GRADUATE SKILL MISMATCH AND LABOR MARKET REQUIREMENTS. A STUDY OF INTERNAL GRADUATES AT SABARAGAMUWA UNIVERSITY OF SRI LANKA FROM 2019 TO 2022

M.W.J. Isurika and P. Dias

ISSN: 2772 128X (Online)
ISSN: 2792 1492 (Print)
SLJESIM
VOLUME 05 ISSUE 01
June 2026
sljesim@sab.ac.lk
www.sab.ac.lk/sljesim

Received: *11 March 2026* ***Revised:*** *16 June 2026* ***Accepted:*** *30 June 2026*

How to Cite this Article: Isurika, M.W.J. & Dias, P. (2026). Graduate Skill Mismatch and Labor Market Requirements. A Study of Internal Graduates at Sabaragamuwa University of Sri Lanka from 2019 to 2022. *Sri Lanka Journal of Economics, Statistics, and Information Management*, 5(1), 39—57

Abstract

When a person unable to obtain suitable employment that matches their educational level, it is referred to as a mismatch between skills and labour market demands. The two main types of mismatches are horizontal and vertical. According to the Sri Lanka Labor Force Survey Annual Report 2022, the underemployment rate in Sri Lanka is 2.7%, while the unemployment rate for graduates is 7.5%. In 2022, the unemployment rate for female graduates is 9.9%, compared to 5.1% for male graduates. The main objective of this study was to identify the determinants of the skills mismatch of graduates and labour market demands in Sri Lanka. It was identified the population as graduates of Sabaragamuwa University from the years 2019 to 2022, totaling 4090 graduates. A sample of 364 graduates was selected using a simple random sampling technique, and primary data were collected through questionnaires. Binary logistic regression was employed to analyze the primary objective of the research. The data were analyzed using the statistical software SPSS, with 22 variables included for analysis. Among these variables, reflectiveness, problem-solving, self-awareness, creativity, and stress tolerance were identified as significant factors affecting the mismatch between graduate skills and labor market demands in Sri Lanka at a 0.05 significance level. The findings may assist universities and policymakers in formulating evidence-based strategies to align higher education outcomes with labour market requirements through curriculum reforms, skills development initiatives, and stronger industry engagement, ultimately enhancing graduate employability..

Keywords: *binary logistic regression, graduates, labour market demand, skills mismatch*

1. INTRODUCTION

High literacy rate and a well- established system with an increasing number of graduates is the outcome of Sri Lanka's notable progress in increasing access to education (Senarath et al., 2017). Unemployment, underemployment and economic inefficiencies occur due to mismatch between graduate skills and labour market demand in Sri Lanka. (Suarta et al., 2017). Even though the labour market includes different sectors such as agriculture, IT, services, most of the companies struggling to find applicants those who have both technical and soft skills. (Sri Lanka Labour Force Survey, 2022). Rapid technology breakthroughs (automation and artificial intelligence (AI)) increasing this skills gap due to changing company expectations and making traditional curriculum obsolete. When preparing graduates for changing job market, universities basically focus on academic knowledge than industry relevant skills. (European Centre for the Development of Vocational Training, 2010; Suarta et al., 2017). According to Senarath et al. (2017), there were two mismatches called vertical and horizontal and graduates work outside of their field of study due to overqualification and underqualification. This problem is seen in both young and graduate unemployment rates in Sri Lanka. In 2022, graduate unemployment rate was 7.5%, with male rate of 5.1% and female rate of 9.9%. I Sri Lanka, 2.7% of the workforce was underemployed, with women experiencing high rates (3.4%) than men (2.3%) (Sri Lanka Labour Force Statistics, 2022). These measurements indicate that how urgent it is to match educational requirements with the labour market requirements. This study explores the skill mismatch among internal graduates at Sabaragamuwa University in Sri Lanka the period of 2019 to 2022. The goal is to reduce the gap between academia and industry, improve graduate employability and identify the relevant variables that affect to national economic development.

1.1. Research problem

The mismatch between graduate skills and labour market demand creates multiple challenges to both individuals and the economy. Therefore, graduates face many difficulties in finding relevant jobs according to their qualifications which leads to underemployment or unemployment. As a result, their ability to contribute effectively to social development and economic growth is restricted. This mismatch creates difficulties in finding candidates with relevant skills and it restricts competitiveness, productivity and innovation.

The skill mismatch and labour market demand significantly affect employers, individuals and the economy. This may affect graduates through unemployment, underemployment or underutilization of their potential capacity. This may affect employers through challenges in innovation and growth, inefficiencies and reduced productivity. The graduate employability gap can negatively affect overall economic development and make it difficult to achieve sustainable and inclusive growth.

According to the Sri Lanka labour force survey annual report in 2022, the Sri Lankan underemployment rate was 2.7% and it was a significant rate. As well as Sri Lankan male underemployment rate was 2.3% and the female underemployment rate was 3.4% in 2022. These two rates were also considerable. In 2022, G.C.E A/L and above

underemployment rate for both males and females was 1.8%. It means Sri Lanka has a disparity between education and labor market requirements.

