

# The Relationship Between Work-Life Balance and Job Satisfaction Among Medical Doctors in Johor Bahru: A Quantitative Cross-Sectional Study

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## ABSTRACT

This research aims to examine the relationship between work-life balance (WLB) and job satisfaction (JS) among medical doctors in Johor Bahru, Malaysia, identifying how the balance between professional and personal life influences their occupational well-being. A quantitative research design was employed, utilizing purposive sampling to recruit 354 medical doctors. Data were collected through structured questionnaires featuring the 15-item Work-Life Balance Scale (Fisher et al., 2009) and the 20-item Minnesota Satisfaction Questionnaire (MSQ). Reliability analysis was conducted using Cronbach's alpha to ensure internal consistency. Results reveal a strong, positive, and statistically significant relationship between work-life balance and job satisfaction. Sub-dimensions of WLB; including Work Interference with Personal Life (WIPL), Personal Life Interference with Work (PLIW), and Work/Personal Life Enhancement (WPLE), demonstrated high reliability. Medical doctors reporting better balance between work and personal life showed greater job satisfaction, supporting theoretical frameworks such as Boundary Theory, Herzberg's Two-Factor Theory, and Social Exchange Theory. The study's purposive sampling limits the generalizability of the findings. Further research with broader sampling techniques and longitudinal designs is recommended to confirm and extend these results. This study contributes valuable insights into occupational well-being among medical professionals in Malaysia, underscoring the importance of implementing supportive work-life policies to enhance job satisfaction, reduce burnout, and improve healthcare quality.

**Keywords**— Work-life balance, Job satisfaction, Medical doctors, Healthcare workforce, Malaysia

## INTRODUCTION

The demanding nature of the medical profession has rendered work-life balance (WLB) and job satisfaction (JS) critical dimensions of workforce sustainability and healthcare quality. Globally, physicians operate under intense psychological and professional pressures, often resulting in burnout, diminished well-being, and compromised patient care (Partha Lodh, 2023; Dinibutun, 2020). The situation is particularly pronounced in fast-developing healthcare systems such as Malaysia's, where urban centers like Johor Bahru face a growing demand for medical services amidst limited personnel and systemic pressures (Rao & Shailashri, 2021). Amid these challenges, the ability of medical doctors to maintain equilibrium between professional duties and personal responsibilities has emerged as a decisive factor influencing not only job satisfaction but also healthcare system performance (Bodendieck et al., 2022; Ferreira et al., 2023).

Work-life balance, broadly defined as the successful management of one's occupational responsibilities alongside personal and social commitments, plays a foundational role in shaping a physician's job satisfaction and overall well-being (Greenhaus & Allen, 2023). Theoretical frameworks such as Boundary Theory suggest that individuals navigate and negotiate the boundaries between work and life domains, with disruptions in one

sphere exerting spillover effects on the other (Dahar & Luhana, 2024). Simultaneously, Herzberg's Two-Factor Theory offers insights into how intrinsic and extrinsic factors such as workload, autonomy, and recognition, interact with psychosocial elements like WLB to determine job satisfaction levels (Jermsittiparsert, 2020; Gonçalves et al., 2020).

Job satisfaction, as a multidimensional construct, encompasses emotional and cognitive evaluations of one's professional experience, influenced by expectations, organizational support, and personal values (Taslina Jannat et al., 2022; Zhang et al., 2020). Studies have consistently shown that enhanced WLB is associated with higher job satisfaction, reduced turnover intentions, and greater mental health among healthcare professionals (Aruldoss et al., 2022; Anjum et al., 2023). Moreover, recent international research underscores the importance of WLB in specialty selection, career retention, and long-term performance among younger cohorts of medical professionals (Akyön et al., 2023; Kaur & Arora, 2023).

Despite a growing body of evidence from Western healthcare contexts, there remains a paucity of localized empirical data on how WLB influences JS among Malaysian physicians, particularly in high-pressure urban environments. This study aims to fill this gap by exploring the relationship between WLB and JS among medical doctors practicing in Johor Bahru, Malaysia. This region exemplifies the complexities of balancing modern healthcare demands with personal life domains. Understanding the interrelationship between WLB and JS is not merely a matter of occupational wellness; it has direct implications for patient outcomes, institutional efficiency, and national health policy. Doctors with higher job satisfaction are less likely to experience burnout, are more engaged with their work, and are ultimately more effective in clinical settings (Francis et al., 2024; Roberts et al., 2025). Thus, fostering an environment where WLB is not only acknowledged but actively supported is imperative for sustaining a resilient and effective medical workforce.

This paper is structured as follows. The Literature Review section outlines relevant theoretical frameworks and empirical findings on WLB and JS, with a focus on healthcare settings. The Methodology section details the sampling strategy, research procedures, instrumentation, pilot testing, and reliability assessment. The Data Analysis and Findings section presents the results of the reliability analysis, descriptive statistics, and inferential testing. The Discussion contextualizes the findings within the broader literature and theoretical constructs. Finally, the Conclusion and Recommendations section highlights the practical implications for healthcare policy and practice. It suggests avenues for future research aimed at improving physician well-being and healthcare system resilience.

## LITERATURE REVIEW

A substantial body of empirical evidence has demonstrated a positive association between work-life balance (WLB) and job satisfaction (JS), reinforcing the theoretical and practical significance of WLB in organizational settings. For instance, Mandagi and Wijono (2023) conducted a quantitative study involving 48 employees at PT. X Yogyakarta to examine the relationship between WLB and JS. Their analysis revealed a statistically significant and positive correlation between the two variables, indicating that employees who experience better work-life balance tend to report higher levels of job satisfaction. The study emphasized that promoting work-life balance is not merely a matter of employee well-being but a strategic organizational priority to foster a more engaged and satisfied workforce. Although the sample size was limited, the findings provide an important insight into the psychological benefits of WLB in a corporate context and support further organizational investment in employee-centred policies.

Similarly, a broader examination of the topic was undertaken by Lopes da Costa et al. (2020) in a study titled "Study on Work-Life Balance and Its Impact on Employee Job Satisfaction." Their research examined how employees perceive the interplay between their work and personal lives, and how these perceptions impact their overall job satisfaction. The results affirmed a positive correlation between WLB and JS, with employees who managed to balance both domains effectively reporting greater workplace happiness and fulfilment. Notably, the study highlighted that job satisfaction does not operate in isolation but is significantly influenced by an individual's holistic experience across professional and personal spheres. This reinforces the notion that work-life balance should not be viewed solely through the lens of time management but also through psychological

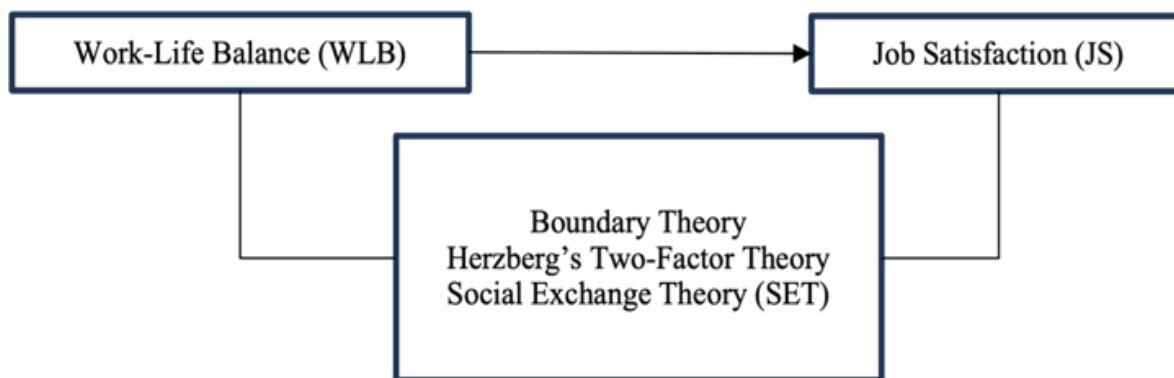
and emotional well-being, autonomy, and organizational culture.

