Eduvest – Journal of Universal Studies
Volume 5 Number 5, May, 2025
p- ISSN 2775-3735- e-ISSN 2775-3727

THE EFFECT OF WORK-LIFE BALANCE ON MENTAL HEALTH WITH JOB SATISFACTION AS A MEDIATOR VARIABLE IN EMPLOYEES PT. XYZ (ENERGY SECTOR)

Wahyu Dodi Tri Marianggodo*, Laura Lahindah
Harapan Bangsa Business School, Indonesia
Email: mm-24038@students.ithb.ac.id, laura@ithb.ac.id

ABSTRACT

The imbalance between work demands and personal life is a growing concern in modern organizational settings, particularly in industries with high operational pressure. This study aims to examine the effect of work-life balance on employee mental health, with job satisfaction positioned as a mediating variable. The research was conducted among permanent employees of a leading energy sector company operating under shift-based systems and strict performance requirements. Using a quantitative approach with a survey method, data were collected from 103 respondents through structured questionnaires. The analysis used mediation modeling with PROCESS Macro Model 4 and bootstrap techniques to ensure robust estimation. The results indicate that work-life balance has a significant direct impact on mental health and also an indirect effect through job satisfaction. The mediating model accounts for 56.2% of the variance in employee mental health. These findings demonstrate that job satisfaction is a crucial psychological mechanism in enhancing the positive impact of work-life balance. The study highlights the importance of developing organizational policies that simultaneously promote work-life harmony and meaningful job experiences to support employee well-being and long-term performance.

KEYWORDS work-life balance, job satisfaction, mental health, mediation, human resource management

This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International

INTRODUCTION

Work-life balance (WLB) is increasingly recognized as a strategic aspect of modern human resource management (Maimunah Kadiyono A. L.at al., 2024)When this balance is disrupted—whether due to target pressures, role conflicts, or a lack of organizational support—the impact is not only felt individually in the form of stress and emotional exhaustion but also becomes a strategic cost for the company in the form of decreased productivity, increased turnover, and potential reputational risks related to Environmental, Social, and Governance (ESG).

In the oil and gas industry, these challenges are increasingly real. PT. XYZ, which operates with a regional rotation system, 24-hour operational demands, and high

How to cite: Marianggodo, W. D. T., & Lahindah, L. (2025). The Effect of Work-Life Balance on Mental Health with Job Satisfaction as a Mediator Variable in Employees PT. XYZ (Energy Sector). Journal Eduvest. *5*(5): 5653-5666.
E-ISSN: 2775-3727
Published by: https://greenpublisher.id/

performance expectations, noted that 21.7% of its employees experienced indications of mental health disorders (Internal Survey, 2023). The highest prevalence was found in the 21–35 age group in strategic business functions at 27.6%, reflecting significant systemic pressures on the psychological balance of the productive workforce (Parombean Abidin F. A. Qodariah L. & Novita S., 2023; Riyani & Handayani. Sri., 2024; Rohwer Velasco Garrido M. Herold R. Preisser A. M. Terschüren C. Harth V. & Mache S., 2022; Salsabila Syani Tentama F. Diponegoro A. M. Psikologi M. & Psikologi Universitas Ahmad Dahlan F., 2021). Some causes identified include emotional workload, unclear roles, and inequality in the performance appraisal system (Kyriazos & Poga M., 2023; Liswandi R., 2023).

However, the officially documented quantitative data regarding the WLB level and job satisfaction at PT. XYZ is still not sufficiently available. Job satisfaction is a key element that plays an important role in mediating the impact of WLB on employee mental health (Sutanto Sigiols P. J. & Wijaya E. N., 2024a; Torrero Buenaflor N. B. Tipon F. K. R. & Alayan J., 2024; Vijayalakshmi Nirmala T. & Subasree R., 2023a). The scientific literature consistently shows that WLB imbalances are directly correlated with increased symptoms of distress, burnout, and other psychological disorders (Zhang et al., 2024). Effective WLB management has been proven to strengthen job satisfaction and mental stability of workers, especially in high-pressure sectors such as health workers (Jessica et al., 2023; Vijayalakshmi et al., 2023).

Riyani & Handayani (2024) found a strong positive correlation between WLB and mental health ($r = 0.667$), where WLB was able to explain 41.8% variation in employee psychological conditions. Janyam's (2011) research also showed that employees with high levels of job satisfaction tended to have better emotional stability, while (Singh & Gautam, 2024) found a significant negative association between job satisfaction and symptoms of stress, anxiety, and depression in intensive work environments (Karvouni Adamakidou T. Mantzorou M. Mantoudi A. Christopoulos D. Fasoi G. & Zartaloudi A., 2023; Koeneman & Cavanaugh J. E., 2024; Kotera Green P. & Sheffield D., 2020).