According to the Sri Lanka labor force statistics quarterly Bulletin in the first quarter of 2022, the Sri Lankan unemployment rate among graduates was 7.5% which was a significant rate. As well as Sri Lankan unemployment rate for male graduates was 5.1% and the unemployment rate among female graduates was 9.9% in 2022. These two rates were also significant. These statistics highlight the importance of aligning graduate competencies with labour market requirements and underscore the need for further investigation into the factors contributing to skill mismatch in Sri Lanka.

1.2. Research objectives

The main objective is to identify the factors associated with the mismatch between graduate skills and labor market demands in Sri Lanka.

1.3. Specific objectives

1. To identify the extent and nature of the discrepancy between graduate skills and labour market demand.
2. To identify the nature of the employability.
3. To develop evidence-based strategies for aligning education and training programs with evolving labor market needs, based on the findings of the study.

2. LITRATURE REVIEW

By considering the internal graduates from the universities of the Sri Lankan government during the years 2019 to 2022, the current chapter conducted a review of the literature on graduate capability and labor market demand mismatch. This study indicated that the mismatch between the capability of the graduates and labor market demand became a key issue in Sri Lanka because there was a huge gap between the skills acquired at the time of graduation and the skills that should be possessed according to the requirements of employers. Past studies have revealed that skill mismatch leads to underemployment, unemployment, low organizational productivity, and less economic development, hence the need to align the outcomes of higher education with labor market requirements (Jayaweera, 2018; Ministry of Education, 2019; Perera, 2020). With the constant changes in the labor market owing to globalization, technological developments, and industry requirement, universities are compelled to ensure that graduates are equipped with the right skills.

From an analysis of the existing literature in this chapter, one can conclude that the employability of graduates depends on both the qualifications attained at university and the suitability of the programs offered and the competencies obtained by the graduates. While most graduates usually attain the required qualifications, employers complain about a lack of practical knowledge and job preparedness among the graduates. From the above discussion, it becomes clear that academic achievement cannot assure job success for graduates. In studies carried out in Sri Lanka, it was found that most graduates have had problems attaining appropriate jobs due to their

lack of relevant competencies that reflect modern-day requirements, especially those associated with dynamic and competitive work environments (Jayaweera, 2018; Perera, 2020).

The review also analyzed various theoretical approaches that serve as the basis for graduate capability and labor market mismatch. One of the major theories explaining the link between education and employment outcomes is Human Capital Theory (Becker, 1964; Schultz, 1961). According to this theory, education can be considered an investment into human development and improvement of his/her capabilities, productivity, and abilities. Graduates spend much money and effort gaining additional education in order to increase their chances in the competitive job market. However, if the gained knowledge and skills do not match the needs of the job market, such investment into education is ineffective from economic perspective since it does not lead to a positive result for both parties. Thus, it can be concluded that labor market mismatches are related not only to graduates' problems but also to inefficient use of human capital.

Furthermore, the chapter discussed mismatch models which distinguish between the different types of skill mismatches such as qualitative, quantitative, and locational mismatching (Sloane, 2003). The quantitative mismatch occurs when there is an oversupply or undersupply of graduates in relation to employment opportunities. On the other hand, locational mismatch occurs as a result of uneven employment opportunities and the availability of skilled labor. Nonetheless, qualitative mismatch appears to be the most critical issue in the Sri Lankan labor market, as graduates do not have adequate technical and interpersonal skills as required by the potential employer (Fugazza & Jacques, 2018).

Gap skills analysis done by organizations like the Institute of Policy Studies (IPS) and other labor market researchers have shown even more evidence of shortage in important skills in areas such as IT, engineering, and healthcare (Institute of Policy Studies [IPS], 2020). From this research, the importance of monitoring labor market trends and adjusting education curriculums based on these trends is evident. In literature, cooperation between universities and industry partners is viewed as an important way to ensure graduates have current skills. Practical training, industrial placements, internships, and other interactions between universities and the industry have been seen as effective ways of addressing skills shortage.

One theme that was discovered from the literature is the multidimensional aspect of graduate capabilities. From the review of the literature, it emerged that employability of graduates cannot be achieved by only relying on personal attributes, skills, and processes. The importance of personal attributes is emphasized in literature since companies are always looking for individuals with a positive attitude, flexible nature, and the ability to deal with issues encountered in the workplace. Self-awareness, self-confidence, adaptability, ability to tolerate stress, initiative, willingness to learn and reflectiveness are some of the qualities required in helping graduates achieve a successful career in their life (Bandura, 1977; Goleman, 2006; Hirschi, 2012; Savickas, 2005).

It is noteworthy that the review highlighted the importance of core skills, which have been acknowledged as fundamental requirements for any career and industry in general. Such skills include literacy, numeracy, self-management, critical analysis, problem-solving, creativity, listening skills, and writing and speaking abilities (Amabile, 1996; OECD, n.d.). There is an increasing demand from organizations for graduates who are skilled communicators, critical thinkers, problem-solvers, and collaborative workers. Such skills have been considered crucial as they enable individuals to apply their knowledge effectively. According to literature, the absence of such core skills has been found responsible for employability issues among graduates despite their good educational qualifications.

