work-life balance (WLB) and stress levels and job satisfaction. Workers are often happier and less stressed when they feel that their personal and professional lives are more balanced. WLB is greatly improved by supportive corporate cultures, such as those that offer flexible work schedules and family-friendly regulations.

In addition to analyzing the connections between the independent factors and the dependent variable, the research also looks at the correlations between the independent variables. Therefore, the purpose of this study is to investigate how working individuals in Malaysia perceive social support, stress at work, work-life balance, and job satisfaction.

Chapter 3

Methodology

3.1 Research Design

This study employed a quantitative, cross-sectional research design to examine the associations among perceived social support, work stress, work-life balance, and job satisfaction among full-time working adults in Malaysia. A quantitative method was used because it is well-suited to examine relationships and test predictive models between these constructs, which are important for job performance and overall well-being (Fowler, 2014). A cross-sectional survey captures data at a single point in time and is a practical and cost-effective approach for identifying relationships and describing characteristics within a specific group (Wang & Cheng, 2020). An anonymous online survey conducted through Qualtrics was used to gather data; item clarity and reliability were evaluated in a quick pilot test (n = 31) that was conducted prior to the main survey. Statistical analyses will be performed using IBM SPSS Version 23, including descriptive statistics, Pearson correlations, and multiple linear regression to evaluate the independent contributions of perceived social support, work stress, and work–life balance to job satisfaction.

3.2 Sampling Method

Convenience and snowball sampling approaches were used to recruit Malaysian full-time working individuals aged 25 to 55. Snowball sampling was applied by requesting initial participants to share the survey link with colleagues and acquaintances who met the inclusion criteria, thereby expanding the reach across industries and geographic regions where a centralized sampling frame was unavailable (Denieffe, 2020). This approach was particularly useful for accessing diverse networks of working adults, including those in sectors that are often underrepresented in formal organizational lists. Complementing this, convenience

sampling was utilized through targeted posts on widely used social networking sites such as Xiaohongshu (Rednote), Facebook, WhatsApp, and Reddit. Social media recruitment was selected due to its cost-efficiency, rapid dissemination, and capacity to reach large, geographically dispersed populations in a relatively short time (Novielli et al., 2023). An estimated 25.1 million users on the platform, or 70.2% of the country's population, Malaysia has a high level of social media penetration, which makes this strategy feasible (Kemp, 2025). When combined, these two strategies increased the research's reach and made sure it could collect a sizable and varied representation of Malaysian working adults while being realistic, given the time and resource constraints.

3.3 Sample size

According to the Department of Statistics Malaysia (DOSM, 2023), the total labour force in Malaysia was approximately 15.7 million, comprising both employed individuals and those actively seeking work. By narrowing the target population to full-time employed adults within the 25 to 55 age brackets, the study captured a segment that is most reflective of Malaysia’s productive workforce and most relevant for organizational and policy-level interventions aimed at improving employee well-being and job satisfaction (Azhar & Omar, 2025). This age group represents the most economically active and professionally stable segment of the workforce, as individuals are more likely to have established careers, stable employment, and accumulated workplace experiences. Younger adults (21–24 years) were excluded because they are often in transitional stages such as internships, job exploration, or early career instability, while older adults (above 55 years) were excluded because many are approaching retirement, engaged in part-time work, or transitioning out of the labour force (Mansor et al., 2021). Restricting the sample in this way minimizes variability caused by career entry or exit phases and ensures a more consistent basis for examining the study’s focal constructs of social support, stress, work–life balance, and job satisfaction.

Sample-size determination combined statistical power analysis (G*Power) and a population-proportion approach (Krejcie & Morgan) to satisfy both analytical precision and population representativeness. Using the effect-size conversion formula, $f^2 = R^2/(1-R^2)$, where R^2 is the percentage of variation in job satisfaction mediated by the predictors, statistical power analysis was carried out using G*Power 3.1.9.7. (Kang, 2021; Faul, Erdfelder, Lang, & Buchner, 2007). Prior correlation estimates for the focal predictors (perceived social support, r = .0.53; work stress, r = −.266; work–life balance, r = .421) were used to inform an estimated overall effect size. Using these estimates, $f^2 \approx 0.296$ was obtained and entered into G*Power. With a conservative statistical power of 0.95 and $\alpha = 0.05$, the G*Power output indicated a minimum sample of 119 participants was sufficient to detect the assumed effect (see Appendix C, p.135). The G*Power result, therefore, represents the lower bound required for hypothesis testing and ensures adequate sensitivity for the planned regression analyses (Cohen, 1988; Faul et al., 2007).

However, to enhance generalisability to Malaysia's large working population and to offset the variability inherent in non-probability sampling, a population-based calculation was also conducted. Using the Krejcie and Morgan table for a population of ≈15.7 million, the recommended sample for a 95% confidence level and 5% margin of error is 384 participants. To further strengthen the study's robustness and account for potential issues such as incomplete responses, non-response bias, and unusable data, an additional 10% buffer was added to the target sample size. This increased the target to 423 participants ($384 \times 1.10 \approx 423$), allowing for a slightly wider reach and improved confidence in representing the diversity of Malaysia's working adult population.

This dual-method approach was deliberately adopted to overcome the limitations of relying on a single calculation. The study was sufficient to identify the estimated effect size. According to the G*Power analysis, the Krejcie and Morgan population-based calculation

ensured representativeness in the context of Malaysia's large and diverse workforce. By integrating these two methods and applying an additional buffer, the study enhanced both its statistical reliability and external validity. Ultimately, with 452 valid responses collected, the study exceeded the minimum requirements established by both approaches, reinforcing confidence in the robustness of the data and the generalisability of the findings to Malaysia's working adult population.

Figure 3.1

Krejcie and Morgan Table

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*

3.4 Location of Study

Peninsular Malaysia and East Malaysia are the two main geographical divisions of Malaysia, where the study was carried out. The states of Sabah and Sarawak make up East Malaysia, while the eleven states that make up Peninsular Malaysia are Perlis, Kedah, Pulau Pinang, Perak, Selangor, Johor, Negeri Sembilan, Melaka, Pahang, Kelantan, and Terengganu. The three Federal Territories of Malaysia, which are Kuala Lumpur, Putrajaya, and Labuan, were taken into consideration for the study. The target respondents were

Malaysian full-time working adults currently residing in any of these states or federal territories. This nationwide coverage ensured diversity in terms of geography, ethnicity, and industry sectors, thereby enhancing the representativeness of the findings for Malaysia's heterogeneous workforce.

3.5 Ethical Consideration

The study complied with established ethical norms for research by obtaining ethical permission from the Universiti Tunku Abdul Rahman (UTAR) Scientific and Ethical Review Committee (SERC) prior to data collection. It serves to uphold academic or scientific integrity and safeguard the rights of study participants, as well as to make research more valid. In the research, voluntary participation is the main concern as the participants are free to opt in or out of the study. While all the participants will know the purpose of questionnaires, benefits, hazards, and finances before deciding whether to join or not the questionnaires. Personally identifiable data is not collected, and the participants' information will be hidden from everyone else. Upon receiving approval, Re: U/SERC/78-438/2025 (see Appendix A, p. 129), the survey was sent to the participants. This process ensured that the study was conducted in a responsible, appropriate, and ethically sound manner, in accordance with institutional guidelines and best practices in social science research.

3.6 Research Instruments

Multidimensional Scale of Perceived Social Support (MSPSS)

According to this study, perceived social support refers to how much a person believes their friends, family, and significant others provide them with both practical and emotional support. The MSPSS (Zimet et al., 1990), a 12-item questionnaire that gauges support from three sources, such as family, friends, and a significant other, will be used to analyze this. Cronbach's alpha for the MSPSS is 0.88, indicating excellent internal coherence

as well as outstanding reliability and validity. With good relationships to other validated social support measures, such as the Social Support Questionnaire (SSQ), the MSPSS has great criterion validity as well. Excellent test-retest reliability is also demonstrated by correlations above 0.80, which show consistency and stability across time. Higher responses on a 7-point Likert scale, where 1 denotes "*very strongly disagree*" and 7 denotes "*very strongly agree*," imply greater perceived social support (Zimet et al., 1990).

Work-Related Stress Questionnaire (WRSQ)

The Work-Related Stress Questionnaire (WRSQ) measures how stressed-out people are at work by looking at things including workload, demands of the job, relationships with coworkers, and organizational pressures that are associated with physical symptoms of stress, work-related pressure, and emotional strain (De Sio, Cedrone, Perri, Nieto, Greco, Buomprisco, & Stansfeld, 2020). On a Likert scale, responses are frequently scored from "*Never*" to "*Always*" or from "*Strongly Disagree"* to "*Strongly Agree*". In general, higher scores reflect greater levels of perceived stress. On a Likert scale with five points, with 1 representing never and 5 representing always, while certain questions (4, 8, 10, 11, and 13) have their scores inverted (De Sio et al., 2020).,

With Cronbach's alpha values value from 0.80 to 0.90, WRSQ has demonstrated great dependability and high internal consistency among its components. Since the WRSQ was created with professional involvement and addresses important facets of workplace stress, it exhibits content validity in terms of validity. Factor studies that demonstrate that the scale measures several stress aspects, such as workload and interpersonal stress, have validated construct validity. Strong relationships with other recognized stress measures and job satisfaction scales have also demonstrated criterion validity, demonstrating the WRSQ's precision in measuring workplace stress. The scale is frequently used in employee well-being

initiatives and occupational health research to pinpoint stressors and guide organizational policies meant to enhance worker health and working conditions (De Sio, Cedrone, Perri, Nieto, Greco, Buomprisco, & Stansfeld, 2020).

Work-Life Balance Self-Assessment Scale

This survey has 15 items with a 5-point Likert scale ranging from 1 to 5, intended to evaluate how well a person feels that their personal and professional lives are balanced. It focuses on time management, stress levels, and general contentment in both areas (Carlson, Kacmar, & Williams, 2000). Validity and reliability of WLBQ are outstanding, with a Cronbach's alpha of 0.80; the items reliably measure the overall construct of work-life balance and have strong internal consistency (Carlson, Kacmar, & Williams, 2000). With components that cover important facets of work-life balance, such time management, stress, and work-life interference, the WLBQ has good content validity in terms of validity. Furthermore, correlations usually surpass 0.80, demonstrating good test-retest reliability and the scale's capacity to yield consistent findings over time. Questions about time allocation (the amount of time spent on work versus personal activities), stress and burnout (the degree to which work gets in the way of leisure, family, or relaxation), balance satisfaction (the respondent's level of satisfaction with the current work-life balance), flexibility (the availability of flexible schedules or work-from-home options), and the degree to which work interferes with personal life are usually included (Carlson, Kacmar, & Williams, 2000).

"I am able to spend enough time with my family and friends," "My job allows me sufficient time to enjoy personal interests and hobbies," and "I often feel that I don't have enough time to relax after work" are a few examples of WLBQ questions. These items are scored using a Likert scale, where 1 represents "*strongly disagree*" and 5 represents "*strongly agree*". While certain items, like those that address how work interferes with personal life,

may be reverse-scored, higher scores generally indicate a better work-life balance (Carlson, Kacmar, & Williams, 2000). These questionnaires are widely used in workplace wellness programs, employee satisfaction assessments, and occupational health research, helping organizations understand and improve the effectiveness of policies related to flexible work arrangements, support systems, and workload management.

Minnesota Satisfaction Questionnaire (MSQ)

Weiss et al. (1967) created the Minnesota Satisfaction Questionnaire (MSQ), which is a popular instrument for gauging work satisfaction. Both intrinsic and extrinsic satisfaction are evaluated, with the former concentrating on external elements like compensation, perks, working conditions, and supervision, and the latter on the nature of the work, personal development, and accomplishment. Twenty items make up the questionnaire, and responses from "*Very Dissatisfied*" to "*Very Satisfied*" are rated on a 5-point Likert scale (Weiss et al., 1967).

With test-retest correlations of 0.80 and Cronbach's alpha values for internal consistency greater than 0.85, MSQ has proven to be very reliable and stable over time. Significant relationships with other work satisfaction metrics, such as the work Descriptive Index (JDI), reinforce its construct validity, and component studies have reliably validated its two-factor model, which separates intrinsic and extrinsic pleasure. The MSQ is a trustworthy indicator of job satisfaction in a variety of work environments since it has also demonstrated excellent criterion validity. Assessing employee happiness and well-being is a standard practice in human resource management and organizational psychology (Weiss et al., 1967).

3.7 Data Collection Procedures

Collection of data commenced with the development of a structured questionnaire in Qualtrics, which consisted of five sections: (i) the informed consent form, (ii) demographic

information, and (iii–vi) four standardized scales measuring the study's focal variables (see Appendix D, p.135). The finalized survey link was disseminated through multiple channels to maximize reach and diversity of respondents. These channels included direct distribution to the researchers' professional and personal networks, as well as targeted sharing via social media platforms. Furthermore, offline sharing of the link to the study was conducted with eligible individuals to ensure inclusivity of respondents who may have limited digital exposure.

The survey's opening page included a written consent agreement that clearly stated the study's aims, methods, potential hazards and advantages, the optional nature of participation, and confidentiality promises. The questionnaire was available to be filled out by people who gave their consent. To preserve anonymity, no personally identifying information was collected, and participants retained the freedom to leave at any time without incurring penalties. The data collection process was conducted over five months, spanning from February 2025 to June 2025, and included both the pilot study and the main study phase. This extended timeframe allowed for sufficient participant recruitment and ensured the quality and comprehensiveness of the dataset.

3.8 Inclusion and Exclusion Criteria

This study focused on individuals aged 25 to 55 years who were employed full-time in Malaysia. Only participants meeting these criteria were retained for analysis. The exclusion criteria comprised freelancers, students, part-time employees, and individuals outside the specified age range.

3.9 Pilot Study

Before the primary data collection, a pilot study was carried out to assess the clarity and reliability of the questionnaire, as well as to identify potential challenges in recruitment

and administration procedures (Arain et al., 2010). The pilot phase served to minimize the risk of design flaws, reduce ambiguity in the survey items, and ensure that the instruments were appropriate for the target population of Malaysian full-time working adults. Conducting a pilot study is a critical step in survey-based research, as it allows researchers to refine both the instrument and the data collection process before scaling up to the full sample. According to Browne (1995), a minimum of 30 participants is the ideal sample size for pilot research to provide meaningful preliminary feedback without overburdening resources.

The questionnaire, developed in Qualtrics, included five components: the informed consent form, demographic questions, and four standardized scales measuring the study's focal variables. It was distributed to full-time working adults through personal networks and online sharing of the Qualtrics survey link. From a total of 43 responses initially collected, 12 were excluded due to incomplete or invalid entries, leaving 31 valid responses for analysis. This number exceeded the minimum threshold recommended for pilot testing and provided sufficient evidence to confirm that the instrument was clear, reliable, and contextually appropriate for the Malaysian working population. Feedback from the pilot phase informed minor refinements in wording and distribution strategy, thereby strengthening the quality and feasibility of the main data collection process.

3.10 Reliability Analysis

To assess the study instruments' reliability, Cronbach's alpha was used, which assesses a test's reliability and internal consistency by determining how closely items on a scale are interrelated (Tavakol & Dennick, 2011). According to Table 3.3, the pilot sample (n = 31) yielded the following α values: Perceived Social Support = .864, Work Stress = .763, Work–Life Balance = .657, and Job Satisfaction = .883. In the cleaned actual sample (n = 452), the

corresponding α were: Perceived Social Support = .861, Work Stress = .871, Work–Life Balance = .872, and Job Satisfaction = .902.

The observed improvements from pilot to actual study are expected and do not indicate measurement problems: Cronbach's alpha is sensitive to sample size and sampling variability (smaller pilots often yield less stable estimates), and reliability commonly increases when items are clarified after pilot testing and when a larger, more representative sample reduces random error (Tavakol & Dennick, 2011; Pallant, 2013). Additionally, scale length contributes to higher alpha (more items → higher alpha), which helps explain the strong reliability for the 20-item job satisfaction scale (Nunnally & Bernstein, 1994). The small difference between raw alpha and standardized alpha for the job satisfaction scale is also normal when items share the same Likert format and similar variances (Pallant, 2013).

Table 3.1

Cronbach's Alpha (α) for Each Instrument in Both Pilot (n=31) and Actual Study (n=452)

Variables (60 items)	Cronbach's Alpha, α	
	Pilot Test	Actual Test
Perceived Social Support (12 items)	.864	.861
Work Stress (13 items)	.763	.871
Work-Life Balance (15 items)	.657	.872
Job Satisfaction (20 items)	.883	.902

3.11 Data Analysis

All analyses were performed using IBM SPSS Statistics version 23. It is software that offers advanced statistical analysis. Apart from testing the reliability and validity of the scales, the study also analysed the descriptive information among participants and variables, and assumption testing before running inferential analyses. Both graphical techniques (like histograms and probability-probability plots) and statistical measures (like skewness, kurtosis, and the Kolmogorov-Smirnov test) were used to check the data distribution. Mahalanobis distance, leverage statistics, and Cook's distance values were used to further screen for potential multivariate outliers and influential responses. Homoscedasticity was inspected with residuals-versus-predicted scatterplots, and independence of residuals was checked using the Durbin–Watson statistic. PPMC was used to examine bivariate associations among perceived social support, work stress, work–life balance, and job satisfaction for Research Questions 1 to 3. Multiple linear regression was used to examine the predictors' independent and shared effects upon work satisfaction in order to answer Research Question 4.

Chapter 4

Results

4.1 Data Cleaning

The survey collected a total of 518 responses among full-time working adults in Malaysia. During the cleaning process, one response was removed due to a lack of consent. Based on the age inclusion criteria, 41 respondents below the age of 25 and five respondents above 55 were excluded. Another six respondents who did not meet our employment status criterion of being full-time workers were also removed. Furthermore, eight straight-line responses (i.e., selecting the same answer across all items) were identified by SPSS, which indicates inattentive responses that might affect the data quality were removed from the dataset. The remaining five respondents who did not complete the survey due to unforeseen reasons were also excluded from the analysis. In total, there were 452 valid responses used to proceed with the analysis after removing 66 invalid responses.

4.2 Assumption of Normality

Histogram

Histograms were generated for each of the study variables to provide a visual representation of their frequency distributions. These figures serve three important purposes in the analysis. First, they illustrate how scores are distributed across respondents for each construct, allowing for a clearer understanding of the data patterns. Second, they offer a visual check of the normality assumption, which is particularly important when applying statistical techniques such as correlation and regression. Finally, histograms make it easier to identify whether the distribution of scores is approximately bell-shaped and symmetric, as would be expected under normal distribution, or whether it exhibits skewness or kurtosis that may influence interpretation (Bessler, 2023).

Each histogram for the four variables (perceived social support, work stress, work-life balance, and job satisfaction) was in the bell-shaped curve, which indicated no violation of normality in histograms for all variables (see Appendix F, p. 143).

Probability-Probability (P-P) plot

Normal Probability–Probability (P–P) plots were used to assess how closely the observed data matched a normal distribution (Rinehart et al., 2022). These plots compare the cumulative probability of the observed data against the expected cumulative probability of a perfectly normal distribution, where variables are considered approximately normal if the data points closely follow the diagonal reference line (Ejemah et al., 2025). The results showed that for perceived social support, work stress, and work-life balance, the data points aligned closely with the diagonal line, indicating no substantial deviations from normality. Overall, the P–P plots provided further evidence that the distributions of the study variables were suitable for parametric analyses (see Appendix G, p. 144).

Skewness and Kurtosis

According to Hair (2022), the satisfactory threshold for skewness and kurtosis in social science research is ±2.0, which allows for moderate departures from perfect normality while still meeting the assumptions required for parametric statistical analysis. As shown in Table 4.1, the skewness values for the study variables ranged from –0.151 to 0.517, while kurtosis values varied from –0.072 to 1.293. All results fell well within the suggested threshold, suggesting no serious violation of the normality assumption. Specifically, perceived social support, work stress, and work-life balance demonstrated values very close to zero, indicating approximately normal distributions. Job satisfaction exhibited a moderate positive skew (0.517) and leptokurtic tendency (1.293), suggesting that responses were somewhat clustered at the lower-to-moderate end of the satisfaction scale with relatively

fewer extreme high scores. However, these values remain acceptable within the defined range, and given the large sample size (n = 452), the central limit theorem further supports the robustness of subsequent parametric tests.

Table 4.1

Skewness and Kurtosis Values for Each Variable

	Skewness	Kurtosis
Perceived Social Support	.082	-.072
Work Stress	-.151	.093
Work-Life Balance	.104	.114
Job Satisfaction	.517	1.293

Kolmogorov-Smirnov (K-S) Test

The Kolmogorov–Smirnov (K-S) test was conducted to assess the normality of the study variables, and the results are presented in Table 4.2 (Cardoso & Galeno, 2023). According to Mishra et al. (2019), a non-significant p-value ($p > .05$) indicates that the sample distribution does not significantly deviate from normality, whereas a significant p-value ($p < .05$) suggests a departure from normality. Based on the findings, only work-life balance ($p = .143$) was non-significant, meeting the normality assumption, while perceived social support ($p = .006$), work stress ($p = .008$), and job satisfaction ($p = .000$) were statistically significant, suggesting deviations from normality.

However, it is important to interpret these results in the context of sample size. As Pallant (2020) explains, the K-S test is highly sensitive to large samples, and with sample sizes greater than 30, even minor deviations from normality can lead to significant results. Given the large sample size in this study (N = 452), the significant values are more likely to reflect the sensitivity of the test rather than meaningful departures from normality. This

interpretation is supported by the skewness, kurtosis, histograms, and P–P plots presented earlier, which showed that the distributions were reasonably normal and within acceptable thresholds. Therefore, despite the K-S test results, the data were deemed suitable for parametric analyses such as correlation and regression.