From a management perspective, mental health disorders have a direct impact on organizational performance through decreased productivity, increased attendance, and high turnover costs (Pazer., 2024; Sharma & Kapur S., 2022; Singh & Gautam D. N. S., 2024; Sutanto Sigiols P. J. & Wijaya E. N., 2024b). A Deloitte study (2024) noted that mental health costs reach £5,379 per employee per year in the financial services industry, while the WHO–ILO (2022) estimates global productivity losses due to depression and anxiety to reach US$1 trillion per year (Begum Hamdard J. & Osmany M., 2019; Deloitte, 2024; Gawande & Shah M. S., 2024; Hayes, 2012; Janyam, 2011a). Data internal PT. DEF Group as a holding in 2024 reinforces these findings, where the mental health survey follow-up report shows a significant increase in the number of outpatient and inpatient visits related to stress disorders at the company's health facilities throughout 2024 compared to the previous year (Al Mutair Al Mohaini M. Fernandez R. Moxham L. Lapkin S. & Ham-Baloyi W. ten., 2018; Alfons Ateş N. Y. & Groenen P. J. F., 2022; Cao Zhang H. Li P. & Huang X., 2022). In addition, it was also found that there was a tendency to increase the burden of medical costs and accelerate work mutations, which had an impact on the stability of the work team and the burden of individual adaptation (Jessica Afifah N. Daud I. Sulistiowati & Pebrianti W., 2023).

Therefore, managing employee mental health is a strategic agenda in human resource management, which has direct implications for operational effectiveness and business sustainability.

Theoretically, job satisfaction, which is defined as an affective evaluation of various aspects of work (Spector, 1997), acts as a psychological buffer that moderates work pressure. The Job Demands–Resources (JD-R) model asserts that the negative impact of

high job demands on well-being can be mitigated by adequate job resources such as job satisfaction and social support (Yang et al., 2024) The Broaden-and-Build theoretical framework (Fredrickson, 2004) also strengthens this argument by stating that positive emotions resulting from job satisfaction are able to build long-term psychological resilience.

This research is focused on PT. XYZ, which covers the regions of East Java, Bali, and Nusa Tenggara. The 2024 Medical Area data notes that 18.2% of employees in the region show indications of psychological disorders. Shift-based work systems, remote deployments, and 24-hour operational pressures further increase the risk of psychosocial imbalances. The position of the researcher who is part of the Human Capital Division of PT. XYZ provides strategic access to collect contextual data and understand the actual dynamics in the field.

This study uses internationally validated instruments, namely the WLB scale from Fisher et al. (2009), the Job Satisfaction Survey (JSS) from Spector (1997), and the Mental Health Inventory (MHI-38) from Veit & Ware (1983), which have been adjusted to the cultural and organizational context of Indonesia. Through this approach, the research not only contributes to the development of JD-R and Broaden-and-Build theories, but also provides applicative recommendations for the development of precise and data-driven HR management policies.

Without optimal job satisfaction, WLB's flexibility policy is at risk of failure because employees do not feel meaning or justice in their work. Therefore, the results of this study are expected to be a reference for PT. XYZ in designing strategic interventions to improve employee mental well-being and productivity in a sustainable manner.

Departing from the description above, this study aims to answer key questions about how much influence WLB has on mental health, the extent to which job satisfaction plays a mediating role, and its implications for effective human resource management in PT. XYZ.

The imbalance between professional obligations and personal life has emerged as a serious challenge in high-demand sectors like oil and gas, particularly where rotational shifts, long operational hours, and performance pressures are prevalent. At PT. XYZ, a significant portion of employees has shown symptoms of psychological distress, with 21.7% reporting mental health indications, especially among younger professionals. Despite this alarming statistic, empirical data regarding the levels of work-life balance (WLB) and job satisfaction within the organization remain insufficiently documented, indicating a critical need for evidence-based evaluation.

In today's competitive and volatile business environment, mental health is no longer a personal concern but a strategic organizational issue. The failure to address psychosocial stressors in the workplace leads to reduced productivity, increased absenteeism, and high turnover rates—factors that not only hurt financial outcomes but also risk reputational damage under ESG (Environmental, Social, Governance) scrutiny. For PT. XYZ, the implications are particularly pressing as internal data show rising trends in medical costs and health-related workforce instability, demanding urgent intervention in workplace policies.

Moreover, global trends supported by the WHO, ILO, and Deloitte emphasize that untreated mental health concerns cost companies trillions annually. In the Indonesian context, where systemic awareness and support mechanisms are still developing, organizations like PT. XYZ must lead the way in embedding mental well-being within HR practices. Targeted strategies that integrate job satisfaction as a psychological buffer in WLB interventions are urgently needed to build a resilient, high-performing workforce.

Multiple studies confirm the pivotal role of WLB in supporting mental health. Zhang et al. (2024) demonstrated among Pakistani nurses that WLB directly improves mental well-being via mediators like psychological capital and job satisfaction. Their findings support the JD-R model's assertion that job satisfaction is a protective psychological resource.

