

The Relationship Between Work-Life Balance and Corporate Performance, Focusing on Industry and Job Type

Koki Kobashi^{1*}, Manabu Ichikawa¹, Kaede Fujita¹

¹Shibaura Institute of Technology, Saitama, Japan

Abstract - In Japan, "Work Style Reform" have been implemented to improve labor productivity and work-life balance (WLB), but sufficient results have not been achieved. Previous studies have analyzed the impact of labor environments and corporate policies on workers' health, WLB, and corporate performance, but there are very few studies that analyze how corporate WLB policies affect corporate performance. This study constructed an agent-based model (ABM) and conducted scenario analysis to clarify changes in workers' WLB and corporate performance. The results showed that WLB improved across all industries, but improvements in corporate performance were limited to certain industries. Additionally, it was confirmed that wage increases or increased labor mobility across the entire labor market may not be effective across all industries. These findings are expected to contribute to the design of government policies and the promotion of the "Work-Style Reform" initiative.

Keywords – Work-life balance, agent-based model, simulation

I. INTRODUCTION

Japan's labor productivity remains low compared to other developed countries. According to the International Comparisons of Labor Productivity 2023 [1], Japan ranked 30th out of 38 OECD member countries in terms of labor productivity per hour worked, and 31st in terms of labor productivity per worker—both the lowest rankings on record.

The White Paper on the Aging Society 2022 [2] reports that Japan's working-age population peaked at 87.16 million in 1995 and has been declining since. The Economic and Fiscal Policy White Paper 2023 [3] states that "in order to enhance Japan's growth potential, improving productivity is essential."

Furthermore, in response to labor shortages and the need to reflect diverse values, efforts to promote women's participation in the workforce and to improve work-life balance (WLB)—such as enabling the compatibility of work with childbirth, childcare, and nursing care—are increasingly important. Against this

backdrop, the "Work Style Reform" [4] was implemented in 2019. However, Japan's labor productivity still falls below the OECD average, making productivity improvement an urgent challenge.

In addition, Kume et al. (2024) [5], through panel data analysis, revealed significant disparities in the implementation of flexible work styles across industries and occupations, highlighting the need to evaluate and address these inequalities.

Considering these findings, this study aims to propose work styles tailored to the characteristics of specific industries and occupations, emphasizing the importance of maintaining and improving both labor productivity and work-life balance.

II. LITERATURE REVIEW

This study conducted a systematic review of Japanese-language academic articles to determine whether work styles tailored to specific industries or occupations have been proposed. Out of a total of 2,365 articles reviewed, 28 were selected excluding those that did not analyze industry, occupation, or health conditions. Research in this field has examined various perspectives, including workplace environment, health status, labor productivity, and WLB.

Juming (2022) [6] conducted an online survey of employees in IT companies and, through multi-group mediation analysis, demonstrated that clarifying working hours and allowing flexible choice of work location contribute to improved WLB and mental health. Similarly, Takahashi (2023) [7] used panel data analysis to show that long working hours exacerbate physical and mental health issues, whereas high rates of paid leave utilization have a mitigating effect.

Furthermore, Koike (2009) [8] used microdata and binary logistic regression analysis to examine the effects of WLB policies and gender equality measures on corporate performance. The study found that both types of initiatives contribute to improved performance, and that combining them yields even greater effects.

*Corresponding author. Email: br21019@shibaura-it.ac.jp

©2025.The 9th International Conference on Management in Emerging Markets (ICMEM)

Published by Unit Research and Knowledge-School of Business and Management-Institut Teknologi Bandung

While previous research has clarified how workplace environments and corporate initiatives influence workers' health, WLB, and corporate outcomes, few studies have systematically analyzed the relationship between WLB policies and corporate performance.

Considering this, the present study aims to investigate how corporate initiatives affect both workers' WLB and business performance.

III. METHODOLOGY

In this study, exploratory factor analysis (EFA), ordinary least squares (OLS) regression analysis, and agent-based modeling (ABM) were interactively employed to identify and analyze the factors influencing workers' WLB and to conduct a scenario analysis that can inform future policy design.

