

The Impacts of the International Student Mobility Program on the Employability Skills: Indonesian Student Perceptions

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Abstract: The Impacts of International Student Mobility Program on the Employability Skills: Indonesian Students' Perceptions. The Indonesia International Student Mobility Awards (IISMA) is an Indonesian government scholarship program that enables Indonesian students to spend one semester studying in overseas English-medium instruction (EMI) classes. The article discusses students' perceptions of the impact of the IISMA on employability skills: interpersonal communication, critical thinking, and teamwork skills. This quantitative study employed a questionnaire to measure three skill variables, utilizing a pre- and post-test design involving 1941 students. The online questionnaire distribution was done from November 27 to December 13, 2023. The data of this study were analyzed using *Jamovi 2.3.24* software. Key findings demonstrate the significance of the Paired T-Test results ($p\text{-value} < 0.001$), and the difference in the increase in those skills experienced by the IISMA students had a significant effect size increase, specifically $d = 0.5$ for interpersonal communication skills, $d = 0.667$ for critical thinking, and $d = 0.667$ for teamwork skills. The Independent Samples T-Tests for students' demographic information show that the value of employability skills among academic students outperforms that of vocational participants. ANCOVA analysis results show a significant correlation between students' perceptions and their home institutions and host institutions. The research highlights the benefits of IISMA for the *Indonesia Emas* generation. Recommendations on critical considerations in designing programs and selecting host institutions are provided to ensure program sustainability.

Keywords: english medium instruction (EMI), experiential learning, *indonesia emas*.

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■ INTRODUCTION

As the fourth-largest country in the world, Indonesia faces significant challenges in preparing its 'golden generation,' *Indonesia Emas*, for the

year 2045, to lead the country towards socio-economic growth and transformation. The year 2045 is a time when the productive age of Indonesian citizens is expected to outnumber non-

productive groups; hence, strategic transformation in education is crucial to ensure that future generations are ready to excel in the global workforce. One of the critical initiatives in the transformation of Indonesian education between 2020 and 2024 was the *Kurikulum Merdeka or MBKM* policy. This policy, part of a broader effort to reform Indonesia's higher education system, was designed to create an educational environment that is more flexible, relevant, and adaptive to the needs of the work field, especially in the 21st century with technological development. One key component of this policy is to equip university graduates with competency in both the academic and professional fields (Abelha, Fernandes, Mesquita, Seabra, & Ferreira-Oliveira, 2020; Cheng, Adekola, Albia, & Cai, 2022).

One of the MBKM initiatives for Indonesian higher education is the Indonesia International Student Mobility Awards (IISMA). This program serves as a pathway for Indonesian bachelor's degree students to gain international experience, enabling them to study for one semester at partner higher education institutions abroad. The scholarship was available to all Indonesian students enrolled in two primary categories of higher education: academic and vocational students in their second or third year of study. There was a limit on the number of students to be accepted from each category. Funding was available in two forms: full and partial, with a limited number of quotas for partial funding. The primary distinction was that partial funding excludes coverage for settlement and living expenses, health insurance, visa processing fees, and local transportation costs. A thorough selection process commenced with a baseline requirement of English proficiency skills (B2 CEFR level). This setting was in line with the condition that all one-semester courses abroad were taught in English-medium instruction (EMI) classes. Subsequently, interviews were conducted (IISMA, 2024). Upon selection, students were

supported through preparation programs, including insights into the target country's socio-cultural dimensions and a cultural exchange program that they should prepare to showcase at the host university.

This international student mobility program is a prime example of experiential learning, an approach to learning that promotes a more profound understanding, skill enhancement, and personal growth through active engagement in real-world experiences (McCarthy & Southeastern, 2010). This short-term study program aligns with Kolb's four-stage learning cycle, which consists of concrete experience, reflective observation, abstract conceptualization, and active experimentation. The cycle was not meant to be linear; however, the activities in the IISMA program began with a concrete experience. For instance, students had the opportunity to live in a new dormitory or with a host family, navigate public transportation, and sit in a different classroom environment. To facilitate reflection, IISMA students were assigned tasks, such as keeping a journal or logbook. They were asked to write a daily and weekly reflection in the logbook. Aspects to reflect on in the journal include the soft and hard skills they have learned. Abstract conceptualization may be nurtured through hands-on experience, such as cross-cultural understanding, where they learning strategies to cope with such challenges (Simbolon, Curle, & Sadiq, 2025). The last cycle, active experimentation, is dynamic and progressing. This stage was initiated during the selection interview, where they were asked for their thoughts on contributing after the program's completion. Future contributions can take the form of nurturing networks (Handayani & Wienanda, 2020) and giving back to society (Dawya & Okvitawanli, 2024). The purpose of this reported study, in line with Kwok's research (2004), is to examine the impact of the mobility program on students' perceptions of employability skills, particularly the soft skills.