Similarly, Addas et al. (2023) confirmed that WLB significantly reduces psychological distress and indirectly elevates job satisfaction, validating a dual-pathway influence in healthcare settings. Their SEM-based research illustrates how perceived balance strengthens mental resilience and workplace morale. Jessica et al. (2023) also highlighted that flexible work environments enhance satisfaction and reduce stress levels, underlining the effectiveness of job design in mental health interventions.

Closer to the Indonesian context, Sutanto et al. (2024) found that job satisfaction mediates the impact of work-life balance on performance and psychological outcomes, reinforcing its strategic importance. These studies collectively validate that the relationship between WLB, job satisfaction, and mental health is statistically significant and practically applicable across various industries, making this topic ripe for further exploration in energy sector settings.

While numerous studies have validated the mediating role of job satisfaction in WLB and mental health across health and service sectors, limited empirical research exists within the energy industry, especially in Indonesia. There is also a scarcity of localized studies incorporating culturally adapted measurement tools. Moreover, few investigations have combined organizational data access with a validated psychological framework to assess mediation comprehensively in high-pressure rotational systems, highlighting a notable research gap.

This study distinguishes itself by applying validated international instruments—Fisher's WLB scale, Spector's JSS, and Veit & Ware's MHI-38—within an Indonesian organizational context, specifically in the energy sector. It uniquely leverages the researcher's internal role in the HR division to capture nuanced employee experiences under rotating schedules. The integration of PROCESS Macro for mediation analysis ensures robust, bootstrapped inference without relying on classical assumptions, advancing methodological precision in workplace mental health research.

This research aims to evaluate the extent to which work-life balance influences mental health among employees of PT. XYZ and to analyze how job satisfaction mediates this relationship. It also seeks to offer empirically grounded recommendations for human resource strategies that can promote psychological well-being and operational sustainability in demanding work environments.

The study contributes practical insights for organizational decision-makers by validating the psychological pathways that connect work-life balance, job satisfaction, and mental health. It enables the formulation of targeted HR interventions such as adaptive work schedules, emotional support systems, and performance evaluation reforms. Beyond corporate utility, the findings enrich theoretical frameworks like the JD-R model and Broaden-and-Build theory, offering broader applicability across sectors facing similar operational stressors.

RESEARCH METHOD

This study used a quantitative approach with a causal research type that aims to test the influence of work-life balance on mental health with job satisfaction as a mediating variable. The design of this study was an explanatory research design that used a survey method to obtain primary data from respondents through the distribution of questionnaires. The population in this study included all permanent employees within PT. XYZ, which

totals 550 people. This population consists of employees of various levels of job titles and work units, in operational and administrative functions, so that they are representative of a diversity of work dynamics and complex organizational structures, conditions that are relevant to the study's focus on Work-Life Balance, job satisfaction, and mental health. This study used a purposive sampling approach, which is a sampling technique based on certain criteria that are determined theoretically. The selection of this method was adapted to time and resource constraints and to ensure that only individuals who meet the substantive requirements are involved as respondents. This technique is commonly used in quantitative research that requires depth of data from subjects who have relevant experience (Sugiyono, 2019).

The inclusion criteria in the selection of respondents are as follows:

- Employees with permanent employee status (non-outsourcing)
- Have had a minimum of 12 months of service in the current work unit
- Engage in a flexible work system (normal, shift, or hybrid)
- Demonstrate commitment to fill out research instruments in a complete and objective manner

This criterion is intended to obtain data from individuals who have a sufficiently in-depth work experience and high exposure to workloads and organizational dynamics. The determination of the number of samples in this study was carried out using the G*Power software version 3.1, developed by Erdfelder et al. (2009) This technique was chosen to replace conventional approaches such as the Slovin formula which only considers the population size and margin of error, without taking into account the statistical strength of the model used. The use of G*Power is based on the consideration that the analysis model used in this study involves mediation analysis with multiple linear regression techniques, so it requires a sample counting approach that is more sensitive to real effects (effect size), significance level (alpha), and test power (power). This method allows researchers to minimize the risk of Type II errors and ensure the reliability of the results obtained.

The data collection technique was carried out through the distribution of questionnaires in online and offline formats. Each questionnaire is arranged on a Likert scale with 5 or 6 points depending on the instrument. The questionnaire consists of three main sections:

a. Work-Life Balance: Use 17 items based on Fisher et al.'s (2009) four-dimensionality, measured on a 5-point Likert scale from "strongly disagree" to "strongly agree".
b. Job Satisfaction: Use the Job Satisfaction Survey (JSS) by Spector (1994), which consists of 36 items spanning nine dimensions and is measured on a 6-point Likert scale.
c. Mental Health: Use the Mental Health Inventory-38 (MHI-38) by Veit & Ware (1983), consisting of 38 items, measured on a 6-point Likert scale.