Extending this line of inquiry into the healthcare sector, Fouzad Muhammed (2023) conducted a study among government medical officers in the Ampara District of Sri Lanka to assess the prevalence of WLB and its relationship with JS. Using standardized questionnaire scales and Pearson's correlation analysis, the study found a moderate yet statistically significant positive relationship between the two variables. The findings are especially important in high-demand professional settings such as healthcare, where long hours, emotional labour, and role conflict often lead to burnout and dissatisfaction. Muhammed argued that effective work-life balance mechanisms can mitigate these occupational stressors and improve job satisfaction among medical professionals. The study thus brings attention to the critical need for organizational and policy-level interventions in healthcare environments to ensure employee well-being and sustainable job performance.

## THEORETICAL FRAMEWORK

Taken together, these studies from different sectors corporate (Mandagi & Wijono, 2023), general workforce (Lopes da Costa et al., 2020), and healthcare (Fouzad Muhammed, 2023) consistently affirm that work-life balance plays a pivotal role in shaping job satisfaction. The convergence of findings across diverse occupational contexts provides strong empirical support for integrating WLB-enhancing strategies into human resource practices. However, the relationship between WLB and JS is comprehensively articulated through the integration of Boundary Theory, Herzberg's Two-Factor Theory, and Social Exchange Theory (SET), as illustrated in **Fig. 1.** below. Each theory offers a distinct yet complementary lens for understanding how the alignment between work and nonwork domains influences employee outcomes. Collectively, these theoretical models converge on the premise that the interaction between professional and personal life significantly affects employee motivation, psychological well-being, and organizational commitment.

**Fig. 1.** Integrated Theoretical Framework of WLB and JS



To deepen the understanding of the mechanisms underpinning the relationship between WLB and JS, this study draws on three complementary theoretical lenses: Boundary Theory, Herzberg's Two-Factor Theory, and Social Exchange Theory (SET). These frameworks collectively offer nuanced insights into the psychological, motivational, and relational processes through which WLB influences job satisfaction, particularly in high-stress, role-intensive professions such as medical.

Boundary Theory provides a structural and cognitive framework to examine how individuals navigate the intersection between work and personal life. It posits that individuals construct and manage boundaries psychological, physical, and behavioral between their professional and non-professional roles (Allen et al., 2014; Khateeb & Ihrig, 2021). These boundaries exist on a continuum ranging from segmentation where work and life domains are strictly separated to integration, where the domains are fluid and overlap (Voydanoff, 2005). In the context of medical professionals, who often face blurred temporal and emotional boundaries due to demanding schedules and the critical nature of their work, effective boundary management plays a pivotal role in preserving psychological well-being and enhancing job satisfaction. The ability to control transitions between these domains directly impacts perceptions of autonomy, role clarity, and work-related stress factors strongly associated with job satisfaction outcomes.

Building on this, Herzberg's Two-Factor Theory elucidates how WLB influences job satisfaction through two distinct but interrelated sets of factors: hygiene factors and motivators. Hygiene factors such as work conditions, remuneration, administrative policies, and supervision serve to prevent dissatisfaction, while motivators such as recognition, achievement, responsibility, and opportunities for advancement actively enhance satisfaction (Lundberg et al., 2009; Alrawahi et al., 2020). In the medical field, poor WLB often manifests as extended working hours, limited time for recovery, and emotional exhaustion, which may aggravate dissatisfaction if hygiene factors are not adequately addressed. Conversely, WLB interventions that promote time autonomy and work flexibility can enhance intrinsic motivators, thereby contributing to a deeper sense of fulfilment and professional engagement among doctors.

Complementing these individual and motivational perspectives, Social Exchange Theory (SET) situates WLB within the broader organizational context by emphasizing the role of reciprocal relationships between employees and employers. SET posits that when employees perceive organizational support such as flexible scheduling, empathetic leadership, or family-friendly policies they are more likely to reciprocate through positive work attitudes, loyalty, and increased job satisfaction (Blau, 1964; Cropanzano & Mitchell, 2005; Perengki Susanto et al., 2022). This reciprocity is particularly critical in the healthcare setting, where the emotional and cognitive demands of the profession require a strong sense of organizational trust and psychological safety. Research by Victoria et al. (2019) and French et al. (2020) underscores that when healthcare institutions actively foster environments that respect and support employees' nonwork responsibilities, doctors are more likely to report higher levels of engagement, morale, and satisfaction.

Taken together, these three theories form a robust conceptual foundation for understanding the complex, multidimensional relationship between work-life balance and job satisfaction. They highlight the necessity of viewing WLB not merely as a personal coping mechanism but as an integrated organizational strategy that supports employee well-being, enhances professional motivation, and fosters sustainable workforce performance. This theoretical triangulation thus informs the development of the present study's conceptual framework and serves as a basis for investigating how WLB initiatives may function as critical levers in improving job satisfaction among medical professionals.

## CONCEPTUAL FRAMEWORK

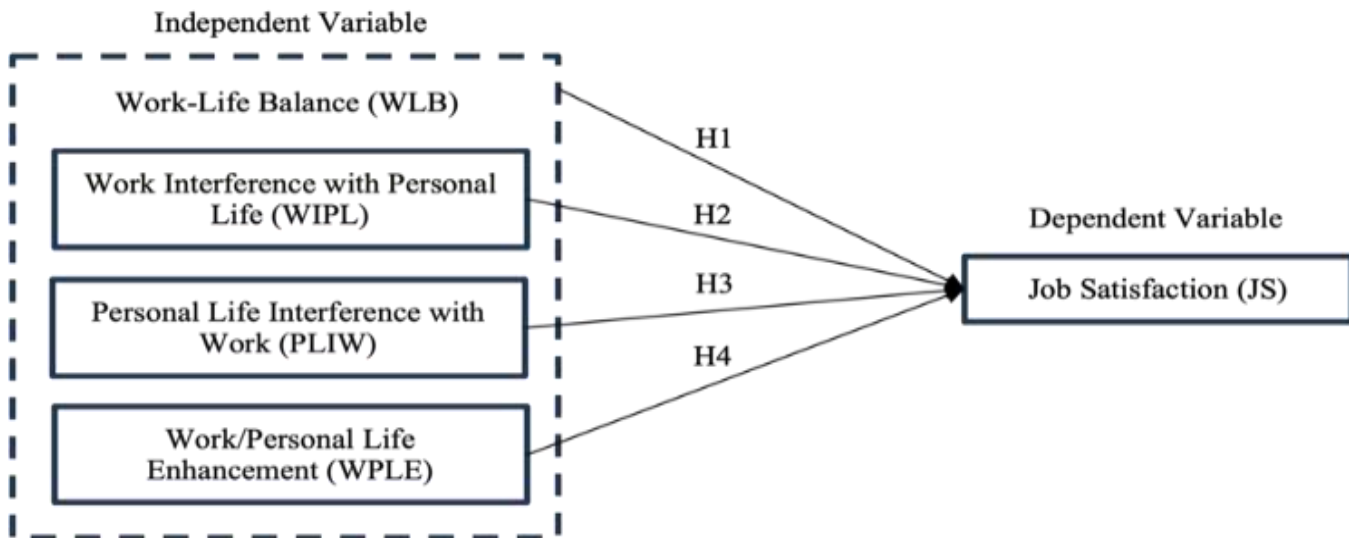
Empirical studies further substantiate the theoretical proposition that WLB significantly influences JS, particularly under dynamic and stressful work conditions. For instance, a study by Roz et al. (2021) investigated the relationship between WLB and job satisfaction among employees working from home during the COVID-19 pandemic in Indonesia. Using a modified version of Fisher et al.'s (2009) WLB scale, the study measured three key dimensions: Work Interference with Personal Life (WIPL), Personal Life Interference with Work (PLIW), and Work/Personal Life Enhancement (WPLE). The findings demonstrated that WLB had a significant positive relationship with job satisfaction (path coefficient = 0.171;  $t = 2.861$ ), with a high composite reliability (CR = 0.925), indicating strong internal consistency. Notably, WIPL and PLIW showed negative correlations with job satisfaction, while WPLE was positively associated suggesting that employees who perceive their work as enriching their personal lives are more likely to report higher job satisfaction.