Table 4.2

Kolmogorov-Smirnov (K-S) Test

Variables	Significant Value
Perceived Social Support	.006
Work Stress	.008
Work-Life Balance	.143
Job Satisfaction	.000

Summary

In conclusion, the assumption of normality was assessed for the four study variables, namely perceived social support, work stress, work-life balance, and job satisfaction. The results from the histogram, Normal P–P plot, skewness, and kurtosis analyses indicated that all variables demonstrated distributions within acceptable limits, with no violations of normality. The Kolmogorov–Smirnov (K-S) test, however, showed significant results for three variables, suggesting potential deviations. However, given the great sensitivity of the K-S test to large numbers of samples, even minor departures from normality are likely to appear statistically significant when the sample size exceeds 30. Given the consistency of results across the other normality assessments, the distributions were deemed sufficiently normal for parametric analyses. Taken together, the evidence supports the conclusion that the assumption of normality was reasonably satisfied.

4.3 Assumption of Multiple Linear Regression (MLR)

Independence of Residuals

The residuals' presumed independence was evaluated using the Durbin–Watson test, which determines whether redundancy is present in a linear regression model's residuals (Dodge, 2008). A Durbin–Watson value close to 2 indicates no autocorrelation, while values between 1 and 3 are considered acceptable (Field, 2013). In this study, the obtained Durbin–Watson value was 1.860 (see Table 4.3), which falls well within the recommended range and is close to 2. This result suggests that the residuals are independent and that there was no breach of the independence of errors premise.

Table 4.3

Durbin-Watson Test

Model	Durbin-Watson
1	1.860

Multicollinearity

A high level of intercorrelation between variables that are independent in a multiple regression model is referred to as multicollinearity, as it compromises the accuracy of the estimated regression coefficients and weakens the interpretability of the results (Kim, 2019). Tolerance and Variance Inflation Factor (VIF) values were analyzed to check for multicollinearity. According to Salmerón Gómez et al. (2020), multicollinearity is considered problematic when tolerance levels are less than .10 and VIF values exceed 10. As illustrated in Table 4.4, the tolerance values for perceived social support (.908), work stress (.933), and work-life balance (.930) were all well above the cut-off point, while the corresponding VIF values (1.101, 1.071, and 1.076, respectively) were far beneath the critical edge value of 10.

These findings suggest that the three independent variables were sufficiently distinct and that multicollinearity was not an issue in this research.

Table 4.4

Collinearity Statistics

	Tolerance	VIF
Perceived Social Support	.908	1.101
Work Stress	.933	1.071
Work-Life Balance	.930	1.076

a. Dependent Variable: Job Satisfaction

Normality of Residuals, Linearity of Residuals, and Homoscedasticity

The assumptions of residual normality, linearity, and homoscedasticity were evaluated through a residual scatterplot (see Appendix J, p.149) (Iheaka, 2025). Assessing these assumptions is critical because violations can bias the estimates of regression coefficients, reduce statistical power, and lead to inaccurate conclusions (Hair et al., 2019). The scatterplot in the study showed that the residuals were dispersed uniformly and randomly around the zero line, which suggests that the regression model did not suffer from systematic errors (Iheaka, 2025). The independent and dependent variables had a linear relationship, the variance of residuals remained constant across predicted values (indicating homoscedasticity), and the residuals did not display any curvilinear patterns or clustering (Adhikari, 2022). Taken together, these results demonstrate that the assumptions were satisfied, thereby supporting the validity and reliability of the regression analysis conducted to test Hypothesis 4.

Multivariate Outliers and Influential Cases

Potential multivariate outliers were first examined by Casewise Diagnostics, while their influence was further evaluated using Mahalanobis Distance, Cook's Distance, and Centered Leverage Value. Standardized residuals more than two standard deviations were found in 25 samples (see Table 4.5). These cases included: Case 4, Case 23, Case 30, Case 50, Case 80, Case 84, Case 147, Case 154, Case 176, Case 197, Case 200, Case 203, Case 211, Case 217, Case 270, Case 314, Case 418, Case 420, Case 427, Case 431, Case 439, Case 441, Case 444, Case 445, and Case 446.

The Mahalanobis distances ranged up to 12.85, with none exceeding the conservative cutoff of 15 for sample sizes greater than 100, as proposed by Barnett & Lewis (1978). According to Cook and Weisberg (1982) guidelines, no influential outliers were detected when all Cook's distance values were below 1. Following Barrett and Gray (1997), the cases with centered leverage values exceeding twice the average leverage should be investigated. By using the formula: $\frac{2(P+1)}{n}$, in which P refers to the independent variables in the model, and n refers to the number of cases. Hence, the calculated leverage value for this study is $\frac{2(3+1)}{452}$ ≈0.0177, and a total of 22 cases exceeded this threshold (see Table 4.6).

In conclusion, only one of the three influence diagnostics indicated potential multivariate outliers. As none of the identified cases simultaneously violated multiple criteria or exceeded critical thresholds, all 452 valid cases were retained for further analysis.

Table 4.5

Casewise Diagnostics

Case Number	Std. Residual	T_JS	Predicted Value	Residual
4	2.117	63.00	49.919	13.081
23	2.612	74.00	57.858	16.142

Table 4.5

Casewise Diagnostics (Continued)

Case Number	Std. Residual	T_JS	Predicted Value	Residual
30	2.117	52.00	38.916	13.084
50	-2.556	36.00	51.799	-15.799
80	-2.968	26.00	44.342	-18.342
84	2.163	66.00	52.632	13.368
147	2.690	58.00	41.374	16.626
154	-2.094	48.00	60.944	-12.94
176	-2.482	41.00	56.339	-15.339
197	7.796	100.00	51.815	48.185
200	3.988	74.00	49.352	24.648
203	-2.153	45.00	58.307	-13.307
211	2.283	57.00	42.892	14.108
217	2.081	59.00	46.141	12.859
270	-2.299	32.00	46.212	-14.212
314	2.373	55.00	40.331	14.669
418	-3.027	30.00	48.707	-18.707
420	-2.016	36.00	48.460	-12.460
427	2.245	63.00	49.124	13.876
431	-2.569	42.00	57.879	-15.879
439	-2.085	31.00	43.887	-12.887
441	2.202	67.00	53.388	13.612
444	2.032	75.00	62.441	12.559
445	3.465	79.00	57.587	21.413
446	2.272	60.00	45.957	14.043

Table 4.6

Case Summaries

Case Number	Mahalanobis Distance	Cook's Distance	Centered Leverage Value
16	8.08572	.00026	.01793
22	10.23829	.01003	.02270
34	10.23476	.00001	.02269
42	9.20198	.00466	.02040
77	9.33144	.00675	.02069
95	9.57747	.01385	.02124
113	8.63178	.00072	.01914
131	12.03424	.00015	.02668
175	7.98759	.00040	.01771
181	9.56423	.00357	.02121
215	12.85493	.00164	.02850
235	9.37017	.00013	.02078
240	8.64809	.00060	.01918
260	11.68086	.00002	.02590
288	10.57768	.00393	.02345
324	8.72268	.00075	.01934
343	9.21102	.00004	.02042
344	10.48836	.00002	.02326
366	10.56325	.00004	.02342
383	8.75601	.00316	.01941
394	8.39721	.00078	.01862
407	8.81624	.00386	.01955

4.4 Descriptive Statistics

Based on Table 4.7, the respondents' ages were between 25 and 55 years old, with a standard deviation (SD) of 8.02 and a mean (M) age of 39.51. There were 69% males and 31% females.

The racial composition reflected Malaysia's multiethnic society. The racial composition of the respondents was led by Malay (*n* = 161, 35.6%), followed by Chinese (*n* = 140, 31.0%), and Indian (*n* = 110, 24.3%), with a smaller proportion identified as others (*n* = 41, 9.1%).

Respondents came from all 13 states in Malaysia, with the highest representation from Johor (18.4%), and the lowest from Kedah (2.4%), who participated in our survey. Regarding the industry in which respondents worked, the most common sectors were Retail (14.4%), Engineering and Manufacturing (11.9%), followed by Agriculture and Healthcare industries (10.6%). This distribution highlights the diversity of industries represented.

In terms of job position and level, 38.5% of respondents held managerial positions, followed by 34.7% mid-level roles, 12.4% of respondents are senior roles, and 11.9% in entry-level positions.

All respondents were employed in full-time positions, as per the inclusion criteria. The majority of those who responded (46.5%) had four to seven years of work experience, whilst only 3.5% had less than a year.

Table 4.7

Descriptive Statistics of Respondents (n = 452)

	n	*%*	*M*	*SD*
Age			39.51	8.02
Gender				
Male	312	69.0		
Female	140	31.0		
Race				
Chinese	140	31.0		
Malay	161	35.6		

Table 4.7

Descriptive Statistics of Respondents (n = 452) (Continued)

	n	*%*	*M*	*SD*
Indian	110	24.3		
Others	41	9.1		
State in Malaysia				
Perlis	21	4.6		
Kedah	11	2.4		
Penang	42	9.3		
Perak	30	6.6		
Selangor	54	11.9		
Negeri Sembilan	29	6.4		
Malacca	33	7.3		
Johor	83	18.4		
Kelantan	24	5.3		
Terengganu	13	2.9		
Pahang	18	4.0		
Sabah	46	10.2		
Sarawak	48	10.7		
Industry Working in				
Healthcare	48	10.6		
Finance and Economics	36	8.0		
Education	43	9.5		
Engineering and Manufacturing	54	11.9		
Retail	65	14.4		
Information Technology	36	8.0		
Agriculture	48	10.6		
Food and Beverages (F&B)	43	9.5		
Entertainment	29	6.4		
Hospitality	41	9.1		

Table 4.7

Descriptive Statistics of Respondents (n = 452) (Continued)

	n	*%*	*M*	*SD*
Others	9	2.0		
Job Position and Level				
Entry-Level	54	11.9		
Mid-Level	157	34.7		
Managerial	174	38.5		
Senior Executive	56	12.4		
Others	11	2.4		
Current Employment Status				
Full time	452	100		
Years of Working Experience				
Less than 1 year	16	3.5		
1-3 years	61	13.5		
4-7 years	210	46.5		
8+ years and above	165	36.5		

Note. *n* = number of cases; *%* = percentage; *M* = mean; *SD* = standard deviation

Frequency Distribution of Variables

As shown in Table 4.8, the mean and standard deviation of each variable were: perceived social support (*M* = 36.37, *SD* = 5.49), within a possible range of 20 to 54, suggesting that respondents generally perceived a moderate to high level of support from family, friends, or significant others. Work stress had a mean score of 39.13 (SD = 6.07), with values ranging between 19 and 57, indicating that the respondents experienced a moderate degree of work-related stress. Work-life balance (*M* = 44.56, *SD* = 6.52), ranging from 25 to 64, which demonstrates that most respondents reported moderately favourable balance between their professional and personal lives, and job satisfaction (*M* = 49.63, *SD* = 9.52), yielded the highest variability, with a mean of 49.63 (SD = 9.52) and a range between 27 and

100. This finding implies that while many respondents expressed satisfactory levels of job fulfillment, there was also notable variability in responses, indicating that satisfaction levels may differ substantially across individuals.

Table 4.8

Descriptive Statistics of Variables (n=452)

Variables	*M*	*SD*	*Min*	*Max*
Perceived Social Support	36.37	5.49	20.00	54.00
Work Stress	39.13	6.07	19.00	57.00
Work-Life Balance	44.56	6.52	25.00	64.00
Job Satisfaction	49.63	9.52	27.00	100.00

Note. *n* = number of cases; *M* = mean, *SD* = standard deviation; *Min* = minimum value; *Max* = maximum value

4.5 Pearson Product-Moment Correlation (PPMC) Analysis

As shown in Table 4.9, it was employed to ascertain the direction and magnitude of the linear correlations between the dependent factor, job satisfaction, and the independent variables, which include work stress, perceived social support, and work-life balance. This statistical approach, developed by Karl Pearson, is widely used in behavioral and social science research to examine associations between continuous variables (Profillidis & Botzoris, 2018). The correlation analysis was conducted prior to regression analysis in order to test Hypotheses 1 through 3.

Cohen's (1988) guidelines were used to interpret the correlations' strength, with r =.10 being regarded as weak, r =.30 as moderate, and r =.50 as strong (Jari Metsämuuronen, 2022). While a negative r implies an inverse association between the two variables, a positive

r shows that when one variable rises, the other one rises as well (Jari Metsämuuronen, 2022). This step was crucial to establishing whether the independent variables were significantly related to job satisfaction before proceeding to the multiple regression analysis for Hypothesis 4.

H_1: There is a significant positive correlation between perceived social support and job satisfaction among working adults in Malaysia.

Perceived social support and job happiness among Malaysian working people are significantly positively correlated, according to Hypothesis 1 ($r = .446$, $p < .001$). This implies that workers who have more social support from their loved ones, friends, or significant others are more likely to be satisfied with their jobs. Practically, it means that organizations that foster supportive work environments, encourage peer collaboration, and acknowledge the role of family and community support systems may improve employee satisfaction levels. Given that the correlation coefficient is below the .50 threshold for a strong link, this indicates a moderate-strength relationship in accordance with Cohen's (1988) references (Jari Metsämuuronen, 2022).

H_2: There is a significant negative correlation between work stress and job satisfaction among working adults in Malaysia.

Given the significant negative relationship between work stress and job satisfaction among Malaysian working adults, the hypothesis was validated. The results supported this hypothesis, as job satisfaction and work stress were found to be substantially and negatively linked. ($r = –.292$, $p < .001$). This suggests that higher levels of stress at work are connected with decreased job satisfaction. Based on Cohen's (1988) guidelines, the correlation reflects a weak relationship, since the coefficient is below the .30 threshold for a moderate effect (Jari Metsämuuronen, 2022).

H_3: There is a significant positive correlation between work-life balance and job satisfaction among working adults in Malaysia.

Hypothesis 3 stated that there is a strong positive relationship between work-life balance and job satisfaction among working adults in Malaysia. The study demonstrated a substantial positive correlation (r =.507, p <.001) between work-life balance and job satisfaction, supporting the hypothesis. This indicates that employees who perceive a healthier balance between their work and personal lives also tend to report higher levels of job satisfaction. In addition, it suggests that positive experiences and resources gained in one domain (e.g., personal life) can improve functioning and satisfaction in another (e.g., work). It also resonates with prior research highlighting that employees who can manage their career responsibilities without sacrificing family, social, or personal commitments often exhibit higher morale and commitment to their organizations. According to Cohen's (1988) guidelines, the strength of this relationship is considered strong, as the correlation coefficient exceeds the .50 threshold (Jari Metsämuuronen, 2022).

Table 4.9

Pearson Correlation for Study Variables

		Perceived Social Support	Work Stress	Work-Life Balance
Job Satisfaction	*r*	.446**	-.292**	.507**
	p	.000	.000	.000

Note. *r* = correlation coefficient, *p* = p-value

**. *Correlation is significant at the 0.01 level (1-tailed).*

4.6 Multiple Linear Regression (MLR) Analysis

Multiple regression enables researchers to assess the total variability explained by independent variables while simultaneously determining each predictor's particular

contribution to the dependent variable's variance (Etemadi & Khashei, 2021). Prior to conducting the regression, all statistical assumptions were tested and met. All statistical assumptions were evaluated and met before proceeding with the regression. This includes normality, linearity, multicollinearity, homoscedasticity, residual independence, and the absence of prominent outliers. This ensured that the regression results were both reliable and valid. This ensured that the regression results would be both robust and valid.

The regression model was statistically significant, F (3, 448) = 207.029, p <.001 (see Table 4.10), showing that the factors associated with prediction explained a large percentage of the variance in work satisfaction. The model explained 57.8% of the variance in job satisfaction (see Table 4.11), which is deemed significant in behavioral and social science research. The effect size for the regression model was calculated using Cohen's (1988) formula, $f^2 = \frac{R^2}{1-R^2}$The result, $f^2 = \frac{0.581}{1-0.581} = 1.387$, suggests a large effect size, further confirming the strength of the predictive model.

These findings support hypothesis 4, which stated that perceived social support, work stress, and work-life balance significantly predict job satisfaction among working adults in Malaysia. The substantial proportion of variance explained shows that job satisfaction is molded by a combination of favourable factors (e.g., social support, work-life balance) and adverse factors (e.g., work tension).

Table 4.10

ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23723.315	3	7907.772	207.029	.000
	Residual	17111.983	448	38.196		
	Total	40835.299	451			

Table 4.11

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.762	.581	.578	6.18032

H_4: Perceived social support, work stress, and work-life balance significantly predict job satisfaction among working adults in Malaysia.

Hypothesis 4 proposed that perceived social support, work stress, and work-life balance would significantly predict job satisfaction among working adults in Malaysia. The hypothesis has been validated, as all three predictors were found to significantly contribute to job satisfaction (see Table 4.12).

Specifically, perceived social support positively predicted job satisfaction ($\beta = .440$, $p < .001$), indicating that employees who receive higher levels of support from family, friends, or significant others tend to report greater satisfaction in their jobs. This underscores the value of social resources as protective factors that enhance employees' psychological well-being and work attitudes.

Work stress, in contrast, was a significant negative predictor of job satisfaction ($\beta = –.476$, $p < .001$). This suggests that employees experiencing greater levels of stress at work are less satisfied with their jobs, highlighting the detrimental role of excessive demands and pressures in reducing employees' work-related well-being.

Work-life balance emerged as the strongest predictor of job satisfaction ($\beta = .485$, $p < .001$). This finding indicates that employees who are able to maintain a healthy balance

between their work responsibilities and personal lives are more likely to feel satisfied with their jobs. In the Malaysian context, where cultural and societal expectations emphasize both career advancement and family obligations, this result suggests that balance across domains is a particularly powerful driver of satisfaction.

Taken together, these findings highlight that job satisfaction among Malaysian working adults is shaped by a combination of social support, stress levels, and the ability to balance work with personal life. While social support and work-life balance enhance satisfaction, work stress diminishes it. Among these, work-life balance exerts the greatest influence, followed closely by work stress and perceived social support. This confirms that a comprehensive approach to improving job satisfaction must involve not only reducing stressors but also strengthening social support systems and implementing organizational policies that enable employees to improve the balance between career and private realms.

Table 4.12

Coefficient Table

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
Perceived Social Support	.762	.056	.440	13.702	.000
Work Stress	-.746	.050	-.476	-15.032	.000
Work-Life Balance	.708	.046	.485	15.292	.000

Based on the coefficient value (β) in Table 4.12:

H_0 (Null): Perceived social support, work stress, and work–life balance do not significantly predict job satisfaction.

H_1 (Alternative): Perceived social support, work stress, and work–life balance significantly predict job satisfaction.

The results of the multiple linear regression analysis indicate that all three predictors, perceived social support, work stress, and work–life balance, significantly contribute to job satisfaction among working adults in Malaysia. Specifically, perceived social support ($\beta = 0.762$, $p < 0.001$) was found to have a positive and significant effect on job satisfaction, suggesting that employees who perceive greater support from their social environment tend to experience higher levels of satisfaction at work. Conversely, work stress ($\beta = –0.746$, $p < 0.001$) emerged as a negative and significant predictor, indicating that increases in stress levels substantially reduce employees' job satisfaction. In addition, work–life balance ($\beta = 0.708$, $p < 0.001$) also showed a positive and significant relationship with job satisfaction, demonstrating that employees who are better able to balance work and personal life report higher satisfaction in their jobs. Collectively, the model explained 58.1% of the variance in job satisfaction ($R^2 = .581$, $F(3,448) = 207.03$, $p < 0.001$), which reflects a strong explanatory power. Based on these findings, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is supported, confirming that perceived social support, work stress, and work–life balance are significant predictors of job satisfaction.

Chapter 5

Discussion

5.1 Discussion of findings

Hypothesis 1: There is a significant positive correlation between perceived social support and job satisfaction among working adults in Malaysia.

The findings of the present study revealed a significant and positive relationship between perceived social support and job satisfaction among working adults in Malaysia, supporting Hypothesis 1. Employees who perceive that they receive higher levels of support from their families, friends, and significant others tend to report greater job satisfaction. Perceived social support refers not only to the actual presence of assistance but to an individual's belief and confidence that social relationships and personal supports are available and accessible when needed (Alsakarneh et al., 2023). These supports include both emotional dimensions, such as feeling appreciated, respected, and cared for, and instrumental dimensions, such as practical help or advice in times of difficulty.

This positive relationship can be explained through Social Support Theory (SST), which emphasizes the functional role of social relationships in promoting well-being and mitigating stress (Cohen & Wills, 1985). SST posits that support functions in two primary ways: (1) direct effects, where supportive relationships enhance psychological well-being regardless of stress levels, and (2) stress-buffering effects, where support protects individuals from the harmful consequences of stress. In the workplace context, both pathways are critical for job satisfaction. Employees who feel emotionally supported experience a stronger sense of belonging, self-worth, and security, while those who receive instrumental support (e.g., advice, help with workloads, or shared household responsibilities) can manage role demands

more effectively. Together, these functions reduce strain and create conditions where employees feel more satisfied with their jobs.

The Malaysian collectivist cultural context makes the theory particularly relevant. In collectivist societies, individuals' sense of self is deeply embedded in their social networks, and the role of family and community support is seen as central to personal and professional life (Mahmud et al., 2020). For instance, when family members share household responsibilities or provide encouragement during stressful work periods, employees experience reduced strain. For example, in extended family households, which are common in Malaysia as family members may share caregiving responsibilities or household tasks during peak work periods. Such support reduces one's people's struggle and allows employees to sustain energy and focus on work, thereby increasing job satisfaction. Friends and significant others who encourage, provide career advice, or offer stress-relief strategies also function as buffers, reinforcing resilience and positivity in the workplace.

Importantly, SST also clarifies that the type and quality of support matter. Emotional support (e.g., empathy, care, reassurance) contributes to a sense of belonging and mental security, while instrumental support (e.g., practical assistance, information sharing) directly alleviates task-related burdens. Informational and appraisal support, such as career advice or constructive feedback, may further increase employees' sense of competence and control, which are important drivers of job satisfaction. However, excessive or mismatched support can be counterproductive—intrusive assistance may undermine autonomy or create dependency, thereby reducing satisfaction (Ibrahim et al., 2019; Duan et al., 2019; Özmete & Pak, 2020).