Apart from personal attributes and core skills, process skills were also considered as an additional component of graduate capabilities. Process skills entail specific practical capabilities of people to work efficiently in a professional environment. They include the ability to plan, apply subject knowledge, solve problems, make decisions, negotiate, work in teams, and be proficient with technology (Hmelo-Silver, 2004). Technological advancement and innovations are currently making it necessary for employers to hire graduates with excellent technological skills. Therefore, educational institutions are increasingly required to ensure that technology skills are incorporated in their programs to meet the changing demands in workplaces.

Another significant point in the literature review relates to the importance of relevant curriculum as a way of solving the problem of graduate skill mismatch. The literature review shows that past research highlights the importance of curricula updating as a response to industry requirements and changes in technology (Ministry of Higher Education, 2021). Focusing more on practical experience and learning, as well as increasing interactions between academia and the industry, may be effective solutions to the challenge of ensuring that graduates possess the skills required in the job market.

While there has been an abundance of research work carried out in relation to graduate employability and labor market alignment, various gaps were found within the current body of literature. Primarily, most studies conducted to date have centered on national level considerations and hence lack a focus on any regional or institutional variations in graduate employability. Furthermore, the role of soft skills and behavioral competencies has largely been overlooked even though there is an increasing demand among employers for graduates that possess such characteristics. Some other gaps noted include the lack of research on the effects of technological changes, failure to consider multi-stakeholder perspectives, a lack of longitudinal research, the exclusion of gender considerations, an absence of industry-specific considerations, and insufficient focus on the informal economy in relation to graduate employment.

In summary, the literature reviewed in this chapter has shown that the gap between graduate capabilities and labor market needs is still an important issue in Sri Lanka. From the review, it is clear that graduate employability depends on several factors such as personal attributes, core skills, process skills, quality education, and labor market conditions. It is necessary to collaborate between universities, the employers,

and policymakers to solve these problems. The issues can be solved through making the curricula relevant, improving industry engagement, encouraging practical training, and acquiring both core skills and soft skills. In addition, filling the gaps found in the literature will help in enhancing understanding on graduate capability and labor market needs, which will in turn guide future policy-making on graduate employment in Sri Lanka.

3. METHODS

With an emphasis on internal graduates from 2019–2022, this study attempts to simulate the discrepancy between graduate skills and labor market demand at Sabaragamuwa University.

The study adopts a quantitative, explanatory research. Structured questionnaire was used to collect primary data. The dependent variable measured as a binary variable, where mismatched coded as (0) when their current job did not match with their field of study or required skill level and matched coded as (1), when their current job matched with their field of study or required skill level. Ordinal-level 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) were used to test the independent variables, which included personal skills, core skills, and process skills. The study population consists of 4,090 graduates from five faculties. A sample of 364 graduates was chosen using a Stratified random sampling technique. Pilot study conducted using 20 graduates. The reliability of the variables was tested using Cronbach's alpha. Validity of the content checked by academic experts. The data was analyzed using both descriptive and inferential statistical techniques. Measures of central tendencies and dispersions were summed up using descriptive statistics, and binary logistic regression, chi-square tests, t-tests, and Pearson correlation were used in inferential analysis. The likelihood of mismatch was investigated using the logistic regression model, which incorporates several independent factors and assumes a binary outcome. The Hosmer-Lemeshow test was applied to evaluate the final model's goodness of fit. In order to ensure accurate modeling of the relationship between graduate skills and labor market needs, the SPSS software was used for data analysis. This scientific approach offers a strong framework for investigating and resolving Sabaragamuwa University's graduate-employer skill gap.

3.1. Hypothesis

Personal Skills

H_0: There is no statistically significant effect of personal skills on graduate skill mismatch.

H_1: There is a statistically significant effect of personal skills on graduate skill mismatch.

Core Skills

H_0: There is no statistically significant effect of core skills on graduate skill mismatch.

H_1: There is a statistically significant effect of core skills on graduate skill mismatch.