As a form of conceptual and technical traceability between theoretical constructs and measurement indicators, the following is presented a blueprint of the instruments used in this study. The following tables show the dimensional structure of each variable, the distribution of indicators per dimension, and the number of statement items. This information makes it easier to evaluate the consistency between theory, variable operationalization, and measurement tools used in the data collection process.

The data analysis in this study was carried out using a simple mediation approach through the PROCESS Macro software version 4.2, developed by Andrew F. Hayes. This approach was chosen because of its suitability in analyzing the causal relationship between Work life Balance (X) and Mental Health (Y) with Job Satisfaction (M) as a mediating variable. Instead of using structural methods such as SEM-PLS, this analysis process adopts a regression framework with a comprehensive direct estimation of the total effects, direct effects, and indirect effects.

The use of PROCESS Macro allows researchers to test mediation models using Model 4, which is a model for one mediator. This procedure was carried out with the bootstrapping technique 5000 times, and a confidence level of 95%. This process provides a more stable parameter estimation, free from normal distribution assumptions, and is well suited for research designs with medium to large amounts of quantitative data.

One of the important plus points of this approach is that this analysis does not require testing of classical regression assumptions, such as residual normality, homokedasticity, or multicollinearity, because by bootstrapping, the PROCESS macro establishes a sampling distribution empirically so that asymmetric bootstrap confidence intervals can be calculated without relying on residual normality. In addition, confidence intervals built directly through data resampling are heteroscedasticity-free because they do not rely on traditional error standard estimators. The application of mean-centering is also optional and is not necessary to handle multicollinearity in the moderation model, without affecting the coefficient or significance of the interaction (Hayes, 2012). Furthermore, in the framework of a multilevel model, wild bootstrap does not require homogeneity of variance or assumption of a particular error distribution, so that the test of classical assumptions of regression is no longer a prerequisite for the validity of inference (Hayes, 2012; Modugno & Giannerini, 2015)

In addition, this approach does not require the Sobel test, which often provides biased estimates in small to medium samples, because the sampling distribution of effects is established empirically through resampling, resulting in more stable and accurate mediation estimates. (Preacher & Hayes, 2008) through large-scale simulations, it was confirmed that bootstrap consistently outperforms the traditional Sobel Test in terms of test strength and confidence interval accuracy. Furthermore, Alfons et al. (2022) found that bootstrap remained stable even when the data deviated from normality, thus offering more robust inferences The study conducted by (Koeneman & Cavanaugh, 2024) also confirmed that bootstrap-based testing significantly outperformed traditional methods in dealing with heteroscedasticity and normality violations, thereby improving the reliability of regression inference.

Overall, the selection of the PROCESS Macro in this study provides significant methodological advantages. Not only is it operationally simple, but it also results in a straightforward and practical interpretation. This approach is particularly suitable for the analysis of mediated relationships in contemporary social and management research, which prioritizes estimation accuracy, procedural efficiency, and interpretation accuracy.

Thus, the data analysis techniques in this study are not only based on solid statistical principles, but are also in line with the latest developments in quantitative research methodologies in the field of social and behavioral sciences.

RESULT AND DISCUSSION

Research Description

Respondent Characteristics

This study described the demographic characteristics of 103 respondents from the oil and gas sector, including gender, age, working period, position level, activity, and work pattern. The majority of respondents were men (80.6%), with a predominance of the productive age of 36–45 years. Most have 11–20 years of work experience, demonstrating professional maturity. In the department structure, the executive position dominates, and almost half of the respondents work in a balance between field and office tasks. Most live normal working hours, which are relevant in assessing aspects of work-life balance, work stress, and time flexibility, as variables that affect mental health and job satisfaction.

This study aims to analyze the influence of work-life Balance on Mental Health with Job Satisfaction as a mediating variable. These three main variables were assessed quantitatively through scores that showed that the higher the score, the better the quality of work balance, job satisfaction, and psychological condition of the respondents. To facilitate the interpretation of the data, categorization based on the mean value and standard deviation was carried out into three groups (low, medium, and high). This process provides a general mapping of the tendencies of each respondent, as well as the basis for analyzing the relationships between variables in the proposed mediation model.

Mediation Analysis Using PROCESS Macro Model 4

Once all the basic assumptions of regression analysis have been met, the next step is to understand how the Job Satisfaction variable mediates the relationship between Work-Life Balance and Mental Health. To answer this question, the researchers used an approach developed by Andrew F. Hayes, namely PROCESS Macro version 4.2, with Model 4 specifically designed to test simple mediation.

In this approach, *a bootstrapping* technique was used for 5000 resampling to obtain a more stable parameter estimate free from normal distribution assumptions. This analysis will systematically explain how the influence of work-life Balance on Mental Health can occur directly or indirectly through Job Satisfaction as a mediator.