Nevertheless, SST also cautions that the quality of exchanges matters. Not all forms of support enhance satisfaction. Support that is excessive, poorly timed, or intrusive may

unintentionally undermine autonomy, create dependency, or generate feelings of imbalance in the exchange, thereby reducing satisfaction (Ibrahim et al., 2019; Duan et al., 2019; Özmete & Pak, 2020). In addition, the present study focused on perceived rather than actual support, which means that outcomes are influenced by subjective interpretations of employees' social relationships. Personality traits, mood states, and cognitive biases may shape whether individuals interpret support as adequate or inadequate, further influencing the strength of the exchange process.

Taken together, the findings highlight the central role of perceived social support in shaping job satisfaction through the mechanisms outlined by SST. By framing support as a reciprocal exchange of care and resources, it becomes clear why supportive environments generate loyalty, commitment, and satisfaction. For organizations, this underscores the value of fostering team-based collaboration, collegial trust, and supervisory support systems that mirror the dynamics of reciprocal exchanges found in personal relationships. For individuals, maintaining close ties with family and friends provides the personal supports that underpin resilience and well-being in the workplace. Ultimately, social support—when perceived as genuine and balanced—creates ongoing cycles of exchange that contribute significantly to employees' job satisfaction in the Malaysian context.

Hypothesis 2: There is a significant negative correlation between work stress and job satisfaction among working adults in Malaysia.

According to Hypothesis 2, there is a significant negative relationship between job satisfaction and work stress among Malaysian working adults. This result indicates that as employees experience greater stress in their roles, their overall satisfaction with work tends to decline. This phenomenon reflects the day-to-day realities of Malaysian workplaces, where employees in demanding sectors such as healthcare, education, and technology often face

long hours, heavy workloads, and pressure to meet organizational targets (Fadillah Binti Ismail & Nesreen Ibrahim Owaida, 2023). These conditions create strain that not only drains physical and emotional resources but also diminishes employees' sense of fulfillment and motivation. While this outcome may appear intuitive, its importance lies in confirming that stress is a meaningful determinant of job satisfaction within the Malaysian context. However, those scenarios shown above can be explained by established theoretical models and prior evidence.

This relationship can be explained by the Job Demands–Resources (JD-R) model, which proposes that stress arises when job demands (e.g., workload, role ambiguity, emotional labor) exceed available resources (e.g., autonomy, support, training). When employees face high demands without adequate resources, their energy is depleted, engagement declines, and job satisfaction is reduced (Bakker & Demerouti, 2017). Conversely, if sufficient resources are present, the negative impact of demands on satisfaction can be buffered. This framework clarifies why stress erodes satisfaction but also why the relationship observed in this study was relatively weak, while other factors, such as supportive leadership, positive organizational culture, and personal coping strategies, may mitigate or amplify the extent to which stress reduces satisfaction.

The stress–satisfaction dynamic can be better understood by examining the range of stressors employees face in the workplace. Role-related stressors are particularly prominent among managers and mid-level staff. Role overload, where individuals are assigned excessive tasks or unrealistic deadlines, often triggers feelings of inadequacy and lowers self-efficacy, which in turn undermines job satisfaction (Rasool et al., 2024). Similarly, role ambiguity, characterized by unclear responsibilities, reporting lines, or performance expectations which creates uncertainty that fuels anxiety and disengagement (Lee et al., 2023). Role conflict further exacerbates dissatisfaction when employees must manage

conflicting demands, such as cutting costs while simultaneously improving service quality (Benitez et al., 2021). These challenges are especially common in high-paced industries, where managers are caught between meeting top management's expectations and addressing subordinates' needs, leaving them in a "sandwiched" position.

Emotional labour and technological change present additional challenges to employee well-being. In managerial and customer-facing roles, employees are often required to regulate emotions by remaining calm in conflict or consistently projecting optimism, which, over time, can lead to emotional exhaustion and dissonance (Pan et al., 2022). They are often required to regulate their emotions to meet organizational or client expectations, such as remaining calm when facing customer complaints or maintaining a consistently cheerful and optimistic demeanour even when under personal or workplace stress. This constant need to "surface act" displays emotions that do not match their true feelings, which creates an internal conflict known as emotional dissonance. Over time, this mismatch drains psychological resources, causing emotional exhaustion and reducing overall job satisfaction (Abgeller et al., 2022). This challenge is especially pronounced in Malaysian SMEs and service-based industries such as retail, F&B, and call centers, where frontline staff interact directly with customers on a daily basis. Cultural expectations of politeness and respect may further pressure employees to suppress genuine emotions, amplifying the burden of emotional labor. When sustained, these stressors not only undermine employee well-being but also negatively affect organizational performance through higher turnover, burnout, and reduced customer service quality.

Beyond emotional demands, rapid digital transformation, frequent system upgrades, and shifting organizational processes can generate "technostress" when employees lack adequate training or support. This burden is particularly pronounced among senior employees, who may struggle to adapt to new technologies as quickly as their younger

counterparts. In small and medium-sized enterprises (SMEs), where resources for comprehensive training and change management are often limited, such adaptation difficulties amplify stress, erode employees' sense of competence and control, and ultimately reduce job satisfaction (Camarena & Fusi, 2021). Finally, the stress–satisfaction link is not uniform, where it varies across both career stages and cultural settings. Mid-career employees, particularly those in managerial roles, often face heightened stress due to simultaneous pressures of career advancement, organizational accountability, and family responsibilities (Baker & Caroline, 2021). Early-career employees may tolerate stress as part of learning and growth, while late-career employees may prioritize stability and security over advancement, framing stress differently in relation to satisfaction (Spina et al., 2022). Cross-cultural research also shows variation, especially that collectivist cultures with stronger social networks may buffer the negative effects of stress, as seen in studies from Singapore and Hong Kong (Brailovskaia et al., 2021). This shared coping mechanism reduces the intensity of perceived stress and prevents it from translating as strongly into job dissatisfaction. In contrast, in more individualistic cultures, where people tend to rely primarily on themselves to manage stress, high job demands are more likely to result in feelings of isolation, exhaustion, and reduced satisfaction. These differences suggest that the stress–satisfaction relationship is not universal but shaped by the broader cultural environment in which employees work.

Hypothesis 3: There is a significant positive correlation between work-life balance and job satisfaction among working adults in Malaysia.

The study's findings supported Hypothesis 3 by showing a strong positive correlation between work–life balance (WLB) and job satisfaction. Employees with higher levels of WLB reported greater satisfaction with their jobs, underscoring that WLB is not a secondary factor but a central determinant of workplace well-being. This relationship was particularly

salient among employees with four to seven years of work experience in mid- to managerial-level roles, who face a unique combination of organizational demands and personal responsibilities. At this career stage, individuals often experience "career stage tension," in which they must pursue professional advancement while simultaneously managing increasing family, financial, or caregiving responsibilities (Muleya et al., 2022). Unlike early-career employees who are still exploring their professional identities or late-career employees who may prioritize stability, mid-level managers encounter heightened expectations for leadership and performance, making the achievement of WLB essential for sustaining job satisfaction (Hardy et al., 2021).

From a Social Exchange Theory (SET) perspective, this association reflects reciprocity in the employment relationship. When organizations provide supportive policies such as flexible scheduling, autonomy, or family-friendly initiatives, employees perceive fairness and organizational care. In return, they reciprocate with positive attitudes, including greater job satisfaction (Cropanzano et al., 2017). Conversely, when WLB support is absent, employees may feel exploited or undervalued, which undermines satisfaction. This challenge is particularly salient for women, who often carry a disproportionate share of caregiving responsibilities at home while simultaneously meeting organizational demands. Research consistently shows that women are more likely than men to exit the workforce or retire earlier, even when their job performance is above average, due to the dual pressure of career and family responsibilities (Osei Boakye et al., 2021). These findings highlight the compounded barriers women face in sustaining long-term career satisfaction and advancement, reinforcing the importance of organizational support for gender-sensitive work-life balance policies. Compared to men, women are more likely to encounter the "second shift" phenomenon, where, after completing their paid work, they continue to shoulder unpaid domestic and caregiving labor (H. S. & Syed, 2024). These overlapping demands

create heightened role conflict, which places women at a greater risk of burnout and diminished job satisfaction. This trend is often described as the “motherhood penalty,” where women’s career trajectories are negatively affected by family responsibilities, in contrast to the “fatherhood bonus” that men may experience when their caregiving roles are socially rewarded rather than penalized (Deming, 2022).

The influence of work–life balance on job satisfaction is not uniform across all contexts but is significantly shaped by industry culture and organizational norms. In highly demanding sectors such as technology, consulting, and finance, employees often face extended working hours, constant connectivity, and heavy workloads, which create structural barriers to achieving balance between work and personal life (Wang & Wang, 2021). Although employees in these industries may gain professional development, financial rewards, or prestige, the persistent strain of long hours and blurred boundaries tends to erode overall job happiness. In contrast, industries or organizations that cultivate a culture of autonomy, flexibility, and respect for individual boundaries are more likely to amplify the positive effects of WLB on job satisfaction. When employees perceive that they have the freedom to manage their time, the ability to work remotely, or policies that accommodate family and personal needs, their sense of control and well-being increases, leading to higher satisfaction levels. Empirical evidence confirms this, as Yu et al. (2022) found that supportive organizational policies—such as flexible scheduling and autonomy-enhancing practices—enable employees to more effectively manage competing demands, thereby translating WLB into tangible gains in job satisfaction. This highlights the importance of contextual factors, suggesting that WLB is not a universal predictor of happiness, but one whose impact depends on the cultural and structural conditions within which employees operate.

Technological advancements give rise to an additional aspect of WLB in the contemporary workplace. The distinction between work and personal life has become hazier

due to the spread of digital communication tools and remote work, which has been hastened by the COVID-19 epidemic (Vyas, 2022). Particularly, workers who may feel demotivated and are vulnerable to "always-on" expectations are mid-level managers, whose emails, phone conversations, and virtual meetings frequently take place well after official business hours. Although working remotely offers flexibility, it can also exacerbate role blurring, making it harder for staff members to set limits. As they maintain control over the resources and projects, as work demands intrude into their personal life, employees who are successful in creating digital boundaries report better levels of satisfaction, according to research by Bisht et al. (2021).

In conclusion, work–life balance plays a critical role in shaping employee well-being and job satisfaction by acting as both a resource and a relational mechanism. Through the lens of the JD-R model, WLB serves as a buffer against excessive job demands, helping employees conserve energy and reduce stress. The multifaceted nature of job happiness, which cannot be adequately described by elements like pay or professional development, is crucially shown by this link. Rather, an employee's overall perception of their work in relation to their lives is what leads to their level of pleasure. Ultimately, WLB emerges as a decisive factor that connects organizational practices with employee happiness, underscoring its importance as both a well-being strategy and a driver of sustainable organizational performance.

Hypothesis 4: Perceived social support, work stress, and work-life balance significantly predict job satisfaction among working adults in Malaysia.

According to the fourth hypothesis, job satisfaction among working adults is predicted by a combination of work-life balance, work stress, and perceived social support. This hypothesis was supported by the research findings, which showed that all three variables

taken together contribute to the variation in job satisfaction. In practical terms, this means that while both increasing resources (WLB and PSS) and decreasing demands (WS) are crucial, strengthening work-life balance may result in the biggest incremental rises in satisfaction, while social support and stress reduction remain important complementary strategies. This finding is in line with the Job Demands-Resources (JD-R) model, which highlights how job resources, such as social support, can mitigate the negative effects of job demands and directly lead to better work outcomes and satisfaction (Tummers & Bakker, 2021; Koroglu & Ozmen, 2021; Radic et al., 2020). Employees suffer from stress and frustration when demands exceed available resources; conversely, when resources are plentiful, employees grow greater resilience and feel fulfilled with their jobs. These findings are consistent with prior research showing that employees with higher work-life balance report greater job satisfaction (Buonomo et al., 2024) and that social support plays a positive role in buffering workplace challenges (Gillman et al., 2023).

The multidimensionality of job satisfaction is revealed by the correlation between these three predicted variables. For example, interpersonal resources are found in social support, work-life balance preserves balance between the personal and professional domains, and manageable work stress shields employees from burnout. Together, these components suggest that environmental and personal resources both affect job satisfaction and provide insight into how employees perceive their job experiences. This perspective is also supported by Malaysian studies, which highlight that flexibility and family-oriented values are central to sustaining employee well-being in local workplaces (Hassan et al., 2020). At the same time, high-demand jobs in Malaysia, such as teachers, doctors, and bankers, face excessive job demands and long working hours, which contribute to dissatisfaction and burnout (Anis & Ali, 2023).

Additionally, the predictive role of these factors highlights their complementary functions. For instance, appropriate social support along with beneficial work-life balance techniques may mitigate the detrimental effects of stress, preserving job satisfaction even in the face of an elevated level of work-related stress. On the other hand, if a certain factor is absent, such as a poor work-life balance, even massive social support might not be sufficient to completely counteract the impacts of stress (Marques & Berry, 2021). Along with this, the Work-Family Border Theory explains the significance of work-life balance. According to this theory, individuals alternate roles and resources between their personal and professional lives on a regular basis. If appropriate boundary management is lacking, conflicts arise, thereby lowering satisfaction (Özdemir, 2023; Llanos et al., 2025). From a theoretical standpoint, this can also be interpreted through Herzberg's Two-Factor Theory: social support and work-life balance act as motivators that enhance intrinsic satisfaction by contributing to recognition, belonging, autonomy, and fulfillment, while work stress functions as a hygiene factor, where excessive stress undermines comfort and morale, leading to dissatisfaction (Galanakis & Peramatzis, 2022; Rai et al., 2021).

This hypothesis closely relates to the research question. As previously stated, working adults in Malaysia frequently suffer from elevated amounts of work stress and struggle with sustaining a work-life balance, which negatively impacts their job satisfaction (Hays Asia, 2020). The findings highlight the importance of organisational strategies that acknowledge resources can interact and compensate for demands (i.e., simultaneously promoting social support and reducing overbearing stress) to promote a healthier work-life balance. Perceived social support also emerged as particularly meaningful in Malaysia's collectivist work culture, where supportive supervisors and colleagues play a pivotal role in shaping positive workplace outcomes (Andersen et al., 2025). In the end, the findings support the idea that job

satisfaction is the outcome of multiple interrelated factors functioning together rather than being explained by a single, independent factor.

5.2 Implications

Theoretical Implications

There are some important theoretical implications for this study. To begin with, Hypothesis 1 confirmed that job satisfaction is positively influenced by perceived social support. This provides strong support for Social Support Theory, which emphasizes that individuals who perceive themselves as supported by their supervisors, colleagues, or family are better equipped to cope with challenges and maintain well-being at work (Kong et al., 2021).

This study's findings add nuance to Social Support Theory by situating it within the career trajectory of Malaysian workers. While the theory broadly argues that perceived support enhances well-being and job satisfaction, our results suggest that the type and salience of support shift with work experience. For employees, support is not limited to emotional reassurance but extends to instrumental and professional resources, such as mentoring, recognition, and collaborative peer networks. This implies that Social Support Theory may need to account for career stage differentiation, where the impact of perceived support is partly shaped by evolving job demands and responsibilities. Additionally, the collectivist orientation of Malaysian culture strengthens the explanatory power of the theory. In such cultural settings, support is not only a personal resource but also a socially embedded mechanism that reinforces loyalty, group cohesion, and long-term organizational commitment. Thus, our findings suggest that Social Support Theory should be viewed through a cultural-career lens, where both cultural values (collectivism, family orientation) and career stage will interact to shape the role of perceived support in job satisfaction.

Second, Hypothesis 2 demonstrated a significant negative relationship between work stress and job satisfaction, which aligns with the Job Demands-Resources (JD-R) model. Importantly, this study extends the JD-R framework by applying it to mid-career Malaysian managerial employees, a group often positioned between senior executives and junior staff. For these individuals, stress arises not only from workload and time pressure but also from role conflict, balancing supervisory responsibilities with personal career growth, and navigating hierarchical expectations (Nuri Herachwati et al., 2024). These findings imply that the JD-R model should explicitly consider career stage dynamics, where the configuration of demands and resources differs across employees' professional trajectories. In particular, for workers who face different stressors and difficulties in terms of experience, psychological demands such as decision-making responsibility and people involved in management appear to be as salient as traditional job demands like workload. By highlighting these dimensions, this study suggests that the JD-R framework can be enriched to account for context-specific stressors shaped by both cultural norms (e.g., collectivist obligations, deference to authority) and career progression. Thus, our results not only confirm the model's predictions but also point to the need for a more granular, culturally contextualized application of JD-R in managerial work settings.

Third, Hypothesis 3 showed that work-life balance is positively associated with job satisfaction. This finding supports Social Exchange Theory, which suggests that when organizations provide flexibility and allow employees to balance personal and professional roles, employees reciprocate with loyalty and improved attitudes toward work (Ahmad et al., 2023). Beyond validating SET, this study contributes theoretically by illustrating that work-life balance functions as a key "relational currency" in the exchange process, particularly in contexts where employees experience dual pressures of advancing in their careers and meeting family or societal obligations (Thomas & Gupta, 2021). In the Malaysian managerial

workforce, employees often face extended working hours, collectivist family expectations, and hierarchical workplace norms, making work-life balance more than just a “perk”, while it becomes a core resource in sustaining reciprocal exchanges. This suggests that SET, while broadly applicable, may undervalue the importance of cultural and role-based nuances in shaping the exchange relationship. Our findings therefore extend SET by demonstrating that in collectivist and high-demand managerial contexts, the provision of balance is interpreted not merely as organizational generosity, but as a signal of trust and respect, which strengthens the psychological contract and drives satisfaction.

Finally, Hypothesis 4 confirmed that perceived social support, work stress, and work-life balance together significantly predict job satisfaction. This broader finding can be understood through Herzberg’s Two-Factor Theory, which distinguishes between motivators (e.g., social support, autonomy, work-life balance) and hygiene factors (e.g., job stress, working conditions) (Miah & Hasan, 2022). According to this theory, the presence of motivators enhances job satisfaction, while the absence of hygiene factors prevents dissatisfaction (Thant & Chang, 2020). The results of this study reaffirm that job satisfaction is multidimensional and influenced by a combination of supportive resources and stress-related constraints, thereby expanding the application of Herzberg’s framework in the Malaysian context. Importantly, this study extends Herzberg’s framework into the Malaysian managerial context, where the boundaries between motivators and hygiene factors may blur. For instance, social support not only serves as a motivator but may also buffer against the negative impact of stress, suggesting a cross-functional role beyond Herzberg’s original categorization. Similarly, work-life balance reflects not just individual well-being but also cultural expectations tied to family and collectivist norms, elevating its importance as a motivator in this context. These nuances highlight that Herzberg’s model, while still robust,

may require contextual adaptation to fully capture how job satisfaction operates in non-Western, high-demand work environments.

Practical Implications

This study addresses a notable gap in local research by providing empirical evidence on the relationships between work stress, work-life balance, perceived social support, and job satisfaction within the Malaysian workforce. In the context of the Malaysian sociocultural and economic setting, collectivist beliefs, traditional workplace expectations, and rapid modernisation processes are all intertwined. The study's implications are both organisational and socially significant, and organisations, policymakers, and employees can all benefit from this.

The significant positive correlation between job satisfaction and social support suggests that social support systems ought to be emphasised and actively improved by organisations. To put this into practice, organisations could set up peer support groups, team-building events, and mentoring programs to help employees feel less isolated and more like valued members of their organisation. In order to give employees the impression that their efforts are appreciated, managers ought to undergo training on how to give prompt feedback while acknowledging them. Especially in emotionally taxing industries such as healthcare and education, managerial support can greatly increase employees' sense of affiliation and trust, which in turn boosts satisfaction and lowers turnover. For example, in Japan, the *senpai–kohai* mentorship model fosters career development and social integration in companies (Sekiguchi & Ikeda, 2025), while in the United States, firms such as Google have implemented structured peer-support initiatives like *gPause* to promote employee well-being and connectedness (Mittal et al., 2024). This programme and structure has reported a positive 20% increase in employee wellbeing and job satisfaction, largely through stress reduction and

stronger peer bonds. This echoes the present study's finding that work stress undermines job satisfaction, while supportive social mechanisms enhance it. When compared to Malaysia, these global cases suggest both similarities and cultural nuances. Like Japan, Malaysia emphasizes interpersonal support networks in organizations, where supervisors and colleagues play a crucial role in enhancing employee morale. However, the US example underscores the role of structured wellness and peer-support initiatives in reducing stress, something that is only beginning to gain traction in Malaysian firms. This indicates that Malaysian organizations may benefit from adopting hybrid approaches: reinforcing cultural strengths in social support while also experimenting with structured programs to manage stress and promote work-life balance.

Second, the negative correlation between work stress and job satisfaction underlines the need for stress management at both organisational and policy levels. Employers should minimise role ambiguity and conflict by clarifying responsibilities, setting achievable performance targets, and creating clear reporting structures. At the national level, SOCSO could play a stronger role by supporting prevention programs and offering incentives to organisations that adopt systematic stress management strategies. Global examples demonstrate the value of such approaches. In Finland, the government co-finances workplace stress-prevention initiatives through the Finnish Institute of Occupational Health (Arkoudea, 2024), while in the UK, the Health and Safety Executive (HSE) has developed a national "Management Standards" framework that guides organisations in identifying and reducing work-related stress (Ageel & Shbeer, 2022). If Malaysia were to adopt similar measures, organisations could reduce burnout, increase motivation, and promote a healthier workplace culture.

Finally, the strong link between work–life balance and job satisfaction calls for flexible workplace practices to be more widely implemented in Malaysia. Organisations

could introduce reduced workweeks, flexible schedules, or hybrid arrangements, which are particularly beneficial for women and mid-level employees who often carry heavier caregiving responsibilities. International models offer practical inspiration. In Sweden, a six-hour workday pilot reduced stress and boosted productivity among healthcare workers (Oliveira et al., 2025). In Germany, legislation on the "right to disconnect" limits after-hours communication and has been shown to reduce work–family conflict (Reilly, 2025). Similarly, Singapore's Tripartite Standard promotes flexible work arrangements, with evidence that companies adopting these practices experience higher retention and employee satisfaction (Amirul et al., 2023). These examples illustrate how proactive national and organisational policies can transform work–life balance from an optional benefit into a fundamental right. For Malaysia, similar initiatives could lead to higher retention and engagement, reduced burnout, and broader societal benefits such as stronger family wellbeing and community resilience.