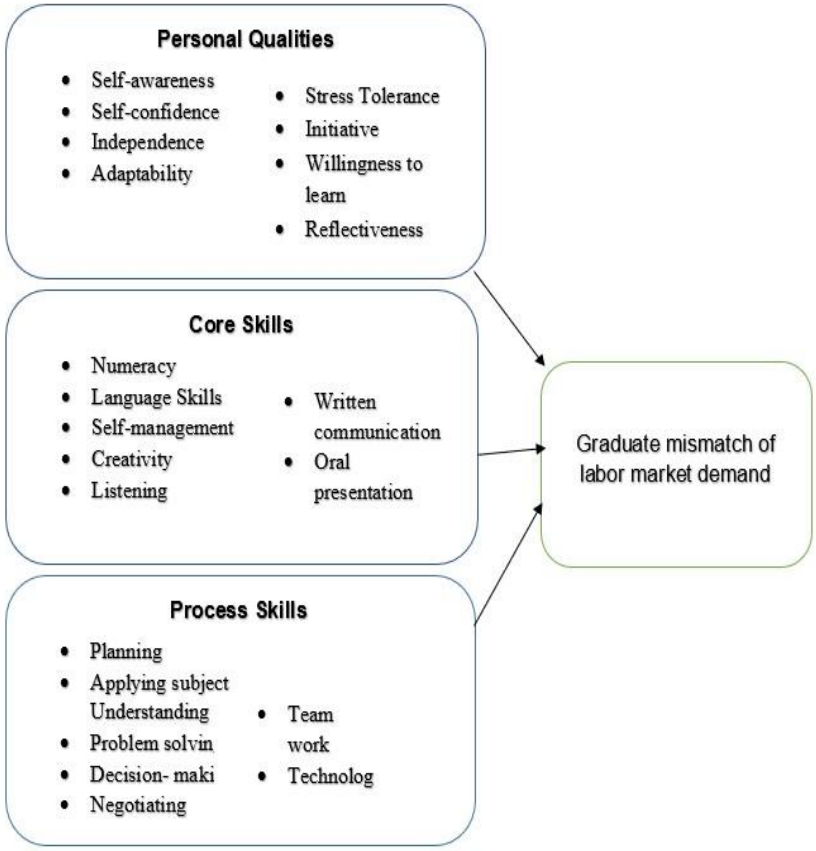
Process Skills

H_0: There is no statistically significant effect of process skills on graduate skill mismatch.

$H_{1:}$ There is a statistically significant effect of process skills on graduate skill mismatch.

3.2. Conceptual Framework

Figure 1
Conceptual frame work



Source: Survey data, 2025

4. RESULTS & DISCUSSION

4.1 Analysis of main objective

The main objective of this research was to identify the mismatch between graduate skills and labor market demands in Sri Lanka. The researcher used binary logistic regression to achieve the main objective of the research. To apply the binary logistic regression, firstly the researcher wanted to identify the reliability of the independent

variables. After that researcher wanted to identify the relationship between a dependent variable and each independent variable. After that wanted to check the multicollinearity between each significant independent variable.

Reliability analysis of each independent variable.

The researcher used Cronbach's alpha method to identify the reliability of the variables. If Cronbach's alpha value is 0.7 or greater than 0.7, then reliability is high in variable. The following table represents Cronbach's alpha values for all variables.

According to all Cronbach's alpha values, the lowest Cronbach's alpha value represents the Applying subject understanding variable and it is 0.735. Therefore, all variables represent high reliability. As well as researcher identified one question under self-awareness variable and one question under planning variable as not important questions to measure these variables. Also after removing these two questions, the researcher increased the reliability measures of these two variables.

Table 1
Reliability test

Variable	Cronbach's alpha
Self- awareness	0.791
Self confidence	0.828
Independence	0.848
Adaptability	0.855
Stress tolerance	0.799
Initiative	0.829
Willingness to learn	0.797
Reflectiveness	0.788
Numeracy	0.885
Language skills	0.847
Self-management	0.872
Creativity	0.822
Listening	0.802
Written communication	0.842
Oral presentation	0.86
Planning	0.912
Applying subject understanding	0.735
Problem solving	0.844
Decision making	0.832
Negotiating	0.798
Team work	0.883
Technology	0.869

Source: Survey data, 2025

Association between dependent variable and each independent variable.

Hypothesis

To check the association between the dependent and each independent variable, the researcher used a chi-square test. Because the dependent variable and all independent variables are categorical variables.

H0: There is no association between skills mismatch and each independent variable.

H1: There is an association between skills mismatch and each independent variable.

All variables represent a p-value of 0.000 and it is less than the significance level (5%). Therefore, there is an association between a dependent variable and each independent variable.

Fit the model

Table 2
Model in main objective

	B	S.E.	Wald	df	Sig.	Exp(B)
Reflectiveness			14.203	2	0.001	
Reflectiveness (1)	-4.999	1.346	13.796	1	0.000	0.007
Reflectiveness (2)	-3.582	1.098	10.636	1	0.001	0.028
Problem Solving			17.382	2	0.000	
Problem solving (1)	-4.565	0.531	7.628	1	0.006	0.010
Problem solving (2)	-0.996	0.336	14.357	1	0.000	0.369
Self-awareness			23.844	2	0.000	
Self-awareness (1)	-2.867	0.599	22.921	1	0.000	0.057
Self-awareness (2)	-2.436	0.706	11.894	1	0.001	0.088
Creativity			9.992	2	0.007	
Creativity (1)	-3.081	1.098	7.877	1	0.005	0.046
Creativity (2)	-3.399	1.102	9.508	1	0.002	0.033
Stress Tolerance			13.098	2	0.001	
Stress Tolerance (1)	-2.934	0.890	10.872	1	0.001	0.053
Stress Tolerance (2)	-0.721	0.743	0.942	1	0.332	0.486
Constant	3.032	0.579	27.466	1	0.000	20.736