The three main trajectories analyzed in this model include:

a. Path a: The Effect of *Work-Life Balance* on Job Satisfaction.
b. Path b: The Effect of Job Satisfaction on *Mental Health.*
c. Path c': Direct effect *of Work life Balance* on *Mental Health* after considering a mediator.

The results of each pathway will be presented along with an interpretation of the significance, strength of the relationship, and substantive impact on outcome variables.

The Effect of Work-Life Balance on Job Satisfaction (Path a)

In the early stages, to understand how the mediation process takes place, the analysis is focused on the direct influence of Work life Balance on Job Satisfaction, known as the **path** The results of this simple regression model show that Work-Life Balance statistically has a very significant influence on Job Satisfaction.

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 4.2 *****************

         Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
    Y  : Y_MH
    X  : X_WLB
    M  : M_JS

Sample
Size:  103

**************************************************************************
OUTCOME VARIABLE:
 M_JS

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .7723      .5964   206.7109   149.2341     1.0000   101.0000      .0000

Model
             coeff         se          t          p       LLCI       ULCI
constant   45.3851     8.6150     5.2682     .0000    28.2952    62.4749
X_WLB       1.6329      .1337    12.2161     .0000     1.3678     1.8981

**************************************************************************
```

Figure 1. Process Path A Calculation Table

From the output produced, it is known that the regression coefficient (B) is 1.6329 with a p-value of 0.001 and an R^2 value of 0.5964. This means that every one-unit increase in the Work Life Balance score will contribute to an increase in the Job Satisfaction score by 1.63 points. In addition, almost 60% of the variance in Job Satisfaction can be explained by Work life Balance itself.

These results confirm that work-life Balance is a strong predictor of Job Satisfaction. Thus, the trajectory of a path is not only statistically significant but also practically relevant in an organizational context.

The Effect of Work-Life Balance and Job Satisfaction on Mental Health (Paths b and c')

After it is known that Work life Balance has a significant effect on Job Satisfaction, the next step is to explore the influence of these two variables on Mental Health. This is done through a multiple regression model, where Mental Health is the bound variable, and Work life Balance and Job Satisfaction are simultaneous predictors.

```
**************************************************************************
OUTCOME VARIABLE:
 Y_MH

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .7496      .5619   284.4926    64.1362     2.0000   100.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant    39.1464    11.4111     3.4306      .0009    16.5071    61.7857
X_WLB        1.3001      .2468     5.2673      .0000      .8104     1.7898
M_JS          .2687      .1167     2.3022      .0234      .0371      .5003
```

Figure 2. Process Path Calculation Table b &c'

The results of the analysis show that both predictors have a significant contribution. Work-life Balance still has a direct influence on Mental Health, with a B coefficient of 1,300 and $p < 0.001$. This means that even though some of its influence is channeled through Job Satisfaction, Work-Life Balance still has a strong direct effect. On the other Satisfaction also showed a significant influence on Mental Health, with B = 0.269 and p = 0.023.

This model has an R^2 value of 0.5619, which means that about 56.2% of the variation in Mental Health can be explained by the combination of Work life Balance and Job Satisfaction. Not only statistically significant, these results also support the power of models in explaining employees' mental well-being in the work environment.

In addition, the multicollinearity test showed a VIF of 2.478 for both predictors, well below the critical limit of 10, and a Tolerance value of 0.404 (> 0.1). This shows that there is no problem of high correlation between independent variables, so the model's estimation results are reliable.

Mediation Effect Test (Indirect Effect)

Once the direct pathway between work-life Balance and Mental Health (path c') and the influence through Job Satisfaction mediators (paths a and b) has been proven to be significant, the next step is to analyze the effects of mediation thoroughly. This analysis

focuses on the indirect effect of work-life Balance on Mental Health through Job Satisfaction, known as the mediating effect or indirect effect.

```
****************** DIRECT AND INDIRECT EFFECTS OF X ON Y *****************

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
     1.3001      .2468     5.2673      .0000      .8104     1.7898

Indirect effect(s) of X on Y:
         Effect     BootSE   BootLLCI   BootULCI
M_JS      .4388      .1873      .0750      .8099

