Factors Influencing the Competence of Indonesian Migrant Workers in Japan's Food Processing Industry

Rismaja Putra[1*]
[1]*Department of Industry Management, Akademik Teknik Indonesia Cut Mutia; Medan, Indonesia*

*Corresponding Author E-Mail: putra.jissho@yahoo.com

Submitted:
November 10, 2025

Revised:
January 19, 2026

Accepted:
March 28, 2026

Published Online:
March 31, 2026

ABSTRACT

Rising demand in Japan's food processing industry underscores the importance of Indonesian migrant workers' technical and non-technical competencies. This study aims to analyze the influence of training received, education, Japanese language proficiency, skills, work experience, and level of cultural adaptation on the competence of Indonesian migrant workers in the food processing industry in Japan. This study employed a mixed-methods approach, combining quantitative questionnaires administered to 150 respondents with qualitative semi-structured interviews, in order to provide a comprehensive understanding of Indonesian migrant workers' competencies in Japan. The findings indicate that language proficiency, skills, cultural adaptation, training, work experience, and education positively affect the competence of Indonesian migrant workers in Japan's food processing industry. The importance of technical skills for operating machinery and maintaining quality, as well as non-technical skills like discipline, communication, and teamwork. Challenges such as language barriers, strict procedures, and cultural differences emphasize the need for pre-departure preparation and continuous training. Together, these factors strengthen both technical and non-technical competencies, supporting effective performance and high-quality production. The findings indicate that training, work experience, education, language ability, skills, and cultural adaptation can improve the competence of migrant workers in the food processing industry in Japan.

Keywords*: Cultural Adaptation, Education, Food Processing Industry, Indonesian Migrant Workers, Work Experience.*

INTRODUCTION

Globalization strengthens the idea of transnational communities, which promote international human mobility, and has a substantial impact on the macroeconomic variables of many nations worldwide, such as labor force-to-population ratios and unemployment rates. One mechanism of knowledge transfer is global human mobility, which gives returning migrants the cognitive-behavioral skills and orientation to participate in knowledge transfer in addition to new information and perspectives (Morin & Talbot, 2023; Rawhouser et al., 2025). International mobility, including internships overseas, gives migrant workers from developing nations the chance to learn skills, practical knowledge, and competencies from developed nations (Guo et al., 2020; Roy, 2020; Lam & Rui, 2023). When these migrant workers return home, their home countries benefit and become more competitive in the global market (Tran et al., 2020; Chowdhury & Chakraborty, 2021; Khan & Arokkiaraj, 2021).

In recent years, Japan has experienced a demographic crisis marked by a declining productive-age population and labor shortages across multiple industrial sectors (Yonezawa, 2020; Nakatani, 2023). This situation poses risks to economic stability, prompting the Japanese government to open employment opportunities for foreign workers under regulated schemes. Japan has therefore cooperated with labor-sending countries, including Indonesia, which has an abundant, productive workforce. One key

JIMKES

Jurnal Ilmiah Manajemen Kesatuan
Vol. 14 No. 2, 2026
pp. 1953-1966
IBI Kesatuan
ISSN 2337 – 7860
E-ISSN 2721 – 169X
DOI: 10.37641/jimkes.v14i2.4566

initiative is the *Tokutei Ginou* or Specified Skilled Worker (SSW) program, a visa scheme to facilitate the employment of foreign workers in Japan (Bachri et al., 2020; Pujiono & Gapur, 2025). Holders of the SSW visa are granted employment rights and obligations equivalent to those of Japanese workers (Takizawa, 2021; Arief, 2022; Maung & Siriwato, 2025). Approximately 2.3 million foreign nationals held specified skilled worker (Type 1) status in Japan, with Indonesian workers totaling 169,539, making them one of the largest groups after other Southeast Asian countries (JP-Mirai, 2025).

Prospective workers who wish to participate in the *Tokutei Ginou* program must meet several requirements. These requirements include passing the Japan Foundation Test Basic (JFT-Basic) and a skill test in the relevant field (Desyana & Jatmika, 2023; Zinchenko, 2023). To join the *Tokutei Ginou* program, prospective migrant workers must apply through official channels, including authorized training and placement institutions such as JITCO and BP2MI, partner labor placement agencies, Japanese companies offering *Tokutei Ginou* positions, or Job Training Centers (*Lembaga Pelatihan Kerja*/LPK) that provide Japanese language instruction, preparation for the JFT-Basic, and sector-specific skills training (Risda, 2022). These procedures are regulated under Law Number 18 of 2017 on the Protection of Indonesian Migrant Workers and Government Regulation Number 31 of 2022 on the Placement and Protection of Indonesian Migrant Workers (Asmorojati et al., 2022; Kunarti et al., 2023; Prianto et al., 2023).

In practice, Indonesian migrant workers face various adaptation challenges related to differences in job standards, language, and culture. Most workers are graduates of the Technical Intern Training Program (*Gino Jisshusei*) with 3–5 years of internship experience in Japan, which has enhanced their technical skills, industry knowledge, and Japanese language proficiency. In contrast, the number of workers entering through the specified skilled worker program remains limited. Moreover, the lack of comprehensive statistical data on the competencies of Indonesian migrant workers in the food processing industry restricts a full understanding of their technical and non-technical capabilities (Wisnujati et al., 2024).

Prior research by Azis et al. (2020) demonstrated how the technical intern training program enhances migrant workers' technical proficiency, knowledge, and proficiency in Japanese. They gain practical experience in production processes, quality control, and hygiene management. Non-technical aspects, such as cultural adaptation, work discipline, and cross-language communication, have been less explored. A study by Athallah and Dharma (2024) found that Indonesian migrant workers in Japan experience three primary forms of anxiety related to language, habits, and mindset, and must employ active, passive, and interactive communication strategies to navigate culture shock in their workplaces. The dearth of research suggests that a more thorough examination of the skills of Indonesian migrant workers in the Japanese food processing sector is necessary.