Kwok's study (2004) highlights explicitly that strategies and initiatives to enhance undergraduate students' employability skills across various disciplines should be customized accordingly. These subject-specific skills were confirmed by a study by Pegnate (2018). She examined employers' perspectives on three subcategories of employability abilities: personal attributes, fundamental skills, and subject-specific knowledge. Her research findings also highlight the significance of soft skills, such as problem-solving, collaboration, and interpersonal skills, which employers essentially seek. The emphasis on these soft skills enhances the audience's awareness and knowledge. The study also highlighted such skills as adaptation and collaboration (Pegnate, 2018). These competencies align with the IISMA program's fundamental goals, particularly in developing the soft skills of Indonesian higher education graduates for the 21st century (IISMA, 2024).

Some studies on experiential learning practices have been done. The reported drawbacks of the program include culture shock, academic challenges, and financial burden (Handayani & Wienanda, 2020; Hossain et al., 2022; Siegel, 2022; Teichler, 2017). According to the research, however, its advantages appear to exceed its disadvantages. Research indicates that the development of employability skills (Lian, 2017; Jackson et al., 2023; Rost et al., 2023) and soft skills, such as creativity (Ramish et al., 2024), are among the benefits of experiential learning. Studies also recommend that a particular setup is required to achieve this experiential learning. For example, a study by Lian (2017) utilized an immersion module in the sponsoring industry to implement experiential learning. The study found that students and employers shared perspectives on improving students' readiness for the work field through the module. A study by Rost et al. (2023) evidenced that the experiential-learning-based program has been institutionalized. The study showed an

enhancement in students' motivation to participate in the experiential learning program, which incorporated real-world activities. A similar positive impact was also confirmed by the study by Jackson et al. (2023). They found that the three-day residential program for MBA students at a university in the UK helped students improve their employability skills and employment outcomes.

Documentation on the student mobility programs has been explicitly provided (Gutema, Pant, & Nikou, 2024; Roy, Newman, Ellenberger, & Pyman, 2018). Few studies have documented the challenges that students in this program experience (Alhassan, Ali, & Ali, 2021; Rakhshandehroo, 2017; Siegel, 2022). Nonetheless, some studies indicate that the mobility initiatives have been positive (Waibel, Petzold, & Rüger, 2018). These include students' academic achievement (Granato et al., 2024), intercultural competencies (Ikhlas, 2020; Sobkowiak, 2019), and expansion of networking opportunities (Ikhlas, 2020). personality development (Valls-Figuera et al., 2023). The advantages of international student exchange were particularly documented by the University of International Catalunya in Spain (UIC Barcelona, 2024). An intriguing conclusion from their 2023 study was that students who pursued overseas education had a 23 percent lower unemployment rate than those who did not. Their international students at UIC were found to have more significant opportunities for higher positions (UIC Barcelona, 2024).

Furthermore, other studies emphasize the importance of a specific arrangement for implementing the mobility program to achieve success. For example, Granja et al. (2023) primarily investigated the impact of foreign mobility on the academic performance of Brazilian university students, particularly analyzing the differences in program length. Approximately ten thousand students were included from 2010 to 2020. Their research showed that student

movement across semesters and years positively impacted academic performance more than mobility within shorter timeframes. Their research indicated that students who participated in mobility programs in the middle of their degree programs demonstrated better academic performance than those who participated in these programs at the beginning of their education. In a different context, Hossain et al. (2022) conducted a cross-sectional study to examine the skills acquired by Bangladeshi students participating in mobility programs in other Asian countries. A semi-structured questionnaire was utilized to identify the positive effects of the activities. Students reported enhancements in their personal, civic, intellectual, and professional skills. Notably, most of the study participants funded the programs partially and independently.