************************ ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000
```

Figure 3. Calculation Table of the Mediation Effect Test Process

The approach used is the bootstrapping technique 5000 times, with a confidence level of 95%. The results of the analysis showed that the indirect effect was 0.4388 with a standard error of 0.1873. The bootstrap confidence interval of [0.0750, 0.8099] does not include zeros, which means this mediating effect is statistically significant (Hayes, 2022). These findings provide strong evidence that some of the effects of work-life Balance on Mental Health are indeed channeled through Job Satisfaction. In other words, the more balanced a person's work life is, the higher their job satisfaction level will be, which will ultimately contribute to improved mental health.

Methodological Affirmation: No Need for Classical Assumption Tests and Sobel Tests

In the mediation analysis approach using bootstrapping through PROCESS Macro, there is no need for classical assumption test prerequisites such as residual normality and homoscedasticity. This is because the bootstrapping method produces an empirical distribution of indirect effects by means of resampling, so it does not rely on normal distribution assumptions as in conventional approaches (Hayes & Scharkow, 2013). Furthermore, the Sobel test is also unnecessary because it assumes a normal distribution of indirect effects, which in practice is often not met, especially in small to medium sample sizes. Therefore, the bootstrapping approach is more recommended in mediation studies because it is more accurate, robust, and does not rely on theoretical distribution parameters (Preacher & Hayes, 2008; Hayes, 2022).

Conclusion of the Mediation Model

Overall, the analysis's results show that the mediation model proposed in this study is supported by data. The influence of work-life Balance on Mental Health has been proven to be significant, both directly and indirectly, through the role of Job Satisfaction.
Key points that can be summed up:

- Work-life Balance has a significant direct influence on Mental Health.
- Job Satisfaction plays a significant role as a mediator in the relationship.

- The mediation effect was found to be partial, meaning that work-life Balance still directly contributes to Mental Health even though some of its influence is channeled through Job Satisfaction.

These results emphasize the importance of organizations in paying attention to employees' work-life balance to improve job satisfaction and maintain psychological conditions and mental well-being in general. Conclusion of the Mediation Model from the above results, it is known that:

- Work-life Balance has a direct effect on Mental Health (significant direct effect)
- Job Satisfaction also plays a significant role as a mediator (significant indirect effect)

Thus, this model shows a **partial mediation**: the effects of work-life Balance on Mental Health are partly channeled through Job Satisfaction but also have a direct influence.

Literature Support

The findings in this study have been strongly validated by various recent empirical studies that support the relationship between work-life balance (WLB), job satisfaction, and mental health in a high-pressure work environment.

Zhang et al. (2024), in their study on nursing staff in Pakistan, showed that WLB has a significant direct influence on mental health and an indirect influence mediated by job satisfaction and psychological capital. The sequential mediation model used affirms that work-life balance strengthens psychological resources and increases job satisfaction, which collectively supports employees' mental health.

Another study by Addas et al. (2023) conducted in various hospitals in Pakistan also showed that WLB plays a significant role as a predictor of employee psychological well-being. This study used a *structural equation modeling* (SEM) approach and confirms that the perception of work-life balance has a direct impact on reducing psychological distress and indirectly increasing job satisfaction. (Janyam, 2011) (Janyam, 2011b)

Specifically in the context of the healthcare industry, Zhang et al. (2024) also emphasized that job satisfaction serves as a psychological buffer that is able to mitigate the negative impact of high job demands on mental health. These findings are in line with the *Job Demands-Resources (JD-R)* model and *the Broaden-and-Build Theory,* which are the conceptual framework in this study, where job satisfaction is positioned as an affective resource that strengthens employees' mental resilience (Vijayalakshmi Nirmala T. & Subasree R., 2023b; Y. F. Young, 2016; Yang Chen Y. Zou Y. Liu J. Mao L. Peng L. & Mao P., 2024; Zhang Rehman S. Addas A. & Ahmad J., 2024; Zolkefley Nassir C. M. N. C. M. & Jaffer U., 2023).

By integrating the findings from the literature, the position of job satisfaction as a mediating variable in the relationship between WLB and mental health is not only statistically supported by the results of the PROCESS Macro Model 4 analysis, but also gains strong theoretical and empirical legitimacy. This strengthens the conclusion that organizational interventions that improve WLB must be, at the same time, directed at strengthening the dimension of job satisfaction to produce more optimal and sustainable psychological outcomes in the work environment.