The urgency of this research arises because there have not been many studies that comprehensively assess the competencies of Indonesian migrant workers, including the influence of training, education, Japanese language skills, work experience, and cultural adaptation on their performance. This study aims to analyze the influence of training received, education, Japanese language proficiency, skills, work experience, and level of cultural adaptation on the competence of Indonesian migrant workers in the food processing industry in Japan.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

The Effect of Japanese Language Proficiency and Skill on Competency

Japanese language proficiency is widely recognized as a crucial determinant of an individual's competency within Japanese-oriented work settings. Research by Yeoh and Singh (2024) demonstrates that employees who possess a higher level of Japanese language proficiency tend to perform better in business communication and show stronger intercultural adaptability, which in turn directly enhances their overall job competency. In line with this, Su et al. (2020) argue that strong language skills facilitate smoother integration into the workplace and significantly improve the employability of graduates

working in Japanese-based companies. Mastery of the Japanese language supports not only grammatical and communicative accuracy but also a deeper understanding of cultural norms and values, both of which contribute positively to employee performance and productivity, as noted by Nishizawa et al. (2022).

Beyond language proficiency, the possession of specific job-related skills also plays an essential role in shaping professional competency. According to Ota (2021), technical expertise and interpersonal abilities function as important complements to language skills in building comprehensive professional competence. Furthermore, Selke et al. (2016) emphasize that the integration of linguistic proficiency with problem-solving capabilities and teamwork skills is a strong predictor of individual success in Japanese corporate environments. Together, these findings suggest that competency in Japanese-related workplaces is multidimensional, arising from the combined influence of language proficiency, cultural understanding, and relevant professional skills (Kasmawati & Imelda, 2024).

H1: Japanese language proficiency has a positive effect on competency.
H2: Skills have a positive effect on competency.

The Effect of Level of Cultural Adaptation and Training Received on Competency

Cultural adaptation has become a vital determinant of employee competency in multicultural and international work contexts. As highlighted by Matsumoto and Hwang (2020) and Nishizawa et al. (2022), employees who demonstrate higher levels of cultural adaptability tend to exhibit greater communication effectiveness, teamwork, and problem-solving ability, all of which contribute positively to job competency. Intercultural adaptability improves not only relational competence but also professional confidence and engagement in global organizations. Cultural adaptation thus acts as a bridge between diversity and performance by fostering inclusivity and reducing misunderstandings in cross-cultural teams.

Training received, meanwhile, reinforces and enhances employee competency by building necessary skills and knowledge. Sakamoto (2023) and Putra et al. (2025) found that structured training programs significantly improve both technical and behavioral competencies, particularly when aligned with organizational goals. Additionally, Tanaka and Aizawa (2024) reported that continuous learning initiatives promote adaptive competence and innovation among employees in Japanese-based firms. Evidence from Indonesian management research indicates that competency development programs that are aligned with job tasks and supported by managerial involvement significantly enhance employee performance in diverse organizational settings (Megawati, 2025).

H3: The level of cultural adaptation has a positive effect on competency.
H4: Training received has a positive effect on competency.

The Effect of Work Experience and Education on Competency

Work experience plays a crucial role in developing individual competencies by providing opportunities for practical skill application and contextual learning. According to Waykar (2023), accumulated work experience enhances employees' problem-solving ability and performance by transforming tacit knowledge into actionable competencies. According to Wibowo et al. (2024), experiential learning significantly enhances intercultural communicative competence by engaging learners in direct, reflective activities that improve their ability to communicate and adapt effectively in diverse professional environments. According to Putra et al. (2025), greater exposure to clinical learning environments significantly enhances nursing students' cultural competence, suggesting that direct engagement in diverse clinical settings contributes to both practical skills and confidence in cross-cultural healthcare interactions. Consistent with these findings, research in the Indonesian context shows that work experience and professional competencies positively influence performance outcomes, as practical engagement

supports the application of knowledge and the development of skills necessary for successful job execution (Mawarni & Nuraini, 2021).

Education also contributes substantially to competency formation by providing theoretical grounding and structured skill development. According to Ponomariovienė et al. (2025), competency-based education blends theoretical knowledge with practical application to develop critical thinking, adaptability, and real-world skills, while Farawowan and Hardianti (2025) demonstrate that competency-based training consistently improves performance outcomes such as creativity, innovation, productivity, and competitiveness in professional settings. Hence, both education and work experience operate synergistically in competency enhancement.

H5: Work experience has a positive effect on competency.
H6: Education has a positive effect on competency.