Research on student mobility from the Indonesian context is crucial for providing insights into the impacts of brief experiences in international education. However, there is a limitation in studies examining the impacts on students' perceived improvement of soft skills, particularly in generating a large-scale study. This scarcity can be understood in the context that this program was newly introduced to the Indonesian higher education system. Some research was conducted on a limited scale. For example, Handayani and Wienanda (2020) delved more deeply into this subject, analyzing the advantages of the program based on data from sixty students from a university in Indonesia who participated in the mobility program. Using a questionnaire, their findings highlighted the program's crucial impact on enhancing students' soft skills. The program significantly improved students' language and communication skills, interpersonal skills, teamwork abilities, and cultural awareness. It significantly encouraged adaptability and openness, essential soft skills in today's globalized landscape. Next, a study by Dewanto and Pritasari (2023) included students from three top Indonesian universities who took

the IISMA program. They utilized semi-structured interviews with ten students to gather their information. They found that students improved their personal growth and other skills, including their creativity and openness. Simbolon, Curle, and Sadiq (2025) recruited fifty-four IISMA students in their research on the experiences of the international mobility program. Employing a mixed-methods approach, their study specifically examined the challenges faced by the students in language matters. The research found that despite a sufficient English proficiency threshold, specific aspects of the productive skills were the most challenging: linking sentences in writing and accurate grammar in academic speaking.

Given the positive impacts of the mobility program, maintaining its sustainability is crucial, allowing for arrangements to be made to preserve the program's ongoing benefits. The study reported in this article specifically examines the students' perceptions of the impacts of the IISMA program on the improvement of soft skills. The research mainly views international mobility as a means of experiential learning, where specific skills, particularly interpersonal communication, critical thinking, and teamwork, can be developed and enhanced. By placing students from different home institutions in groups at their university destinations, they can practice and improve their teamwork skills. So, this research emphasizes three essential competencies that facilitate students' personal development in the international mobility program: interpersonal communication, critical thinking, and collaborative work. The evaluation is crucial for understanding its potential in equipping Indonesian youth with the practical skills necessary for the 21st century. The research by Handayani and Wienanda (2020) and Dewanto and Pritasari (2023) offers significant perspectives derived from one to three universities, providing a wealth of knowledge. The study by Simbolon, Curle, and Sadiq (2025), which investigated 54 students, may provide insights into the impact of IISMA on students'

interpersonal and communication skills. Aiming to fill the gap, particularly in the aspect of contextual void, the article presents research that analyzes the impacts of a government-initiated international student mobility program on students from various types of universities in Indonesia. The research specifically examines the students' perspectives on the enhanced employability skills they have developed as a result of the international student mobility program. Two research questions of this project are:

1. Is there any significant perceived improvement in students' employability skills from the IISMA program?

2. Do the students' perceptions of the improvement of their employability skills correlate with their demographic information?

METHOD

Participants

Table 1 provides an overview of the demographic information of the participants. A comprehensive demographic analysis revealed that females comprise a significant portion of the sample (63.9%), with nearly three-quarters of students from the academic streams participating in this program. This finding reflects the arrangement of the IISMA program regarding quota proportion for each stream.

Table 1. IISMA participants' demographic information (N= 1941)

Sample Demographics	Percentage	Sample Demographics	Percentage
Gender		Country of Host University	
Female	63.85	United Kingdom	17.43
Male	36.15	United States of America	9.66
Degree		South Korea	8.44
Academic	71.57	Australia	7.98
Vocational	28.43	Malaysia	7.26
Semester		Taiwan	6.24
Semester 5	40.95	Italy	4.81
Semester 7	59.05	Netherlands	4.04
Country of Host University		Hungary	3.94
Lithuania	2.51	New Zealand	3.37
France	2.51	Ireland	3.12
Spain	1.74	Poland	2.91
Singapore	1.58	Germany	2.71
Russia	1.02	Canada	2.66
Turkey	1.02	Czech	2.56
Croatia	0.77	Chile	0.26
Japan	0.72	Thailand	0.26
Belgium	0.51		

Research Design and Procedures

This quantitative research (Creswell, 2012) employed an online survey to assess participants' self-reported employability skills before and after their mobility experiences. Due to its self-report nature, it may contribute to response bias. This

aspect becomes a limitation to the data obtained and the results discovered.

Data collection used an online survey conducted via Google Forms. Data collection used an online survey conducted via Google Forms. It was distributed to students between

November 27 and December 13, 2023. It should be noted that there were some different timelines for the start and end of the one-semester mobility program. This survey is integral to the business process, focusing on enhancing program implementation, with an anticipated completion of 1,980 student awardees. This survey effectively gathered a sample of 1975 awardees, achieving a strong response rate and guaranteeing the representativeness of the data.

The research protocol was established to guarantee the ethical integrity and moral soundness of the survey instruments employed in this study. An application for ethical clearance was submitted to the Directorate of Research, Universitas Gadjah Mada, the institution appointed to execute this country program. Ethical clearance for this survey was granted and is valid for one year. In applying for this clearance, several documents were requested, including the informed consent form, a detailed proposal, a description of the surveys, and a list of researchers who will be involved in analyzing the survey. The ethical clearance requires that survey researchers maintain the confidentiality of respondents and dispose of all information after ten years.