EFA was conducted using data from the 2023 National Survey on Working Conditions [9], provided by the Recruit Works Institute, to extract latent structures behind multiple variables related to WLB. Based on factor loadings, the variables were classified into principal components, and interpretable factors were derived.

Subsequently, OLS regression analysis was used to quantitatively evaluate the direction and magnitude of the influence of each factor on WLB, with "life satisfaction" as the dependent variable and the extracted factors as independent variables, based on their coefficients and statistical significance.

ABM is a method that defines decision-making entities such as individuals and organizations as agents, enabling the simulation of social phenomena through their interactions. This allows for the quantitative evaluation of behavioral changes and their effects under various institutional or social intervention scenarios. In this study, based on the results of the OLS analysis, the decision-making processes of workers and firms were formalized as agents. ABM was then used to dynamically observe and analyze how changes in employment behavior and corporate initiatives impact WLB and business performance.

For model construction, the SOARS Toolkit (Spot Oriented Agent Role Simulator Toolkit) [10], a social simulation library, was used. SOARS is a language for implementing ABM based on the concepts of agents, spots, roles, and stages.

Agents are entities capable of autonomous behavior and decision-making and can assume different roles depending on the situation. Each role is associated with specific rules that govern behavior and decisions within a spot. Spots are abstractions of geographic locations or social groups, within which agents move and make decisions influenced by other agents.

The SOARS Toolkit allows for detailed definitions of agent attributes and behaviors, making it well-suited for modeling dynamic social processes in which multiple factors interact to produce phenomena such as isolation or differentiation. Given that agents in this study interactively influence each other's behavior and decisions, this method was employed.

IV. USAGE DATA

In constructing the model, employment rates by industry for new graduates and job turnover rates for general workers were calculated. The employment rates of new graduates were based on the 2019 Employment Trends Survey [11] conducted by the Ministry of Health, Labor and Welfare, and were used in the model when simulating the job selection behavior of newly graduated workers. The job entry and exit rates of general workers were derived from the 2023 Employment Trends Survey [12] and were used to simulate job-changing behavior.

To estimate corporate performance based on WLB, the study referred to Yamamoto et al. (2011) [13], which analyzed the relationship between WLB policies and corporate performance across both the manufacturing and non-manufacturing sectors. In this model, the six factors extracted through EFA were mapped to the categories of WLB policies defined in Yamamoto's study. The quantitative impact of each policy was set based on the average effect values labeled as "<Average Effect> All Years" presented in their analysis.

The results of the EFA conducted using the 2023 National Survey on Working Conditions [9] are shown in Figure 1.

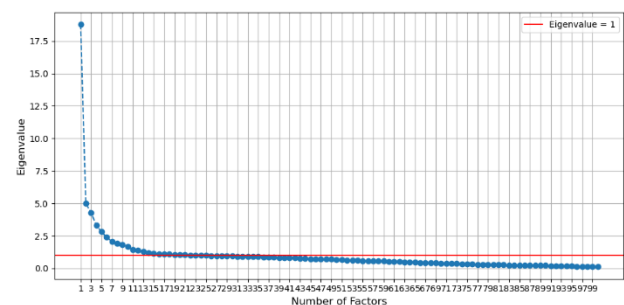


Figure 1 Screen Plot for factor selection

Following Kaiser's criterion, factors with eigenvalues greater than 1.0 were selected as candidates. Additionally, a scree plot was used to identify the elbow point, and six factors were ultimately adopted for this study. Based on these, the contribution of each factor to the dependent variable, life satisfaction, was calculated by gender and industry category. The results are shown in Tables I - IV.

Table I OLS results by age group for males

Age	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6
20s	-0.066506	-0.388147	-0.198071	-0.028665	-0.050116	-0.512892
30s	-0.121891	-0.410591	-0.151346	-0.005050	0.063290	-0.445270
40s	-0.100507	-0.420416	-0.148046	0.048589	0.042403	-0.528583
50s	-0.134098	-0.489442	-0.175365	0.051373	0.082938	-0.435315
60s	-0.055052	-0.508968	-0.189112	0.062026	0.059539	-0.399077