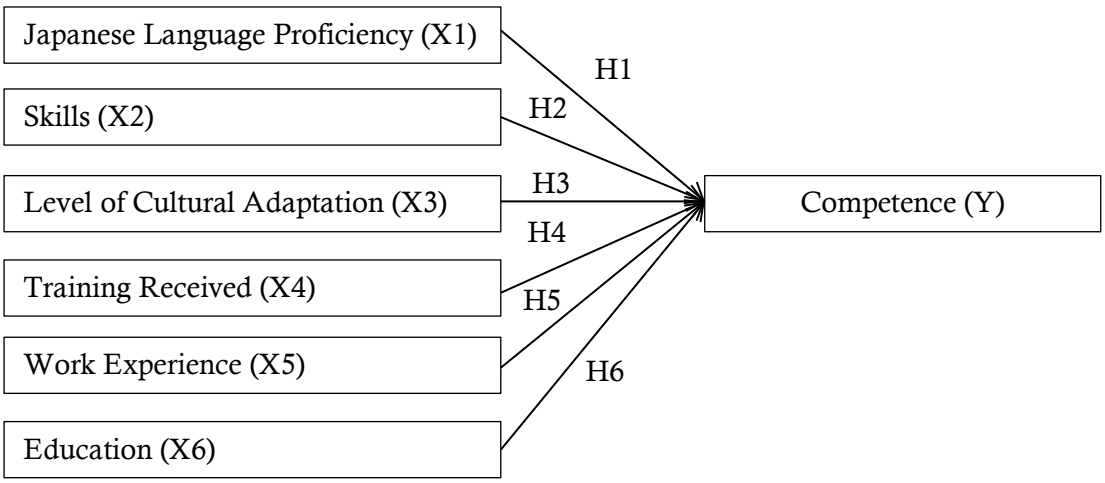

Figure 1. Conceptual Framework

The conceptual structure of this study, which describes the elements impacting competency, is shown in Figure 1. The model demonstrates how a number of individual and contextual factors, including Japanese language ability, degree of cultural adaptation, training received, work experience, and education, influence competency. These factors reflect important facets of learning processes and human capital that support the growth of individual competency. The framework makes the assumption that while cultural adaptation facilitates more seamless contact and adjustment in the workplace, higher levels of language fluency and abilities improve people's capacity to carry out activities efficiently. Furthermore, education, training, and job experience are thought to be crucial channels for acquiring skills and information that enhance total competency.

RESEARCH METHODS

The method employed in this study is mixed-methods, a research approach that integrates both quantitative and qualitative data collection and analysis to provide a comprehensive understanding of the relationships between variables (Sugiyono, 2022). The study focused on Indonesian migrant workers employed in Japan's food processing industry. To gather a representative sample, a simple random sampling technique was applied, selecting participants randomly from a comprehensive list of migrant workers across various regions in Japan. This approach resulted in a sample of 150 respondents, which was considered sufficient to reflect the characteristics, experiences, and competencies of the broader population. By combining rigor in sampling with the mixed-methods design, the study aimed to balance generalizability with the depth of understanding of the migrant workers' professional realities.

The data analysis was conducted using both quantitative and qualitative techniques to capture complementary insights. Quantitative analysis was carried out using SmartPLS 3 software, which included tests for instrument validity and reliability, assessment of the structural model, and hypothesis testing to examine the statistical relationships among variables. In parallel, qualitative data were collected through semi-structured interviews and analyzed using thematic analysis, enabling the identification of recurring patterns, emerging themes, and nuanced insights regarding the technical and non-technical competencies, challenges, and adaptation experiences of Indonesian migrant workers in Japan. This integrated approach allowed the study to triangulate findings, ensuring that statistical results were enriched by contextualized, in-depth qualitative evidence, thereby providing a holistic view of the factors influencing migrant worker competence and performance.

Primary and secondary data were the two primary sources of data used in this investigation. Questionnaires and in-person interviews with Indonesian migrant workers in Japan's food processing sector were used to gather primary data in order to learn more about their technical and non-technical skills as well as their work experiences. Meanwhile, secondary data were obtained from various documentary sources, including statistical data, Human Resource Management (HRM) policy documents, academic publications, and government publications, which were used to support the analysis and provide additional context on the phenomenon under study.

The research instrument used a questionnaire consisting of 24 questions, with each indicator measured through 4 questions. This survey was created to gather information on the technical and non-technical skills of Indonesian migrant laborers employed in Japan's food processing sector. Before use, the instrument was tested for validity and reliability. Validity and reliability tests were conducted to determine whether the questionnaire was suitable for use. The validity test consisted of convergent validity, which can be seen from the loading factor value, Average Variance Extracted (AVE), and Composite Reliability (CR). An indicator is said to be convergent valid if the loading factor value is > 0.70, AVE is > 0.50, and Composite Reliability is > 0.70 (Narimawati & Sarwono, 2025). The inner model was assessed using R-square, f-square, and GoF indices, while hypotheses were tested via bootstrapping in SmartPLS at a 95% significance level ($t > 1.96$; $p < 0.05$).

RESULTS

Quantitative Findings

The loading factor calculation is shown in Figure 2, and the results show that the loading factor value is above 0.70, indicating that the indicator has satisfied the convergent validity requirements and has the necessary validity based on the rule of thumb applied in accordance with what has been tested previously.

Figure 2 shows that the measurement model has excellent convergent validity because loading factor values for all indicators across constructs are higher than the suggested cutoff of 0.70. While indicator X3.4 (0.745) has the lowest loading factor, indicator X4.3 (0.930) has the highest loading factor, indicating a very substantial contribution to the construct it measures. This score is the lowest, yet it still surpasses the minimal requirement, indicating that the indication is still reliable. According to the convergent validity criteria put forward by Hair et al., these findings generally demonstrate that each indicator is capable of accurately representing its related latent variable. It is appropriate to keep all of the indicators in the research model for further structural model analysis and reliability testing.

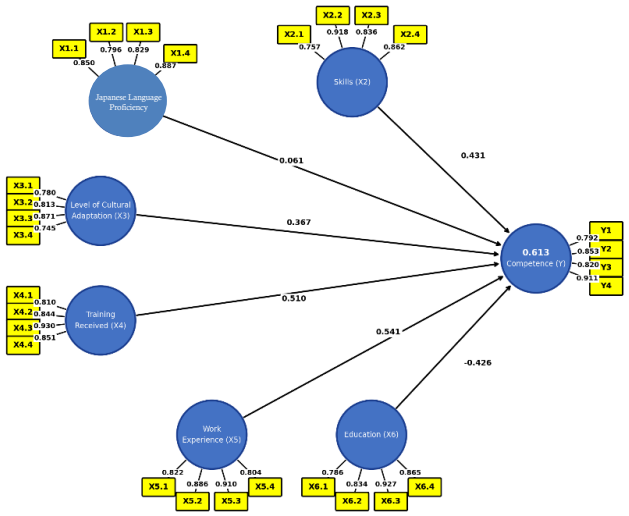

Figure 2. Loading Factor Results

Average Variance Extracted (AVE) was used to assess convergent validity, where a threshold value of 0.50 is generally considered acceptable. The results in Table 1 show that all constructs have AVE values above 0.50, indicating that each latent variable is able to explain more than half of the variance of its indicators. The highest AVE value is found in the skills construct at 0.674, suggesting a strong ability to capture indicator variance. Meanwhile, the lowest AVE value is observed in the level of the cultural adaptation construct at 0.562. However, this value still meets the minimum acceptable threshold. These findings confirm that all constructs demonstrate adequate convergent validity.