CONCLUSION

This research emerges as a critical organizational response to the increasingly complex demands of the contemporary work environment, where high productivity expectations, dynamic role adaptability, and sustainable employee performance are becoming structural imperatives. In this evolving context, the promotion of Work-Life Balance (WLB) is no longer a peripheral concern but a core tenet of resilient and human-

centric work culture. Employing a robust quantitative methodology through PROCESS Macro Model 4, this study rigorously analyzes the causal linkage between WLB and employee mental health, with job satisfaction as a mediating psychological construct. The findings underscore that WLB exerts a substantial and statistically significant direct influence on mental health, validating the premise that equilibrium between professional and personal life fosters psychological stability. Concurrently, WLB positively affects job satisfaction, which further strengthens employees' emotional and evaluative engagement with their work. The mediating role of job satisfaction, confirmed by bootstrapped analysis and an R^2 value of 56.2%, signifies a layered psychological mechanism wherein positive workplace experiences amplify the mental health benefits of balanced life practices. The strong internal consistency of the measurement instruments (Cronbach's Alpha > 0.90) reinforces the reliability of these insights. These conclusions enrich the theoretical framework of the Job Demands–Resources (JD-R) and Broaden-and-Build models and yield actionable implications for HR policy design, highlighting the strategic necessity of cultivating satisfaction-enhancing job attributes to sustainably improve mental well-being. For future research, it is recommended that scholars expand the scope by incorporating longitudinal designs, diverse industrial contexts beyond energy, and cultural moderators that may influence the dynamics of WLB and mental health. Additionally, integrating qualitative or mixed-method approaches could deepen understanding of subjective experiences and identify organizational levers that quantitative data may overlook.

REFERENCES

Al Mutair Al Mohaini M. Fernandez R. Moxham L. Lapkin S. & Ham-Baloyi W. ten., A. (2018). Psychometric testing of the mental health inventory in an Arabian context: Cross-cultural validation study. *Nursing Open*, *5*(3), 376–383. https://doi.org/https://doi.org/10.1002/nop2.149

Alfons Ateş N. Y. & Groenen P. J. F., A. (2022). A Robust Bootstrap Test for Mediation Analysis. *Organizational Research Methods*, *25*(3), 591–617. https://doi.org/https://doi.org/10.1177/1094428121999096

Begum Hamdard J. & Osmany M., G. T. (2019). Work-life balance and Mental health among Women managers. *ResearchGate*, *nan*(nan), nan. https://doi.org/https://www.researchgate.net/publication/342845850

Cao Zhang H. Li P. & Huang X., X. (2022). The Influence of Mental Health on Job Satisfaction: Mediating Effect of Psychological Capital and Social Capital. *Frontiers in Public Health*, *10*(nan), nan. https://doi.org/https://doi.org/10.3389/fpubh.2022.797274

Deloitte. (2024). Mental health and employers. *Deloitte*, *nan*(nan), nan.

Gawande & Shah M. S., R. P. (2024). Work-Life Balance And Its Impact On Employees: Navigating Strategies For Better Work-Life Balance At Workplace. *ResearchGate*, *nan*(nan), nan. https://doi.org/https://www.researchgate.net/publication/381852352

Hayes, A. F. (2012). PROCESS: A Versatile Computational Tool for Observed Variable Mediation, Moderation, and Conditional Process Modeling. *Hayes*, *nan*(nan), nan. https://doi.org/http://www.afhayes.com/

Janyam, K. (2011a). The influence of job satisfaction on the mental health of factory workers. *Internet Journal of Mental Health*, *7*(1), 1. https://doi.org/https://doi.org/10.5580/1a93

Janyam, K. (2011b). The influence of job satisfaction on mental health of factory workers. *Internet Journal of Mental Health*, *7*(1), 1. https://doi.org/10.5580/1a93

Jessica Afifah N. Daud I. Sulistiowati . & Pebrianti W., N. (2023). The Effect of Work Environment and Work-life Balance on Job Satisfaction: Work Stress as a Mediator.

Journal of Economics, Management and Trade, *nan*(nan), 54–65. https://doi.org/https://doi.org/10.9734/jemt/2023/v29i11074

Karvouni Adamakidou T. Mantzorou M. Mantoudi A. Christopoulos D. Fasoi G. & Zartaloudi A., L. (2023). Job Satisfaction of Nurses Versus Other Mental Health Professionals Working in Psychosocial Rehabilitation Services. *Advances in Experimental Medicine and Biology*, *1425*(nan), 247–256. https://doi.org/https://doi.org/10.1007/978-3-031-31986-0_23

Koeneman & Cavanaugh J. E., S. H. (2024). A novel bootstrap goodness-of-fit test for normal linear regression models. *AStA Advances in Statistical Analysis*, *nan*(nan), nan. https://doi.org/https://doi.org/10.1007/s10182-024-00517-y

Kotera Green P. & Sheffield D., Y. (2020). Work-life balance of UK construction workers: relationship with mental health. *Construction Management and Economics*, *38*(3), 291–303. https://doi.org/https://doi.org/10.1080/01446193.2019.1625417