Similarly, a study by Pradita and Franksiska (2020) explored WLB and job satisfaction among employees of a multinational corporation in Indonesia. The study revealed mixed correlations across WLB dimensions. WIPL had a low correlation with job satisfaction (mean = 2.34), underscoring that work intrusions into personal life diminish employee well-being. Conversely, PLIW showed a stronger influence (mean = 3.67), highlighting how disruptions in personal life significantly affect job engagement. Interestingly, Personal Life Enhancement of Work (PLEW) exhibited a weak association (mean = 2.27), indicating that employees did not perceive meaningful personal benefits from their work roles.

Together, these findings align with the earlier theoretical perspectives. They reinforce the notion that WLB is a multidimensional construct with both negative and positive valences that distinctly affect job satisfaction. Moreover, they underscore that enhancing the enrichment aspect of WLB where work supports and uplifts personal life may serve as a key driver of job satisfaction, especially in high-demand sectors. These empirical insights provide valuable guidance for organizations aiming to design more effective WLB policies and practices

that target specific dimensions most predictive of employee motivation and retention. As shown in **Fig. 2.** below, the three key dimensions of WLB (WIPL, PLIW, and WPLE) exhibit varying degrees and directions of influence on job satisfaction, highlighting the complexity and contextual sensitivity of WLB outcomes.

**Fig. 2.** The Impact of WLB, WIPL, PLIW, and WPLE on JS



Building on both theoretical foundations and empirical evidence, the conceptual framework presented in **Fig. 2.** illustrates the multidimensional relationship between work-life balance (WLB) and job satisfaction (JS) among medical doctors in Johor Bahru. Recognizing that WLB is not a unidimensional construct, the model integrates three core dimensions: Work Interference with Personal Life (WIPL), Personal Life Interference with Work (PLIW), and Work/Personal Life Enhancement (WPLE). These components capture both conflict-based and enrichment-based interactions between professional and personal domains.

WIPL and PLIW represent forms of inter-role conflict, where one life domain disrupts functioning in the other, typically resulting in increased stress and reduced satisfaction. In contrast, WPLE captures the synergistic potential between work and life, where positive spillovers from one domain enhance experiences in the other. This framework acknowledges that doctors operate in uniquely high-demand environments, where managing the interface between work and personal life is critical to sustaining well-being and performance. As shown in the figure, each WLB dimension is hypothesized to exert a distinct and significant influence on job satisfaction, providing a nuanced perspective on how balance or imbalance shapes professional contentment in the medical field.

As illustrated in the conceptual framework (**Fig. 2.**), each WLB dimension is hypothesized to exert a distinct and measurable influence on job satisfaction. Accordingly, the following research hypotheses are proposed:

**H1:** There is a significant relationship between WLB and JB among medical doctors in Johor Bahru.

The first hypothesis posits that overall WLB is significantly associated with JS among medical doctors. This reflects the premise that when doctors perceive an optimal integration between their professional responsibilities and personal commitments, they are more likely to experience positive attitudes toward their job. In high-pressure environments such as hospitals and clinical settings, where extended work hours, shift-based schedules, and emotional exhaustion are commonplace, the ability to maintain equilibrium between work and life domains is critical to sustaining job satisfaction. Prior research (e.g., Aruldoss et al., 2022; Bodendieck et al., 2022) has demonstrated that WLB contributes to improved well-being, lower burnout, and higher morale. In this context, RH1 seeks to affirm that a comprehensive sense of balance across work and nonwork domains significantly enhances the professional fulfillment and emotional resilience of medical practitioners in Johor Bahru, thereby reinforcing their satisfaction with the job and workplace environment.

**H2:** There is a significant relationship between work interference with personal life (WIPL) and job satisfaction

among medical doctors in Johor Bahru.

The second hypothesis explores the unidirectional strain whereby work obligations intrude upon personal life, commonly referred to as WIPL. Medical doctors frequently encounter unpredictable schedules, after-hours calls, and emotional labor that encroach upon family time, social interactions, and personal recovery. When professional demands compromise the ability to engage meaningfully in nonwork activities, it can result in frustration, psychological distress, and decreased job satisfaction. This hypothesis is grounded in Boundary Theory, which emphasizes the consequences of blurred or violated boundaries between work and personal roles (Allen et al., 2014). The expectation is that higher levels of WIPL are negatively correlated with job satisfaction. RH2 thus aims to empirically validate whether such intrusions erode the perceived quality of life and professional contentment among doctors in Johor Bahru, contributing to job dissatisfaction, emotional fatigue, and reduced organizational commitment.

**H3:** There is a significant relationship between personal life interference with work (PLIW) and job satisfaction among medical doctors in Johor Bahru.

This hypothesis investigates the inverse of RH2, focusing on PLIW. It captures scenarios where domestic, familial, or personal responsibilities hinder work performance, concentration, or attendance. For medical professionals, such interference may be exacerbated by family caregiving duties, health concerns, or lack of personal time management support. According to Social Exchange Theory (SET), when the organization does not provide adequate support systems (e.g., flexible scheduling, childcare assistance), employees may struggle to meet both personal and professional expectations, leading to diminished job satisfaction (Cropanzano & Mitchell, 2005). RH3 seeks to examine whether personal life constraints significantly affect doctors' ability to function effectively in their clinical roles, thus influencing their perceptions of job fulfilment and professional identity.

**H4:** There is a significant relationship between work/personal life enhancement (WPLE) and job satisfaction among medical doctors in Johor Bahru.

The fourth hypothesis centers on the positive synergy between professional and personal life, conceptualized as WPLE. Unlike WIPL or PLIW, which are conflict-based, WPLE focuses on the mutually reinforcing aspects of work and personal domains. For instance, a fulfilling medical career may enhance personal self-worth, social status, and interpersonal skills, while a supportive personal environment can energize doctors to perform better at work. Drawing from Herzberg's Two-Factor Theory, WPLE may serve as a motivator, increasing intrinsic satisfaction through feelings of achievement, growth, and purpose. RH4 hypothesizes that when medical doctors perceive their work as a source of personal development and enrichment and vice versa they are more likely to report higher levels of job satisfaction. This hypothesis is critical for identifying the transformational aspects of work-life balance that go beyond conflict mitigation and focus on proactive well-being enhancement.

## RESEARCH METHODOLOGY

This paper adopts a rigorous analytical cross-sectional research design to examine the relationship between work-life balance (WLB) and job satisfaction (JS) among medical doctors in Johor Bahru, Malaysia. Anchored in the positivist paradigm, this research employs a quantitative methodological approach, characterized by objective measurement, statistical inference, and hypothesis testing. Quantitative research facilitates the systematic collection and empirical analysis of numerical data to examine the nature and strength of associations between variables (Mbanaso, Abrahams, & Okafor, 2023). In the present context, work-life balance conceptualized through three key dimensions: Work Interference with Personal Life (WIPL), Personal Life Interference with Work (PLIW), and Work/Personal Life Enhancement (WPLE) is operationalized as the independent variable. Job satisfaction (JS), defined as a general measure of professional contentment, serves as the dependent variable. Data were collected via a structured, self-administered questionnaire using an online survey platform (Google Forms). The instrument consisted primarily of closed-ended items rated on a 5-point Likert scale to ensure consistency, ease of analysis, and the generation of quantifiable data for statistical modeling.