Table 1. Validity Test

Variable	Item	Loading Factor	AVE	Composite Reliability	Significance
Japanese Language Proficiency (X1)	X1.1	0.850	0.631	0.751	Valid & Reliable
	X1.2	0.796			
	X1.3	0.829			
	X1.4	0.887			
Skills (X2)	X2.1	0.757	0.674	0.770	Valid & Reliable
	X2.2	0.918			
	X2.3	0.836			
	X2.4	0.862			
Level of Cultural Adaptation (X3)	X3.1	0.780	0.562	0.719	Valid & Reliable
	X3.2	0.813			
	X3.3	0.871			
	X3.4	0.745			
Training Received (X4)	X4.1	0.810	0.580	0.723	Valid & Reliable
	X4.2	0.844			
	X4.3	0.930			
	X4.4	0.851			
Work Experience (X5)	X5.1	0.822	0.643	0.735	Valid & Reliable
	X5.2	0.886			
	X5.3	0.910			
	X5.4	0.804			
Education (X6)	X6.1	0.786	0.643	0.784	Valid & Reliable
	X6.2	0.834			
	X6.3	0.927			
	X6.4	0.865			
Competencies (Y)	Y1	0.792	0.618	0.748	Valid & Reliable
	Y2	0.853			
	Y3	0.820			
	Y4	0.911			

After the validity evaluation, Composite Reliability was used to assess the measurement model's reliability. All constructions obtain values above the suggested threshold of 0.70, according to the data, suggesting adequate internal consistency across variables. The variable with the highest Composite Reliability value (0.784) is education, followed by skills at 0.770 and competence at 0.748. Even though the level of cultural adaptation variable has the lowest reliability rating (0.719), it still surpasses the minimal criteria, indicating that the construct is measured reliably.

The questionnaire created for this study satisfies the necessary psychometric standards, according to the combined findings of the validity and reliability tests. The measuring tools are appropriate for additional analysis in the structural model and hypothesis testing phases since all indicators and constructs have been demonstrated to be valid and reliable. According to Narimawati and Sarwono (2025), multicollinearity testing seeks to determine whether the independent variables in the regression equation exhibit any association. The independent variables should not be correlated in a suitable regression model. The value of the Variance Inflation Factor (VIF) indicates multicollinearity testing. A VIF result of less than 10 indicates that the variable under test is not multicollinear. The multicollinearity test computation results are displayed in Table 2.

Table 2. Multicollinearity Test

Variable	Value
Japanese Language Proficiency	1.196
Skills	1.144
Level of Cultural Adaptation	1.095
Training Received	1.140
Work Experience	1.082
Education	1.092

Table 2 shows that every variable has a Variance Inflation Factor (VIF) value between 1.082 and 1.196, which is less than 10. This suggests that the independent variables in this research model do not have a multicollinearity issue. In other words, each variable, such as Japanese language proficiency, skills, training received, education, work experience, and level of cultural adaptation, has low correlation with the others, so it can be said that each variable is able to make a unique contribution to the dependent variable, namely competence. Since all VIF values are below the threshold of 10, the regression model is declared free of multicollinearity and suitable for further analysis.

The R-Square value is used to determine how much the independent variables affect the dependent variables. A higher R-Square value indicates a more accurate research model prediction. An R-Square value of 0.750 represents a strong model, 0.500 represents a moderate model, and 0.250 represents a weak model (Narimawati & Sarwono, 2025). The results of the R-square test calculation can be seen in Table 3.

Table 3. R-Square Test Results

Items	Value
Dependent Variable	Competence
R Square	0.613

The dependent variable competence has an R-Square of 0.613, according to Table 3. This figure shows that the independent variables Japanese language proficiency, skills, training received, education, work experience, and degree of cultural adaptation can account for 61.3% of the variation in the competence variable. The remaining 38.7%, however, can be explained by variables not included in this research model. These findings show that the study model falls into the moderate category, which means that while it has a respectable level of explanatory power, it can still be enhanced by taking into account other factors.

Goodness of Fit (GoF) is used to assess the extent to which the research model fits the empirical data obtained (Goretzko et al., 2024). One commonly used indicator is the

Standardized Root Mean Square Residual (SRMR) value, where the model is considered feasible or fit if it has an SRMR value below 0.10 (Narimawati & Sarwono, 2025). This value indicates that the difference between the observed covariance and that predicted by the model is very small, so it can be concluded that the model has good suitability and is able to accurately describe the relationship between variables.

Table 4. Goodness of FIT Test Results

Indicator	Saturated Model	Estimated Model
SRMR	0.068	0.068
d_ULS	2.315	2.315
d_G	1.482	1.482
Chi-Square	865.274	865.274
NFI	0.923	0.923

Based on Table 4, the GoF test results show that the research model has a good level of suitability. The SRMR value of 0.068 is below the threshold of 0.10, which means that the model meets the fit criteria. In addition, the NFI value of 0.923 also indicates that the model has a high degree of conformity with empirical data. Thus, it can be concluded that the model used is appropriate and capable of adequately representing the relationship between variables.

The f-square test is used to assess the magnitude of the influence of each independent variable on the dependent variable in the structural model. The f-square value helps determine how strong the contribution of a construct is in explaining other variables. The interpretation criteria are 0.02, indicating low influence, 0.15, indicating moderate influence, and 0.35, indicating strong influence (Narimawati & Sarwono, 2025).

Table 5. F-Square Test

Variable	Value	Description
Japanese Language Proficiency	0.210	Moderate
Skills	0.185	Moderate
Level of Cultural Adaptation	0.243	Moderate
Training Received	0.591	High
Work Experience	0.159	Moderate
Education	0.430	High

The F-square test results in Table 5 indicate that the variables education (0.430) and training received (0.591) have a significant impact on competence. In the meantime, the variables' level of cultural adaptation (0.243), work experience (0.159), skills (0.185), and Japanese language proficiency (0.210) fall into the intermediate group. This suggests that every factor has a favorable impact on competence, but to differing degrees.