Table II OLS results by age group for females

Age	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6
20s	0.016047	-0.377767	-0.165143	0.042746	-0.008494	-0.159221
30s	0.088931	-0.481075	-0.153178	0.034873	-0.002398	-0.131970
40s	0.064596	-0.514535	-0.167275	-0.009069	0.000035	-0.280674
50s	0.016613	-0.498559	-0.143822	0.054705	-0.028275	-0.533812
60s	0.015948	-0.511402	-0.176608	0.028435	-0.007697	-0.393071

Table III OLS results by industry

Industry	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6
Mining	1.556856	-0.572471	0.200861	0.512818	0.617681	-0.439647
Construct	1.110516	-0.499534	-0.029651	-0.004101	0.046639	-0.217633
Manufacturing	1.109079	-0.480005	-0.019924	-0.021766	-0.021988	-0.195639
Electric	1.455689	-0.401659	0.034836	-0.004909	-0.144073	-0.174439
Telecommunications	1.136360	-0.502502	-0.053628	-0.006960	-0.010000	-0.247302
Transportation	1.064674	-0.488053	-0.038095	-0.004095	0.018439	-0.219951
Wholesaling	1.136749	-0.504932	0.041249	-0.017065	-0.046658	-0.150191
Retail	0.979419	-0.465992	-0.063526	-0.004617	-0.044306	-0.197359
Financing	0.808623	-0.439845	-0.069855	-0.010072	-0.057976	-0.161043
Estate	1.094725	-0.512577	-0.071364	-0.049506	-0.018034	-0.141867
Medical	0.917210	-0.465781	-0.041088	0.019703	-0.023913	-0.118463
Education	0.657410	-0.486311	-0.080935	0.022896	-0.031413	-0.187002
Lodging	0.921797	-0.496494	-0.057857	0.009613	-0.055252	-0.185425
Lifestyle	1.047628	-0.485959	-0.071652	0.003397	-0.023199	-0.168169
Multiservice	0.933545	-0.350373	-0.031266	-0.025386	-0.116725	-0.138717
Specialty	0.759342	-0.525332	-0.087583	-0.022598	0.055790	-0.253814
Service	1.069105	-0.448732	-0.038479	0.011635	0.016624	-0.245704

Table IV Label names for each factor

Factor	Label Name
Factor1	Terms of Employment
Factor2	Balance between Work and Health
Factor3	Learning Environment
Factor4	Long-term Employment
Factor5	Risk Hedge
Factor6	Life Stage Changes

V. MODEL CONSTRUCTION

An overview of the workers and firms in this model is shown in Figure 2. This analysis targets workers aged 22 to 64 and simulates a 42-year period from their initial employment after university graduation to retirement.

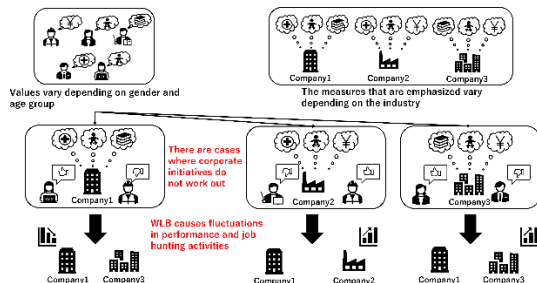


Figure 2 Research overview diagram

Regarding workers, the model analyzes how work preferences differ by gender and age group, and how these preferences influence decision-making. For firms,

the analysis focuses on 17 industries within the secondary and tertiary sectors, distinguishing between large and small-to-medium enterprises, and examining the work style policies each prioritizes.

It should be noted that the 2023 National Survey on Working Conditions [9] used in this study does not include data on the primary industry; therefore, the primary sector is excluded from the analysis.

In the model, new graduate and general workers are defined as agents, while firms are defined as spots. New graduate worker agents are generated in each simulation cycle based on actual demographic trends. These are derived from the Table 1-9: Population by Sex and Single Year of Age (Total Population) [13] published by the National Institute of Population and Social Security Research. The population of 22-year-old men and women from 2023 to 2065 is scaled down to one-thousandth for use in the model.

General worker agents are generated based on the 2023 Labor Force Survey [14] by the Ministry of Economy, Trade and Industry (METI), scaling the non-agricultural labor force aged 22 to 64 (56.84 million people) down to one-thousandth, resulting in 56,840 agents. The gender ratio and age distribution of the agents reflect the proportions reported in the same survey.