Source: Survey data, 2025

Table 3
Interpret the model

	B	Exp(B)	Sig.	Interpretation (Significance level = 5%)
Reflectiveness			0.001	Significant.
Reflectiveness (Disagree)	-4.999	0.057	0.000	Significant negative effect. The odds of experiencing skills mismatch among Graduates who disagree with the reflectiveness statement were 0.057 times the odds of graduates in the agree with the reflectiveness statement.
Reflectiveness (Neutral)	-3.582	0.028	0.001	Significant negative effect. The odds of experiencing skills mismatch among Graduates who neutral with the reflectiveness statement were 0.028 times the odds of graduates in the agree with the reflectiveness statement.
Problem Solving			0.000	Significant.
Problem solving (Disagree)	-4.565	0.010	0.006	Significant negative effect. The odds of experiencing a skills mismatch among Graduates who disagree with the problem-solving statement were 0.010 times the odds of graduates who agree with the problem-solving statement.
Problem solving (Neutral)	-0.996	0.369	0.000	Significant negative effect. The odds of experiencing a skills mismatch among Graduates who neutral with the problem-solving statement were 0.369 times the odds of graduates who agreed with the problem-solving statement.
Self-awareness			0.000	Significant.
Self-awareness (Disagree)	-2.867	0.057	0.000	Significant negative effect. The odds of experiencing a skills mismatch among Graduates who disagree with the self-awareness statement were 0.057 times the odds of graduates who agree with the self-awareness statement.
Self-awareness (Neutral)	-2.436	0.088	0.001	Significant negative effect. The odds of experiencing a skills mismatch among Graduates who neutral with the self-awareness statement were 0.088 times the odds of graduates who agreed with the self-awareness statement.
Creativity			0.007	Significant.
Creativity (Disagree)	-3.081	0.046	0.005	Significant negative effect.

				The odds of experiencing a skills mismatch among Graduates who disagree with the creativity statement were 0.046 times the odds of graduates who agree with the creativity statement.
Creativity (Neutral)	-3.399	0.033	0.002	Significant negative effect. The odds of experiencing a skills mismatch among Graduates who neutral with the creativity statement were 0.033 times the odds of graduates who agreed with the creativity statement.
Stress Tolerance			0.001	Significant.
Stress Tolerance (Disagree)	-2.934	0.053	0.001	Significant negative effect. The odds of experiencing a skills mismatch among Graduates who disagree with the stress tolerance statement were 0.053 times the odds of graduates who agree with the stress tolerance statement.
Stress Tolerance (Neutral)	-0.721	0.486	0.332	Not significant.
Constant	3.032	20.736	0.000	Significant Positive effect. Graduates belong to the reference level for all independent variables, the odds of experiencing the skill mismatch are 20.736 times greater than the odds of not experiencing skill mismatch**.**

Source: Survey data, 2025

Logit p(x) = 3.032 – 4.999 Reflectiveness $_{Disagree}$ – 3.582 Reflectiveness $_{Neutral}$ – 4.565 Problem solving $_{Disagree}$ – 0.996 Problem solving $_{Neutral}$ – 2.867 Self-awareness $_{Disagree}$ – 2.436 Self-awareness $_{Neutral}$ –3.081 Creativity $_{Disagree}$ – 3.399 Creativity $_{Neutral}$ – 2.934 Stress tolerance $_{Disagree}$

Goodness of fit of the model

Hosmer- Lemeshow goodness of fit test was applied to evaluate the goodness of fit of final model.

Hypothesis testing

H_0: Model is adequate.

H_1: Model is not adequate.

Test statistics

Table 4: Adequate of the model in main objective

Homer and Lemeshow Test

Sig.
0.213

Decision rule

If P value is less than 0.05 significant level, then reject H_0.

Decision

0.213> 0.05

Don't reject H_0.

Conclusion

The model is adequate.

4.2 Analysis of Sub objectives

Identify the extent and nature of the discrepancy between graduate skills and labour market demand.

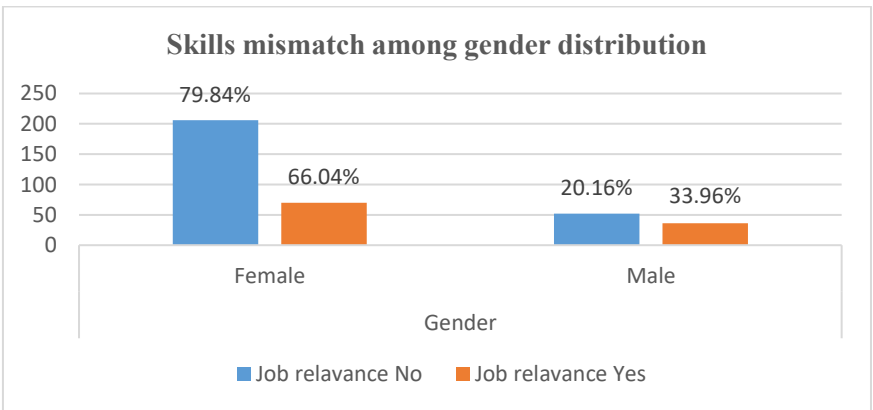
Distribution of skills mismatch among gender

Table 5
Distribution of skills mismatch among gender

		Skill mismatch				Total
		No		Yes		
Gender	**Female**	206	74.64%	70	25.36%	276
	Male	52	59.09%	36	40.91%	88
	Total	258		106		364

Source: Survey data, 2025

Figure 2
Distribution of skills mismatch among gender



Source: Survey data, 2025

It can be seen from the figures provided in Table 5 and Figure 2 that skills mismatch differs depending on gender. A larger number of females (79.84%) than males (20.16%) fall under the skills mismatch group. In addition, in the graduates group that lacks skills mismatch, there is also a higher number of females (66.04%) as opposed to males (33.96%).