Taken together, these implications show that enhancing social support, managing workplace stress, and improving work–life balance are not only theoretically important but also practically feasible, as demonstrated in other countries. By adapting such strategies to Malaysia's unique sociocultural context, organisations and policymakers can create a more sustainable, supportive, and productive workforce.

5.3 Limitations

This study has different constraints that should be considered. First, the cross-sectional design used in this study limited causal inferences because exposure and outcome were measured at the same time point; the data can establish associations but not cause and effect (Grujičić & Nikolić, 2021). Cross-sectional studies are also prone to reverse causation (Besser et al., 2021). For example, higher job satisfaction might lead to a higher perceived

social support rather than the other way round, and the direction of relationships cannot be confirmed. In addition, measuring all variables at a single point captures respondents' states only at that moment and does not account for short-term fluctuations caused by events or temporary circumstances. As a result, some observed associations may reflect temporary conditions tied to the survey moment rather than stable relationships among perceived social support, work stress, work–life balance, and job satisfaction.

Second, the use of non-probability sampling methods reduces the generalisability of the results and increases the possibility of selection bias (Shukla, 2023; Stratton, 2023). These methods often show systematic differences from the target population in terms of critical factors, require statistical adjustments to ensure representativeness. For example, non-probability recruitment may produce demographic imbalances. In the present study, the sample is skewed (69% male, 38.5% managerial, Johor = 18.4%, retail = 14.4%), which can bias estimates of perceived social support, work stress, work–life balance, and job satisfaction. Managers and workers in certain industries often face different stressors, have different levels of autonomy, and report different satisfaction levels, while network-based recruitment can also cluster similar respondents. Consequently, some observed relationships may reflect the sample makeup rather than true population effects (Khan, 2020).

Third, respondent burden is a practical limitation. The long questionnaire (60 items) will increase completion time and induce respondent fatigue or satisficing (answering carelessly to finish quickly), especially among time-pressed full-time workers. According to Sharma (2022), a good questionnaire should have 25 to 30 questions and be able to be completed in 30 minutes or less to maintain the participants' interest and attention. Empirical studies and reviews show that long instruments increase dropout, reduce data quality, and raise the chance of speeded responses; shortening instruments or building validated short-

forms can materially improve completion rates and response quality (Rolstad et al., 2011; Sharma, 2022).

Fourth, the potential of response bias cannot be overlooked. Response bias occurs when participants give incorrect or distorted answers for various reasons (Elston, 2021), and it can introduce common-method variance (CMV) and social-desirability effects. CMV is a systematic error resulting from a common method used to measure the constructs of the study (Kock et al., 2021). For example, common method bias may occur when both independent and dependent variables are collected in a single survey using the same Likert scale. This can inflate or deflate observed relationships as respondents may under-report stress (attenuating H2) or overstate perceived social support and balance. For social desirability effects, it tends to present when individuals are more likely to reply in a way that is socially acceptable or favorable than to provide honest or correct answers (Dodou & De Winter, 2014). Together, these biases undermine construct validity and make it difficult to know whether correlations reflect true psychological relationships or measurement biases.

5.4 Recommendations

To address the limitations above, several practical recommendations are proposed. Instead of employing a cross-sectional study, a longitudinal study can be utilized to collect data by making observations over a longer period (Sheppard, 2020). For example, a panel study allowed the researchers to repeatedly observe or survey the same people over a period and get a powerful result. This could track employees over time to determine whether changes in work stress levels directly lead to changes in job satisfaction, or whether improved work-life balance consistently predicts higher satisfaction. According to Arkhangelsky and Imbens (2023), adding time separation supports the claims about whether one construct precedes another. Hence, adopting a longitudinal design in the present study could provide

stronger evidence on how work stress, perceived social support, and work-life balance influence job satisfaction over time.

Furthermore, the researchers generally preferred the probability sampling methods to the non-probability sampling methods as they follow basic statistical principles and are typically used when generalization is intended (Ahmed, 2024). For example, stratified sampling could be applied in this study by dividing working adults into relevant strata such as age groups, industry sectors, or employment levels, and then drawing a proportional number of participants from each stratum to ensure balanced representation. Within each stratum, simple random sampling can then be used to select respondents, thereby reducing selection bias and improving the generalizability of the findings. Therefore, using probability sampling methods can increase the representativeness of the full-time working adults in Malaysia.

In addition to reducing respondent burden and improving data quality, the questionnaire is recommended to be shortened to ensure that the survey can be completed in a shorter time by working adults. Research showed that shorter surveys can achieve significantly higher completion rates. In one study, a long 72-item survey had only a 37% completion rate, whereas the shorter versions achieved 54 to 63% completion without sacrificing reliability (Kost & Da Rosa, 2018). Another survey from Sahlqvist et al. (2011) found that recipients of a shorter questionnaire were about 50% more likely to respond than those who received a long version, and item non-response was lower on shorter forms. Online survey studies also suggest surveys longer than 10 to 15 minutes lead to fatigue and higher dropout rates, while the ideal survey length often falls between 10 and 15 minutes (Wang & Cheng, 2020). In light of this, implementing a shorter questionnaire in the present study could encourage higher participation rates among working adults and yield more complete and reliable data.

To reduce response bias and CMV, a mixed-method approach, integrating quantitative and qualitative interviews or observations, can be used. This approach enables the researchers to acquire a more comprehensive understanding of a research topic by leveraging the strengths of both methods (McLeod, 2024). Practically, the researchers can administer the main questionnaire to a large sample, like the present study, and then add on to conduct interviews with a purposive subsample to investigate how respondents interpret items about social support, work stress, and work-life balance. The interview data can help detect misinterpretation, social desirability pressures, and context-specific meanings that may distort survey responses (Willis, 2015). Dawadi et al. (2021) explained that mixed-method designs enhance understanding by integrating findings from both quantitative and qualitative data to strengthen the validity and reliability of research conclusions. Incorporating this strategy would allow the present study to capture richer, contextually grounded insights into the experiences of Malaysian working adults, complementing and extending the quantitative results.

5.5 Future Direction

Future research can extend the current study in several meaningful ways. First, industry-specific investigations may provide deeper insights into the dynamics between perceived social support, work stress, work–life balance, and job satisfaction. Different sectors in Malaysia, such as healthcare, education, and retail, experience unique stressors and organizational cultures, which may shape the availability and effectiveness of social support as well as perceptions of balance between work and personal life. For example, in the palm-oil sector, job stress has been shown to affect organizational commitment and job satisfaction in context-specific ways (Noor et al., 2024), suggesting that industry-specific research can yield more actionable insight. Thus, future research could improve external validity and practical relevance by examining these predictors within specific industries.

Second, cultural and ethnic diversity in Malaysia suggests the need for cross-cultural measurement invariance testing. Constructs such as "support," "stress," and "balance" may not carry identical meanings across different ethnic or language groups. For example, collectivist cultural orientations may emphasize family or community-based support differently than individualist perspectives (Lacko et al., 2022). Establishing measurement invariance would ensure that observed differences in job satisfaction truly reflect variations in the constructs rather than artifacts of cultural interpretation. This step is critical for producing findings that are both valid and generalizable across Malaysia's multiethnic workforce.

Lastly, while the present study focused on psychosocial predictors (social support, stress, work–life balance), future studies should consider integrating extrinsic factors such as salary, incentives, and job security. Randstad Malaysia (2024) highlighted that salary remains one of the top priorities for Malaysian employees, alongside work–life balance. Although intrinsic factors like support and motivation strongly influence job satisfaction, extrinsic rewards continue to play a decisive role in why individuals remain in or leave their jobs (Jalil et al., 2023; Judge et al., 2010). Incorporating both intrinsic and extrinsic predictors would provide a more holistic understanding of job satisfaction among Malaysian working adults.

5.6 Conclusion

This study aims to explore the predictive role of perceived social support, work stress, and work-life balance on job satisfaction among working adults in Malaysia. According to the results, all four hypotheses are validated, showing that job satisfaction is significantly impacted by these predictors. In particular, work-life balance and perceived social support have a significant positive correlation with job satisfaction, while work stress is significantly negatively correlated with job satisfaction. Furthermore, regression analysis further reveals

that the three variables can jointly predict job satisfaction, with work-life balance having the strongest predictive effect. Overall, this study successfully validates the proposed hypotheses.

The findings are mostly in accordance with previous studies and theoretical frameworks. The Social Exchange Theory, which highlights the importance of mutual support in interpersonal and organizational relationships, adheres to the positive correlation between job satisfaction and perceived social support. As for the Job Demands-Resources (JD-R) model, which holds that an excessive workload drains individual resources, hence lowering satisfaction, is supported by the negative effect of work stress on job satisfaction. Additionally, the Work-Family Border Theory and other theories that highlight the significance of coordination across life domains have been strengthened by the strong predictive effect that work-life balance has on job satisfaction. As a result, this study emphasises how important it is that increase job satisfaction through a supportive work environment, controllable work stress, and effective work-life integration.

With this, the research findings suggested that the problem statement provided at the commencement of this study has been pointed out. A previously stated, Malaysian employees have experienced a rising level of work discontent due to the demanding nature of their jobs, greater amounts of stress at work, and challenges in juggling work and personal commitments. This study provides empirical evidence that while excessive work stress might reduce job satisfaction, increased perceived social support and a healthy work-life balance might enhance it. This finding shows convincing evidence that the key components stated in the problem statement are, in fact, a significant foundation for comprehending and enhancing the well-being of Malaysian employees.

In conclusion, this research offers both theoretical and practical insights. According to the theory, it strengthens and contributes to the relevance of the work-life balance structures,

Social Exchange Theory, and the JD-R model in the Malaysian setting. From a practical standpoint, the findings emphasise the necessity for organisations to strategically execute initiatives intended for boosting employees' social support, eliminating unnecessary work-related stress, and fostering a more favourable work-life balance. By putting emphasis on these important factors, employers can increase employee job satisfaction while also potentially boosting productivity, retention rates, and the long-term sustainability of the organisation.

References

Abdirahman, H. I. H., Najeemdeen, I. S., Abidemi, B. T., & Ahmad, R. (2020). The relationship between job satisfaction, work-life balance and organizational commitment on employee performance. *Advances In Business Research International JournaL*, *4*(1), 42. https://doi.org/10.24191/abrij.v4i1.10081

Abdullah, H., Kabia, S. K., & Pandey, P. (2022). Impact of work life balance on job satisfaction: A study Of Chhattisgarh. *Journal of Positive School Psychology, 6*(8), 126-135.

Abgeller, N., Bachmann, R., Dobbins, T., & Anderson, D. (2022). Responsible autonomy: The interplay of autonomy, control and trust for knowledge professionals working remotely during COVID-19. *Economic and Industrial Democracy*, *45*(1), 0143831X2211401. https://doi.org/10.1177/0143831x221140156

Acoba, E. F. (2024). Social support and mental health: the mediating role of perceived stress. *Frontiers in Psychology*, *15*. https://doi.org/10.3389/fpsyg.2024.1330720

Adhikari, G. P. (2022). Interpreting the basic results of multiple linear regression. *Scholars' Journal*, *5*, 22–37. https://doi.org/10.3126/scholars.v5i1.55775

Afif, M. R. (2019). Millennials engagement: Work-life balance vs work-life integration. *Proceedings of the Social and Humaniora Research Symposium (SoRes 2018)*. https://doi.org/10.2991/sores-18.2019.67

Ageel, M., & Shbeer, A. (2022). Exploring occupational stress among intensive care units nurses in Saudi Arabia using the health and safety executive management standards indicator tool. *Nursing: Research and Reviews*, *12*, 247–258. https://doi.org/10.2147/NRR.S386670

Ahmad, E., Jaber, N. M., & Albanna, N. H. (2022). The relationship between job satisfaction and intention to quit a job: mediating factor job burnout. *International Journal of*

Research in Business and Social Science (2147-4478), *11*(9), 45–56. https://doi.org/10.20525/ijrbs.v11i9.2213

Ahmad, R., Nawaz, M. R., Ishaq, M. I., Khan, M. M., & Ashraf, H. A. (2023). Social exchange theory: Systematic review and future directions. *Frontiers in Psychology*, *13*(2), 1–13. https://doi.org/10.3389/fpsyg.2022.1015921

Ahmed, S. K. (2024). Research methodology simplified: how to choose the right sampling technique and determine the appropriate sample size for research. *Oral Oncology Reports*, *12*, 100662. https://doi.org/10.1016/j.oor.2024.100662

Ahsan, N., Abdullah, Z., Fie, D. Y. G., & Alam, S. S. (2009). A study of job stress on job satisfaction among university staff in Malaysia: An empirical study. *European Journal of Social Sciences, 8*(1), 121–131.

Alrawahi, S., Sellgren, S. F., Altouby, S., Alwahaibi, N., & Brommels, M. (2020). The application of herzberg's two-factor theory of motivation to job satisfaction in clinical laboratories in Omani hospitals. *Heliyon*, *6*(9), e04829. https://doi.org/10.1016/j.heliyon.2020.e04829

Alsakarneh, A., Eneizan, B., Fraihat, B. a. M., Makhamreh, H. Z., Al-Gharaibeh, S. M., & Alhyasat, K. M. K. (2023). An investigation into the effect of social support on job performance and job satisfaction in the Jordanian insurance industry. *International Journal of Data and Network Science*, *7*(3), 1435–1444. https://doi.org/10.5267/j.ijdns.2023.3.020

Amirul, S. R., Härtel, C. E. J., Jones, S., Mail, R., & Amirul, S. M. (2023). Government incentives: The role of human resource in delivering flexible organizational working strategies in Singapore. *International Journal of Economics, Management and Accounting*, *31*(2), 369–395. https://doi.org/10.31436/ijema.v31i2.1084

An, H., Gu, X., Bojan Obrenovic, & Danijela Godinic. (2023). The role of job insecurity,

social media exposure, and job stress in predicting anxiety among white-collar employees. *Psychology Research and Behavior Management*, *Volume 16*, 3303–3318. https://doi.org/10.2147/prbm.s416100

An, J., Liu, Y., Sun, Y., & Liu, C. (2020). Impact of work–family conflict, job stress and job satisfaction on seafarer performance. *International Journal of Environmental Research and Public Health*, *17*(7), 2191. https://doi.org/10.3390/ijerph17072191

Andersen, L. P., Jesper Pihl-Thingvad, & Andersen, D. R. (2025). How superiors support employees to manage emotional demands: A qualitative study. *International Journal of Environmental Research and Public Health*, *22*(5), 670–670. https://doi.org/10.3390/ijerph22050670

Andrade, M. S., & Westover, J. H. (2019). Global comparisons of job satisfaction across occupational categories. *Evidence-based HRM a Global Forum for Empirical Scholarship*, *8*(1), 38–59. https://doi.org/10.1108/ebhrm-09-2019-0086

Anis, & Ali, O. (2023). The healthcare workers' dissatisfaction factors on employment contract in Malaysia: A systematic review. *Asian Journal of Medicine & Health Sciences*, *6*(2), 5–23. https://ejournal.unikl.edu.my/index.php/ajmhs/article/view/176

Arain, M., Campbell, M. J., Cooper, C. L., & Lancaster, G. A. (2010). What is a pilot or feasibility study? A review of current practice and editorial policy. *BMC Medical Research Methodology, 10*, 67. https://doi.org/10.1186/1471-2288/10/67

Arkhangelsky, D., & Imbens, G. (2023). *Causal models for longitudinal and panel Data: a survey*. https://doi.org/10.3386/w31942

Arkoudea, D. (2024). Navigating occupational stress in Swedish universities: An HR perspective. *Handle.net*. https://hdl.handle.net/2077/83153

Aruldoss, A., Kowalski, K. B., Travis, M. L., & Parayitam, S. (2021). The relationship between work–life balance and job satisfaction: moderating role of training and

development and work environment. *Journal of Advances in Management Research*, *19*(2), 240–271. https://doi.org/10.1108/jamr-01-2021-0002

Au, W. C., & Ahmed, P. K. (2014). Sustainable people management through work-life balance: a study of the Malaysian Chinese context. *Asia-Pacific Journal of Business Administration*, *6*(3), 262–280. https://doi.org/10.1108/apjba-02-2014-0024

Azhar, N., & Omar, A. (2025). Aging workforce in Malaysia: Navigating challenges and shaping policies. *Quantum Journal of Social Sciences and Humanities*, *6*(2), 226–236. https://doi.org/10.55197/qjssh.v6i2.615

Baker, V. L., & Caroline. (2021). A mid-career faculty agenda. *Higher Education*, 419–484. https://doi.org/10.1007/978-3-030-44007-7_10

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: the JD–R approach. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*(1), 389–411. https://doi.org/10.1146/annurev-orgpsych-031413-091235

Barnett, V., & Lewis, T. (1978). *Outliers in statistical data* (2nd ed.). John Wiley & Sons Ltd.

Barrett, B. E., & Gray, J. B. (1997). Leverage, residual, and interaction diagnostics for subsets of cases in least squares regression. *Computational Statistics & Data Analysis, 26*(1), 39-52. https://doi.org/10.1016/S0167-9473(97)00022-4

Bekiros, S., Jahanshahi, H., & Munoz-Pacheco, J. M. (2022). A new buffering theory of social support and psychological stress. *PLoS ONE*, *17*(10), e0275364. https://doi.org/10.1371/journal.pone.0275364

Benitez, M., Leon-Perez, J. M., Orgambídez, A., & Medina, F. J. (2021). Interpersonal conflicts in the unit impact the service quality rated by customers: The mediating role of work-unit well-being. *International Journal of Environmental Research and Public Health*, *18*(15), 8137. https://doi.org/10.3390/ijerph18158137

Besser, L. M., Brenowitz, W. D., Meyer, O. L., Hoermann, S., & Renne, J. (2021). Methods to address self-selection and reverse causation in studies of neighborhood environments and brain health. *International Journal of Environmental Research and Public Health*, *18*(12), 6484. https://doi.org/10.3390/ijerph18126484

Bessler, L. (2023). Distributions, histograms, box plots, and alternative tools. *Apress EBooks*, 465–502. https://doi.org/10.1007/978-1-4842-8609-8_12

Bexheti, L., & Bexheti, A. (2016). The impact of herzberg's two factor theory and efficiency at work. *European Journal of Multidisciplinary Studies*, *1*(2), 378. https://doi.org/10.26417/ejms.v1i2.p378-385

Bhanu, M. V. V., & Sai Babu, P. C. (2018). Impact of work environment and job stress towards job satisfaction. *IOSR Journal of Business and Management, 20*(2), 1–7. https://doi.org/10.9790/487X-2002020107

Bin Saleh, H. (2015). Work-life balance (WLB) relationship with employees satisfaction: An evidence from Malaysia higher education institution. *International Journal of Science Commerce and Humanities, 2*(3), 50-60.

Bisht, N. S., Trusson, C., Siwale, J., & Ravishankar, M. N. (2021). Enhanced job satisfaction under tighter technological control: The paradoxical outcomes of digitalisation. *New Technology, Work and Employment*, *38*(2). https://doi.org/10.1111/ntwe.12222

Brailovskaia, J., Ozimek, P., & Bierhoff, H.-W. (2021). How to prevent side effects of social media use (SMU)? Relationship between daily stress, online social support, physical activity and addictive tendencies – A longitudinal approach before and during the first Covid-19 lockdown in Germany. *Journal of Affective Disorders Reports*, *5*, 100144. https://doi.org/10.1016/j.jadr.2021.100144

Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology, 35*(5), 307–311. https://doi.org/10.1037/h0055617

Brough, P., Timms, C., O'Driscoll, M. P., Kalliath, T., Siu, O.-L., Sit, C., & Lo, D. (2014). *Work-Life Balance Scale* [Database record]. APA PsycTests. https://doi.org/10.1037/t61357-000

Browne, R. H. (1995). On the use of a pilot sample for sample size determination. *Statistics in Medicine, 14*(17), 1933–1940. https://doi.org/10.1002/sim.4780141709

Buonomo, I., De Vincenzi, C., Pansini, M., D'Anna, F., & Benevene, P. (2024). Feeling supported as a remote worker: The role of support from leaders and colleagues and job satisfaction in promoting employees' work–life balance. *International Journal of Environmental Research and Public Health*, *21*(6), 770. https://doi.org/10.3390/ijerph21060770

Cacciatore, J., Thieleman, K., Fretts, R., & Jackson, L. B. (2021). What is good grief support? Exploring the actors and actions in social support after traumatic grief. *PLoS ONE*, *16*(5), e0252324. https://doi.org/10.1371/journal.pone.0252324

Camarena, L., & Fusi, F. (2021). Always connected: Technology use increases technostress among public managers. *The American Review of Public Administration*, *52*(2), 027507402110503. https://doi.org/10.1177/02750740211050387

Cao, X., Zhang, H., Li, P., & Huang, X. (2022). The influence of mental health on job satisfaction: Mediating effect of psychological capital and social capital. *Frontiers in Public Health*, *10*. https://doi.org/10.3389/fpubh.2022.797274

Caplan, G. (1974). Support systems and community mental health: Lectures on concept development. New York, NY: *Behavioral Publications*.

Cardoso, D. O., & Galeno, T. D. (2023). Online evaluation of the Kolmogorov–Smirnov test on arbitrarily large samples. *Journal of Computational Science*, *67*, 101959–101959. https://doi.org/10.1016/j.jocs.2023.101959

Chua, S. N. (2020). Workplace mental health: The business costs. *Relate Mental Health Malaysia*, 1-30.