Instruments

This project was part of the evaluation of the government program's initiative. The evaluation consisted of 21 questions that assessed seven essential skills: interpersonal communication, critical thinking, teamwork, career orientation, leadership, self-management, and self-esteem. This article specifically reported the

first three soft skills: interpersonal communication, critical thinking, and teamwork, which are the core of the 21st-century's 4Cs (critical thinking, communication, collaboration (teamwork), and creativity) skills necessary for the job markets (Dewi et al., 2023; World Economic Forum, 2020). There were three items in each variable, resulting in nine elements in total. The questions presented in the questionnaires were in the Indonesian language. The measurement instruments used for this study were adapted from previously available measurement scales. To measure the variable interpersonal communication, measurement instruments were adapted from studies by Oliver (2011), Kwok (2004), and Murillo-Zamorano & Montanero (2017). Measurement items that are deemed fit to the nature of the IISMA Program and the purpose of this study were selected to become part of this study's measurement scale. Measurement items used to assess critical thinking are adapted from D'Zurilla (1971), and those used to measure teamwork skills are adapted from Shakir (2009). These measurement items were initially written in English. Therefore, a forward-backward translation process was conducted to ensure the accurate representation of the true meaning of each measurement item.

Prior to disseminating this questionnaire to a large sample, validity, reliability, and Confirmatory Factor Analysis were conducted to ensure the factor loading is true. It was confirmed that each item question is consistent with the variable at hand. The items are presented in Table 2.

Table 2. The instrument items

A.	Interpersonal communication
1.	I can organize my ideas when I speak.
2.	I know how to express my ideas.
3.	I am motivated to help others who I feel are having difficulties.
B.	Critical thinking
1.	People know me as a critical person when it comes to solving problems.
2.	I can provide logistical explanations for the decisions I make.
3.	I think of many alternative angles before considering them.

-
- C. Teamwork skills
4. I am able to get others to cooperate with me.
5. I have the ability to influence others.
6. I am able to accommodate the interests of others in a conflict.
-

*Instrument items were adapted from some studies (Kwok, 2004; Murillo-Zamorano & Montanero, 2017; D'Zurilla & Goldfried, 1971; Shakir, 2009)

Data Analysis

A total of 1941 valid responses were obtained and analyzed with Jamovi 2.3.26. The quality of data analysis was maintained by implementing various cleaning procedures. The demographics of the respondents were initially cross-referenced with the IISMA 2023 participant database to confirm their participation in the program. Manual verification was conducted. For instance, when participants did

not provide details about the country of their host university, the information was supplemented with details about the host university itself. Secondly, responses were evaluated for consistency, eliminating instances where all questions received identical answers, which indicated a need for more thoughtful consideration. Validity and reliability testing were conducted to ensure the robustness of the measurement items. The result is presented in Table 3.

Table 3. Validity and reliability testing

	Pearson's r	Cronbach's Alpha
Interpersonal communication		0.740
I can organize my ideas when I speak.	0.865 < 0.001	
I know how to express my ideas.	0.862 < 0.001	
I am motivated to help others who I feel are having difficulties.	0.697 < 0.001	
Critical thinking		0.746
People know me as a critical person when it comes to solving problems.	0.814 < 0.001	
I can provide logistical explanations for the decisions I make.	0.8533 < 0.001	
I consider many alternative angles before settling on one.	0.779 < 0.001	
Teamwork skills		0.778
I am able to get others to cooperate with me.	0.818 < 0.001	
I have the ability to influence others.	0.860 < 0.001	
I am able to accommodate the interests of others in a conflict.	0.820 < 0.001	

The results presented in Table 3 demonstrate that Pearson's correlation coefficient confirms the validity of all measurement items for analyzing the variable in question, as evidenced

by their p-values below 0.005. This figure indicates that the measurement items effectively reflect the intended dimensions of the variable. The overall Cronbach's alpha values for each

variable indicate that interpersonal communication is 0.740, critical thinking is 0.746, and teamwork skill is measured at 0.778. The standard for assessing the reliability of a measurement instrument is a Cronbach's alpha value of 0.6 or higher (DeVellis, 2012). Consequently, the measurement items employed are dependable in assessing the specified variable. All measurement items were retained since the instruments demonstrate validity and reliability.