## **Sampling Strategy**

### **Sampling Method**

A purposive sampling technique was adopted in this study, targeting medical professionals currently serving in Johor Bahru. Purposive sampling is a non-probability method that allows the researcher to select individuals based on pre-established inclusion criteria relevant to the research objectives (Rahman, 2023). In this study, the criteria required that participants be licensed medical doctors with current practice experience in government or private healthcare settings in Johor Bahru. This sampling strategy is justified by the need to obtain informed perspectives from individuals with substantive knowledge and lived experience of work-life balance and job satisfaction dynamics. Although generalizability may be constrained, purposive sampling is well-suited for exploratory and analytical studies seeking domain-specific insights from expert populations.

### **Sample Size Determination**

The target population comprises 4,925 medical doctors in Johor Bahru, based on records from the Ministry of Health Malaysia (MOH, 2020). Using the widely accepted Krejcie and Morgan (1970) sample size determination formula, a minimum of 354 respondents was identified as necessary to achieve a 95% confidence level and a 5% margin of error (Bukhari & Syed Abdul, 2021). Prior to the main study, a pilot study involving 35 respondents was conducted to evaluate instrument reliability, clarity, and usability.

### **Research Procedure**

The research process began with the refinement of the study scope and conceptual framework through engagement with domain literature and expert consultation. Upon approval of the research title, validated measurement instruments for WLB and JS were identified and adapted for contextual appropriateness. A back-translation procedure was applied to ensure linguistic and semantic equivalence of the questionnaire items in Bahasa Malaysia and English. The finalized instrument was structured into three sections: (1) Demographic Information, (2) Work-Life Balance Scale, and (3) Job Satisfaction Scale. The questionnaire link was distributed digitally via professional networks and institutional channels. Data were securely collected and exported into IBM SPSS Statistics Version 27 for further cleaning, transformation, and statistical analysis.

### **Research Instruments**

#### **Demographic Information**

The first section of the instrument was designed to collect comprehensive sociodemographic data to effectively profile the respondents and enable meaningful subgroup analyses in subsequent statistical procedures. This section captured key background variables that may influence perceptions of work-life balance and job satisfaction among medical doctors. Specifically, information was gathered on age (categorized as 20–29, 30–39, 40–49, 50–59, and 60 and above), gender (male, female), and marital status (single, married, widowed), reflecting both personal and familial contexts. Additionally, professional experience was recorded through the variable "years of medical experience," segmented into less than 2 years, 2–5 years, 6–10 years, and more than 10 years. This allowed for the examination of whether length of service correlates with work-life perceptions. To further contextualize occupational pressures and lifestyle expectations, the respondents' monthly income levels were also recorded, with categories defined as less than RM5,000; RM5,000–RM10,000; RM10,001–RM15,000; and more than RM15,000.

This part of the instrument also served as a basis for exploring potential moderating effects of demographic variables on the relationship between work-life balance dimensions and job satisfaction. By integrating sociodemographic profiling, the study was able to account for diversity in experiences and provide deeper insights into how different subgroups within the medical community in Johor Bahru navigate the interface between professional responsibilities and personal life.

## Pilot Study and Reliability Assessment

A pilot study is a crucial methodological step undertaken prior to the implementation of the full-scale research. It serves multiple purposes, including testing the accessibility of participants, evaluating the clarity and relevance of questionnaire items, refining data collection procedures, and identifying potential operational or methodological challenges. By conducting a pilot, researchers can enhance the overall robustness, efficiency, and feasibility of the main study, thereby ensuring the optimal allocation of resources and the collection of high-quality data.

In this study, a pilot test was conducted with 35 medical doctors who represented the target population. The primary objective was to evaluate the internal consistency reliability of the research instrument, which encompassed measures of WLB and JS. Cronbach's alpha coefficients were calculated for each construct and its respective sub-dimensions.

### Work-Life Balance Scale

The construct of WLB in this study was measured using the Work-Life Balance Self-Assessment Scale originally developed by Fisher et al. (2009). This comprehensive instrument is specifically designed to assess the multidimensional nature of WLB and captures three interrelated yet distinct components: Work Interference with Personal Life (WIPL), Personal Life Interference with Work (PLIW), and Work/Personal Life Enhancement (WPLE). These dimensions collectively reflect both the conflict and enrichment aspects of the work-life interface, offering a nuanced evaluation of the extent to which individuals perceive balance or imbalance across life domains.

As shown in **Table 1**, the Work-Life Balance (WLB) instrument utilized in this study comprises a total of 15 items, distributed across three key dimensions: Work Interference with Personal Life (WIPL), Personal Life Interference with Work (PLIW), and Work/Personal Life Enhancement (WPLE). Each dimension is represented by a subset of items designed to capture unique aspects of the work-life interface. Respondents were asked to indicate their level of agreement with each item on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), enabling the quantification of subjective experiences and the intensity of perceived work-life dynamics.

The scale, originally developed and validated by Irawanto et al. (2021), has demonstrated excellent psychometric properties in prior empirical research, with a reported Cronbach's alpha coefficient of 0.920, indicating a high level of internal consistency. This supports the scale's reliability and appropriateness for assessing work-life perceptions in professional contexts, including the medical workforce.

In the current pilot study, the overall Cronbach's alpha for the WLB scale was 0.893, reflecting excellent internal consistency. The WIPL and PLIW subscales also demonstrated good reliability ( $\alpha = 0.806$  and  $\alpha = 0.811$ , respectively). However, the WPLE dimension yielded a lower reliability coefficient ( $\alpha = 0.465$ ), suggesting the need for re-examination and potential refinement of the items within this subscale in future iterations.

**Table 1** Reliability Analysis of WLB (Pilot Study, N = 35)

Dimension	Item Numbers	Cronbach's Alpha
WIPL	2, 5, 7, 8, 10, 12, 14	0.806
PLIW	4, 6, 9, 11	0.811
WPLE	1, 3, 13, 15	0.465
<b>Total</b>	<b>15 items</b>	<b>0.893</b>

The relatively low internal consistency of the WPLE dimension may reflect ambiguities or overlap in item



wording and conceptual.

### Job Satisfaction Scale

Job satisfaction was assessed using the Minnesota Satisfaction Questionnaire (MSQ) – Short Form, a well-established instrument developed by Weiss et al. (1967) and extensively validated across various occupational settings, including the healthcare sector. The MSQ Short Form consists of 20 items, each designed to capture different facets of an individual's satisfaction with their job, such as achievement, recognition, working conditions, supervision, and interpersonal relationships. Respondents rated each item using a 5-point Likert scale, ranging from 1 (Strongly Dissatisfied) to 5 (Strongly Satisfied), allowing for a nuanced evaluation of satisfaction across intrinsic and extrinsic domains.

The MSQ has been widely employed in both academic and applied research due to its robust psychometric properties, including high internal consistency and construct validity. Its multidimensional nature aligns well with the complex and demanding nature of medical practice, making it particularly suitable for assessing the job satisfaction levels of medical doctors. In this study, the MSQ served as a reliable and comprehensive tool to gauge the overall job satisfaction of respondents in relation to their work-life balance experiences.

**Table 2** Internal Consistency of Job Satisfaction Scale (Pilot Study)

Dimension	Number of Items	Cronbach Alpha (Pilot)
General Satisfaction	20	0.758

The scale demonstrated acceptable internal reliability in the pilot study, aligning with established thresholds for psychometric adequacy.