Cobb, S. (1976). Social support as a moderator of life stress. Psychosomatic Medicine, 38(5), 300–314. https://doi.org/10.1097/00006842-197609000-00003

Cohen, J (1988) Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum

Cohen, S. (1988). Statistical Power Analysis for Behavioral Science (2nd ed.). New Jersey: Lawrence Erlbaum Associates

Cook, R. D., & Weisberg, S. (1982). Criticism and influence analysis in regression. *Sociological Methodology, 13*, 313. https://doi.org/10.2307/270724

Countries with the happiest workers | Utility Bidder. (2021). Utility Bidder. https://www.utilitybidder.co.uk/compare-business-energy/countries-with-the-happiest-workers/

Crisci, A., Sepe, E., & Malafronte, P. (2018). What influences teachers' job satisfaction and how to improve, develop and reorganize the school activities associated with them. *Quality & Quantity*, *53*(5), 2403–2419. https://doi.org/10.1007/s11135-018-0749-y

Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, *31*(6), 874–900. https://doi.org/10.1177/0149206305279602

Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-methods research: A discussion on its types, challenges, and criticisms. *Journal of Practical Studies in Education*, *2*(2), 25–36. https://doi.org/10.46809/jpse.v2i2.20

De Sio, S., Cedrone, F., Perri, R., Nieto, H. A., Greco, E., Buomprisco, G., & Stansfeld, S. A. (2020). Work-Related Stress Questionnaire (WRSQ): A new tool to assess

psychosocial risks at workplaces. *Clinical Terapeutics, 171*(5), e316–e320. https://doi.org/10.7417/ct.2020.2235

Deming, S. M. (2022). Beyond measurement of the motherhood penalty: How social locations shape mothers' work decisions and stratify outcomes. *Sociology Compass*, *16*(6). https://doi.org/10.1111/soc4.12988

Deng, Q., Liu, Y., Cheng, Z., Wang, Q., & Liu, J. (2024). Global job satisfaction and fluctuation among community general practitioners: a systematic review and meta-analysis. *BMC Health Services Research*, *24*(1). https://doi.org/10.1186/s12913-024-10792-9

Denieffe, S. (2020). Commentary: Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing, 25*(8), 662–663. https://doi.org/10.1177/1744987120928156

Dharma, A. A. A. S., & Supartha, W. G. (2019). Effect Of Work Stress On Work Satisfaction And Organizational Commitments Of Employees. *International Journal of Business, Economics and Law, 20*(5), 75-82.

Dodge, Y. (2008). **Durbin–Watson test**. In *The concise encyclopedia of statistics* (pp. 173–175). Springer. https://doi.org/10.1007/978-0-387-32833-1_122

Dodou, D., & De Winter, J. (2014). Social desirability is the same in offline, online, and paper surveys: A meta-analysis. *Computers in Human Behavior*, *36*, 487–495. https://doi.org/10.1016/j.chb.2014.04.005

Dousin, O., Collins, N., & Kler, B. K. (2019). Work-Life balance, employee job performance and satisfaction among doctors and nurses in Malaysia. *International Journal of Human Resource Studies*, *9*(4), 306. https://doi.org/10.5296/ijhrs.v9i4.15697

Dziuba, S. T., Ingaldi, M., & Zhuravskaya, M. (2020). Employees' job satisfaction and their work performance as elements influencing work safety. *System Safety Human -*

Technical Facility - Environment, *2*(1), 18–25. https://doi.org/10.2478/czoto-2020-0003

Eagle, D. E., Hybels, C. F., & Proeschold-Bell, R. J. (2018). Perceived social support, received social support, and depression among clergy. *Journal of Social and Personal Relationships*, *36*(7), 2055–2073. https://doi.org/10.1177/0265407518776134

Ejemah, T., Itiveh, F. E., Eriyeva, G. A., Omosioni, E. P., & Opone, F. C. (2025). Exploring the statistical treatments, different methods of parameter estimation, and practical applications of a new probability model. *Earthline Journal of Mathematical Sciences*, 755–778. https://doi.org/10.34198/ejms.15525.755778

Elston, D. M. (2021). Participation bias, self-selection bias, and response bias. *Journal of the American Academy of Dermatology*. https://doi.org/10.1016/j.jaad.2021.06.025

Etemadi, S., & Khashei, M. (2021). Etemadi multiple linear regression. *Measurement*, *186*, 110080. https://doi.org/10.1016/j.measurement.2021.110080

Fadillah Binti Ismail, & Nesreen Ibrahim Owaida. (2023). Depression at workplaces: The factors that influencing and how to overcome the issues. *Journal of Techno-Social/Journal of Techno-Social*, *15*(2). https://doi.org/10.30880/jts.2023.15.02.001

Field, A. (2013). *Discovering statistics using Ibm SPSS statistics* (4th ed.). SAGE Publications. https://search.worldcat.org/title/discovering-statistics-using-ibm-spss-statistics/oclc/892190525

Galanakis, M., & Peramatzis, G. (2022). Herzberg's motivation theory in workplace. *Journal of Psychology Research*, *12*(12), 971–978.

Galanakis, N. M., & Peramatzis, N. G. (2022). Herzberg's motivation theory in workplace. *Journal of Psychology Research*, *12*(12). https://doi.org/10.17265/2159-5542/2022.12.009

García-Salirrosas, E. E., Rondon-Eusebio, R. F., Geraldo-Campos, L. A., & Acevedo-Duque,

Á. (2023). Job satisfaction in remote work: The role of positive spillover from work to family and work–life balance. *Behavioral Sciences*, *13*(11), 916. MDPI. https://doi.org/10.3390/bs13110916

Garmendia, P., Fernández-Salinero, S., González, A. I. H., & Topa, G. (2023). Social support and its impact on job satisfaction and emotional exhaustion. *European Journal of Investigation in Health Psychology and Education*, *13*(12), 2827–2840. https://doi.org/10.3390/ejihpe13120195

Gazi, M. a. I., Islam, M. A., Shaturaev, J., & Dhar, B. K. (2022). Effects of job satisfaction on job performance of sugar industrial workers: Empirical evidence from Bangladesh. *Sustainability*, *14*(21), 14156. https://doi.org/10.3390/su142114156

Ge, J., He, J., Liu, Y., Zhang, J., Pan, J., Zhang, X., & Liu, D. (2021). Effects of effort-reward imbalance, job satisfaction, and work engagement on self-rated health among healthcare workers. *BMC Public Health*, *21*(1). https://doi.org/10.1186/s12889-021-10233-w

George, D., & Mallery, P. (2019). *IBM SPSS statistics 26 step by step: A simple guide and reference* (16th ed.). Routledge. https://doi.org/10.4324/9780429056765

Giao, H. N. K., Vuong, B. N., & Tushar, H. (2020). The impact of social support on job-related behaviors through the mediating role of job stress and the moderating role of locus of control: Empirical evidence from the Vietnamese banking industry. *Cogent Business & Management*, *7*(1), 1841359. https://doi.org/10.1080/23311975.2020.1841359

Gillman, J., Turner, M. J., & Slater, M. J. (2023). The role of social support and social identification on challenge and threat cognitive appraisals, perceived stress, and life satisfaction in workplace employees. *PLOS One*, *18*(7), e0288563–e0288563. https://doi.org/10.1371/journal.pone.0288563

Gorjifard, R., & Crawford, J. (2021). Working from Home: Impact on Wellbeing and Work-Life Balance. *New Zealand Journal of Employment Relations*, *46*(2), 64–78. https://doi.org/10.24135/nzjer.v46i2.63

Grey, I., Arora, T., Thomas, J., Saneh, A., Tohme, P., & Abi-Habib, R. (2020). The role of perceived social support on depression and sleep during the COVID-19 pandemic. *Psychiatry Research*, *293*, 113452. https://doi.org/10.1016/j.psychres.2020.113452

Grujičić, S., & Nikolić, A. (2021). Cross-section studies: Advantages and disadvantages. *Zdravstvena zastita, 50*(4), 43-54. https://doi.org/10.5937/zdravzast50-35574

Gunnar, M. R. (2017). Social buffering of stress in development: A career perspective. *Perspectives on Psychological Science*, *12*(3), 355–373. https://doi.org/10.1177/1745691616680612

Hair, J., Black, W. C., Babin, B. J. & Anderson, R. E. (2010) Multivariate data analysis (7th ed.). Upper Saddle River, New Jersey: Pearson Educational International.

Hardy, K., Williams, M., Bullington, K., & Commodore, F. (2021). Preparing to fill the leadership gap: The challenges facing women leaders in mid-level positions at urban community colleges. *Journal of Women in Educational Leadership*. https://doi.org/10.32873/unl.dc.jwel.202

Hasan, N. A. B. B., & Teng, L. S. (2017). Work-life balance and job satisfaction among working adults in Malaysia: The role of gender and race as moderators. *Journal of Economics, Business and Management, 5*(1), 18-24.

Hassan, Z., Tnay, J. S., Sukardi Yososudarmo, S. M., & Sabil, S. (2020). The relationship between workplace spirituality and work-to-family enrichment in selected public sector organizations in Malaysia. *Journal of Religion and Health*. https://doi.org/10.1007/s10943-019-00971-y

Hayman, J. (2005). Psychometric assessment of an instrument designed to measure work life balance. *Research and Practice in Human Resource Management, 13*(1), 85–91.

Hays Asia. (2020). *The 2020 Hays Asia Salary Guide: Survey Findings*, 1-116.

Herzberg, F. (1976). One more time: How do you motivate employees? *Palgrave Macmillan UK eBooks*, 17–32. https://doi.org/10.1007/978-1-349-02701-9_2

Hoboubi, N., Choobineh, A., Ghanavati, F. K., Keshavarzi, S., & Hosseini, A. A. (2016). The impact of job stress and job satisfaction on workforce productivity in an Iranian petrochemical industry. *Safety and Health at Work*, *8*(1), 67–71. https://doi.org/10.1016/j.shaw.2016.07.002

Hossain, M. I., Limon, N., Amin, M. T., & Asheq, A. S. (2018). Work-life balance trends: A study on Malaysian Generation Y bankers. *IOSR Journal of Business and Management (IOSR-JBM), 20*(9), 1-9. https://doi.org/10.9790/487X-2009030109

Huang, Y., Sung, C., Chen, W. T., & Liu, S. (2021). Relationships between Social Support, Social Status Perception, Social Identity, Work Stress, and Safety Behavior of Construction Site Management Personnel. *Sustainability*, *13*(6), 3184. https://doi.org/10.3390/su13063184

Iheaka, V. C. (2025). Diagnosing and correcting violations of normality and constant variance assumptions in multiple linear regression analysis. *International Journal of Advanced Statistics and Probability*, *12*(1), 17–27. https://doi.org/10.14419/8bnsc148

Ioannou, M., Kassianos, A. P., & Symeou, M. (2019). Coping with depressive symptoms in young adults: Perceived social support protects against depressive symptoms only under moderate levels of stress. *Frontiers in Psychology*, *9*. https://doi.org/10.3389/fpsyg.2018.02780

Irawanto, D., Novianti, K., & Roz, K. (2021). Work from home: Measuring satisfaction between work–life balance and work stress during the COVID-19 pandemic in Indonesia. *Economies*, *9*(3), 96. https://doi.org/10.3390/economies9030096

Jaafar, S. B. (2021). The relationship between stress and job satisfaction. *International Journal of Business and Management*, *5*(1), 8–12. https://doi.org/10.26666/rmp.ijbm.2021.1.2

Jalil, N. I. A., Tan, S. A., Ibharim, N. S., Musa, A. Z., Ang, S. H., & Mangundjaya, W. L. (2023). The relationship between job insecurity and psychological well-being among Malaysian precarious workers: work–life balance as a mediator. *International Journal of Environmental Research and Public Health*, *20*(3), 2758. https://doi.org/10.3390/ijerph20032758

Jari Metsämuuronen. (2022). Directional nature of the product–moment correlation coefficient and some consequences. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.988660

Jayasingam, S., Lee, S. T., & Zain, K. N. M. (2021). Demystifying the life domain in work-life balance: A Malaysian perspective. *Current Psychology*, *42*(1), 1–12. https://doi.org/10.1007/s12144-021-01403-5

Jia, C. X., Cheung, C., & Fu, C. (2020). Work support, role stress, and life satisfaction among Chinese social workers: The mediation role of work-family conflict. *International Journal of Environmental Research and Public Health*, *17*(23), 8881. https://doi.org/10.3390/ijerph17238881

JobStreet. (2021). Malaysia ranks 4th in recent employee job happiness index 2017 by JobStreet.com. *JobStreet Career Advice*. https://my.jobstreet.com/career-advice/article/malaysia-ranks-4th-recent-employee-job-happiness-index-2017-jobstreet-com

Judge, T. A., Piccolo, R. F., Podsakoff, N. P., Shaw, J. C., & Rich, B. L. (2010). The relationship between pay and job satisfaction: A meta-analysis of the literature. *Journal of Vocational Behavior*, *77*(2), 157–167. https://doi.org/10.1016/j.jvb.2010.04.002

Kelliher, C., Richardson, J., & Boiarintseva, G. (2018). All of work? All of life? Reconceptualising work-life balance for the 21st century. *Human Resource Management Journal*, *29*(2), 97–112. https://doi.org/10.1111/1748-8583.12215

Kemp, S. (2025). *Digital 2025: Malaysia — DataReportal – Global Digital Insights*. DataReportal – Global Digital Insights. https://datareportal.com/reports/digital-2025-malaysia

Khan, N. (2020). Critical review of sampling techniques in the research process in the world. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3572336

Khuong, M. N., & Linh, U. D. T. (2020). Influence of work-related stress on employee motivation, job satisfaction and employee loyalty in hospitality industry. *Management Science Letters*, 3279–3290. https://doi.org/10.5267/j.msl.2020.6.010

Kim, J. H. (2019). *Multicollinearity and misleading statistical results*. *Korean Journal of Anesthesiology, 72*(6), 558–569. https://doi.org/10.4097/kja.19087

Kim, J., Henly, J. R., Golden, L. M., & Lambert, S. J. (2019). Workplace flexibility and worker well-being by gender. *Journal of Marriage and Family*, *82*(3), 892–910. https://doi.org/10.1111/jomf.12633

Klijn, E. (2021). *The effect of social support in the workplace on job satisfaction: Exploring the mediating role of gender*. *Tilburg University Repository*. http://arno.uvt.nl/show.cgi?fid=160343

Kock, F., Berbekova, A., & Assaf, A. G. (2021). Understanding and managing the threat of common method bias: Detection, prevention and control. *Tourism Management*, *86*, 104330. https://doi.org/10.1016/j.tourman.2021.104330

Kong, Y.-L., Anis-Syakira, J., Jawahir, S., R'ong Tan, Y., Rahman, N. H. A., & Tan, E. H. (2021). Factors associated with informal caregiving and its effects on health, work, and social activities of adult informal caregivers in Malaysia: findings from the National Health and Morbidity Survey 2019. *BMC Public Health*, *21*(1). https://doi.org/10.1186/s12889-021-11022-1

Kori, F. A., & Omar, M. K. (2022). Individual, organizational, and environmental factors affecting work-life balance among Malaysian lecturers amidst COVID-19 pandemic. *Clinical Case Reports Open Access*, *5*(4). https://doi.org/10.46527/2582-5038.235

Kort-Butler, L. A. (2017). Social support theory. *The Encyclopedia of Juvenile Delinquency and Justice*, 1–4. https://doi.org/10.1002/9781118524275.ejdj0066

Kost, R. G., & Da Rosa, J. C. (2018). Impact of survey length and compensation on validity, reliability, and sample characteristics for ultrashort-, short-, and long-research participant perception surveys. *Journal of Clinical and Translational Science*, *2*(1), 31–37. https://doi.org/10.1017/cts.2018.18

Kurniawaty, K., Ramly, M., & Ramlawati, R. (2019). The effect of work environment, stress, and job satisfaction on employee turnover intention. *Management Science Letters*, 877–886. https://doi.org/10.5267/j.msl.2019.3.001

Kusairi, S., Muhamad, S., Razak, N. A., & Trapsila, A. P. (2021). The role of ICT and local wisdom in managing work-life balance during the COVID-19 Pandemic: an empirical study in Malaysia. *Journal of Asian Finance Economics and Business*, *8*(9), 321–331. https://doi.org/10.13106/jafeb.2021.vol8.no9.0321

Lacko, D., Čeněk, J., Točík, J., Avsec, A., Đorđević, V., Genc, A., Haka, F., Šakotić-Kurbalija, J., Mohorić, T., Neziri, I., & Subotić, S. (2022). The necessity of testing measurement invariance in cross-cultural research: Potential bias in cross-cultural comparisons with individualism–collectivism self-report scales. *Cross-Cultural Research*, *56*(2–3), 228–267. https://doi.org/10.1177/10693971211068971

Lakey, B., & Cohen, S. (2000). Social support theory and measurement. In Oxford University Press eBooks (pp. 29–52). https://doi.org/10.1093/med:psych/9780195126709.003.0002

Lee, B., Lee, C., Choi, I., & Kim, J. (2022). Analyzing determinants of job satisfaction based on Two-Factor Theory. *Sustainability*, *14*(19), 12557. https://doi.org/10.3390/su141912557

Lee, M. C. C., Sim, B. Y. H., & Tuckey, M. R. (2023). Comparing effects of toxic leadership and team social support on job insecurity, role ambiguity, work engagement, and job performance: A multilevel mediational perspective. *Asia Pacific Management Review*, *29*(1). https://doi.org/10.1016/j.apmrv.2023.09.002

Lesener, T., Gusy, B., & Wolter, C. (2018). The job demands-resources model: A meta-analytic review of longitudinal studies. *Work & Stress*, *33*(1), 76–103. https://doi.org/10.1080/02678373.2018.1529065

Lestari, D., & Margaretha, M. (2020). Work life balance, job engagement and turnover intention: Experience from Y generation employees. *Management Science Letters*, 165–170. https://doi.org/10.5267/j.msl.2020.8.019

Liu, D., Yang, X., Zhang, C., Zhang, W., Tang, Q., Xie, Y., & Shi, L. (2022). Impact of job satisfaction and social support on job performance among primary care providers in Northeast China: a Cross-Sectional study. *Frontiers in Public Health*, *10*. https://doi.org/10.3389/fpubh.2022.884955

Liu, H., Tan, Q., & Mai, H. (2023). Stress-buffering effects of social support on tourism employees during the covid-19 pandemic: A moderated mediation model. *International Journal of Environmental Research and Public Health*, *20*(3), 2342. https://doi.org/10.3390/ijerph20032342

Liu, L., Wu, D., Wang, L., Qu, Y., & Wu, H. (2020). Effort-Reward Imbalance, Resilience and Perceived Organizational Support: A Moderated Mediation Model of Fatigue in Chinese Nurses *Risk Management and Healthcare Policy*, *Volume 13*, 893–901. https://doi.org/10.2147/rmhp.s259339

Llanos, L. F., Tallabs, R., Sánchez, A., & Jure, S. (2025). Strategies to achieve work–family balance in a home office using border theory: case study of Mexican university employees. *Qualitative Research in Organizations and Management an International Journal*. https://doi.org/10.1108/qrom-01-2024-2657

Mansor, N., Halimah Awang, & Nur. (2021). Malaysia ageing and retirement survey. *Springer EBooks*, 3032–3036. https://doi.org/10.1007/978-3-030-22009-9_344

Marques, V. C., & Berry, G. R. (2021). Enhancing work-life balance using a resilience framework. *Business and Society Review, 126*(3), 263–281. https://doi.org/10.1111/basr.12237

Marques, V. C., & Berry, G. R. (2021). Enhancing work-life balance using a resilience framework. *Business and Society Review*, *126*(3), 263–281. https://doi.org/10.1111/basr.12237

Matud, M. P., Sánchez-Tovar, L., Hernández-Lorenzo, D. E., & Cobos-Sanchiz, D. (2024b). Job satisfaction, mental symptoms, and well-being in adult workers: A gender analysis. *Psychiatry International, 5*(2), 253–267. https://doi.org/10.3390/psychiatryint5020018

McLeod, S. (2024). *Mixed Methods Research Guide With Examples* [PDF]. ResearchGate. https://doi.org/10.13140/RG.2.2.31329.93286

Meira, J. V. de S., & Hancer, M. (2021). Perceived organizational support and psychological empowerment in the hospitality industry. *Journal of Hospitality & Tourism Research, 45*(1), 35-52.

Miah, T., & Hasan, J. (2022). Impact of herzberg two-factor theory on teachers' job satisfaction: An implication to the private universities of Bangladesh. *International Journal of Business and Management Research*, *10*(1), 1–5. https://doi.org/10.37391/ijbmr.100101

Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia*, *22*(1), 67-72. https://doi.org/10.4103/aca.ACA_157_18

Mittal, S., Dhand, S., & Nghiem, X.-H. N. (2024). Social support networks and their role in entrepreneurial well-being. *Advances in Psychology, Mental Health, and Behavioral Studies*, 319–344. https://doi.org/10.4018/979-8-3693-3673-1.ch017

Mohammad Amiruddin, N. Z., & Rodzalan, S. A. (2024). The relationship between compensation and job satisfaction. *Research in Management of Technology and Business, 5*(1), 145–154. https://doi.org/10.30880/rmtb.2024.05.01.013

Muleya, D., Ngirande, H., & Terera, S. R. (2022). The influence of training and career development opportunities on affective commitment: A South African higher education perspective. *SA Journal of Human Resource Management*, *20*. https://doi.org/10.4102/sajhrm.v20i0.1620

Noor, N. a. M., E-Vahdati, S., Yew, M. P., & Chuah, F. (2024). The influence of job stress on organizational commitment among workers in the palm oil industry: Does job

satisfaction matter? *Global Business Review*. https://doi.org/10.1177/09721509241252499

Noor, N. M., & Mahudin, N. D. M. (2015). Work–life balance policies in Malaysia: theory and practice. In *Edward Elgar Publishing eBooks*. https://doi.org/10.4337/9781783475094.00017

Novielli, J., Kane, L., & Ashbaugh, A. R. (2023). Convenience sampling methods in psychology: A comparison between crowdsourced and student samples. *Canadian Journal of Behavioural Science*. https://doi.org/10.1037/cbs0000394

Nuri Herachwati, Haqq, Z. N., Zuyyinna Choirunnisa, Gebrina Ayu Pramesti, & Rahmandika, H. P. (2024). Revealing Indonesian healthcare workers' burnout, work engagement, and job satisfaction during the covid-19 pandemic: the lens of the job demands-resources model. *Cogent Business & Management*, *11*(1). https://doi.org/10.1080/23311975.2024.2371328

Ogunola, A. A. (2022). Quality of work-life and work-life balance as predictors of employee job satisfaction. *Tazkiya Journal of Psychology*, *10*(1), 74–84. https://doi.org/10.15408/tazkiya.v10i1.22499

Oliveira, A., Cruz, S. A., Couto, A. I., Cerdeira, J., Parente, C., & Gonçalves, C. M. (2025). Work time reduction: A critical analysis of the main arguments for adopting a 4-day workweek. *Lecture Notes on Multidisciplinary Industrial Engineering*, 333–355. https://doi.org/10.1007/978-3-031-89948-5_14

Omar, W. M. W., Zaid, D. D. M., Mohamad, N. H., & Ismail, Z. (2021). Conceptualizing the impact of work-life balance on job satisfaction - Can the issues be resolved among nurses? *Journal of Emerging Economies and Islamic Research*, *9*(1), 1. https://doi.org/10.24191/jeeir.v9i1.9763

Osei Boakye, A., Dei Mensah, R., Bartrop-Sackey, M., & Muah, P. (2021). Juggling between

work, studies and motherhood: The role of social support systems for the attainment of work–life balance. *SA Journal of Human Resource Management*, *19*(0). https://doi.org/10.4102/sajhrm.v19i0.1546

Özdemir, İ. (2023). Work/family border theory or work-life spillover theory: A meta-analytical approach to turnover intention. *Elektronik Sosyal Bilimler Dergisi, 22*(88), 1392–1407. https://doi.org/10.17755/esosder.1205895

Pallant, J. (2013) SPSS Survival Manual. A step by step guide to data analysis using IBM SPSS. Open University Press, Berkshire.