The estimation findings reveal details regarding the correlation between the variables under study. Hypothesis testing is based on the values discovered in the path coefficients, which are the outcomes of executing the bootstrapping function on SmartPLS. The hypothesis can be rejected or accepted using the t-statistic and path coefficients. This hypothesis test employs a 95% significance threshold (alpha = 0.050). At the 95% significance level, the t-table value is 1.96. Table 6 displays the results of the testing for each hypothesis in this study.

Based on Table 6, the results of the structural model testing indicate that all proposed hypotheses are supported, as each independent variable shows a positive and significant effect on competence. Japanese language proficiency demonstrates a positive influence on competence, with a path coefficient of 0.312 and a t-statistic of 3.184, which exceeds the critical value of 1.960, confirming the acceptance of Hypothesis 1 and indicating that higher language proficiency significantly enhances competence. Similarly, skills have a positive and significant effect on competence, as reflected by a path coefficient of 0.284 and a t-statistic of 3.121, leading to the acceptance of Hypothesis 2 and suggesting that skills play an important role in shaping competence. The level of cultural adaptation also shows a significant positive effect on competence, with a coefficient of 0.241 and a t-

statistic of 2.537, satisfying the criteria of t-statistics > 1.960 and p < 0.05. Therefore, Hypothesis 3 is accepted, indicating that better cultural adaptation contributes meaningfully to competence.

Table 6. Hypothesis Testing Results

Relationship	Original Sample	Sample Mean	Standard Deviation	t-statistics	p-values
Japanese Language Proficiency -> Competency	0.312	0.298	0.098	3.184	0.002
Skills -> Competency	0.284	0.276	0.091	3.121	0.003
Level of Cultural Adaptation -> Competency	0.241	0.228	0.095	2.537	0.012
Training Received -> Competency	0.51	0.478	0.208	2.454	0.014
Work Experience -> Competency	0.295	0.283	0.112	2.634	0.009
Education -> Competency	0.267	0.259	0.103	2.592	0.01

Furthermore, training received exhibits the strongest positive effect on competence, with a path coefficient of 0.510 and a t-statistic of 2.454, supporting Hypothesis 4 and confirming that training significantly improves competence. Work experience also positively affects competence, as shown by a coefficient of 0.295 and a t-statistic of 2.634, which exceeds the threshold value, leading to the acceptance of Hypothesis 5 and demonstrating that experience contributes significantly to competence development. Thus, education has a positive and significant effect on competence, with a coefficient value of 0.267 and a t-statistic of 2.592, resulting in the acceptance of Hypothesis 6 and indicating that higher educational attainment significantly influences competence. These findings confirm that all examined factors play an important role in enhancing Competence within the proposed research model.

Qualitative Findings

Indonesian migrant workers explained that technical competence is a key aspect of their work in the Japanese food processing industry. They said that operating production machinery, processing raw materials, and packaging and storage must comply with Japanese standards, and that even small mistakes can affect product quality. One worker mentioned that in making sushi, filleting fish, or fermenting vegetables and fruits such as miso and kimchi, regular practice is very important to ensure proper technique and product safety (Rosidin, 2021). Most workers undergo training before working in Japan, either at official institutions or through company programs, which equip them with basic technical skills and field practice (Roberts & Fujita, 2024; Tsukada, 2024). Intensive training before departing for Japan, which usually lasts 2–4 weeks, includes daily practice sessions to master basic skills (Rahman et al., 2020).

After arriving at the workplace, workers receive regular follow-up training 2–3 times per week over several months to strengthen technical skills and adapt to company standards. Most workers have a high school or vocational education background. Prior work experience, particularly 6 months to 2 years in restaurants, food processing, or catering, is considered valuable as it supports understanding of hygiene, ingredient processing, and production workflows, facilitating faster adaptation to Japan's strict standards (Monteiro et al., 2021). The majority of workers are graduates of the Technical Intern Training Program (*Gino Jisshusei*), with 3–5 years of internship experience in Japan, which enhances their technical competence, industry knowledge, and Japanese language skills. In contrast, the number of workers entering through the specified skilled worker program remains limited.

In addition to technical skills, non-technical competencies are also very important. Workers say that discipline and concentration determine the smooth running of the production process, while accuracy and cleanliness are priorities in maintaining quality (Okpala & Korzeniowska, 2023; Wiyanti et al., 2023; Shestakofsky, 2024).

Communication skills help them understand instructions from superiors or co-workers, including the use of Japanese language skills equivalent to at least JLPT N4 or JFT-Basic A2. Cultural adaptation and teamwork are also considered keys to success, as the production process involves the coordination of many people.

Indonesian migrant workers face several challenges in adapting to the Japanese food processing industry, including differences in culture and work ethics, language barriers, strict work standards, and complex production procedures (Akbar et al., 2024; Badawi, 2024; Nurul & Hidayatun, 2025). Japanese language skills equivalent to JLPT N4 or JFT-Basic A2 are crucial for effective communication and understanding technical instructions. Workers also need non-technical skills, mental resilience, and adaptability to manage homesickness, work pressure, and coordination in multicultural teams (Kuga, 2024; Akon et al., 2025). Training, education, language proficiency, work experience, and cultural adaptation collectively enhance both technical and non-technical competencies, improving task performance, production quality, and adjustment to the work environment.

DISCUSSION

The findings of this study indicate that the competence of Indonesian migrant workers in the Japanese food processing industry is shaped by a multidimensional set of factors, encompassing both technical and non-technical aspects. Japanese language proficiency, work-related skills, training, work experience, education, and cultural adaptation collectively contribute to enhancing workers' competence. This suggests that competence is not solely determined by technical expertise, but also by communication ability, contextual understanding of the workplace, and the capacity to adjust to a different cultural environment. Therefore, worker competence can be conceptualized as an integration of hard skills and soft skills that jointly support effective performance in an international work setting (Ladegaard, 2020).