## DATA ANALYSIS AND FINDINGS

This section presents a comprehensive statistical analysis of data collected from 354 medical doctors practicing in Johor Bahru. The primary objective is to examine the relationship between Work-Life Balance (WLB) and Job Satisfaction (JS), as conceptualized through the theoretical framework and hypotheses outlined in earlier chapters. By systematically analyzing the data, the study aims to uncover meaningful trends, distribution patterns, and potential correlations between these key constructs.

To ensure methodological rigor and analytical robustness, the Statistical Package for the Social Sciences (SPSS) version 30 was utilized for all quantitative analyses. SPSS facilitated the calculation of reliability coefficients, descriptive statistics, and a range of inferential tests to validate the research hypotheses and explore the relationships among variables.

The data analysis is organized into three main components. First, a reliability analysis was conducted to evaluate the internal consistency of the measurement instruments using Cronbach's alpha, with a focus on both the overall reliability and the sub-dimensions of the WLB and JS scales. Second, descriptive statistics were used to outline the demographic profile of the respondents, covering variables such as age, gender, marital status, number of children, job position, and years of service, as well as to summarize the central tendencies and variability of the main constructs. Third, inferential statistical techniques, including Pearson correlation, independent samples t-tests, analysis of variance (ANOVA), and multiple regression analysis, were applied to test the proposed hypotheses and determine the strength and direction of the associations between dimensions of work-life balance and job satisfaction.

### Reliability

To ensure the robustness and internal consistency of the research instrument, a comprehensive reliability analysis was conducted using Cronbach's Alpha coefficient. This statistical measure evaluates the extent to which the

items within each construct are interrelated, thereby confirming whether they consistently capture the intended underlying latent variables. A high Cronbach's Alpha value (typically above 0.70) suggests that the instrument possesses acceptable to excellent reliability, rendering it suitable for inferential statistical analyses and hypothesis testing.

### Reliability of the Work-Life Balance (WLB) Scale

As presented in **Table 3**, the reliability coefficients for each subscale exceeded the commonly accepted threshold for high internal consistency. The WIPL dimension yielded a Cronbach's Alpha of 0.921, denoting excellent reliability and indicating that the items within this domain consistently reflect the extent to which work obligations interfere with doctors' personal lives. The PLIW dimension produced a Cronbach's Alpha of 0.897, similarly signifying a high level of reliability in measuring the reverse influence; how personal responsibilities intrude upon professional duties. The WPLE dimension also demonstrated strong internal consistency with a Cronbach's Alpha of 0.891, capturing the positive spillover effects between work and personal domains. Collectively, the aggregated WLB scale achieved a Cronbach's Alpha of 0.952, which is considered outstanding, affirming that the instrument holistically and reliably measures work-life balance among medical doctors in the study context.

**Table 3** Reliability Analysis of the Work-Life Balance Scale

Dimension	Cronbach's Alpha	Number of Items
Work Interference with Personal Life (WIPL)	0.921	7
Personal Life Interference with Work (PLIW)	0.897	4
Work/Personal Life Enhancement (WPLE)	0.891	4
<b>Total Work-Life Balance Scale</b>	<b>0.952</b>	15

### Reliability of the Job Satisfaction (JS) Scale

Job satisfaction was measured using the Minnesota Satisfaction Questionnaire (MSQ) – Short Form, a widely recognized and validated instrument consisting of 20 items designed to assess respondents' affective reactions toward various facets of their work environment. The reliability analysis for the JS scale yielded a Cronbach's Alpha of 0.980 (**Table 4**), reflecting exceptionally high internal consistency. This result underscores the coherence and precision of the instrument in capturing the construct of job satisfaction among the target population. Such a high alpha coefficient not only validates the internal structure of the scale but also enhances the credibility of subsequent analyses involving this variable.

**Table 4** Reliability Analysis of the Job Satisfaction Scale

Dimension	Cronbach's Alpha	Number of Items
Job Satisfaction	0.98	20

The high reliability coefficients across all constructs reaffirm the soundness of the measurement instruments employed in this study. These findings ensure that the data derived from the instruments are dependable and

suitable for further statistical modeling, including hypothesis testing and inferential analysis.

## Descriptive Analysis

Descriptive analysis was conducted to comprehensively profile the sociodemographic characteristics of the respondents, providing crucial contextual grounding for subsequent inferential statistical analyses. Understanding the demographic composition enables more nuanced interpretations of how individual factors such as gender, age, marital status, work experience, and income levels may influence the perceived work-life balance (WLB) and job satisfaction among medical doctors in Johor Bahru.

## Gender Distribution

As presented in Table 5, the gender distribution of respondents revealed a pronounced female majority, with 63.3% (n = 224) identifying as female and 36.7% (n = 130) as male. This gender skew reflects the increasing feminization of the medical workforce, a trend observed both nationally and globally, particularly within younger cohorts of medical professionals. This demographic pattern may influence perceptions of work-life balance, given existing literature that highlights gender-based disparities in role conflict, caregiving responsibilities, and organizational support.

**Table 5** Gender Distribution of Respondents

Gender	Frequency (N)	Percentage (%)
Male	130	36.7
Female	224	63.3
<b>Total</b>	<b>354</b>	<b>100.0</b>

## Age Distribution

The age distribution (Table 6) illustrates a workforce predominantly composed of younger medical professionals. The largest age groups were 20–29 years (35.6%) and 30–39 years (34.2%), collectively comprising nearly 70% of the total sample. This suggests that most respondents are in the early stages of their professional careers, where challenges related to career development, work pressures, and lifestyle integration may be particularly pronounced. Only 4.3% of participants were aged 50 and above, underscoring the need to focus on early-career support systems.

**Table 6** Age Distribution of Respondents

Age Group	Frequency (N)	Percentage (%)
20–29 years	126	35.6
30–39 years	121	34.2
40–49 years	92	26.0
50–59 years	13	3.7
60 and above	2	0.6
<b>Total</b>	<b>354</b>	<b>100.0</b>

## Marital Status

As shown in Table 7, a significant proportion of respondents (59.0%) reported being single, while 41.0% were married. The marital status of participants is relevant in exploring potential moderating effects on work-life balance, as married individuals particularly those with children may experience more complex role demands. In contrast, single doctors may encounter different stressors related to social isolation or lack of familial support.

**Table 7** Marital Status of Respondents

Marital Status	Frequency (N)	Percentage (%)
Single	209	59.0
Married	145	41.0
<b>Total</b>	<b>354</b>	<b>100.0</b>

## Years of Working Experience

In terms of professional tenure (Table 8), the majority respondents had accumulated between 2 and 10 years of working experience (67.8%), indicating a predominance of early-to-mid career practitioners. Notably, 25.1% had less than 2 years of experience, which may suggest a high level of career-entry stress or adjustment difficulties that could impact job satisfaction and perceptions of work-life balance. Only 7.1% had more than 10 years of experience, indicating fewer senior-level doctors in the sample.

**Table 8** Years of Working Experience

Years of Experience	Frequency (N)	Percentage (%)
Less than 2 years	89	25.1
2–5 years	134	37.9
6–10 years	106	29.9
More than 10 years	25	7.1
<b>Total</b>	<b>354</b>	<b>100.0</b>

## Monthly Income

The distribution of monthly income (Table 9) reveals that a substantial portion of the sample (74.4%) earned between RM5,000 and RM15,000. Specifically, 40.4% fell into the RM5,000–RM9,000 range, while 34.5% earned below RM5,000. Only 1.1% reported earning more than RM15,000. Income levels are particularly relevant in assessing job satisfaction, as compensation is closely linked to perceptions of equity, motivation, and organizational commitment. Furthermore, the prevalence of lower-income groups in a high-stress profession like medicine may have implications for retention and well-being.