■ RESULT AND DISCUSSION

Perceptions of Improvement on Employability Skills

It should be noted that the results from this quantitative study may differ in nuance from those obtained through qualitative data, such as interviews. Incorporating open follow-up

interviews, where probing responses can reveal more in-depth issues. With a large number of samples in this quantitative data, students' voices are sufficient to discuss this topic.

The statistical analysis employed paired T-tests to evaluate the significant differences between the scores before and after the program. Independent Sample T-tests were then employed for binary variables, providing valuable insights into the influence of demographic factors on post-program skills. The use of analysis of covariance (ANCOVA) enhances the examination of categorical variables across multiple levels simultaneously.

Table 4 presents the statistical results of the paired samples T-test. The findings indicate a rise in three key soft skills: interpersonal communication, critical thinking, and teamwork.

Table 4. Paired samples T-test results

Before	After		Statistic	p-value	Mean Difference
Interpersonal communication	Interpersonal communication	Wilcoxon W	203027 ^a	<.001	-0.500
Critical thinking	Critical thinking	Wilcoxon W	137242 ^b	<.001	-0.667
Teamwork	Teamwork	Wilcoxon W	116189 ^d	<.001	-0.667

Note. H_a μ Measure 1 - Measure 2 < 0

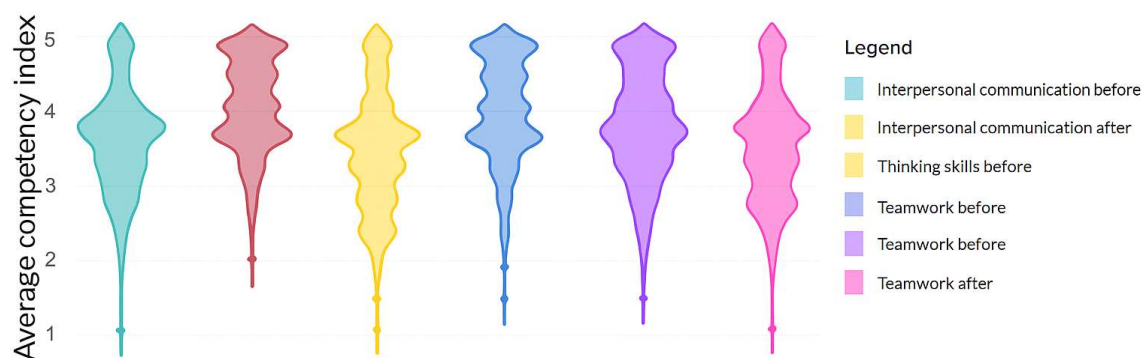


Figure 1. Violin plot of average competency index: pre and post IISMA

Table 4 demonstrates notable enhancements across all three skills, indicated by p-values below 0.05. After the program, average scores rose by 0.5, 0.667, and 0.667 points in

communication and interpersonal skills, thinking skills, and teamwork, respectively.

Subsequently, Independent Samples T-Tests were performed to analyze the skill scores

of participants from vocational and academic streams. Although the data did not follow a normal distribution, the large sample size warranted the application of t-tests (Fagerland, 2012).

The Violin plot provides a visual representation of the change in average competency index before and after the IISMA Program. It can be seen that after participating in the IISMA program, a larger number of samples have an average competency index above the threshold of 3.00. This implies that after participating in the program, students believe they have better interpersonal communication capabilities, critical thinking, and teamwork competency.

The Indonesian International Student Mobility (IISMA) program is a valuable opportunity for students to immerse themselves in their educational journey, fostering active participation in their learning process. The framework encompasses the four learning stages, as outlined by Kolb in McCarthy and Southeastern (2010), beginning with experiencing, then reflecting, thinking, and culminating in taking action. The four stages are evident in the students' various experiences throughout the program, including international travel, engaging with new individuals, navigating different educational systems at the host university, participating in evaluation surveys during and after the programs, and composing a final report. The favorable outcomes regarding students' perceived enhancement of their employability skills reinforce the idea that practical experiences significantly shape students' personality attributes (Pegnate, 2018). The student's engagement in learning is consistent with earlier research findings. The findings of this study corroborate those of earlier studies (Handayani & Wienanda, 2020; Dewanto & Pritasari, 2023) and provide significant national-scale suggestions.

The study by Simbolon, Sadiq, and Curle (2025) provides valuable insights into understanding the challenges faced by students, despite the absence of follow-up interviews in

this reported research. Their study highlighted challenges in the specific items in academic speaking (accurate grammar); overall, their study supports the enactment of the minimum requirement of English proficiency and suggests introducing social norms and intercultural communication prior to the program. Hence, their study findings highlight the lowest score of improvement among the three soft skills evaluated in the study. Mirroring their study (Simbolon, Sadiq, & Curle, 2025), which included a small number of participants in their study, this reported article suggests that, despite the overall reported positive impacts, cases of a few students experiencing challenges in interpersonal communication do exist. In this sense, further arrangement of interpersonal communication skills during the program preparation becomes key.