Firm spots were created based on the 2014 Economic Census for Business Frame [15] conducted by METI. The actual number of large and small-to-medium enterprises by industry was scaled down to one-thousandth, resulting in 4,286 companies in total.

In this model, general worker agents choose a company, and their WLB is calculated based on that selection. Each firm spot determines its own business performance according to the WLB outcomes of its employees. The overall structure of the model is illustrated in Figure 3.

The attributes of the agents are shown in Tables 1, 2, and 3, respectively.

Table V Attributes of new worker

Attribute	Definition
Gender	Male / Female
Age	22 years old
Key Factors	Factor1 / Factor2 / Factor3 / Factor4 / Factor5 / Factor6

Table VI Attributes of workers

Attribute	Definition
Number of agents	56,840
Gender	Male / Female
Age	22 - 29 / 30s / 40s / 50s / 60 - 64
Key Factors	Factor1 / Factor2 / Factor3 / Factor4 / Factor5 / Factor6

Table VII Attributes of company

Attribute	Definition
Industry Category	Mining and quarrying / Construction / Manufacturing / Electricity and gas / Information and communications / Transportation / Wholesale and retail / Finance / Real estate / Academic research / Lodging / Personal services / Education / Medical / Multiservice / Other services
Company Size	Small and medium-sized enterprises / Large enterprises
Key Initiatives	Factor1 / Factor2 / Factor3 / Factor4 / Factor5 / Factor6

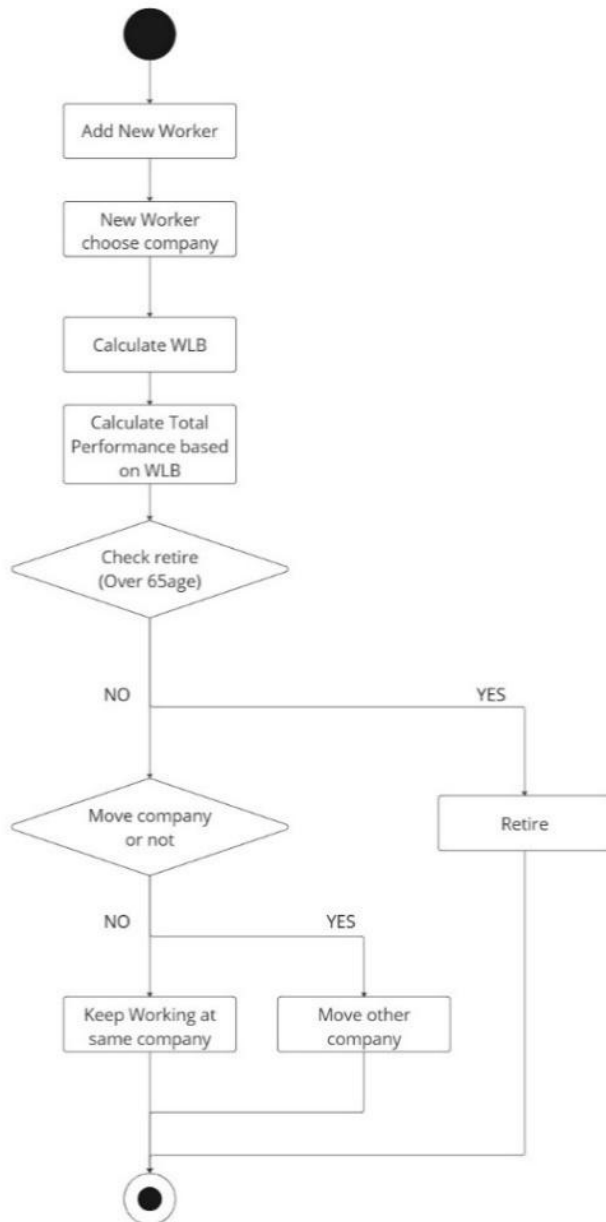


Figure 3 Model flowchart

First, new workers enter the labor market and select a company. After this, each worker's WLB and the business performance of the selected company are calculated.