These findings are consistent with previous studies emphasizing the importance of such factors in shaping migrant worker competence. Language proficiency and training play a crucial role in facilitating effective communication and improving job performance, while the balance between technical and non-technical skills is essential in developing comprehensive competence (McDonald et al., 2024). Furthermore, work experience and cultural adaptation are critical in enabling workers to navigate diverse work environments and enhance their performance abroad (Mabkhot & Al-Ameryeen, 2023). This study reinforces the perspective that migrant worker competence is determined by a holistic readiness that includes skills, experience, and socio-cultural adaptability.

The qualitative findings provide deeper insights into these relationships. Indonesian migrant workers reported that technical competence, such as operating production machinery, processing raw materials, and maintaining hygiene standards, is essential, with even small mistakes potentially affecting product quality (Rosidin, 2021). Workers emphasized the importance of intensive pre-departure training, including daily practice for 2–4 weeks, followed by continuous follow-up training 2–3 times per week, which strengthens technical skills and ensures compliance with Japanese standards (Rahman et al., 2020). Prior work experience of 6 months to 2 years in restaurants or catering was considered highly valuable, as it facilitates faster adaptation to production workflows and hygiene requirements (Monteiro et al., 2021). Many workers participated in the Technical Intern Training Program (*Gino Jisshusei*), accumulating 3–5 years of internship experience that enhanced both technical competence and Japanese language proficiency.

Non-technical competencies were also emphasized, including discipline, concentration, accuracy, cleanliness, communication skills, cultural adaptation, and teamwork (Okpala & Korzeniowska, 2023; Wiyanti et al., 2023; Shestakofsky, 2024). Workers faced challenges such as cultural differences, language barriers, strict production standards, and psychological pressures like homesickness, which require mental resilience and high adaptability (Akbar et al., 2024; Badawi, 2024; Nurul & Hidayatun, 2025; Akon et al., 2025). These qualitative insights confirm that the combination of technical skills,

non-technical skills, training, education, and cultural adaptation forms a mutually reinforcing framework that enhances worker competence, efficiency, and productivity.

CONCLUSION

Based on the results of the study, it can be concluded that training received, education, Japanese language skills, work experience, and level of cultural adaptation significantly positively affect the competence of Indonesian migrant workers in the food processing industry in Japan. Training and work experience are the most dominant factors in improving technical competence, while Japanese language skills, cultural adaptation, education, and skills support the mastery of non-technical skills and integration into the Japanese work environment.

These findings confirm that a combination of pre-departure preparation and practical experience in the field is essential to ensure that workers can work effectively and maintain production quality in accordance with Japanese industry standards. The government, placement agencies, and Japanese businesses are advised to enhance organized training programs, Japanese language instruction, and cultural adjustment before departure in light of the research findings. In addition, monitoring and ongoing training in the workplace need to be strengthened to improve technical and non-technical competencies, so that migrant workers can adapt more quickly, and productivity and work quality can be optimally maintained.

This study has several limitations: the sample size is relatively small, and it focuses only on the food processing sector, which may limit generalizability. Data were obtained through self-reports, potentially introducing bias. The cross-sectional study design only captures a single point in time, not long-term skill development or adaptation. Future studies are recommended to involve larger sample sizes, include Indonesian migrant workers from other industrial sectors, and consider additional variables such as organizational support or psychological well-being to provide a more comprehensive understanding of competency development among migrant workers in Japan.

FUNDING STATEMENT: This research did not receive any specific grant from funding agencies in the public, commercial, or not - for - profit sectors.

CONFLICTS OF INTEREST: The author declares no conflict of interest.

DECLARATION OF GENERATIVE AI STATEMENT: During the preparation of this work, the author(s) used ChatGPT, Grammarly, and Turnitin to assist with language refinement, grammar checking, and originality verification. After using this tool/service, the author(s) reviewed and edited the content as needed and take(s) full responsibility for the content of the publication.

REFERENCES

[1] Akbar M, R., Hasibuan, A. S., & Nishikubo, E. (2024). Implementation of Japanese work ethics and culture for prospective workers at LPK tomoni marawa abadi. *International Journal of Research in Vocational Studies (IJRVOCAS), 3*(4), 236–243.

[2] Akon, M. S., Sharmin, D., Farsim, M. N., & Hossain, S. (2025). Cross-cultural and psychological adjustment experiences of Bangladeshi students in Japan: a qualitative investigation. *Current Psychology, 44*(8), 7168–7180.

[3] Arief, F. N. (2022). Japan's foreign policy on migrant workers: implementation of the specified skilled workers (SSW) policy in overcoming labor crisis. *Mediasi Journal of International Relations, 5*(1), 12-24.

[4] Asmorojati, A. W., Nur, M., Dewi, I. K., & Hashim, H. (2022). The impact of COVID-19 on challenges and protection practices of migrant workers' rights. *Bestuur, 10*(1), 43–56.

[5] Athallah, M. A., & Dharma, F. A. (2024). Strategi Komunikasi Pekerja Migran Indonesia dalam Mengatasi Culture Shock Selama Bekerja di Jepang. *Academic Journal of Da'wa and Communication*, *5*(1), 81-104.

[6] Azis, A., Wahyudi, R., Prasetyo, Y., Awigra, D., & Hayashi, M. (2020). Shifting the paradigm of Indonesia–Japan labour migration cooperation. *Human Rights Working Group, 3*(14), 34-39.

[7] Bachri, A. S., Kusrini, D., & Augustine, F. Z. (2020, December). Factors influencing the successful implementation of prospective ginou jisshuu and tokutei ginou careworkers' training. In *4th International Conference on Language, Literature, Culture, and Education (ICOLLITE 2020)* (pp. 7-13). Paris: Atlantis Press.