This study also supported another research finding (Ramish et al., 2024), particularly regarding the effects of the mobility program on various facets of creativity in those who practice their thinking skills. The stimulation can be achieved. For instance, beyond the classroom, individuals may find opportunities to converse with others in communal areas, such as shopping malls or on public transportation. In the classroom, students can explore various methods to acclimate themselves to the host university's learning and lecture styles. Establishing a mobility program in the later stages of their study would prove advantageous. Allowing students to establish themselves in their studies during their initial years at their home institution equips them for the upcoming mobility program overseas. Therefore, this investigation corroborates the conclusions drawn by Granja et al. (2023), who found that students in the middle of their study program duration benefit more from the mobility program than the first-year cohorts.

It is worth underscoring that the findings of this research and a study by Hossain and his collaborators (Hossain et al, 2022) are similar in terms of positive outcomes from the mobility programs. They, however, differ in two main

characteristics. First, IISMA offers full funding, whereas only a select few cases receive partial funding. Meanwhile, in a study conducted by Hossain et al. (2022), a majority of the participants engaged in the program through partial and self-funding arrangements. Second, unlike Hossain and his colleagues' research, the IISMA destinations extend beyond one continent, encompassing Asia, Australia, Europe, and America. This comparison highlights the need for further evaluation of arrangements to scale up the program's beneficiaries. This speculation suggests the necessity for follow-up interviews in upcoming studies. This study extends findings by featuring its extensive destinations and presenting a hopeful outlook for student mobility. It should also be noted that the significant relationship between the improvement of students' employability skills and the university's destinations lends insights into the further arrangement of international students' mobility.

It is worth noting that the factors leading to positive outcomes in the reported studies (Sobkowiak, 2019; UIC Barcelona, 2024; Valls-Figuera et al., 2023) are noteworthy. Firstly, the students enrolled in a degree program that exceeded the duration of IISMA. Furthermore, geopolitical considerations are crucial when companies seek to expand their operations in other European countries, which provide more opportunities for European students to secure work placements. These two factors contributed significantly to the success of the mobility programs. The prolonged duration spent overseas allowed students to adapt to the professional

norms of both their home and host nations. The socio-geographic closeness between countries is sufficient for this access. Henceforth, neighboring universities with a high impact on positive perceptions can be placed at the top of the list of destination hosts. There are some rationales for this consideration. First, to maintain program sustainability due to funding limitations, one potential solution is to consider sending students to partner institutions in neighboring countries. Furthermore, scaling up the number of beneficiaries for the international mobility programs would be feasible. The second reason for considering neighboring countries as the destination of the mobility program is that this strategy would be a smooth transfer to a different socio-cultural environment. A relative closeness and familiarity with the host country could facilitate smooth integration (Rakhshandehroo, 2017), particularly for short-term mobility programs. In summary, a review of program preparation modules is necessary, especially those focused on cultural and linguistic aspects (Simbolon, Sadiq, & Curle, 2025).

Factors of Perceived Improvement on Employability Skills

An Independent Sample Student's t-test was performed to assess variations in employability skills between study streams (refer to Table 5) and between gender types (refer to Table 6). Although the data did not follow a normal distribution, the large sample size warranted the application of t-tests (Fagerland, 2012).

Table 5. Independent sample T-test, normality, and homogeneity tests results based on the type of undergraduate degree

		Statistic	p-value	Mean Difference	Shapiro-Wilk	Levene's
Interpersonal communication	Student's t	3.44	<.001	0.0957	<.001	0.758
Critical thinking	Student's t	4.16	<.001	0.1041	<.001	0.755
Teamwork	Student's t	1.75	0.040	0.0473	<.001	0.530