Each agent has an age attribute, and agents retire upon reaching the age of 65. If they have not yet reached retirement age, they determine whether to

engage in job-seeking or stay with their current employer.

This sequence of processes constitutes the basic flow of the model. The simulation advances in one-year steps, and the total simulation period is 42 years, corresponding to the span from initial employment at age 22 to retirement at age 65.

VI. RESULT

In recent years, there has been growing interest in Japan in implementing wage increase policies and enhancing labor mobility as means to improve labor productivity and corporate performance. The Ministry of Health, Labor and Welfare, in the 2022 White Paper on the Labor Economy, identified the promotion of labor mobility as a key initiative for improving labor productivity.

Aoshima (2021) [17] also pointed out that one of the reasons Japan has the lowest labor productivity among G7 countries is the lack of labor mobility. His study introduced leading cases within Japanese companies and proposed directions for improving productivity.

In this study, changes in WLB and corporate performance were analyzed under a single scenario in which two modifications were applied simultaneously: (1) strengthening companies' wage increase initiatives (Factor 2) to have a greater impact on life satisfaction, and (2) adjusting job entry and exit rates to alter labor mobility. Figure 4 shows changes in corporate performance before and after this combined scenario, with improvements observed in several industries.

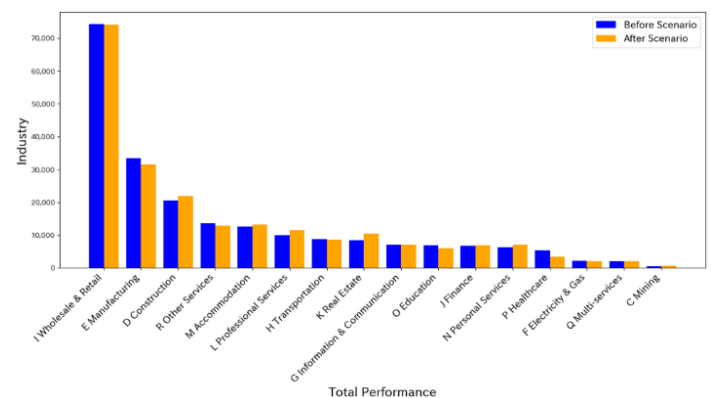


Figure 4 Comparison of corporate performance scenario

Figure 5 illustrates changes in WLB, confirming that the overall distribution of WLB improved across all industries.

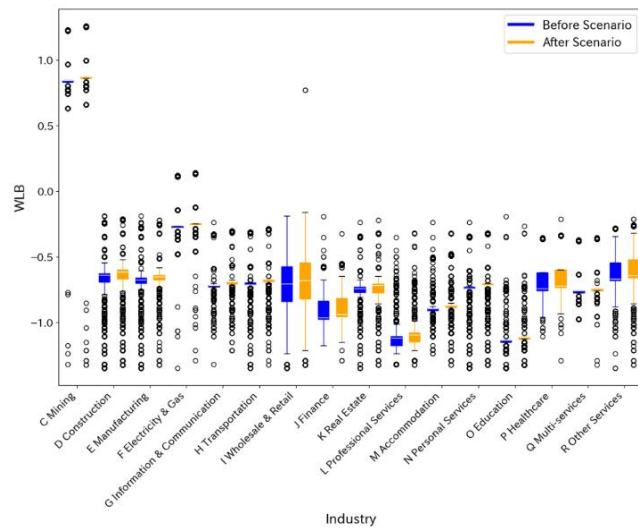


Figure 5 WLB scenario comparison

VII. DISCUSSION

The validity of this model was evaluated by comparing the industry-specific trends in corporate performance derived from the simulation results with actual data. Figure 6 presents industry-specific sales figures based on the 2023 Survey on the Actual State of Economic Structure [18], conducted by the Statistics Bureau of Japan. Figure 7 shows the corresponding simulation results generated by the model.