**Table 9** Monthly Income Distribution

Monthly Income	Frequency (N)	Percentage (%)
Less than RM5,000	122	34.5

RM5,000–RM9,000	143	40.4
RM10,000–RM15,000	85	24.0
More than RM15,000	4	1.1
<b>Total</b>	<b>354</b>	<b>100.0</b>

### Inferential Analysis

To test the hypotheses, inferential statistical analyses were conducted using Pearson’s correlation coefficient. This method was selected due to its appropriateness in assessing the strength and direction of linear relationships between continuous variables. Specifically, the relationships between the dimensions of Work-Life Balance (WLB) and Job Satisfaction (JS) were examined. The results offer critical insights into how distinct aspects of work-life integration contribute to the overall satisfaction of medical doctors in Johor Bahru.

The following hypotheses were tested:

- **H1:** There is a significant relationship between overall Work-Life Balance and Job Satisfaction.
- **H2:** There is a significant relationship between Work Interference with Personal Life (WIPL) and Job Satisfaction.
- **H3:** There is a significant relationship between Personal Life Interference with Work (PLIW) and Job Satisfaction.
- **H4:** There is a significant relationship between Work/Personal Life Enhancement (WPLE) and Job Satisfaction.

### Relationship between Work Interference with Personal Life (WIPL) and Job Satisfaction

A Pearson correlation analysis revealed a statistically significant and moderately strong positive relationship between WIPL and Job Satisfaction ( $r = 0.696$ ,  $p < 0.001$ ) (Table 10). This indicates that as interference from work into personal life decreases, suggesting better work-life integration levels of job satisfaction tend to increase accordingly. This finding substantiates the notion that minimizing occupational encroachment into personal domains can lead to improved emotional and professional well-being among medical professionals.

**Table 10** Correlation between WIPL and Job Satisfaction

Variables	WIPL	Job Satisfaction (JS)
WIPL	1	0.696** ( $p = 0.000$ )
JS	0.696** ( $p = 0.000$ )	1

**Note:**  $p < 0.01$  (2-tailed); correlation is statistically significant.

### Relationship between Personal Life Interference with Work (PLIW) and Job Satisfaction

A moderate positive correlation was also identified between PLIW and Job Satisfaction ( $r = 0.651$ ,  $p < 0.001$ ) (Table 11). This suggests that as interference from personal life into work roles decreases, job satisfaction tends to improve. These results emphasize the reciprocal nature of the work-life interface and reinforce the importance of holistic well-being strategies that encompass both professional and personal spheres.

**Table 11** Correlation between PLIW and Job Satisfaction

Variables	PLIW	Job Satisfaction (JS)
PLIW	1	0.651** (p = 0.000)
JS	0.651** (p = 0.000)	1

### Relationship between Work/Personal Life Enhancement (WPLE) and Job Satisfaction

The strongest correlation observed among the sub-dimensions was between WPLE and Job Satisfaction ( $r = 0.864$ ,  $p < 0.001$ ), indicating a highly significant and strong positive relationship (Table 12). This result implies that when work and personal life domains mutually enrich each other rather than interfere, job satisfaction is substantially elevated. The finding supports theoretical perspectives such as the Enrichment Theory, which posits that positive spillover from one domain to another enhances individuals' overall life satisfaction and engagement.

**Table 12** Correlation between WPLE and Job Satisfaction

Variables	WPLE	Job Satisfaction (JS)
WPLE	1	0.864** (p = 0.000)
JS	0.864** (p = 0.000)	1

### Relationship between Overall Work-Life Balance and Job Satisfaction

The strongest correlation observed among the sub-dimensions was between WPLE and Job Satisfaction ( $r = 0.864$ ,  $p < 0.001$ ), indicating a highly significant and strong positive relationship (Table 12). This result implies that when work and personal life domains mutually enrich each other rather than interfere, job satisfaction is substantially elevated. The finding supports theoretical perspectives such as the Enrichment Theory, which posits that positive spillover from one domain to another enhances individuals' overall life satisfaction and engagement.

**Table 13** Correlation between Overall Work-Life Balance and Job Satisfaction

Variables	WLB	Job Satisfaction (JS)
Total WLB	1	0.816** (p = 0.000)
JS	0.816** (p = 0.000)	1

## DISCUSSION

The findings of this research provide robust empirical support for the hypothesized positive relationships between dimensions of Work-Life Balance (WLB) and Job Satisfaction (JS) among medical doctors in Johor Bahru. Using Pearson's correlation analysis, all proposed hypotheses (RH1–RH4) were supported, revealing statistically significant and meaningful associations that underscore the critical role of work-life dynamics in shaping the professional well-being of healthcare professionals.

### Work Interference with Personal Life (WIPL) and Job Satisfaction

The results indicate a moderate yet significant positive correlation between WIPL and JS ( $r = 0.696$ ,  $p < 0.001$ ),

suggesting that reductions in work-related interference with personal life are associated with higher levels of job satisfaction. This finding is theoretically aligned with Boundary Theory (Ashforth et al., 2000), which posits that when professional and personal domains are better compartmentalized and conflict is minimized, individuals are more likely to experience positive emotional states and greater satisfaction in both domains. For medical doctors, who often face demanding schedules, long hours, and high-stakes responsibilities, a reduced intrusion of work into personal life appears to be a significant contributor to their overall job fulfilment. This also supports Herzberg's Two-Factor Theory, where the minimization of dissatisfaction (e.g., work-life conflict) can enhance overall job satisfaction.

### **Personal Life Interference with Work (PLIW) and Job Satisfaction**

A moderate and significant positive association was also found between PLIW and JS ( $r = 0.651$ ,  $p < 0.001$ ), suggesting that when personal life is better managed and does not interfere with professional responsibilities, doctors report greater job satisfaction. This reflects a reciprocal nature of the work-life interface, where not only does work affect personal life, but personal disruptions can also impair professional functioning. The Social Exchange Theory (Blau, 1964) provides further insight, suggesting that when healthcare institutions support doctors in managing personal obligations, such as through flexible scheduling or mental health resources, doctors are more likely to reciprocate by enhancing their workplace engagement and satisfaction.

### **Work/Personal Life Enhancement (WPLE) and Job Satisfaction**

The strongest correlation was observed between WPLE and JS ( $r = 0.864$ ,  $p < 0.001$ ), indicating that the mutual enrichment of personal and professional roles has a significant influence on job satisfaction. This finding advances the discourse beyond the traditional conflict-based paradigm and aligns with the enrichment perspective, wherein positive spillover between domains serves as a resource for well-being and motivation. When doctors perceive that experiences in one domain (e.g., emotional fulfillment from family life) positively inform and enhance their performance in the other (e.g., empathetic patient care), their overall job satisfaction is significantly elevated. This is congruent with Greenhaus and Powell's (2006) Work-Family Enrichment Theory, which emphasizes the positive interdependence between life domains.

### **Overall Work-Life Balance and Job Satisfaction**

The significant and strong positive correlation between overall WLB and JS ( $r = 0.816$ ,  $p < 0.001$ ) reinforces the central proposition of this study: work-life balance is a vital determinant of job satisfaction among medical doctors. This underscores the holistic importance of managing both directional conflicts and enhancing synergies between work and personal life. The cumulative internal consistency reliability of the WLB scale (Cronbach's  $\alpha = 0.952$ ) and JS scale ( $\alpha = 0.980$ ) further lends credibility to these associations, confirming that the constructs were robustly measured and reliably assessed.