Note. H_a is Scholar degree > Vocational degree

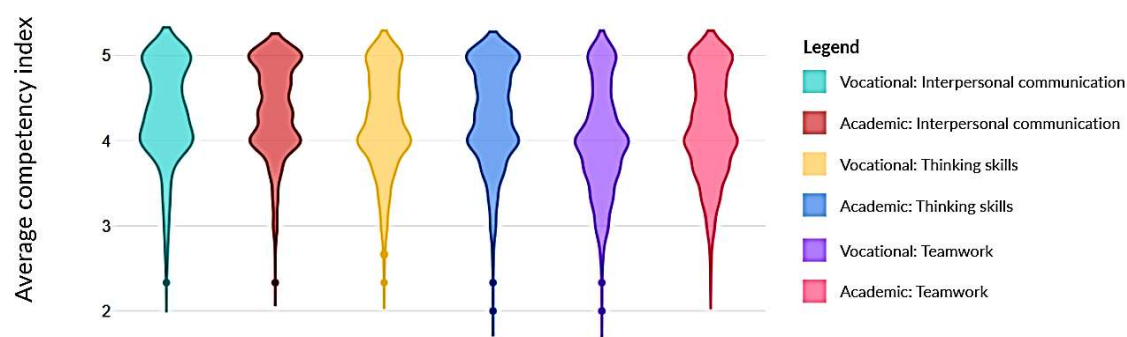


Figure 2. Violin plot of average competency index based on degree

As illustrated in Table 5, participants with academic streams outperformed those with vocational degrees by 0.0957, 0.1041, and 0.0473 points in communication and interpersonal skills, thinking skills, and teamwork, respectively, reinforcing the validity of the statistical methods. The Violin plot yields similar findings, indicating that students pursuing an academic degree tend to believe they possess heightened levels of competency, which results in a higher competency average index after participating in the IISMA program compared to their vocational counterpart. This is evident in terms of thinking skills, where

the number of Violin plots for academic degree students is thicker around the average of 5, compared to those from vocational degrees. This finding suggests a closer match between the learning environment experienced by students from academic streams and that encountered when they attend universities overseas. This situation may help them to adjust more quickly than their counterparts. This suggestion lends further investigation into the preparation suitable for vocational students prior to the program. Next, Table 6 presents the test results categorized by gender type.

Table 6. Independent sample T-test, normality, and homogeneity tests results based on gender

		Statistic	p-value	Mean Difference	Shapiro -Wilk	Levene's
Interpersonal communication	Student's t	1.152 ^a	0.250	0.0302	<.001	0.009
Critical thinking	Student's t	0.540 ^a	0.589	0.0128	<.001	0.019
Teamwork	Student's t	2.256	0.024	0.0573	<.001	0.943

Note. H_a μ Male $\neq$ μ Female

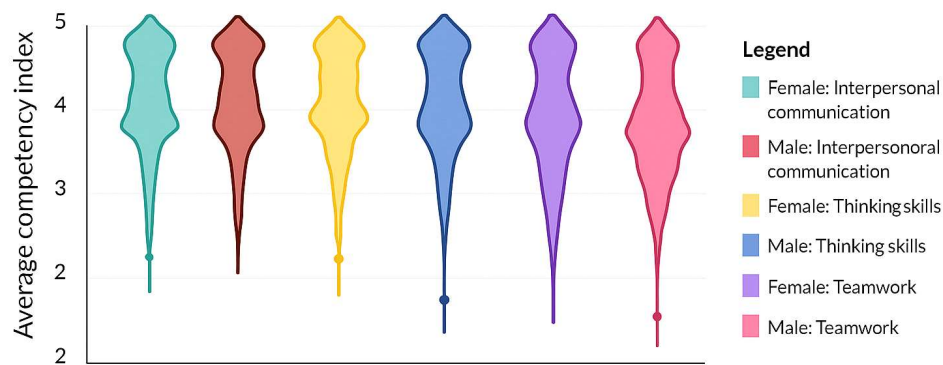


Figure 3. Violin plot of average competency index based on gender

A T-test for independent samples was performed to assess the variations in employability skills between females and males. As shown in Table 6, these main findings indicate that gender influences differences in the perception of program impacts on employability skills. The main findings indicate that gender influences differences in employability skills. Male students were viewed as having higher average interpersonal communication, critical thinking, and teamwork skills by 0.0302, 0.0128, and 0.0573, respectively. The Violin plot makes the difference between genders visible. In terms of teamwork competency, both female and male students' Violin plots have a longer tail, implying that the scores are more dispersed across the range 1 to 5. In contrast, for competencies such as

interpersonal communication, the Violin plots are denser in higher scores, ranging from 4 to 5. The study findings by Hsu and Sung (2025) may be used to suggest this particular finding. As reflected in the suggestions from their study (Hsu & Sung, 2025), male students strongly emphasized the practical aspects, while female students focused on their emotional connection. In particular, the responses were self-reports, thus suggesting various biases among the participants. This finding may also lend support to further consideration in making arrangements for the mobility program and ensuring that gender sensitivity is taken into account.