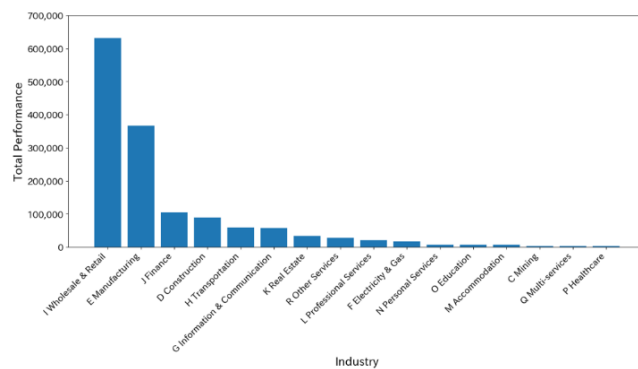


Figure 6 Actual data

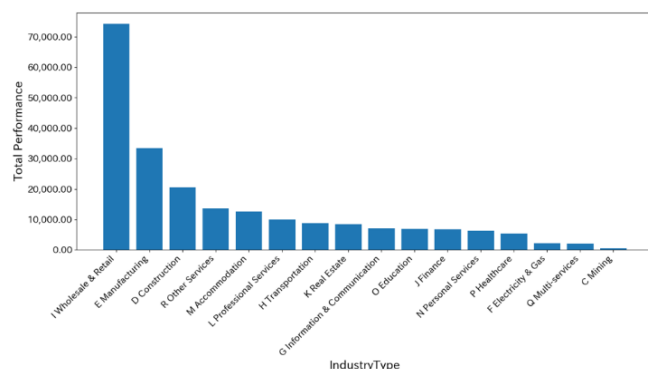


Figure 7 Simulation results

In industries such as wholesale and retail, manufacturing, construction, information and communications, and mining, consistency was observed between the actual data and the simulation results, indicating that the model appropriately reproduced trends in corporate performance.

In contrast, discrepancies were found in certain industries such as finance, professional services, and education, suggesting that industry-specific factors and external environmental influences may not have been fully captured within the model.

The analysis of the integrated scenario—simultaneously implementing strengthened wage increase initiatives and adjustments to labor mobility—revealed that the impact on corporate performance varied across industries. In wholesale and retail, information and communications, construction, accommodation, and certain service sectors, performance improvements were observed. Previous empirical studies have shown that measures such as partial remote work adoption, flexible working arrangements, and reduced turnover can enhance productivity and organizational outcomes [19-22], and these effects were reproduced in the model. In construction and accommodation, although the direct effects of flexible work are limited, indirect benefits from long-term employment and skill accumulation are known to contribute to performance gains. In the model, these effects were reflected through variables such as reduced turnover and increased learning opportunities.

In contrast, manufacturing, education, and healthcare and welfare experienced performance declines. Manufacturing relies heavily on fixed production processes and equipment utilization, leaving limited room for efficiency gains through flexible work [21]. Education is characterized by a high proportion of face-to-face teaching, rigid schedules, and high emotional labor demands, which limit the effectiveness of WLB measures [23][24]. Healthcare and welfare sectors also face high interpersonal dependency and shift-based scheduling constraints, which are only partially represented in the current model [19].

Furthermore, industries such as electricity and gas, mining, and composite services showed little change. These sectors are subject to geographical constraints and stable demand, limiting the influence of WLB and labor mobility measures. In the case of mining, prior research has indicated that optimized shift systems and family accompaniment policies can be effective [25], but such practices are rarely implemented in Japan, potentially explaining the limited observed effects.

Additionally, variables incorporated into the models such as long-term employment, workplace learning environments, and health measures—produced results

consistent with literature. Long-term employment contributes to productivity gains through the accumulation of firm-specific skills, with the largest effects occurring early in a career, after which continuous skill updating becomes necessary [26]. Investment in reskilling and vocational training not only directly improves sales and productivity but also contributes to better WLB by increasing employee satisfaction and retention [27][28]. Moreover, workplace health measures and mental health support have been shown to reduce absenteeism, enhance productivity, and improve both job satisfaction and quality of life [29][30].

These results indicate that the model can replicate, to a certain extent, the influence of wages, labor mobility, long-term employment, learning environments, and health measures. However, it also has limitations in fully capturing cultural, institutional, and operational constraints specific to each industry.

VIII. CONCLUSION

This study examined the relationship between corporate initiatives, WLB, and corporate performance, based on the premise that workers' preferences regarding work styles vary according to individual attributes and firm characteristics, and that corporate initiatives do not necessarily lead directly to improvements in WLB or performance.