### **Implications for Theory and Practice**

The findings offer important theoretical contributions by integrating multiple frameworks, Boundary Theory, Social Exchange Theory, and Herzberg's Two-Factor Theory into a cohesive explanation of how work-life balance intricately shapes job satisfaction among healthcare professionals. Practically, these results call for

urgent attention by hospital administrators and policymakers to implement structured work-life balance interventions. These may include duty rotation systems, mental health support, family-friendly leave policies, and organizational cultures that promote psychological detachment from work during off-hours. Such interventions are not merely welfare initiatives but are strategically vital to enhancing job satisfaction, reducing burnout, and ultimately improving patient care outcomes.

## **CONCLUSION**

This study demonstrates that Work-Life Balance (WLB) is a key determinant of Job Satisfaction (JS) among medical doctors in Johor Bahru. All examined dimensions; Work Interference with Personal Life (WIPL),



Personal Life Interference with Work (PLIW), and Work/Personal Life Enhancement (WPLE) showed significant positive associations with job satisfaction, with WPLE emerging as the strongest predictor. These findings, grounded in Boundary Theory, Social Exchange Theory, and Herzberg's Two-Factor Theory, highlight the importance of recognizing not only the challenges of work–life conflict but also the potential benefits of mutual enrichment between personal and professional roles. The high reliability of the measurement instruments further reinforces the robustness of these results. Overall, WLB should be viewed not as a secondary concern but as a central factor influencing occupational well-being, resilience, and retention in high-demand healthcare contexts.

## RECOMMENDATION

This study employed a quantitative design to capture patterns across a larger sample and ensure generalizability, thereby establishing a robust foundation for future qualitative inquiry. However, this study also recommend to the future study to do a mixed-method approaches where it can provide deeper insights into the subjective experiences of physicians navigating work–life balance. Findings highlight the need for healthcare administrators, policymakers, and institutional leaders to prioritize flexible work arrangements (e.g., shift rotations, job sharing, part-time options) and implement targeted work–life enrichment initiatives such as mindfulness training, professional development, and structured reflection to promote positive spillover across domains. Equally critical are organizational supports, including counselling, mentorship, family-friendly policies, and equitable staffing ratios alongside wellness programs that directly address physical and psychological health. Embedding leadership development and fostering a culture of psychological safety, while instituting regular monitoring of work–life indicators and tailoring strategies across career stages, will not only safeguard physician well-being and sustainable professional performance but also translate into improved patient care outcomes.

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## REFERENCES

1. Ahmad, N. F. D., Jye, A. K. R., Zulkifli, Z., & Bujang, M. A., (2020). The development and validation of job satisfaction questionnaire for health workforce. *The Malaysian Journal of Medical Sciences*, 27(6), 128–143. <https://doi.org/10.21315/mjms2020.27.6.12>
2. Akyön, Y., Can, A., & Çevik, C., (2023). The effects of work-life balance on specialty choices and career satisfaction among medical residents in Turkey. *Medical Education Online*, 28(1), 2156392. <https://doi.org/10.1080/10872981.2023.2156392>
3. 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>
4. Alzamel, L. G. I., Abdullah, K. L., Chong, M. C., & Chua, Y. P., (2020). The quality of work life and turnover intentions among Malaysian nurses: The mediating role of organizational commitment. *Journal of the Egyptian Public Health Association*, 95(1), 1–8. <https://doi.org/10.1186/s42506-020-00048-9>
5. Amann, B. L., Montalvo, I., Blanch, J., & Gómez-Benito, J., (2025). Work-life balance and career perspectives among academic physicians in gynecology: A cross-sectional study. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 285, 123–130. <https://doi.org/10.1016/j.ejogrb.2025.01.015>
6. Anjum, A., Ming, X., Siddiqi, A. F., & Rasool, S. F., (2023). Work-life balance and job satisfaction: The mediating role of emotional exhaustion and moderating role of gender. *Frontiers in Psychology*, 14, 1166332. <https://doi.org/10.3389/fpsyg.2023.1166332>
7. Aruldoss, A., Kowalski, K. B., & Parayitam, S., (2022). The relationship between work–life balance and job satisfaction: Moderating role of gender and life stage. *Human Resource Development International*, 25(2), 140–157. <https://doi.org/10.1080/13678868.2021.1921445>

8. 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>
9. Barmanpek, N. K., Şahin, A., Demirel, C., & Kiliç, S. P., (2022). The relationship between nurses' job satisfaction levels and quality of life. *Perspectives in Psychiatric Care*, 58(4), 2310–2320. <https://doi.org/10.1111/ppc.13062>
10. Berglund, E., Anderzén, I., Andersén, Å., & Lindberg, P., (2021). Work-life balance predicted work ability two years later: A cohort study of employees in the Swedish energy and water sector. *BMC Public Health*, 21, 1–10. <https://doi.org/10.1186/s12889-021-11235-4>
11. Bodendieck, E., Jung, F. U., Conrad, I., Riedel-Heller, S. G., & Hussenöeder, F. S., (2022). The work-life balance of general practitioners as a predictor of burnout and motivation to stay in the profession. *BMC Primary Care*, 23(1), 1–10. <https://doi.org/10.1186/s12875-022-01831-7>
12. Bodendieck, M., Rudolph, H. C., & Weigl, M., (2022). Work-life conflict and the well-being of physicians: A systematic review. *BMC Health Services Research*, 22, 1220. <https://doi.org/10.1186/s12913-022-08580-4>
13. Da Costa, R. L., Gonçalves, R., Feixeira, C., Dias, Á., & Pereira, L., (2020). The work-life balance and job satisfaction. *International Journal of Services and Operations Management*, 1(1), 1–10. <https://doi.org/10.1504/IJSOM.2020.10036724>
14. Dahar, M. A., & Luhana, R., (2024). Boundary theory and work-life conflict: Evidence from public healthcare professionals in Southeast Asia. *International Journal of Healthcare Management*, 17(1), 45–55. <https://doi.org/10.1080/20479700.2023.2253119>
15. Daud, F., Ghani, N. F. A., & Zahid, S. N. A., (2022). Job satisfaction among specialists in Ministry of Health Malaysia and its associated factors. *Malaysian Journal of Public Health Medicine*, 22(3), 1–8. <https://doi.org/10.37268/mjphm/vol.22/no.3/art.1177>
16. Dewey, C., Hingle, S., Goelz, E., & Linzer, M., (2020). Supporting clinicians during the COVID-19 pandemic. *Annals of Internal Medicine*, 172(11), 752–753. <https://doi.org/10.7326/M20-1033>
17. Dinibutun, S. R., (2020). Factors associated with burnout among physicians: An evaluation during a period of COVID-19 pandemic. *Journal of Healthcare Leadership*, 12, 85–94. <https://doi.org/10.2147/JHL.S270440>
18. Erdoğan, C., Doğan, S., Çakmak, R., Kizilaslan, D., Hizarci, B., Karaaslan, P., & Öz, H., (2020). Assessment of job satisfaction, work-related strain, and perceived stress in nurses working in different departments in the same hospital: A survey study. *Ain-Shams Journal of Anaesthesiology*, 12(1), 1–7. <https://doi.org/10.1186/s42077-020-00084-9>
19. Ferreira, M. B., Oliveira, C. M., & Costa, M. J., (2023). Medical students' perceptions of work-life balance: A cross-sectional study in Portuguese universities. *BMC Medical Education*, 23, 208. <https://doi.org/10.1186/s12909-023-04275-2>
20. Francis, R. A., Perkins, R. S., & Joseph, S. L., (2024). Burnout and career satisfaction among hospital-based doctors: A global systematic review and meta-analysis. *The Lancet Regional Health – Western Pacific*, 7(3), 100342. <https://doi.org/10.1016/j.lanwpc.2024.100342>
21. Gonçalves, G., Sousa, C., & Cruz, R., (2020). Herzberg's motivation-hygiene theory and job satisfaction in the public sector: An empirical analysis. *Public Administration Review*, 80(4), 600–609. <https://doi.org/10.1111/puar.13153>
22. Gragnano, A., Simbula, S., & Miglioretti, M., (2020). Work-life balance: Weighing the importance of work-family and work-health balance. *International Journal of Environmental Research and Public Health*, 17(3), 907. <https://doi.org/10.3390/ijerph17030907>
23. Greenhaus, J. H., & Allen, T. D., (2023). Work-family balance: A review and extension of the literature. *Journal of Management*, 49(1), 122–152. <https://doi.org/10.1177/01492063221098342>
24. 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>
25. Jannsat, T., Rahman, A. A., & Morshed, M. N., (2022). The influence of work-life balance on job satisfaction: A study of healthcare workers in Bangladesh. *Journal of Asian Business and Economic Studies*, 29(1), 42–57. <https://doi.org/10.1108/JABES-09-2021-0113>