[8] Badawi, H. (2024). Exploring classroom discipline strategies and cultural dynamics: lessons from the Japanese education system. *Tafkir: Interdisciplinary Journal of Islamic Education, 5*(1), 1–12.

[9] Chowdhury, M. B., & Chakraborty, M. (2021). The impact of COVID-19 on the migrant workers and remittances flow to Bangladesh. *South Asian Survey, 28*(1), 38–56.

[10] Desyana, A., & Jatmika, S. (2023). Japan-Indonesia cooperation in dealing with the labour crisis in Japan. In *Proceedings of Universitas Muhammadiyah Yogyakarta Graduate Conference* (Vol. 3, No. 1, pp. 121-133). Yogyakarta: Universitas Muhammadiyah Yogyakarta.

[11] Farawowan, F. F., & Hardianti, A. (2025). The effectiveness of competency-based training program classes on human resources performance in the creative industry sector. *MSJ: Majority Science Journal*, *3*(3), 158-166.

[12] Goretzko, D., Siemund, K., & Sterner, P. (2024). Evaluating model fit of measurement models in confirmatory factor analysis. *Educational and Psychological Measurement, 84*(1), 123–144.

[13] Guo, Y., Jasovska, P., Rammal, H. G., & Rose, E. L. (2020). Global mobility of professionals and the transfer of tacit knowledge in multinational service firms. *Journal of Knowledge Management, 24*(3), 553–567.

[14] JP-Mirai. (2025). *Data warga asing yang bekerja di Jepang*. Retrieved on July 17, 2025, from https://portal.jp-mirai.org/id/work/s/work-in-japan/facts-of-foreign-workers-in-japan

[15] Kasmawati, K., & Imelda, I. (2024). Faktor yang memengaruhi tingkat kelulusan wawancara kerja siswa bahasa Jepang di LPK Wilayah Makassar dan sekitarnya. *Kiryoku, 8*(2), 364–374.

[16] Khan, A., & Arokkiaraj, H. (2021). Challenges of reverse migration in India: a comparative study of internal and international migrant workers in the post-COVID economy. *Comparative Migration Studies, 9*(1), 49-56.

[17] Kuga, K. (2024). Business and human rights: The case of Japan. *Oxford Monitor of Forced Migration, 4*(5), 141-144.

[18] Kunarti, S., Afwa, U., & Hartini, S. (2023). Strengthening migrant CARE: A comprehensive approach to ensure worker protection and safeguard the rights of Indonesian Migrants. *Journal of Law and Sustainable Development, 11*(12), 1454–1467.

[19] Ladegaard, H. J. (2020). Language competence, identity construction and discursive boundary-making: Distancing and alignment in domestic migrant worker narratives. *International Journal of the Sociology of Language, 2020*(262), 97–122.

[20] Lam, A., & Rui, H. (2023). Global human mobility and knowledge transfer: Highly skilled return migrants as agents of transnational learning. *Global Networks, 23*(2), 311–331.

[21] Mabkhot, H., & Al-Ameryeen, M. F. I. (2023). Bridging cultures, building careers: the role of diverse work environments in international assignments. *Croatian International Relations Review, 29*(93), 209–233.

[22] Matsumoto, D., & Hwang, H. C. (2020). Reconsidering the active psychological ingredients underlying intercultural adaptation: Implications for international business. *Frontiers in Psychology, 11*(5), 529-537.

[23] Maung, M. T., & Siriwato, S. (2025). Myanmar migrant workers in Japan: a case study of specified skilled workers (SSW). *Journal of Contemporary Social Sciences and Humanities, 12*(1), 50–70.

[24] Mawarni, S. A., & Nuraini, A. (2021). Pengaruh tingkat pendidikan, pengalaman kerja dan kompetensi akuntansi terhadap kualitas laporan keuangan UMKM di Kota Bogor. *Jurnal Ilmiah Akuntansi Kesatuan*, *9*(2), 441-450.

[25] McDonald, N., Luke, J., & Cosby, A. (2024). Non-technical skills needed for the current and next-generation agricultural workforce. *Agriculture, 14*(7), 1106-1112.

[26] Megawati. (2025). Employee perceptions of competency development effectiveness in multinational companies: A qualitative insight. *Jurnal Ilmiah Manajemen Kesatuan, 13*(4), 2807–2816.

[27] Monteiro, A. P., Vale, J., Silva, A., & Pereira, C. (2021). Impact of the internal control and accounting systems on the financial information usefulness: The role of the financial information quality. *Academy of Strategic Management Journal*, *6*(3), 1-13.

[28] Morin, G., & Talbot, D. (2023). Cultural intelligence of expatriate workers: a systematic review. *Management Review Quarterly, 73*(1), 413–454.

[29] Nakatani, H. (2023). Aging and shrinking population: The looming demographic challenges of super-aged and super-low fertility society starting from Asia. *Global Health & Medicine, 5*(5), 257–263.

[30] Narimawati, U., & Sarwono, J. (2025). *Structural equation modeling berbasis partial least square menggunakan SmartPLS.* Bandung: Andi Publisher.

[31] Nishizawa, H., Isbell, D. R., & Suzuki, Y. (2022). Review of the Japanese-language proficiency test. *Language Testing, 39*(3), 494-503.

[32] Nurul H, N., & Hidayatun N, D. (2025). A comparative study of character education practices across nations: Lessons and insights for global implementation. *Dewantara: Journal of Education Research, 1*(1), 26–54.

[33] Okpala, C. O. R., & Korzeniowska, M. (2023). Understanding the relevance of quality management in agro-food product industry: From ethical considerations to assuring food hygiene quality safety standards and its associated processes. *Food Reviews International, 39*(4), 1879–1952.

[34] Ota, F. (2021). *Japanese competence in intercultural workplaces.* Melbourne: Universitas Monash (Doctoral dissertation).

[35] Ponomariovienė, J., Jakavonytė-Staškuvienė, D., & Torterat, F. (2025). Implementing competency-based education through the personalized monitoring of primary students' progress and assessment. *Education Sciences*, *15*(2), 252-276.