The ABM-based simulation revealed that, under the integrated scenario combining strengthened wage increase initiatives (Factor 2) with adjustments to labor mobility, changes in corporate performance varied across industries. In sectors where flexible work arrangements and reduced turnover were expected to be effective, performance improved, whereas in industries with limited potential for operational flexibility, the effects were smaller or even negative.

Future research should focus on enhancing the model for selecting new employers after job transitions and expanding it to better reflect Japan's unique social context. In the current model, job transitions are simulated by randomly assigning new employers without considering firm size or industry characteristics. Decision-making is influenced by multiple factors, including wages, benefits, employment stability, and interpersonal relationships. Incorporating these elements would enable the development of a more interactive and realistic model.

Furthermore, Japanese-specific socio-psychological factors should also be considered. As noted by Ooya et al. [31], pluralistic ignorance—a phenomenon in which individuals mistakenly believe that others accept certain values—can significantly influence preferences regarding WLB. By integrating such factors along with industry- and firm-specific characteristics, it will be possible to construct a more detailed and realistic model.

ACKNOWLEDGMENT

The data for this secondary analysis, "Japanese Panel Study of Employment Dynamics, 2023, Recruit Works Institute," was provided by the Social Science Japan Data Archive, Center for Social Research and Data Archives, Institute of Social Science, The University of Tokyo.

REFERENCES

- [1] Japan Productivity Center. (2023). International Comparisons of Labor Productivity 2023 (Summary). <https://www.jpc-net.jp/research/assets/pdf/summary2023.pdf>
- [2] Cabinet Office. (2022). Annual Report on the Ageing Society (2022). https://www8.cao.go.jp/kourei/whitepaper/w-2022/zenbun/04pdf_index.html
- [3] Cabinet Office. (2023). Annual Economic and Fiscal Report 2023. https://www5.cao.go.jp/j-j/wp/wp-je23/index_pdf.html
- [4] Ministry of Health, Labour and Welfare. (2019). Work Style Reform. <https://www.mhlw.go.jp/content/000474499.pdf>
- [5] Kume, K., Hagihara, M., & Yawan, S. (2024). Evaluation and challenges of work style reform. *The Japanese Journal of Labour Studies*.
- [6] Juming, J., Ishii, R., & Oyama, T. (2022). The effects of fixed telework location and hours on mental health through work-life balance. *The Japanese Journal of Psychology*, 93(4), 311–319.
- [7] Takahashi, Y. (2023). Factors related to workers' physical and mental health problems. *Journal of Economic Policy*, 20(1), 1–14.
- [8] Koike, H. (2009). Evaluating the effectiveness of work-life balance policies and proposing promotion strategies. *Journal of Business Ethics in Japan*, 16, 165–172.
- [9] Recruit Works Institute. (2023). National Employment Status Panel Survey 2023. <https://www.works-i.com/surveys/panel-surveys.html>
- [10] Ono, I., Ichikawa, M., & Deguchi, H. (2020). Proposal of SOARS Toolkit for large-scale agent-based simulations. *Proceedings of the Society of Instrument and Control Engineers (SICE)*, GS6-4-5.
- [11] Ministry of Health, Labour and Welfare. (2019). Employment Trends Survey 2019. <https://www.mhlw.go.jp/toukei/itiran/roudou/koyou/doukou/20-2/index.html>
- [12] Ministry of Health, Labour and Welfare. (2023). Employment Trends Survey 2023. <https://www.mhlw.go.jp/toukei/itiran/roudou/koyou/doukou/24-2/index.html>