Pallant, J. (2020). SPSS survival manual: A step by step guide to data analysis using IBM SPSS (7th ed.). *Routledge*. https://doi.org/10.4324/9781003117452

Pan, C., Abbas, J., Álvarez-Otero, S., Khan, H., & Cai, C. (2022). Interplay between corporate social responsibility and organizational green culture and their role in employees' responsible behavior towards the environment and society. *Journal of Cleaner Production*, *366*, 132878. https://doi.org/10.1016/j.jclepro.2022.132878

Parker, D. F., & Decotiis, T. A. (1983). Organizational determinants of job stress. *Organizational Behavior and Human Performance, 32*(2), 160–177. https://doi.org/10.1016/0030-5073(83)90145-9

Pascucci, T., Hernández Sánchez, B., & Sánchez García, J. C. (2021). Being stressed in the family or married with work? A literature review and clustering of work-family conflict. *European Journal of Management and Business Economics*, *31*(2), 239–265. https://doi.org/10.1108/ejmbe-06-2021-0191

Pinna, R., De Simone, S., Cicotto, G., & Malik, A. (2020). Beyond organisational support: Exploring the supportive role of co-workers and supervisors in a multi-actor service ecosystem. *Journal of Business Research*, *121*, 524–534. https://doi.org/10.1016/j.jbusres.2020.02.022

Prayudi, N. A., & Komariyah, N. I. (2023). The impact of work motivation, work environment, and career development on employee job satisfaction. *Jurnal Visi Manajemen, 9*(1), 100–112. https://doi.org/10.56910/jvm.v9i1.268

Profillidis, V., & Botzoris, G. (2018). Statistical methods for transport demand modeling. In *Elsevier eBooks* (pp. 163–224). https://doi.org/10.1016/b978-0-12-811513-8.00005-4

PwC. (2022). *Hopes and fears 2022: Global workforce survey.* PwC. Retrieved from https://www.pwc.com/gx/en/issues/workforce/hopes-and-fears-2022.html

Rahman, M. M., Ali, N. A., Jantan, A. H., Mansor, Z. D., & Rahaman, M. S. (2020). Work to family, family to work conflicts and work family balance as predictors of job satisfaction of Malaysian academic community. *Journal of Enterprising Communities People and Places in the Global Economy*, *14*(4), 621–642. https://doi.org/10.1108/jec-05-2020-0098

Rai, R., Thekkekara, J. V., & Kanhare, R. (2021). Herzberg's two factor theory: A study on nurses's motivation. *RGUHS Journal of Allied Health Sciences*, *1*(1). https://doi.org/10.26463/rjahs.1_1_5

Rai, R., Thekkekara, J. V., & Kanhare, R. (2021). Herzberg's two factor Theory: A study on nurses's motivation. *RGUHS Journal of Allied Health Sciences*, *1*(1). https://doi.org/10.26463/rjahs.1_1_5

Rajâa, O., & Mekkaoui, A. (2025). Revealing the impact of social exchange theory on financial performance: a systematic review of the mediating role of human resource performance. *Cogent Business & Management*, *12*(1). https://doi.org/10.1080/23311975.2025.2475983

Rakhmitania, T. (2022). Job satisfaction relationship with turnover intention. *Muhammadiyah International Public Health and Medicine Proceeding*, *2*(1), 232-235.

Ramlawati, R., Trisnawati, E., Yasin, N. A., & Kurniawaty, K. (2020). External alternatives, job stress on job satisfaction and employee turnover intention. *Management Science Letters*, 511–518. https://doi.org/10.5267/j.msl.2020.9.016

Randstad Malaysia. (2024). Malaysians want career growth and upskilling: 2024 Workmonitor. *Randstad Malaysia*. https://www.randstad.com.my/hr-trends/workforce-trends/malaysians-want-career-growth-and-upskilling-2024-workmonitor-malaysia/

Randstad. (2019). *Randstad Workmonitor Global Report: Q4 2019.* https://www.randstad.com.au/s3fs-media/au/public/2023-02/randstad_workmonitor_global_report_q4_-_dec_2019.pdf

Rasool, T., Nosheen Fatima Warraich, & Arshad, A. (2024). Assessing the relationship between information overload, role stress, and teachers' job performance: Exploring the moderating effect of self-efficacy. *Information Development*. https://doi.org/10.1177/02666669241232422

Reilly, A. (2025). Work–life balance and the "right to disconnect" for women teleworkers: current limitations and potential developments1. *Edward Elgar Publishing EBooks*, 302–313. https://doi.org/10.4337/9781035302567.00039

Rinehart, L. F., Heckert, A. B., & Lucas, S. G. (2022). The utility of probability plotting in palaeobiology. *Palaeontology*, *65*(6). https://doi.org/10.1111/pala.12633

Riyanto, Setyo, Endri Endri, and Novita Herlisha. "Effect of work motivation and job satisfaction on employee performance: Mediating role of employee engagement." *Problems and Perspectives in Management* 19.3 (2021): 162.

Rizkina, N. S., & Mahudin, N. M. (2022). I've got enough on my plate! The mediating role of job demands in the relationship between psychosocial safety climate and job satisfaction. *Human Factors and Ergonomics Journal, 7*(1), 19-37.

Rolstad, S., Adler, J., & Rydén, A. (2011). Response burden and questionnaire length: Is shorter better? A review and meta-analysis. *Value in Health*, *14*(8), 1101–1108. https://doi.org/10.1016/j.jval.2011.06.003

S, J. H., & Syed, R. (2024). Antecedents and outcomes of work-life balance for women faculty members in India. *Problems and Perspectives in Management*, *22*(4), 324–339. https://doi.org/10.21511/ppm.22(4).2024.25

Sahlqvist, S., Song, Y., Bull, F., Adams, E., Preston, J., & Ogilvie, D. (2011). Effect of questionnaire length, personalisation and reminder type on response rate to a complex postal survey: randomised controlled trial. *BMC Medical Research Methodology*, *11*(1). https://doi.org/10.1186/1471-2288-11-62

Salmerón Gómez, R., Rodríguez Sanchez, A., García, C. G., & García Pérez, J. (2020). The VIF and MSE in raise regression. *Mathematics, 8*(4), 605. https://doi.org/10.3390/math8040605

Saraiva, M., & Nogueiro, T. (2025). Perspectives and realities of disengagement among younger generation Y and Z workers in contemporary work dynamics. *Administrative Sciences*, *15*(4), 133. https://doi.org/10.3390/admsci15040133

Schaufeli, W. B. (2017). Applying the Job Demands-Resources model. *Organizational Dynamics*, *46*(2), 120–132. https://doi.org/10.1016/j.orgdyn.2017.04.008

Schulz, U., & Schwarzer, R. (2003). Soziale Unterstützung bei der Krankheitsbewältigung: Die Berliner Social Support Skalen (BSSS) [Social Support in Coping with Illness: The Berlin Social Support Scales (BSSS)]. *Diagnostica, 49*(2), 73–82. https://doi.org/10.1026/0012-1924.49.2.73

Sekiguchi, T., & Ikeda, M. (2025). The informal structure of senpai (seniors), kohai (juniors), and doki (peers) in Japanese organizations. *Encyclopedia*, *5*(2), 49.

https://doi.org/10.3390/encyclopedia5020049

Sharma, H. (2022). How short or long should be a questionnaire for any research? Researchers dilemma in deciding the appropriate questionnaire length. *Saudi Journal of Anaesthesia*, *16*(1), 65–68. https://doi.org/10.4103/sja.sja_163_21

Sheppard, V. (2020). *8.4 types of surveys*. Pressbooks. https://pressbooks.bccampus.ca/jibcresearchmethods/chapter/8-4-types-of-surveys/

Shukla, S. S. (2023). *Non-probability sampling method 1* [Paper Presentation]. National Faculty Development Programme, Department of Testing and Evaluation, Children's University, Gandhinagar, India. https://www.researchgate.net/publication/372724527_NON-PROBABILITY_SAMPLING_METHOD_1

Shultz, K. S., Wang, M., Crimmins, E. M., & Fisher, G. G. (2021). Age differences in the demand—control model of work stress. *Journal of Applied Gerontology*, *29*(1), 21–47. https://doi.org/10.1177/0733464809334286

Sigursteinsdottir, H., & Karlsdottir, F. B. (2022b). Does social support matter in the workplace? Social support, job satisfaction, bullying and harassment in the workplace during COVID-19. *International Journal of Environmental Research and Public Health*, *19*(8), 4724. https://doi.org/10.3390/ijerph19084724

Sinar Daily. (2024, November 16). Work-life balance in Malaysia second worst in the world. *Sinar Daily*. Retrieved from https://www.sinardaily.my/article/219213/focus/national/work-life-balance-in-malaysia-second-worst-in-the-world

Singh, K. (2023). The relationship between occupational stress and job satisfaction among employed engineers. *The International Journal of Indian Psychology, 11*(2), Article DIP: 18.01.128.20231102. https://doi.org/10.25215/1102.128

Spector, P. E. (1985). Measurement of human service staff satisfaction: Development of the Job Satisfaction Survey. *American Journal of Community Psychology, 13*(6), 693–713. https://doi.org/10.1007/BF00929796

Spina, N., Smithers, K., Harris, J., & Mewburn, I. (2022). Back to zero? Precarious employment in academia amongst "older" early career researchers, a life-course approach. *British Journal of Sociology of Education*, *43*(4), 534–549. https://doi.org/10.1080/01425692.2022.2057925

Standard Insights. (2024). The future of work in Malaysia. *Standard Insights.* Retrieved from https://standard-insights.com/blog/the-future-of-work-in-malaysia/

Stratton, S. J. (2023). Population sampling: probability and non-probability techniques. *Prehospital and Disaster Medicine*, *38*(2), 147–148. https://doi.org/10.1017/s1049023x23000304

Sumari, M., Baharudin, D. F., Khalid, N. M., Ibrahim, N. H., & Tharbe, I. H. A. (2019). Family functioning in a collectivist culture of Malaysia: A qualitative study. *The Family Journal*, *28*(4), 396–402. https://doi.org/10.1177/1066480719844334

Susanto, P., Hoque, M. E., Jannat, T., Emely, B., Zona, M. A., & Islam, M. A. (2022). Work-life balance, job satisfaction, and job performance of SMES employees: The moderating role of family-supportive supervisor behaviors. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.906876

Susanto, P., Hoque, M. E., Jannat, T., Emely, B., Zona, M. A., & Islam, M. A. (2022). Work-|ife balance, job satisfaction, and job performance of SMES employees: The

Moderating role of Family-Supportive Supervisor Behaviors. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.906876

Tan, Shen Kian. (2013). Herzberg's two-factor theory on work motivation: Does it works for todays environment?. *Global Journal of Commerce and Management Perspective. 2*. 18-22.

Tentama, F., Rahmawati, P. A., & Muhopilah, P. (2019). The effect and implications of work stress and workload on job satisfaction. *International Journal of Scientific and Technology Research, 8*(11), 2498-2502.

Thant, Z. M., & Chang, Y. (2020). Determinants of public employee job satisfaction in Myanmar: Focus on herzberg's two factor theory. *Public Organization Review*, *21*(1), 157–175.

The Sun Daily. (2024). Poor work-life balance bane of Malaysian workers. *The Sun Daily.* Retrieved November 18, 2024, from https://thesun.my/malaysia-news/poor-work-life-balance-bane-of-malaysian-workers-GA12651456

Thomas, A., & Gupta, V. (2021). Social capital theory, social exchange theory, social cognitive theory, financial literacy, and the role of knowledge sharing as a moderator in enhancing financial well-being: from bibliometric analysis to a conceptual framework model. *Frontiers in Psychology*, *12*(1). https://doi.org/10.3389/fpsyg.2021.664638

Trivellas, P., Reklitis, P., & Platis, C. (2013). The effect of job related stress on employees' satisfaction: a survey in health care. *Procedia - Social and Behavioral Sciences*, *73*, 718–726. https://doi.org/10.1016/j.sbspro.2013.02.110

Tummers, L. G., & Bakker, A. B. (2021). Leadership and Job Demands-Resources Theory: A Systematic Review. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.722080

Vyas, L. (2022). “New Normal” at Work in a post-COVID world: Work–life balance and labor markets. *Policy and Society*, *41*(1), 155–167. Oxford Academic. https://doi.org/10.1093/polsoc/puab011

Wang, B., & Wang, Y. (2021). Job burnout among safety professionals: A Chinese survey. *International Journal of Environmental Research and Public Health*, *18*(16), 8343. https://doi.org/10.3390/ijerph18168343

Wang, X., & Cheng, Z. (2020). Cross-sectional studies. *Chest, 158*(1), S65–S71. https://doi.org/10.1016/j.chest.2020.03.012

Weiss, D. J, Dawis, R. V., England, G. W., & Lofquist, L. H. (1967). *Minnesota Satisfaction Questionnaire--Short Form* [Database record]. APA PsycTests. https://doi.org/10.1037/t08880-000

Willis, G. B. (2015). *Analysis of the Cognitive Interview in Questionnaire Design*. Oxford University Press.

Wu, F., Ren, Z., Wang, Q., He, M., Xiong, W., Ma, G., Fan, X., Guo, X., Liu, H., & Zhang, X. (2020). The relationship between job stress and job burnout: the mediating effects of perceived social support and job satisfaction. *Psychology Health & Medicine*, *26*(2), 204–211. https://doi.org/10.1080/13548506.2020.1778750

Wyrwa, J., & Kaźmierczyk, J. (2020). Conceptualizing job satisfaction and its determinants: a systematic literature review. *Journal of Economic Sociology*, *21*(5), 138–167. https://doi.org/10.17323/1726-3247-2020-5-138-168

Xie, Y., Tian, J., Jiao, Y., Liu, Y., Yu, H., & Shi, L. (2021). The impact of work stress on job satisfaction and sleep quality for couriers in China: The role of psychological capital. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.730147

Yadav, R. (2022). A formative measurement model and development of quality of work-life scale based on two-factor theory: evidence from Indian private industries. *Benchmarking an International Journal*, *30*(5), 1713–1733. https://doi.org/10.1108/bij-11-2020-0571

Yildirim, M., Turan, M. E., Albeladi, N. S., Crescenzo, P., Rizzo, A., Nucera, G., ... & Chirico, F. (2023). Resilience and perceived social support as predictors of emotional well-being. *Journal of Health and Social Sciences*, 8(1), 59-75.

Yu, H.-S., Lee, E.-J., & Na, T.-K. (2022). The mediating effects of work–life balance (WLB) and ease of using WLB programs in the relationship between WLB organizational culture and turnover intention. *International Journal of Environmental Research and Public Health*, *19*(6), 3482. https://doi.org/10.3390/ijerph19063482

Yunus, W. M. a. W. M., Badri, S. K. Z., Panatik, S. A., & Mukhtar, F. (2021). The unprecedented movement control order (lockdown) and factors associated with the negative emotional symptoms, happiness, and work-life balance of Malaysian university students during the coronavirus disease (COVID-19) pandemic. *Frontiers in Psychiatry*, *11*. https://doi.org/10.3389/fpsyt.2020.566221

Yusli, N. F. Q., Suhaimi, S. A., Taib, N. Z., Abdullah, S. A., & Mohamad, M. H. (2023). Examining effects of work environment and work-life balance towards job satisfaction among MNCs millennials in Klang Valley during Covid-19 pandemic outbreak. *International Journal of Business Management (IJBM), 6*(1), 1-6.

Zanabazar, A., Jigjiddor, S., & Jambal, T. (2022). the impact of work-related stress on job satisfaction and organizational trust during COVID-19 pandemic. *SHS Web of Conferences, 135*, 01019. https://doi.org/10.1051/shsconf/202213501019

Zhang, X., Liao, H., Li, N., & Colbert, A. E. (2019). Playing it safe for my family: Exploring the dual effects of family motivation on employee productivity and creativity.

Academy of Management Journal, 63(6), 1923–1950. https://doi.org/10.5465/amj.2018.0680

Zimet, G. D., Powell, S. S., Farley, G. K., Werkman, S., & Berkoff, K. A. (1990). Psychometric characteristics of the multidimensional scale of perceived social support. *Journal of Personality Assessment*, *55*(3–4), 610–617. https://doi.org/10.1080/00223891.1990.9674095

Appendices

Appendix A

Ethical Approval for Research Project

UNIVERSITI TUNKU ABDUL RAHMAN DU012(A)
Wholly owned by UTAR Education Foundation Co. No. 578227-M

Re: U/SERC/78-438/2025

10 January 2025

Dr Lee Wan Ying
Head, Department of Psychology and Counselling
Faculty of Arts and Social Science
Universiti Tunku Abdul Rahman
Jalan Universiti, Bandar Baru Barat
31900 Kampar, Perak.

Dear Dr Lee,

Ethical Approval For Research Project/Protocol

We refer to the application for ethical approval for your students' research project from Bachelor of Social Science (Honours) Psychology programme enrolled in course UAPZ3023. We are pleased to inform you that the application has been approved under Expedited Review.

The details of the research projects are as follows:

No	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	Perceived Social Support, Work Stress, and Work-Life Balance as the Predictors of Job Satisfaction Among Working Adults in Malaysia	1. Kong Jing See 2. Liew Zi Yi Mark 3. Ng Jun Qi	Ms Sanggari a/p Krishnan	10 January 2025 – 9 January 2026

The conduct of this research is subject to the following:

(1) The participants' informed consent be obtained prior to the commencement of the research;

(2) Confidentiality of participants' personal data must be maintained; and

(3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

(4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

Should the students collect personal data of participants in their studies, please have the participants sign the attached Personal Data Protection Statement for records.

Thank you.

Yours sincerely,

Professor Ts Dr Faidz bin Abd Rahman
Chairman
UTAR Scientific and Ethical Review Committee

c.c Dean, Faculty of Arts and Social Science
Director, Institute of Postgraduate Studies and Research

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Tel: (603) 9086 0288 Fax: (603) 9019 8868
Website: www.utar.edu.my

Figure A1: Ethical approval letter with the approval number U/SERC/78-438/2025

Appendix B

Effect Size Calculation

Table 2

Means, standard deviations, and correlations for all study variables

	Min	Max	M	SD	1	2	3	4	5
1. Social support in the workplace	5.00	25.00	9.87	3.75	1				
2. Job satisfaction	4.25	20.00	9.44	2.92	.53**	1			
3. Gender [a]	0	1	X	X	-.02**	.00	1		
4. Contract hours [b]	0	1	.82	.39	.00	.07**	-.03**	1	
5. Age	15	86	42.11	11.74	.05**	.04**	.02**	-.02**	1

*, Correlation is significant at the 0.05 level (2-tailed)
**, Correlation is significant at the 0.01 level (2-tailed)
[a] Gender coded 0 (male), 1 (female)
[b] Contract hours coded 0 (parttime), 1 (fulltime)
N = 32539 (listwise)

Figure B1: Perceived Social Support and Job Satisfaction (Klijn, 2021)

$$f^2 = \frac{(.053)^2}{1-(0.53)^2} = 0.391$$

TABLE 2 | Pearson correlation analysis among different variables.

Variables	M ± SD	1	2	3	4
Work stress	2.49 ± 0.76	1			
Job satisfaction	3.76 ± 0.78	–0.266**	1		
Sleep quality	3.25 ± 0.82	–0.141**	0.194**	1	
Psychological capital	4.22 ± 0.66	–0.268**	0.234**	0.148**	1

**$P < 0.01$.

Figure B2: Work Stress and Job Satisfaction (Xie et al., 2021)

$$f^2 = \frac{(-0.266)^2}{1-(-0.266)^2} = 0.076$$

TABLE 3 | Discriminant validity and latent variable correlation.

Constructs	FSSB	JP	JS	WLB
Panel A: Fornell-lacker criterion				
Family Supportive Supervisor Behaviors (FSSB)	**0.857**			
Job Performance (JP)	0.431	**0.779**		
Job Satisfaction (JS)	0.521	0.573	**0.831**	
Work-Life Balance (WLB)	0.545	0.388	0.421	**0.911**
Panel B: Heterotrait-monotrait ratio (HTMT)				
Family Supportive Supervisor Behaviors (FSSB)	1.000			
Job Performance (JP)	0.493	1.000		
Job Satisfaction (JS)	0.605	0.629	1.000	
Work-Life Balance (WLB)	0.637	0.425	0.471	1.000
Panel C: Latent variable correlation				
Family Supportive Supervisor Behaviors (FSSB)	1.000			
Job Performance (JP)	0.431	1.000		
Job Satisfaction (JS)	0.521	0.573	1.000	
Work-Life Balance (WLB)	0.545	0.388	0.421	1.000

The square roots of the AVE values (bold) are higher the latent construct correlation.