The study utilized the chi-square test of independence to assess the relationship between skills mismatch and gender. The findings indicated that there is a statistically significant relationship ($\chi^2 = 7.814$, $p < 0.05$).

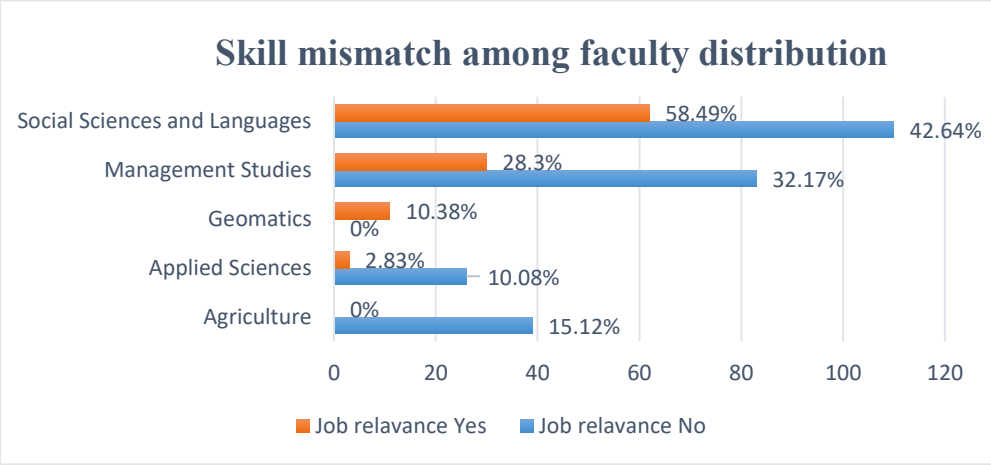
Distribution of skill mismatch among faculty.

Table 6
Distribution of skill mismatch among faculty distribution

		Skill mismatch				Total
		No		Yes		
Faculty	**Agriculture**	39	100%	0	0%	39
	Applied Sciences	26	89.66%	3	10.34%	29
	Geomatics	0	0%	11	100%	11
	Management Studies	83	73.45%	30	26.55%	113
	Social Sciences and Languages	110	63.95%	62	36.05%	172
	Total	258		106		364

Source: Survey data, 2025

Figure 3
Distribution of skill mismatch among faculty distribution



Source: Survey data, 2025

As per Table 6 and Figure 3, skills mismatch differs among faculties. Skills mismatch was experienced in a higher proportion by the graduates from the Faculty of Social Sciences and Languages (42.64%), Faculty of Management Studies (32.17%),

Agriculture (15.12%) and Applied Sciences (10.08%). No instance of skills mismatch is reported from the Faculty of Geomatics.

A comparable situation exists for those who did not experience skills mismatch. The highest proportion of this category can be noted from graduates from the Faculty of Social Sciences and Languages (58.49%), followed by Management Studies (28.30%), Geomatics (10.38%), and Applied Sciences (2.83%). None such instances were noted in the Faculty of Agriculture.

In sum, these findings reveal that skills mismatch existed in specific faculties in particular proportions.

The results of chi-square test of independence indicated that there is a statistical significance of skills mismatch with faculty ($\chi^2 = 52.109$, $p < 0.05$), which means that skills mismatch differs among faculties.

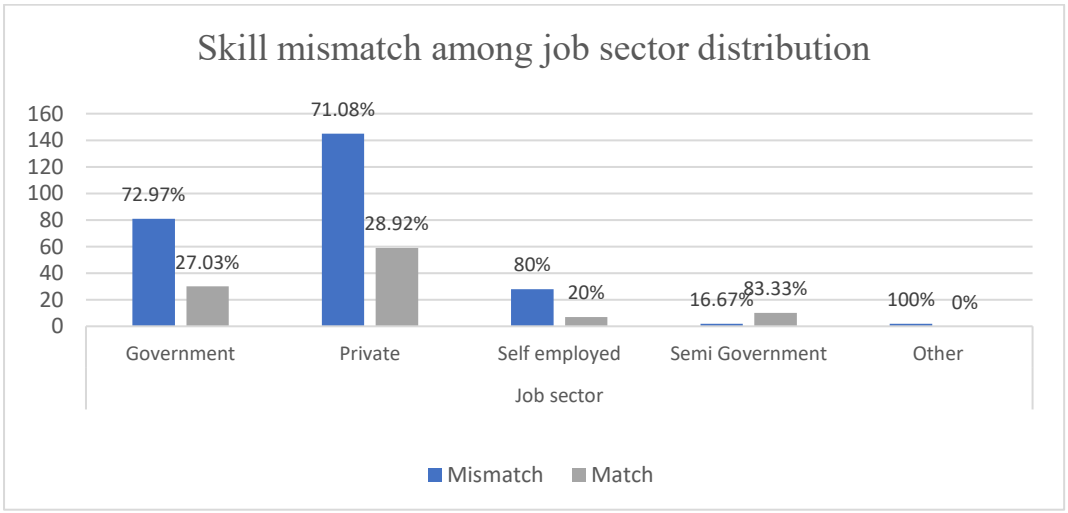
Distribution of skills mismatch among job sector.