Kyriazos & Poga M., T. (2023). Dealing with Multicollinearity in Factor Analysis: The Problem, Detections, and Solutions. *Open Journal of Statistics*, *13*(03), 404–424. https://doi.org/https://doi.org/10.4236/ojs.2023.133020

Liswandi R., & M. (2023). The Association Between Work-Life Balance And Employee Mental Health: A Systemic Review. *Asia Pacific Journal of Health Management*, *18*(3), nan. https://doi.org/https://doi.org/10.24083/apjhm.v18i3.2565

Maimunah Kadiyono A. L. Nugraha Y. Psikologi F. Padjadjaran U. Raya J. Sumedang B. 21 K. M. Jatinangor K. Sumedang K. & Barat J., F. (2024). Reliabilitas dan Validitas Konstruk Work-Life Balance Pada Remote Working Employee di Indonesia. *Tekmapro: Journal of Industrial Engineering and Management*, *19*(1), nan.

Parombean Abidin F. A. Qodariah L. & Novita S., A. C. (2023). Adaptation of the Mental Health Inventory (MHI-38) for Adolescents - Indonesian Version. *Psychology Research and Behavior Management*, *16*(nan), 2655–2665. https://doi.org/https://doi.org/10.2147/PRBM.S412460

Pazer., S. (2024). Mental health and job satisfaction among social workers a quantitative study an analysis of workplace well-being in the social work profession. *World Journal of Advanced Research and Reviews*, *24*(1), 196–201. https://doi.org/https://doi.org/10.30574/wjarr.2024.24.1.2985

Riyani & Handayani. Sri., D. T. (2024). The Influence Of Work-Life Balance On The Mental Health Of Millennial Generation Workers In Yogyakarta Special. *International Journal of Economic Integration and Regional Competitiveness*, *1*(nan), 13–20. https://doi.org/https://economic.silkroad-science.com/index.php/IJEIRC

Rohwer Velasco Garrido M. Herold R. Preisser A. M. Terschüren C. Harth V. & Mache S., E. (2022). Police officers' work-life balance, job satisfaction and quality of life: longitudinal effects after changing the shift schedule. *BMJ Open*, *12*(9), nan. https://doi.org/https://doi.org/10.1136/bmjopen-2022-063302

Salsabila Syani Tentama F. Diponegoro A. M. Psikologi M. & Psikologi Universitas Ahmad Dahlan F., R. (2021). VALIDITAS DAN RELIABILITAS KONSTRUK SKALA KEPUASAN KERJA GURU. *DOI*, *nan*(nan), nan. https://doi.org/https://doi.org/10.21009/JPPP.102

Sharma & Kapur S., M. (2022). Mental health linked with work life balance of working women. *International Journal of Health Sciences*, *nan*(nan), 1887–1899. https://doi.org/https://doi.org/10.53730/ijhs.v6ns4.6575

Singh & Gautam D. N. S., Y. K. (2024). The Impact of Job Satisfaction on Teacher Mental Health: A Call to Action for Educational Policymakers. *Open Education Studies*, *6*(1), nan. https://doi.org/https://doi.org/10.1515/edu-2024-0008

Sutanto Sigiols P. J. & Wijaya E. N., E. M. (2024a). Work-Life Balance, Employee Engagement, Job Satisfaction, And Indonesian Employees' Performance. *International Journal of Business and Society*, *25*(3), 832–851. https://doi.org/https://doi.org/10.33736/ijbs.8355.2024

Sutanto Sigiols P. J. & Wijaya E. N., E. M. (2024b). Work-Life Balance, Employee Engagement, Job Satisfaction, And Indonesian Employees' Performance. *International Journal of Business and Society*, *25*(3), 832–851. https://doi.org/https://doi.org/10.33736/ijbs.8355.2024

Torrero Buenaflor N. B. Tipon F. K. R. & Alayan J., K. A. (2024). Self-Efficacy, Job Satisfaction, And the Mental Health of Work-From-Home Employees A Mixed Method Approach. *Psychology And Education: A Multidisciplinary Journal*, *22*(nan), 123–145.

Vijayalakshmi Nirmala T. & Subasree R., S. (2023a). An Analysis of Work Life Balance and Mental Health of Women in India during Work from Home with Special Reference to IT Sector. *Asian Review of Social Sciences*, *12*(1), 29–33. https://doi.org/https://doi.org/10.51983/arss-2023.12.1.3337

Vijayalakshmi Nirmala T. & Subasree R., S. (2023b). An Analysis of Work Life Balance and Mental Health of Women in India during Work from Home with Special Reference to IT Sector. *Asian Review of Social Sciences*, *12*(1), 29–33. https://doi.org/https://doi.org/10.51983/arss-2023.12.1.3337

Y. F. Young, F. (2016). Working Hour, Work-Life Balance and Mental Health on Construction Workers. *Journal of Human Resource Management*, *4*(5), 49. https://doi.org/https://doi.org/10.11648/j.jhrm.20160405.11

Yang Chen Y. Zou Y. Liu J. Mao L. Peng L. & Mao P., J. (2024). *Role of job burnout and work engagement in the relationship between mental health literacy and life satisfaction in Chinese Barefoot Social Workers: A serial mediation model based on the job demands-resources theory*. *nan*(nan), nan. https://doi.org/https://doi.org/10.21203/rs.3.rs-5276819/v1

Zhang Rehman S. Addas A. & Ahmad J., J. (2024). Influence of Work-Life Balance on Mental Health Among Nurses: The Mediating Role of Psychological Capital and Job Satisfaction. *Psychology Research and Behavior Management*, *17*(nan), 4249–4262. https://doi.org/https://doi.org/10.2147/PRBM.S497305

Zolkefley Nassir C. M. N. C. M. & Jaffer U., M. K. I. (2023). Work-Life Balance in Managing Stress, Job Satisfaction and Performance: The Wasatiyyah Concept and Neuroscience Perspective. *Global Journal Al-Thaqafah*, *13*(2), 1–13. https://doi.org/https://doi.org/10.7187/GJAT122023-3