Figure B3: Work-Life Balance and Job Satisfaction (Susanto et al., 2022)

$$f^2 = \frac{(0.421)^2}{1-(0.421)^2} = 0.215$$

Average effect size:

$$f^2 = \frac{(0.39+0.076+ +0.421)}{3} = 0.296$$

Appendix C

G*Power Sample Size Calculation

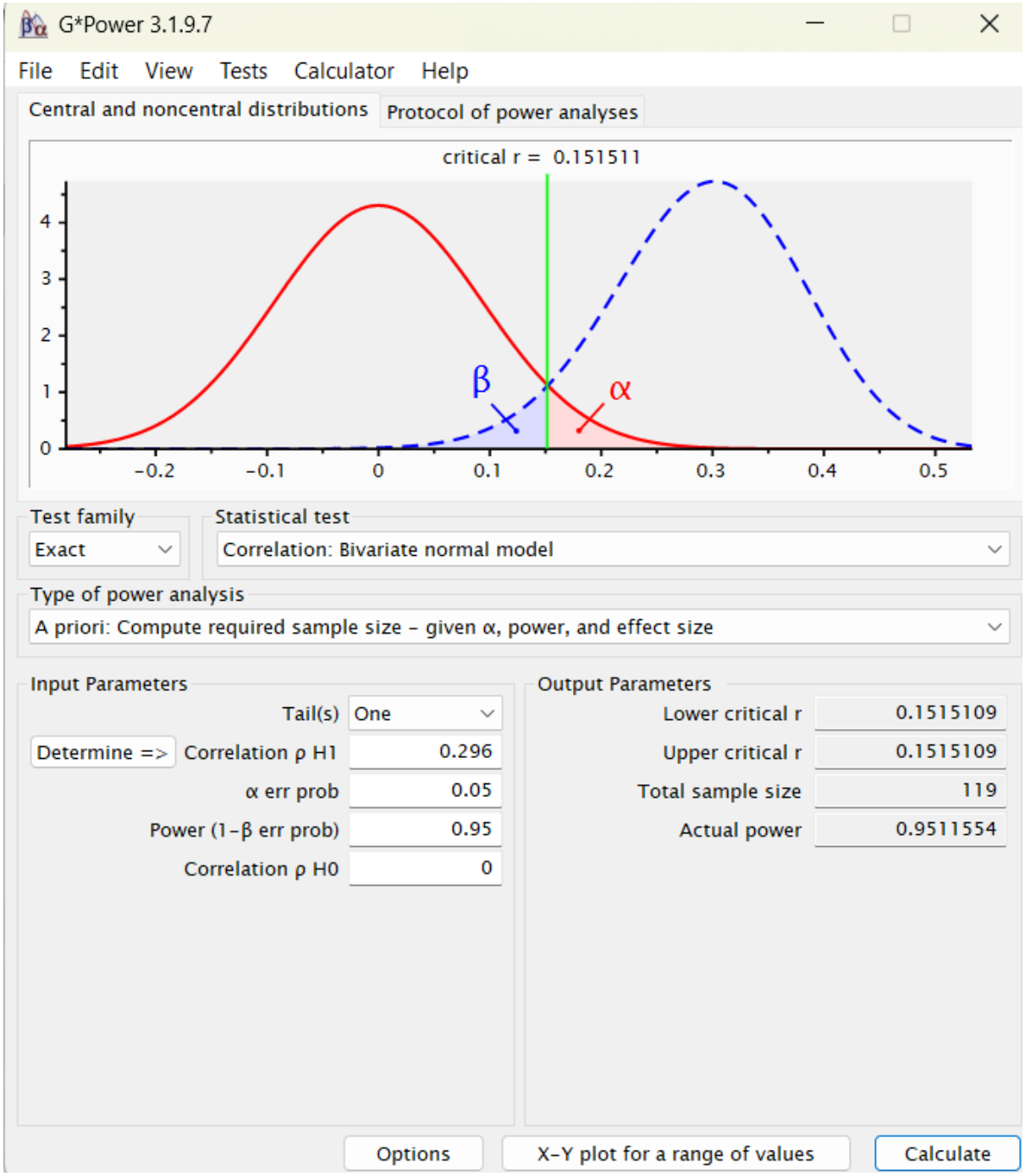

*Figure C1: G*Power Sample Size Calculation for Correlation Analyses*

Table for Determining Sample Size of a Known Population									
N	**S**	**N**	**S**	**N**	**S**	**N**	**S**	**N**	**S**
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384
Note: N is Population Size; S is Sample Size							*Source: Krejcie & Morgan, 1970*		

Figure C2: Krejcie & Morgan Table

Appendix D

Questionnaire

PERSONAL DATA PROTECTION NOTICE

Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

1. Personal data refers to any information which may directly or indirectly identify a person which could include sensitive personal data and expression of opinion. Among others it includes:

   a) Name
   b) Identity card
   c) Place of Birth
   d) Address
   e) Education History
   f) Employment History
   g) Medical History
   h) Blood type
   i) Race
   j) Religion
   k) Photo
   l) Personal Information and Associated Research Data

2. The purposes for which your personal data may be used are inclusive but not limited to:

   a) For assessment of any application to UTAR
   b) For processing any benefits and services
   c) For communication purposes
   d) For advertorial and news
   e) For general administration and record purposes
   f) For enhancing the value of education
   g) For educational and related purposes consequential to UTAR
   h) For replying any responds to complaints and enquiries
   i) For the purpose of our corporate governance
   j) For the purposes of conducting research/ collaboration

3. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

4. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

5. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:

6. By submitting or providing your personal data to UTAR, you had consented and agreed for your personal data to be used in accordance to the terms and conditions in the Notice and our relevant policy.

7. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

8. You may access and update your personal data by writing to us at junqi0721@gmail.com.

Acknowledgment of Notice

[ ] I have been notified and that I hereby understood, consented and agreed per UTAR above notice.

[ ] I disagree, my personal data will not be processed.

.....
Name:
Date:

Figure D1: Personal Data Protection Notice

Appendix E

Reliability

Pilot Study

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.864	.869	12

Figure E1: Reliability for Multidimensional Scale of Perceived Social Support (MSPSS)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.763	.772	13

Figure E2: Reliability for Work-Related Stress Questionnaire (WRSQ)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.657	.674	15

Figure E3: Reliability for Work-Life Balance Self-Assessment Scale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.883	.885	20

Figure E4: Reliability for Minnesota Satisfaction Questionnaire (MSQ)

Actual Study

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.861	.863	12

Figure E5: Reliability for Multidimensional Scale of Perceived Social Support (MSPSS)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.871	.871	13

Figure E6: Reliability for Work-Related Stress Questionnaire (WRSQ)

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.872	.874	15

Figure E7: Reliability for Work-Life Balance Self-Assessment Scale

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.902	.921	20

Figure E8: Reliability for Minnesota Satisfaction Questionnaire (MSQ)

Appendix F

Histogram for Each Distribution

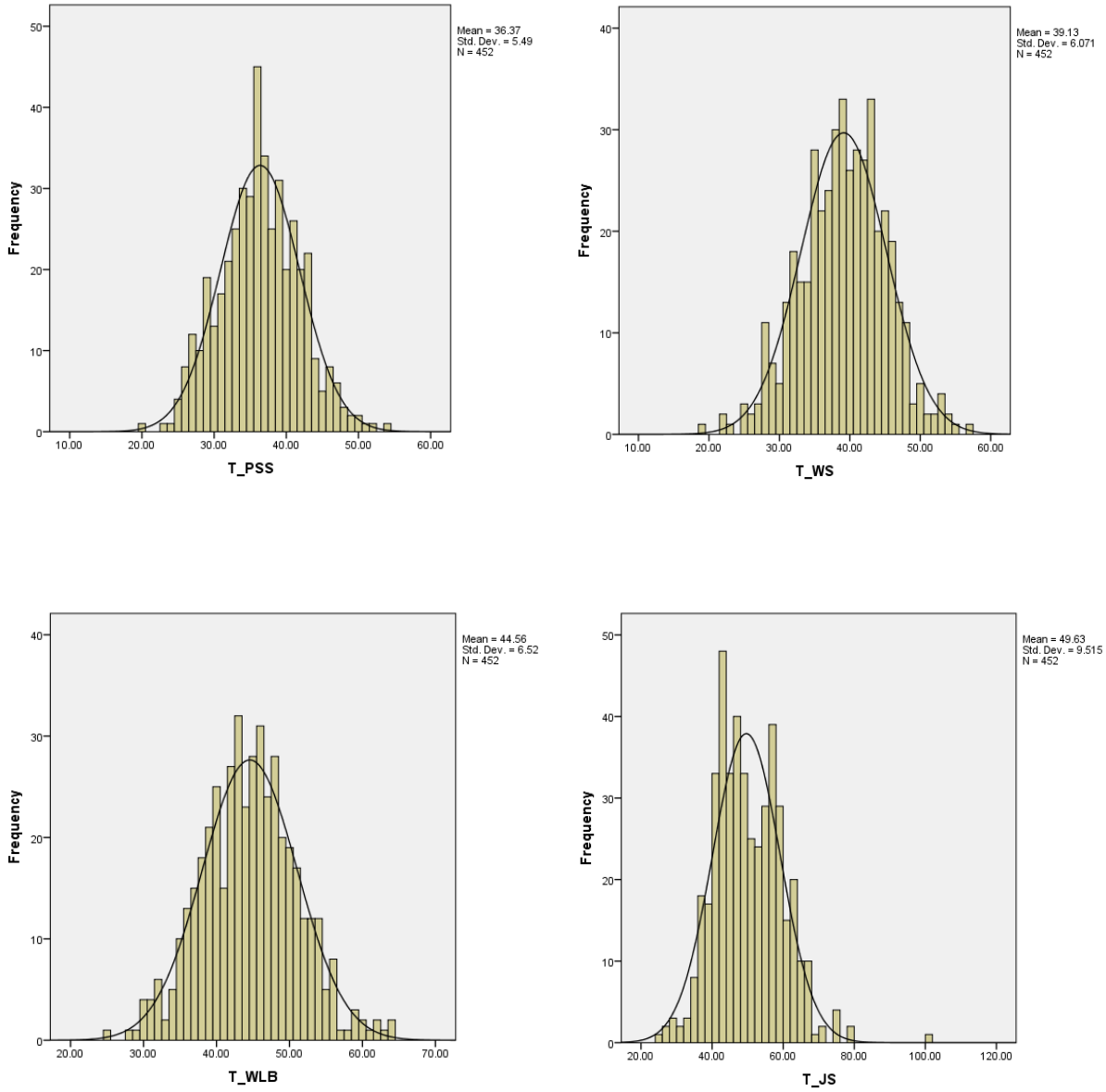

Figure F1: Histogram for each variable.

Appendix G

P-P plot for Each Variable

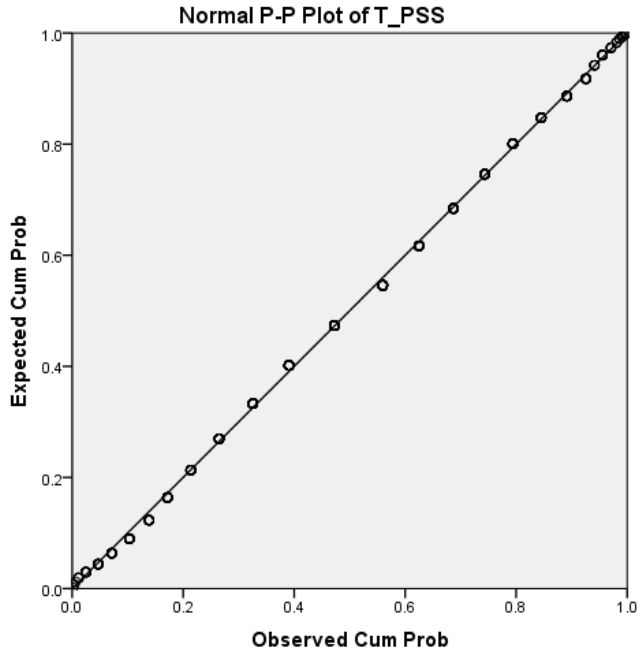

Figure G1: P-P plot for Perceived Social Support

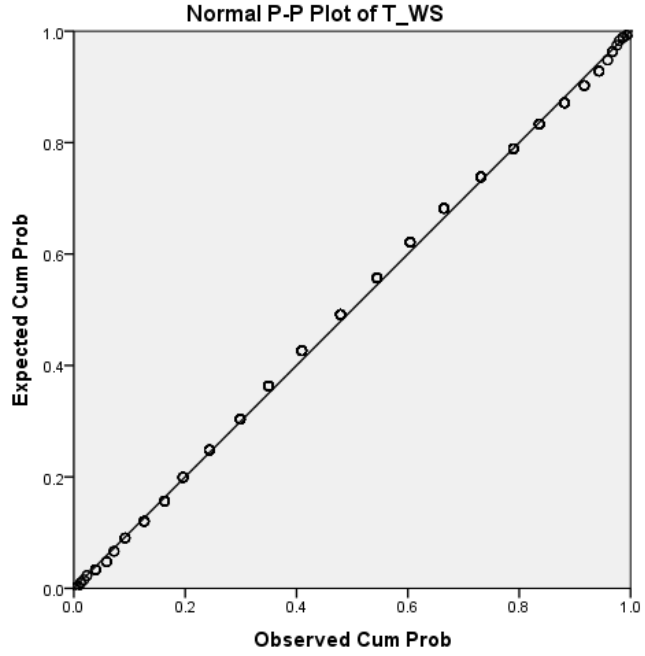

Figure G2: P-P plot Work Stress

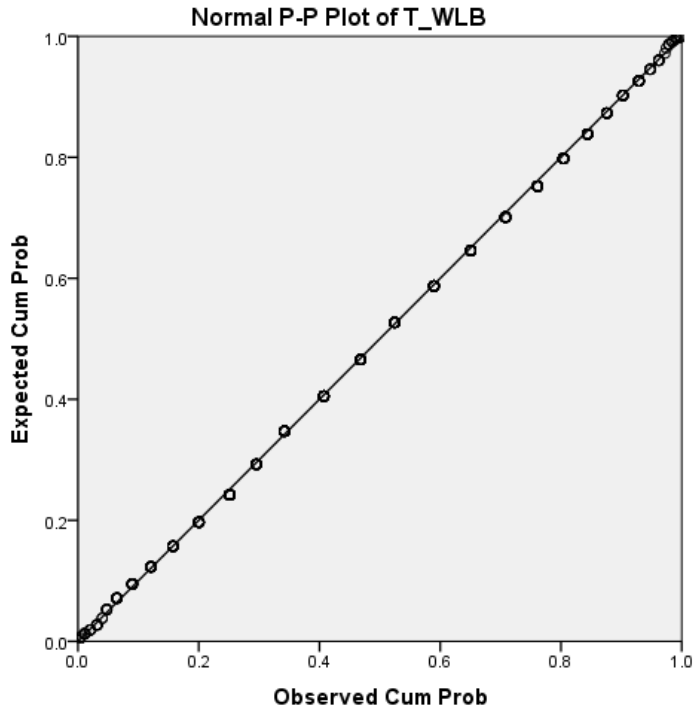

Figure G3: P-P plot for Work-Life Balance

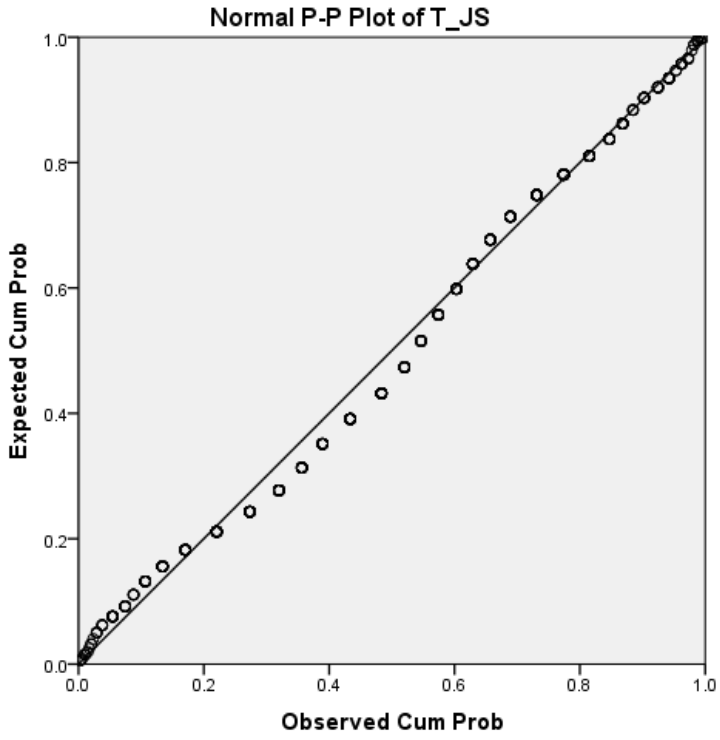

Figure G4: P-P plot for Job Satisfaction

Appendix H

Pearson's Product Correlation (PPMC)

Correlations

		Total of Perceived Social Support	Total of Work Stress	Total of Work-Life Balance	Total of Job Satisfaction
Total of Perceived Social Support	Pearson Correlation	1	.227**	.236**	.446**
	Sig. (1-tailed)		.000	.000	.000
	N	452	452	452	452
Total of Work Stress	Pearson Correlation	.227**	1	.172**	-.292**
	Sig. (1-tailed)	.000		.000	.000
	N	452	452	452	452
Total of Work-Life Balance	Pearson Correlation	.236**	.172**	1	.507**
	Sig. (1-tailed)	.000	.000		.000
	N	452	452	452	452
Total of Job Satisfaction	Pearson Correlation	.446**	-.292**	.507**	1
	Sig. (1-tailed)	.000	.000	.000	
	N	452	452	452	452

**. Correlation is significant at the 0.01 level (1-tailed).

Figure H1:Correlation analysis for study variables

Appendix I

Normality Assumptions

Descriptives

			Statistic	Std. Error
T_PSS	Mean		36.3673	.25823
	95% Confidence Interval for Mean	Lower Bound	35.8598	
		Upper Bound	36.8747	
	5% Trimmed Mean		36.3156	
	Median		36.0000	
	Variance		30.140	
	Std. Deviation		5.48997	
	Minimum		20.00	
	Maximum		54.00	
	Range		34.00	
	Interquartile Range		7.00	
	Skewness		.082	.115
	Kurtosis		-.072	.229
T_WS	Mean		39.1261	.28555
	95% Confidence Interval for Mean	Lower Bound	38.5649	
		Upper Bound	39.6873	
	5% Trimmed Mean		39.1701	
	Median		39.0000	
	Variance		36.855	
	Std. Deviation		6.07087	
	Minimum		19.00	
	Maximum		57.00	
	Range		38.00	
	Interquartile Range		8.00	
	Skewness		-.151	.115
	Kurtosis		.093	.229
T_WLB	Mean		44.5597	.30667
	95% Confidence Interval for Mean	Lower Bound	43.9571	
		Upper Bound	45.1624	
	5% Trimmed Mean		44.5197	
	Median		45.0000	
	Variance		42.509	
	Std. Deviation		6.51986	
	Minimum		25.00	
	Maximum		64.00	
	Range		39.00	
	Interquartile Range		9.00	
	Skewness		.104	.115
	Kurtosis		.114	.229
T_JS	Mean		49.6305	.44757
	95% Confidence Interval for Mean	Lower Bound	48.7510	
		Upper Bound	50.5101	
	5% Trimmed Mean		49.4272	
	Median		48.0000	
	Variance		90.544	
	Std. Deviation		9.51546	
	Minimum		25.00	
	Maximum		100.00	
	Range		75.00	
	Interquartile Range		13.00	
	Skewness		.517	.115
	Kurtosis		1.293	.229

Figure I1: Skewness and kurtosis value

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
T_PSS	.051	452	.006	.995	452	.120
T_WS	.050	452	.008	.995	452	.139
T_WLB	.038	452	.143	.996	452	.243
T_JS	.075	452	.000	.978	452	.000

a. Lilliefors Significance Correction

Figure I2: Kolmogorov-Smirnov Test for Each Distribution

Appendix J

Multiple Linear Regression (MLR) Analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	19.554	2.820		6.933	.000	14.011	25.097		
	T_PSS	.762	.056	.440	13.702	.000	.653	.871	.908	1.101
	T_WS	-.746	.050	-.476	-15.032	.000	-.843	-.648	.933	1.071
	T_WLB	.708	.046	.485	15.292	.000	.617	.799	.930	1.076

a. Dependent Variable: T_JS

Figure J1:Variance Inflation Factor (VIF) Values and Tolerance Values

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.762[a]	.581	.578	6.18032	1.860

a. Predictors: (Constant), T_WLB, T_WS, T_PSS

b. Dependent Variable: T_JS

Figure J2: Durbin-Watson Test

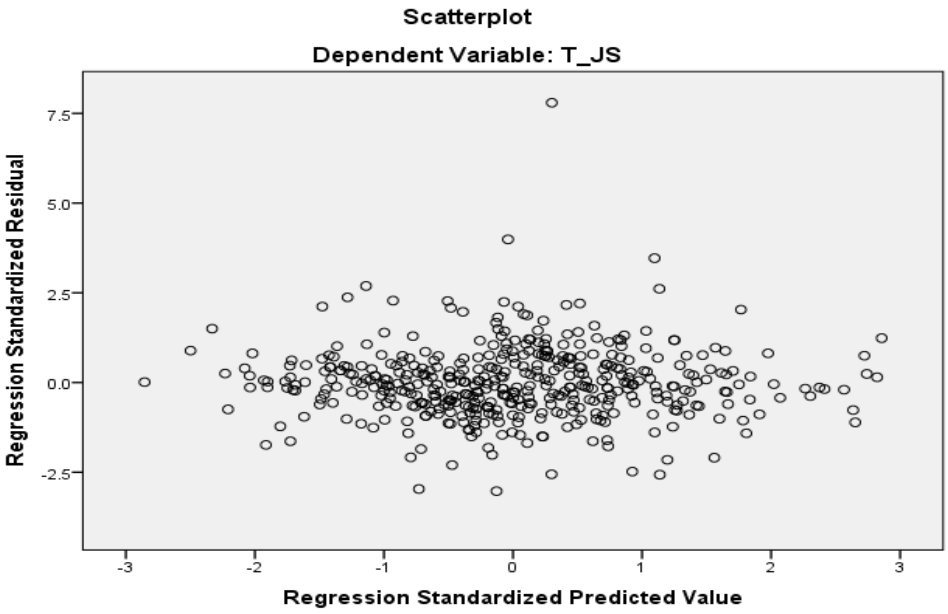

Figure J3: Scatterplot demonstrated the normality of residuals, linearity, and homoscedasticity