Table 7
Distribution of skills mismatch among job sector

		Skill Mismatch				Total
		Mismatch		Match		
Job sector	**Government**	81	72.97%	30	27.03%	111
	Private	145	71.08%	59	28.92%	204
	Self employed	28	80%	7	20%	35
	Semi Government	2	16.67%	10	83.33%	12
	Other	2	100%	0	0%	2
	Total	258		106		364

Source: Survey data, 2025

Figure 4
Distribution of skills mismatch among job sector



Source: Survey data, 2025

Based on the results provided in Table 7 and Figure 4, both graduates facing skills mismatch and those not facing skills mismatch have their main sources of employment in the private sector, constituting 56.2% and 55.66% respectively. In second place is the government sector; for graduates facing skills mismatch, 31.4% are employed in this sector, whereas 28.3% of those not facing skills mismatch are engaged in it. In third and fourth place are the self-employed and semi-government sectors, respectively, while the "others" category occupies a very small portion of the total respondents surveyed.

The results of the Chi-square test of independence revealed that there is a significant relationship between occupation sector and skills mismatch ($\chi^2 = 19.559$, $p < 0.05$).

Identify the nature of employability.

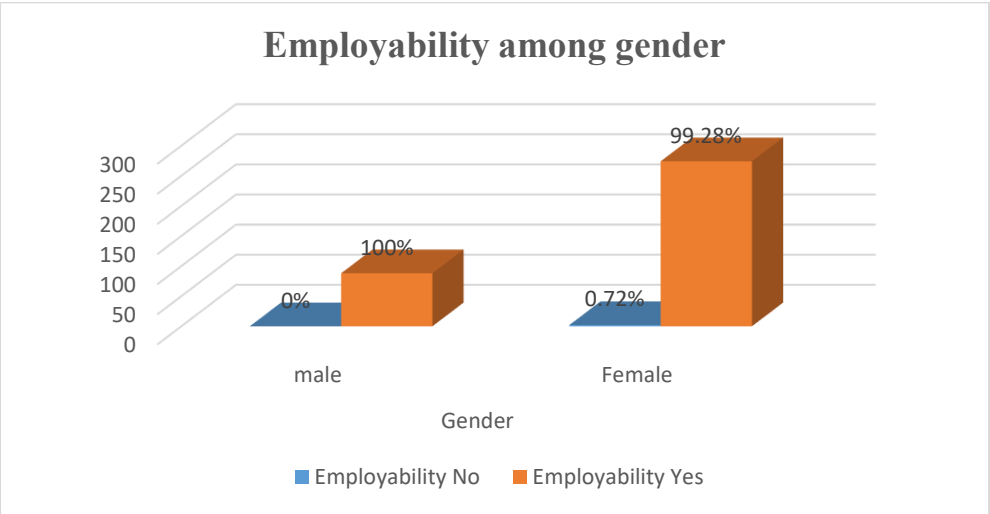
Distribution of employability among gender

Table 8
Distribution of employability among gender

		Employability				Total
		No		Yes		
Gender	**male**	0	0%	88	100%	88
	Female	2	0.72%	274	99.28%	276
	Total	2		362		364

Source: Survey data, 2025

Figure 5
Distribution of employability among gender



Source: Survey data, 2025

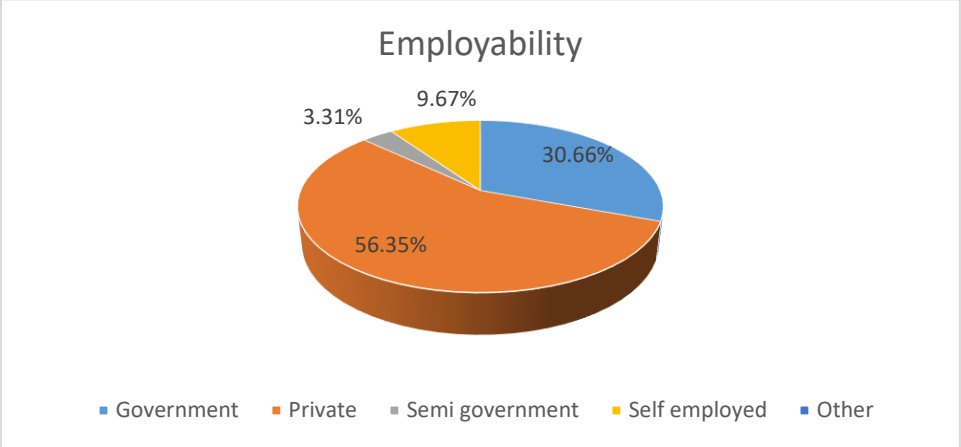
As per Table 8 and Figure 5, there are 276 female respondents, of which two respondents are not working. This constitutes 0.72%, while 274 are working and

constitute 99.28%. Also, there are 88 male respondents, of whom all respondents are working and constitute 100%.

Chi-square Test for Independence results indicated that there is no association between gender and employability ($\chi^2 = 0.641$, $p > 0.05$).