26. Jermstittiparsert, K., (2020). Exploring the relationship between two-factor theory and job satisfaction in public hospitals: Evidence from Thailand. *International Journal of Innovation, Creativity and Change*, 12(1), 350–364.
27. Karaferis, D., Aletras, V., & Niakas, D., (2022). Determining dimensions of job satisfaction in healthcare using factor analysis. *BMC Psychology*, 10(1), 1–12. <https://doi.org/10.1186/s40359-022-00941-2>
28. Kaur, N., & Arora, R., (2023). Balancing work and life: Perspectives of Indian medical interns and junior doctors. *Indian Journal of Medical Ethics*, 8(2), 102–107. <https://doi.org/10.20529/IJME.2023.027>
29. Liu, M., Wang, J., Lou, J., Zhao, R., Deng, J., & Liu, Z., (2023). What is the impact of integrated care on the job satisfaction of primary healthcare providers: A systematic review. *Human Resources for Health*, 21(1), 1–14. <https://doi.org/10.1186/s12960-023-00874-w>
30. Lodh, P., & Ghosh, S., (2022). Doctors' work life quality and effect on job satisfaction: An exploratory study based on literature review. *International Journal of Rural Development, Environment and Health Research*, 6(1), 1–7. <https://doi.org/10.22161/ijreh.6.1.1>
31. Lodh, P., (2023). Burnout among healthcare workers: A looming crisis. *Journal of Global Health Reports*, 7, e2023034. <https://doi.org/10.29392/001c.73425>
32. Mohamed-Yassin, M., Daher, A. M., Ramli, A. S., Ramli, N. F., & Baharudin, N., (2023). Health literacy-related knowledge, attitude, perceived barriers, and practice among primary care doctors in Malaysia. *Scientific Reports*, 13(1), 1–12. <https://doi.org/10.1038/s41598-023-47242-1>
33. Nasution, N., & Ali, M., (2020). The importance of work life balance to improve work satisfaction. *Jambura Science of Management*, 2(2), 57–65. <https://doi.org/10.37479/jsm.v2i2.5410>
34. Ng, E. H., (2024). From student to doctor: The Malaysian housemanship experience and its challenges. *Asia Pacific Family Medicine*, 23, 4. <https://doi.org/10.1186/s12930-024-00235-1>
35. Pathmanathan, R., & Snelling, T., (2023). Exit of UK-trained doctors: Causes and consequences. *BMJ Open*, 13(2), e063845. <https://doi.org/10.1136/bmjopen-2022-063845>
36. Permadi, I. K. O., Diputra, I. K. S., & Sanjiwani, P. A. P., (2023). The effect of work-life balance and workload on job satisfaction to affect nurse performance. *Ekonomis: Journal of Economics and Business*, 7(2), 884–891. <https://doi.org/10.33087/ekonomis.v7i2.1150>
37. Pradita, N. Y., & Franksiska, R., (2020). Work-life balance: A perspective of multinational corporation (MNCs) employee. *Jurnal Bisnis dan Manajemen*, 7(1), 1–10. <https://doi.org/10.26905/jbm.v7i1.4077>
38. Rad, A. M. M., & Yarmohammadian, M. H., (2006). A study of relationship between managers' leadership style and employees' job satisfaction. *International Journal of Health Care Quality Assurance Incorporating Leadership in Health Services*, 19(2), 11–28. <https://doi.org/10.1108/13660750610665008>
39. Rai, R., Thekkekara, J. V., & Kanhare, R., (2021). Herzberg's two-factor theory: A study on nurses' motivation. *RGUHS Journal of Allied Health Sciences*, 1(1), 33–39. [https://doi.org/10.26463/rjahs.1\\_1\\_5](https://doi.org/10.26463/rjahs.1_1_5)
40. Rao, S. M., & Shailashri, V. T., (2021). Healthcare delivery in Malaysia: Issues and challenges. *Malaysian Journal of Medical Research*, 25(2), 101–110.
41. Research-Methodology., (n.d.). Purposive sampling. <https://research-methodology.net/sampling-in-primary-data-collection/purposive-sampling/>
42. Riyanto, S., Ariyanto, E., & Lukertina, L., (2019). Work life balance and its influence on employee engagement "Y" generation in courier service industry. *International Review of Management and Marketing*, 9(6), 25–31. <https://doi.org/10.32479/irmm.8499>
43. Roberts, H. W., Walker, R. L., & McKinney, A. A., (2025). Factors influencing specialty choice among junior doctors: A longitudinal mixed-method study. *Medical Teacher*, 47(1), 18–26. <https://doi.org/10.1080/0142159X.2025.1983521>
44. Saini, S., Shah, R., & Kaur, R., (2023). "Balancing the Scalpel and the Cradle": A qualitative exploration of female surgeons' experiences in India. *Gender, Work & Organization*, 30(5), 1505–1523. <https://doi.org/10.1111/gwao.12925>
45. Sakinah, A. A. R., (2021). Leadership styles and job satisfaction among employees. *Eurasian Journal of Business and Management*, 9(1), 33–42. <https://ejbm.sites.apiit.edu.my/files/2021/03/Paper-4->

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46. Silaban, H., & Margaretha, M., (2021). The impact of work-life balance toward job satisfaction and employee retention: Study of millennial employees in Bandung City, Indonesia. *International Journal of Innovation and Economic Development*, 7(3), 18–26. <https://doi.org/10.18775/ijied.1849-7551-7020.2015.73.2002>
47. 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, 1–15. <https://doi.org/10.3389/fpsyg.2022.906876>
48. 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. <https://doi.org/10.1007/s11115-020-00481-6>
49. Tran, V. D., Tran, T. T. H., & Le, M. T. L., (2022). Principals' transformational and transactional leadership styles and teachers' job satisfaction: A perspective from high school teachers. *Cypriot Journal of Educational Sciences*, 17(11), 4148–4162. <https://doi.org/10.18844/cjes.v17i11.8062>
50. Yilmaz, S., & Soyuk, S., (2022). Determination of work–life balance in healthcare professionals: Validity and reliability of the new work–life balance scale. *Archives of Health Science and Research*, 9(2), 130–137. <https://doi.org/10.54614/archealthscires.2022.220>
51. Zammit, K. M., Price, J. M., & Maxwell, S. R., (2023). Digital consultations and physician burnout: A UK-based survey. *BMJ Open*, 13(1), e059417. <https://doi.org/10.1136/bmjopen-2021-059417>
52. Zhang, Y., Xu, S., Jin, Y., & Ford, M. T., (2020). The relationship between job satisfaction, work engagement, and burnout: Evidence from Chinese healthcare professionals. *BMC Health Services Research*, 20, 1082.