[36] Prianto, A. L., Amri, A. R., & Ajis, M. N. (2023). Governance and protection of Indonesian migrant workers in Malaysia: A study on policy and innovation network. *JSEAHR, 7*(6), 214-219.

[37] Pujiono, M., & Gapur, A. (2025). Dari sumatra ke jepang: dinamika dan tantangan program tokutei ginou dalam merekrut tenaga kerja Indonesia. *Abdul Media Literasi Books, 4*(2), 104-106.

[38] Putra, K. R., Hany, A., Vatmasari, R. A., Rahmawati, I. N., Hidayah, R., Agse, K. B. D., ... & Zuhri, S. N. N. (2025). Clinical learning environment: Improving cultural competence in nursing students. *Journal of Education and Health Promotion, 14*(1), 21-36.

[39] Rahman, M., Khan, T. I., & Sadique, M. Z. (2020). SDG Implementation progress: What does the Asian experience reveal?. *Journal International Economics, 4*(4), 345-357.

[40] Rawhouser, H., Sutter, C., Holzaepfel, N., Conger, M., & Newbert, S. L. (2025). Knowledge-related resourcefulness for growth in weak entrepreneurial ecosystems. *Entrepreneurship Theory and Practice, 49*(1), 159–195.

[41] Risda, D. (2022). Increasing Japanese and Indonesian mutual cooperation, Indonesian human resources' contribution to Japan's technical intern training program. In *Japan and Asia: Business, Political and Cultural Interactions* (pp. 79–143). Cham: Springer.

[42] Roberts, G. S., & Fujita, N. (2024). Low-skilled migrant labor schemes in Japan's agriculture: Voices from the field. *Social Science Japan Journal, 27*(1), 21–40.

[43] Rosidin, I. S. (2021). Inequality, regional economic development and access to public services in decentralizing Indonesia. *Journal International Economics, 4*(4), 12-21.

[44] Roy, J.-P. (2022). Managing a demographically driven labor shortage: An assessment of Japan's strategic approach. In *International business in the new Asia-Pacific: Strategies, opportunities and threats* (pp. 75–125). Cham: Springer.

[45] Roy, S. (2020). Democracy, dissent, and dialogue in contemporary India. *Journal of Dialogue Studies, 11*(4), 258–272.

[46] Sakamoto, F. (2023). *Global competence and foreign-language learning in Japan: an exploration of stakeholder perspectives on the goals and challenges of global competence-oriented FL education in Japanese higher education*. Sydney: Macquarie University (Doctoral dissertation).

[47] Selke, R., Sekiguchi, T., Moehle, A., Elsharqawy, A., & Streich, P. (2016). Foreign language proficiency as an asset for japanese graduates. *IAFOR Journal of Education, 6*(1), 103-120.

[48] Shestakofsky, B. (2024). Cleaning up data work: Negotiating meaning, morality, and inequality in a tech startup. *Big Data & Society, 11*(3), 20-53.

[49] Su, Y. L., Manjet, K., & Tengku-Sepora, T. M. (2020). The importance of Japanese language skills proficiency among Malaysian graduates in Japanese-based Companies. *Pertanika Journal of Social Sciences & Humanities, 28*(2), 23-24.

[50] Sugiyono. (2022). *Metode penelitian: kuantitatif, kualitatif, dan R&D* (27 ed.). Bandung: Alfabeta.

[51] Takizawa, S. (2021). Japan's immigration policy 2015-2020: Implications for human security of immigrant workers and refugees. *Journal of Human Security Studies, 10*(2), 51–78.

[52] Tanaka, E., & Aizawa, S. (2022). Measures to develop human resources with AI skills in Japan: Society 5.0 and investment in the next generation. In *Policies and challenges of the broadband ecosystem in Japan* (pp. 123-151). Singapore: Springer Nature Singapore.

[53] Tran, L. T., Rahimi, M., Tan, G., Dang, X. T., & Le, N. (2020). Post-study work for international graduates in Australia: opportunity to enhance employability, get a return on investment or secure migration? *Globalisation, Societies and Education, 18*(5), 495–510.

[54] Tsukada, N. (2024). Expanding policies for hiring foreign long-term care workers in Japan: Current status, challenges, and responses. In *Care of older persons* (pp. 230–262). London: Routledge.

[55] Waykar, Y. A. (2023). Tacit knowledge: Understanding the enigmatic underpinnings of human expertise. *International Journal of Scientific Research in Engineering and Management (IJSREM)*, *7*(1), 56-57.

[56] Wibowo, A. H., Mohamad, B., Djatmika, & Santosa, R. (2024). Designing and assessing experiential learning pedagogy for an intercultural communicative competence training module: a quasi-experimental study. In *Frontiers in education* (Vol. 9, p. 1470209). London: Frontiers Media SA.

[57] Wisnujati, A., Wijaya, N. H., Wardana, L. K., & Rahaman, M. (2024). Towards enhancing the capabilities of Indonesian migrant workers in Taiwan through the development of soft skills and preparation for self-reliance. In *SHS Web of Conferences* (Vol. 202, p. 01001). Cham: EDP Sciences.

[58] Wiyanti, T., Lestari, F., Yoedani, Y., & Iskandar, Y. (2023). Production quality control as an important factor to meet buyer quality standards at the garment company PT. Sukabumi Single Estuary. *Devotion: Journal of Research and Community Service, 4*(5), 1195–1210.

[59] Yeoh, L. S., & Singh, M. K. (2024). A Japanese language proficiency and business Japanese competence: what do Malaysian Japanese companies expect? *e-Bangi, 21*(3), 139-151.

[60] Yonezawa, A. (2020). Challenges of the Japanese higher education amidst population decline and globalization. *Globalisation, Societies and Education, 18*(1), 43–52.

[61] Zinchenko, A. V. (2023). Japan's revised immigration law of 2018 and its application after the Covid-19 Pandemic. *Редколлегия, 6*(3), 91-98.