The ANCOVA analysis demonstrated the impact of students' home university of origin on their development of employability skills. Table

Table 7. ANCOVA, Normality, and Homogeneity tests results based on students' home institution Origin

Variable	df	Mean Square	F Statistics	p-value	Shapiro-Wilk	Levene's
Interpersonal communication	164	0.391	1.30	0.008	<.001	<.001
Critical thinking	164	0.310	1.27	0.016	<.001	<.001
Teamwork	164	0.341	1.20	0.048	<.001	<.001

7 indicates that students' home university origin significantly influences students' perceptions of enhanced employability skills, as all variables present a p-value below 0.005. The analysis of

normality and homogeneity has further substantiated our findings by demonstrating that the data are normally distributed and that there is no heterogeneity of variance.

Table 8. ANCOVA, normality, and homogeneity test results based on the host university region

Variable	df	Mean Square	F Statistics	p-value	Shapiro-Wilk	Levene's
Interpersonal communication	25	0.603	1.99	0.003	<.001	0.146
Critical thinking	25	0.535	2.17	<.001	<.001	0.526
Teamwork	25	0.722	2.54	<.001	0.374	<.001

The subsequent ANCOVA analysis was conducted on the host university regions of the students (refer to Table 8). The findings suggest a link between the host countries of universities and the improvement of employability skills, as perceived by students, particularly after

participating in the IISMA program. The findings suggest that different host university regions impact students' interpersonal communication, critical thinking, and teamwork skills, with the IISMA program making a significant contribution to this enhancement.

Looking closer through Tukey's Honestly Significant Difference, elucidates the regions that are statistically significant compared to others. For interpersonal communication skills, participants residing in host universities across Asia are statistically significantly different from those in the US or Chile (p -value = 0.0013). For critical thinking, the US and Chile are statistically significantly different from participants from Canada (p -value = 0.005) and Asia (p -value = 0.004). Additionally, participants from the US and Chile exhibit a statistically significant difference in teamwork skills compared to those from Australia and New Zealand (p -value = 0.039), Canada (p -value = 0.007), and the US and Chile regions (p -value = 0.015). This particular finding provides points for evaluation of the program arrangement, especially when determining host countries. Mapping program objectives and institutional partners is a key step in planning the program. For example, when a program aims to enhance students' critical thinking, considering hosts in the US Asia should be viewed objectively.

Aspects Contributing to Impactful Student Mobility Programs

Differences in the perception of students from academic and vocational streams, as well as between male and female groups, have some implications. First, these findings lend themselves to further investigation, particularly into the content of the programs offered by the host universities. The findings can be integrated with existing research, indicating that host university countries influence students' perceived levels of interpersonal communication, critical thinking, and teamwork skills. This finding suggests the need for additional investigation, mainly focusing on the curriculum of the host university involved in the mobility program. It is worth noting that IISMA and programs in UIC Barcelona (2024) differ; the former is a short-term program, whereas the latter is a long-term program pursuing a degree, particularly a degree from a host university enables

individuals to approach their engagement with a professional mindset in the destination country, providing a valuable experience as numerous companies expand their operational landscapes.

Furthermore, the study highlights key aspects to enhance the program's benefits, including equipping students with intercultural communication skills through exposure to relevant cultural aspects they may encounter in their destination country. Identifying host institutions and ensuring that the programs offered are relevant to students, regardless of their study streams and gender, are key aspects to making a positive impact on students. This particular strategy may help maintain the sustainability of the mobility program when host partners are from neighboring countries.

CONCLUSION

The study examines the influence of international student mobility on students' views of enhanced employability.. The investigation instrument included a questionnaire assessing three employability skills: interpersonal communication, critical thinking, and collaborative abilities. Results indicate that students recognized a substantial improvement in their employability skills.

The research identified an association between the participants' responses and their backgrounds. Students' voices from two main backgrounds are essential. Academic students reported that the influence of the improvement index was more significant than that of vocational students. Furthermore, it has been noted that variations in perception occur depending on the host institution. Additionally, male students reported a more significant increase in soft skills compared to their female counterparts. The two primary conclusions are key to the further development of comparable initiatives under the Indonesian human capital development agenda, preparing the youth generations of *Indonesia Emas for 2045*.

In conclusion, despite the insights gleaned from the data, the study's limitation is the use of a single instrument for data gathering. Other types of data, such as interviews, would be beneficial to provide thorough perspectives. The brief duration of the program restricted this potential. Further research incorporating qualitative data is recommended. Examining students' professional experiences after graduation in future investigations can provide comprehensive insights into this topic.

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