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23723.315	3	7907.772	207.029	.000[b]
	Residual	17111.983	448	38.196		
	Total	40835.299	451			

a. Dependent Variable: T_JS

b. Predictors: (Constant), T_WLB, T_WS, T_PSS

Figure J4: Regression Model

Casewise Diagnostics[a]

Case Number	Std. Residual	T_JS	Predicted Value	Residual
4	2.117	63.00	49.9192	13.08081
23	2.612	74.00	57.8577	16.14230
30	2.117	52.00	38.9158	13.08416
50	-2.556	36.00	51.7988	-15.79876
80	-2.968	26.00	44.3420	-18.34196
84	2.163	66.00	52.6316	13.36845
147	2.690	58.00	41.3737	16.62628
154	-2.094	48.00	60.9439	-12.94388
176	-2.482	41.00	56.3387	-15.33872
197	7.796	100.00	51.8154	48.18465
200	3.988	74.00	49.3519	24.64805
203	-2.153	45.00	58.3074	-13.30740
211	2.283	57.00	42.8923	14.10769
217	2.081	59.00	46.1409	12.85910
270	-2.299	32.00	46.2116	-14.21163
314	2.373	55.00	40.3313	14.66870
418	-3.027	30.00	48.7074	-18.70744
420	-2.016	36.00	48.4599	-12.45988
427	2.245	63.00	49.1243	13.87566
431	-2.569	42.00	57.8794	-15.87944
439	-2.085	31.00	43.8871	-12.88712
441	2.202	67.00	53.3881	13.61192
444	2.032	75.00	62.4411	12.55887
445	3.465	79.00	57.5870	21.41298
446	2.272	60.00	45.9568	14.04324

a. Dependent Variable: T_JS

Figure J5: Casewise Diagnostics for Job Satisfaction

Case Summaries[a]

	Mahalanobis Distance	Cook's Distance	Centered Leverage Value
1	.73804	.00207	.00164
2	1.02853	.00094	.00228
3	5.16972	.01063	.01146
4	3.21209	.01065	.00712
5	1.29842	.00008	.00288
6	4.71066	.00231	.01044
7	5.13631	.00064	.01139
8	.50650	.00015	.00112
9	3.87011	.00006	.00858
10	1.30669	.00003	.00290
11	2.97488	.00029	.00660
12	6.55435	.00491	.01453
13	2.61712	.00546	.00580
14	1.65444	.00004	.00367
15	5.71435	.00000	.01267
16	8.08572	.00026	.01793
17	.92955	.00085	.00206
18	2.32571	.00005	.00516
19	1.37154	.00149	.00304
20	.40723	.00114	.00090
21	.48366	.00041	.00107
22	10.23829	.01003	.02270
23	1.36392	.00903	.00302
24	.61904	.00103	.00137
25	4.26282	.00108	.00945
26	1.88894	.00091	.00419
27	2.53602	.00103	.00562
28	5.15610	.00006	.01143
29	.47911	.00024	.00106
30	5.75012	.01728	.01275
31	7.56741	.00020	.01678
32	1.82726	.00003	.00405
33	1.99611	.00153	.00443
34	10.23476	.00001	.02269
35	1.51106	.00018	.00335
36	.12442	.00005	.00028
37	.27837	.00088	.00062
38	2.40400	.00061	.00533
39	1.57984	.00056	.00350

40	.33058	.00081	.00073
41	6.60697	.00344	.01465
42	9.20198	.00466	.02040
43	2.02803	.00050	.00450
44	1.65446	.00011	.00367
45	4.09920	.00068	.00909
46	1.75109	.00279	.00388
47	3.47296	.00018	.00770
48	3.71163	.00603	.00823
49	2.96391	.00135	.00657
50	1.39204	.00875	.00309
51	1.45734	.00000	.00323
52	5.24588	.00545	.01163
53	2.06593	.00002	.00458
54	3.25845	.00000	.00722
55	2.60819	.00065	.00578
56	3.04501	.00264	.00675
57	3.45257	.00018	.00766
58	5.46690	.00002	.01212
59	2.92885	.00029	.00649
60	2.69521	.00070	.00598
61	2.40010	.00010	.00532
62	.91770	.00002	.00203
63	2.95700	.00001	.00656
64	.49130	.00015	.00109
65	3.11626	.00188	.00691
66	2.68219	.00617	.00595
67	2.77396	.00022	.00615
68	2.25260	.00068	.00499
69	1.82738	.00042	.00405
70	4.20940	.00332	.00933
71	.81681	.00048	.00181
72	1.79565	.00005	.00398
73	5.42360	.00011	.01203
74	6.25846	.00387	.01388
75	.85270	.00043	.00189
76	.46752	.00000	.00104
77	9.33144	.00675	.02069
78	.60879	.00139	.00135
79	1.79792	.00002	.00399
80	5.46607	.03248	.01212
81	2.95047	.00122	.00654
82	1.56206	.00020	.00346

83	5.74519	.00122	.01274
84	.86634	.00488	.00192
85	2.24041	.00000	.00497
86	1.42252	.00004	.00315
87	.43751	.00046	.00097
88	7.86571	.00657	.01744
89	.01209	.00015	.00003
90	2.62829	.00046	.00583
91	1.85700	.00036	.00412
92	4.21716	.00033	.00935
93	1.32894	.00006	.00295
94	.55648	.00001	.00123
95	9.57747	.01385	.02124
96	.56611	.00046	.00126
97	1.86584	.00553	.00414
98	2.74882	.00038	.00609
99	1.07244	.00125	.00238
100	.40953	.00063	.00091
101	3.75174	.00017	.00832
102	2.91564	.00024	.00646
103	1.39689	.00044	.00310
104	2.22382	.00022	.00493
105	1.28407	.00111	.00285
106	1.37735	.00004	.00305
107	1.84346	.00526	.00409
108	7.27221	.00002	.01612
109	5.20501	.00023	.01154
110	1.83410	.00095	.00407
111	1.57541	.00020	.00349
112	3.02192	.00031	.00670
113	8.63178	.00072	.01914
114	2.41181	.00012	.00535
115	.99987	.00036	.00222
116	2.04324	.00001	.00453
117	2.44156	.00115	.00541
118	1.77339	.00000	.00393
119	.86133	.00007	.00191
120	.11707	.00030	.00026
121	6.31666	.00523	.01401
122	.92605	.00069	.00205
123	1.28471	.00014	.00285
124	2.45859	.00004	.00545
125	5.55840	.00248	.01232

126	7.52605	.00005	.01669
127	2.17741	.00054	.00483
128	3.93754	.00216	.00873
129	4.57995	.00077	.01016
130	3.66535	.00036	.00813
131	12.03424	.00015	.02668
132	.20201	.00004	.00045
133	.52731	.00062	.00117
134	1.73135	.00004	.00384
135	.92771	.00012	.00206
136	4.59887	.00251	.01020
137	1.56512	.00000	.00347
138	.57424	.00036	.00127
139	3.17502	.00003	.00704
140	.69678	.00009	.00154
141	1.02465	.00015	.00227
142	3.67069	.00737	.00814
143	3.73904	.00105	.00829
144	3.81841	.00034	.00847
145	.83919	.00050	.00186
146	1.97669	.00000	.00438
147	4.76884	.02374	.01057
148	3.46108	.00011	.00767
149	2.97046	.00007	.00659
150	2.69986	.00012	.00599
151	5.11828	.00005	.01135
152	3.50786	.00000	.00778
153	3.00451	.00024	.00666
154	2.93797	.00974	.00651
155	3.64047	.00000	.00807
156	.44675	.00010	.00099
157	4.97431	.00093	.01103
158	1.07244	.00001	.00238
159	2.41710	.00001	.00536
160	1.35873	.00011	.00301
161	2.95433	.00001	.00655
162	3.75933	.00539	.00834
163	7.60855	.00612	.01687
164	.97525	.00003	.00216
165	.17263	.00148	.00038
166	1.45443	.00010	.00322
167	2.70077	.00081	.00599
168	2.66267	.00032	.00590

169	1.68512	.00228	.00374
170	2.89055	.00052	.00641
171	2.89297	.00000	.00641
172	.27940	.00042	.00062
173	.17104	.00019	.00038
174	1.65901	.00236	.00368
175	7.98759	.00040	.01771
176	1.66493	.00920	.00369
177	2.07803	.00012	.00461
178	.31610	.00150	.00070
179	.72170	.00051	.00160
180	3.62787	.00059	.00804
181	9.56423	.00357	.02121
182	3.53667	.00004	.00784
183	.49043	.00014	.00109
184	2.13591	.00136	.00474
185	1.57526	.00158	.00349
186	1.85479	.00118	.00411
187	2.99381	.00007	.00664
188	.41704	.00198	.00092
189	2.25852	.00013	.00501
190	4.08085	.00596	.00905
191	.27940	.00052	.00062
192	.90161	.00000	.00200
193	7.33151	.00283	.01626
194	1.48137	.00308	.00328
195	1.08818	.00016	.00241
196	5.23913	.00173	.01162
197	1.54530	.08666	.00343
198	1.47600	.00437	.00327
199	3.01743	.00017	.00669
200	3.22888	.03797	.00716
201	2.06507	.00246	.00458
202	4.00367	.00107	.00888
203	7.44803	.02254	.01651
204	1.80684	.00002	.00401
205	1.45928	.00266	.00324
206	1.44187	.00001	.00320
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208	.29570	.00001	.00066
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210	.23895	.00003	.00053
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226	7.48195	.00012	.01659
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229	.59749	.00049	.00132
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234	.46543	.00045	.00103
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236	1.39769	.00260	.00310
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271	.10132	.00084	.00022
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400	4.09294	.00500	.00908
401	.42292	.00262	.00094
402	3.50061	.00001	.00776
403	3.59264	.00127	.00797
404	1.77165	.00174	.00393
405	.85843	.00137	.00190
406	.50691	.00008	.00112
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449		10.01397	.00000	.02220
450		3.07542	.00012	.00682
451		2.90883	.00856	.00645
452		7.07000	.00475	.01568
Total	N	452	452	452

a. Limited to first 452 cases.

Table J1: Case summaries for Mahalanobis Distance, Cook's Distance and Leverage

Appendix K

Descriptive Statistics of Demographic Variables

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	25	5	1.1	1.1	1.1
	26	11	2.4	2.4	3.5
	27	17	3.8	3.8	7.3
	28	15	3.3	3.3	10.6
	29	16	3.5	3.5	14.2
	30	18	4.0	4.0	18.1
	31	8	1.8	1.8	19.9
	32	18	4.0	4.0	23.9
	33	7	1.5	1.5	25.4
	34	22	4.9	4.9	30.3
	35	5	1.1	1.1	31.4
	36	24	5.3	5.3	36.7
	37	26	5.8	5.8	42.5
	38	16	3.5	3.5	46.0
	39	16	3.5	3.5	49.6
	40	18	4.0	4.0	53.5
	41	20	4.4	4.4	58.0
	42	23	5.1	5.1	63.1
	43	26	5.8	5.8	68.8
	44	19	4.2	4.2	73.0
	45	10	2.2	2.2	75.2
	46	3	.7	.7	75.9
	47	24	5.3	5.3	81.2
	48	14	3.1	3.1	84.3
	49	6	1.3	1.3	85.6
	50	18	4.0	4.0	89.6
	51	9	2.0	2.0	91.6
	52	7	1.5	1.5	93.1
	53	16	3.5	3.5	96.7
	54	8	1.8	1.8	98.5
	55	7	1.5	1.5	100.0
	Total	452	100.0	100.0	

Figure K1: Descriptive statistics for age

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	312	69.0	69.0	69.0
	Female	140	31.0	31.0	100.0
	Total	452	100.0	100.0	

Figure K2:Descriptive statistics for gender

Race

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chinese	140	31.0	31.0	31.0
	Malay	161	35.6	35.6	66.6
	Indian	110	24.3	24.3	90.9
	Others	41	9.1	9.1	100.0
	Total	452	100.0	100.0	

Figure K3: Descriptive statistics for race

State in Malaysia

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Perlis	21	4.6	4.6	4.6
	Kedah	11	2.4	2.4	7.1
	Penang	42	9.3	9.3	16.4
	Perak	30	6.6	6.6	23.0
	Selangor	54	11.9	11.9	35.0
	Negeri Sembilan	29	6.4	6.4	41.4
	Malacca	33	7.3	7.3	48.7
	Johor	83	18.4	18.4	67.0
	Kelantan	24	5.3	5.3	72.3
	Terengganu	13	2.9	2.9	75.2
	Pahang	18	4.0	4.0	79.2
	Sabah	46	10.2	10.2	89.4
	Sarawak	48	10.6	10.6	100.0
	Total	452	100.0	100.0	

Figure K4: Descriptive statistics for living states in Malaysia

Industry Working In

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Healthcare	48	10.6	10.6	10.6
	Finance and Economic	36	8.0	8.0	18.6
	Education	43	9.5	9.5	28.1
	Engineering and Manufacturing	54	11.9	11.9	40.0
	Retail	65	14.4	14.4	54.4
	Information technology	36	8.0	8.0	62.4
	Agriculture	48	10.6	10.6	73.0
	Food and Beverages	43	9.5	9.5	82.5
	Entertainment	29	6.4	6.4	88.9
	Hospitality	41	9.1	9.1	98.0
	Others	9	2.0	2.0	100.0
	Total	452	100.0	100.0	

Figure K5: Descriptive statistics for working industries

Job Position and Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Entry-Level	54	11.9	11.9	11.9
	Mid-Level	157	34.7	34.7	46.7
	Managerial	174	38.5	38.5	85.2
	Senior Executive	56	12.4	12.4	97.6
	Others	11	2.4	2.4	100.0
	Total	452	100.0	100.0	

Figure K6: Descriptive statistics for job position and level

Years of Work Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	16	3.5	3.5	3.5
	1-3 years	61	13.5	13.5	17.0
	4-7 years	210	46.5	46.5	63.5
	8+ years and above	165	36.5	36.5	100.0
	Total	452	100.0	100.0	

Figure K7: Descriptive statistics for years of work experience

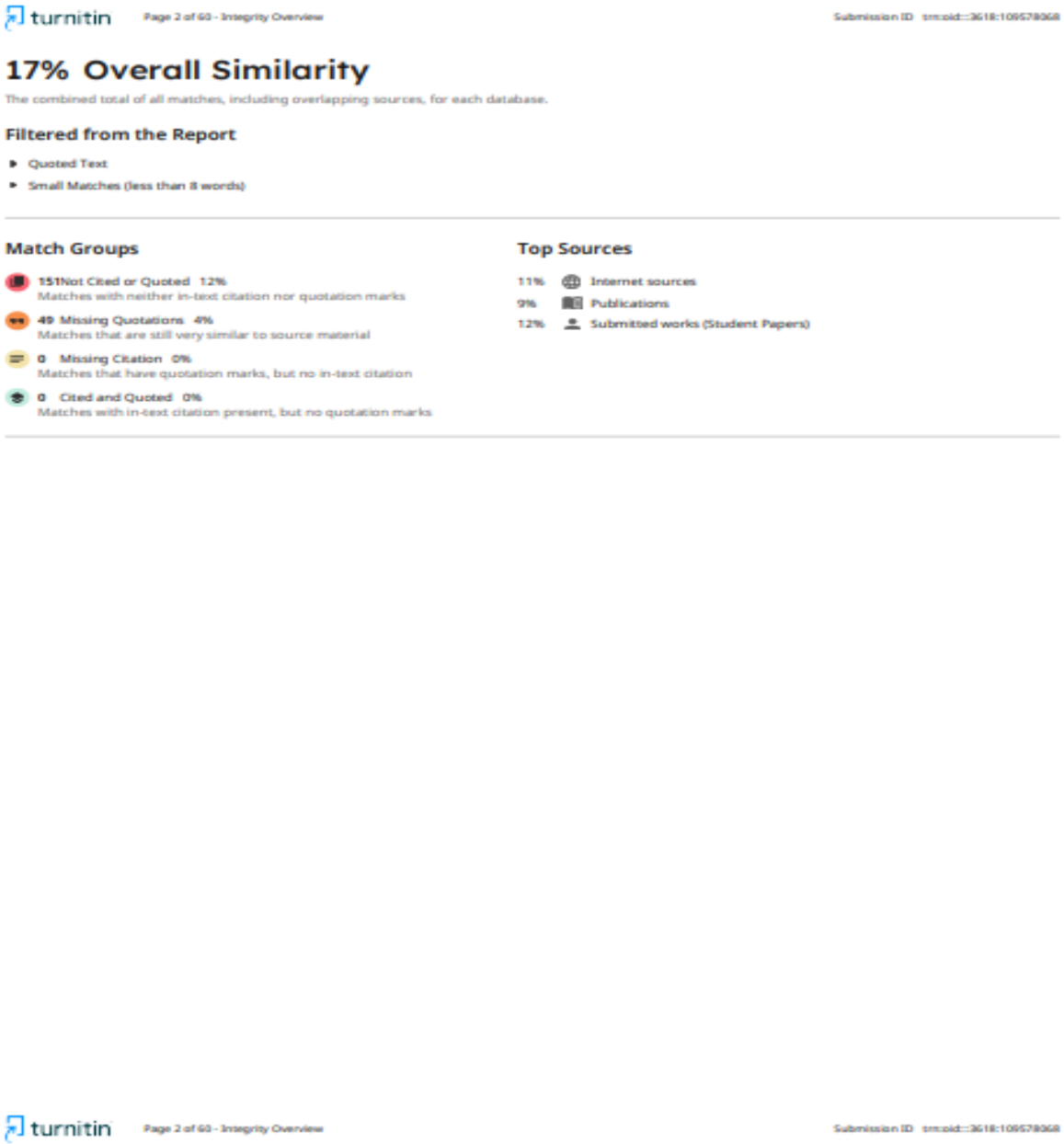
Statistics

		Total of Perceived Social Support	Total of Work Stress	Total of Work-Life Balance	Total of Job Satisfaction
N	Valid	452	452	452	452
	Missing	0	0	0	0
Mean		36.3673	39.1261	44.5597	49.6305
Std. Deviation		5.48997	6.07087	6.51986	9.51546
Minimum		20.00	19.00	25.00	25.00
Maximum		54.00	57.00	64.00	100.00

Figure K8: Descriptive statistics for variables

Appendix L

Turnitin Report



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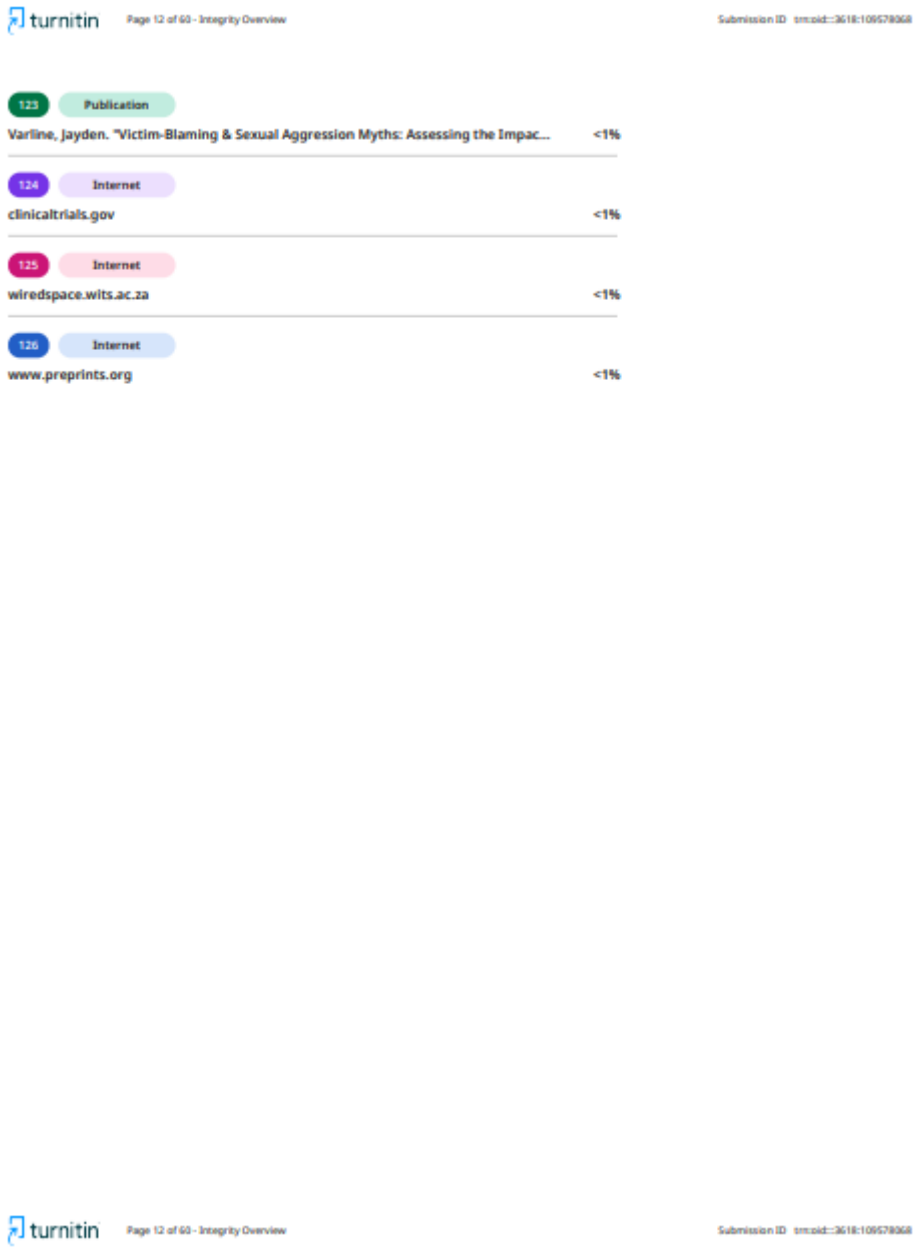

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