- [13]National Institute of Population and Social Security Research. (2023). Population by Single Year of Age and Sex.
https://www.ipss.go.jp/pp-zenkoku/j/zenkoku2023/db_zenkoku2023/db_zenkoku2023syosaikekka.html
- [14]Ministry of Internal Affairs and Communications. (2023). Labour Force Survey.
<https://www.stat.go.jp/data/roudou/sokuhou/nen/ft/index.html>
- [15]Ministry of Economy, Trade and Industry. (2014). Economic Census for Business Frame 2014.
<https://www.stat.go.jp/data/e-census/2014/index.htm>
- [16]Ministry of Health, Labour and Welfare. (2022). White Paper on the Labour Economy 2022.
<https://www.mhlw.go.jp/stf/wp/hakusyo/roudou/21/21-1.html>
- [17]Aoshima, M. (2021). Enhancing labor mobility to improve productivity. Intellectual Asset Creation, November.
<https://www.nri.com/content/900034163.pdf>
- [18]Ministry of Economy, Trade and Industry. (2023). Economic Census for Business Activity 2023.
https://www.stat.go.jp/data/kkj/kekka/pdf/2023_gaiyo4.pdf
- [19]Eurofound. (2020). *Telework and ICT-based mobile work: Flexible working in the digital age*.
<https://www.eurofound.europa.eu/publications/report/2020/telework-and-ict-based-mobile-work-flexible-working-in-the-digital-age>
- [20]Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does working from home work? Evidence from a Chinese experiment. *Quarterly Journal of Economics*, 130(1), 165–218.
https://www.nber.org/system/files/working_papers/w18871/w18871.pdf
- [21]OECD. (2021). *OECD Employment Outlook 2021: Navigating the COVID-19 crisis and recovery*. OECD Publishing.
https://www.oecd.org/content/dam/oecd/en/publications/reports/2021/07/oecd-employment-outlook-2021_e81ed73a/5a700c4b-en.pdf
- [22]U.S. Bureau of Labor Statistics. (2022). *Job flexibility and work schedules – 2017–2018 data from the American Time Use Survey*.
<https://www.bls.gov/news.release/pdf/flex2.pdf>
- [23]Kinman, G., & Wray, S. (2018). Higher stress: A survey of stress and wellbeing among staff in higher education. *Education Support*.
https://www.ucu.org.uk/media/5911/Higher-stress-a-survey-of-stress-and-well-being-among-staff-in-higher-education-Jul-13/pdf/HE_stress_report_July_2013.pdf
- [24]OECD. (2020). *Education at a glance 2020: OECD indicators*. OECD Publishing.
https://www.oecd.org/content/dam/oecd/en/publications/reports/2020/09/education-at-a-glance-2020_19b01e87/69096873-en.pdf
- [25]Joyce, S. J., Tomlin, S. M., Somerford, P. J., & Weeramanthri, T. S. (2013). Health behaviours and outcomes associated with fly-in fly-out and shift workers in Western Australia. *Internal Medicine Journal*, 43(4), 440–444.
<https://mhwbf.org/wp-content/uploads/2019/02/Joyce-2013-Health-behaviours-and-outcomes-asso.pdf>
- [26]Gagliardi, L., Grinza, E., & Rycx, F. (2022). Tenure and productivity: A comparative analysis. *Industrial Relations: A Journal of Economy and Society*, 61(1), 58–95.
<https://onlinelibrary.wiley.com/doi/epdf/10.1111/irel.12314>
- [27]Martins, P. S. (2021). The impact of training subsidies on firm performance: Evidence from Portugal. *OECD Productivity Working Papers*, No. 26. OECD Publishing.
<https://doi.org/10.1787/3cb0950b-en>
- [28]The Adecco Group. (2025). *Global workforce of the future: 2025 report*.
<https://www.adeccogroup.com/-/media/project/Adecco-Group/AdeccoGroup/PDF-Files/2025-Aug/TAG-GWOF-Lessons-Policy-Makers-January-2023.pdf>
- [29]World Health Organization. (2016). *Investing in treatment for depression and anxiety leads to fourfold return*.
<https://www.who.int/news/item/13-04-2016-investing-in-treatment-for-depression-and-anxiety-leads-to-fourfold-return>
- [30]Gallup. (2025). *State of the global workplace: 2025 report*. Gallup, Inc.
<https://www.gallup.com/workplace/349484/state-of-the-global-workplace.aspx>
- [31]Ooya, T., & Shoji, Y. (2022). Pluralistic ignorance and anticipated sanctions related to work-life balance. *AAOS Transactions*, 183–189.
https://www.jstage.jst.go.jp/article/aaostrans/11/1/11_183/pdf/-char/ja