Distribution of employability among the Sector

Figure 6
Distribution of Employability among Sector



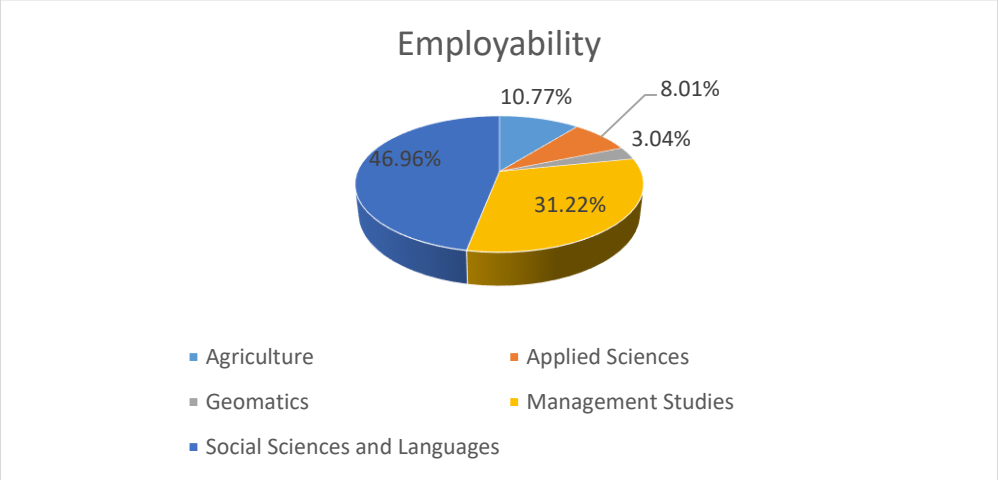
Source: Survey data, 2025

According to the figure 6, Out of 364 respondents, 362 them are doing jobs. Out of these 362 respondents, the highest amount of those who are doing jobs represents the private sector and it is 56.35%. The lowest amount those who are doing jobs represents semi government sector and it is 3.31%. 30.66% of them are doing government jobs and 9.67% of them are doing self-employed jobs.

Chi-square test for Independence was performed to check the relationship between the employment sectors and employability. The findings reveal a statistically significant relationship ($\chi^2 = 364$, $p < 0.05$), implying that employability differs by employment sectors.

Distribution of employability among faculty

Figure 7
Distribution of Employability among faculty



Source: Survey data, 2025

According to the figure 7, Out of 364 respondents, 362 them are doing jobs. Out of these 362 respondents, the highest amount of those who are doing jobs represent the faculty of Social Sciences and languages and is 46.96%. The lowest amount of those who are doing jobs represents the faculty of Geomatics and it is 3.04%. Faculty of Management Studies graduates who are doing jobs represent 31.22%. Faculty of Agriculture graduates who are doing jobs represent 10.77%. Faculty of Applied Sciences graduates who are doing jobs represent 8.01%.

Test for Independence was run to investigate whether there is any association between the faculty and employability. The analysis revealed that there was no significant association ($\chi^2 = 2.245$, $p > 0.05$).

Suggest strategies for aligning education and training programs with evolving labor market needs.

Reflectiveness, problem-solving skills, self-awareness, creativity, and stress tolerance were found to be important variables influencing graduates who work in non-degree-related employment. Problem-solving is a process skill, creativity is a fundamental skill, and reflectiveness, self-awareness, and stress tolerance are personal traits. By incorporating these qualities into training programs and curriculum, educators can better match education to the evolving needs of the labor market and assist graduates in adjusting to a variety of job pathways.

Educational programs should encourage reflective practices, build critical thinking and problem-solving skills through experiential and collaborative learning, and cultivate emotional intelligence and self-awareness to handle obstacles at work in order to improve graduate employability. While stress-management and mindfulness

programs can help develop resilience and stress tolerance, interdisciplinary learning and innovation-focused environments should foster creativity across disciplines. In order to guarantee curriculum relevance through collaborations, internships, and frequent changes based on employer input, tight industry involvement is also crucial.

5. CONCLUSION

The study aims at exploring the level of skills mismatch amongst the graduates of Sabaragamuwa University of Sri Lanka despite the extraordinarily high employment level of 99.45%. It is found out that there exists considerable mismatch between the qualifications of the graduates and labour market demands where only 29% of the graduates are engaged in occupations pertaining to their field of study. In addition, considerable mismatches occurred amongst different faculties, between genders, and various employment sectors.

In the case of faculties, the department of Geomatics showed the highest degree of job relevance, while the Faculty of Social Sciences and Languages displayed the maximum level of skills mismatch (63.95%). In terms of gender, females have faced considerably higher levels of skill mismatch (74.64%) than males (59.09%). Moreover, the mismatch was particularly high amongst the private sector employees, where about 56% of graduates were employed (the rate of skills mismatch was 71.08%).

Additionally, this study reveals that some soft skills such as problem-solving ability, creativity, stress tolerance, reflectiveness, and self-awareness play an important role in making individuals relevant in the job market. Therefore, one can deduct from these results that theoretical knowledge may not be enough to make sure that individuals have successful careers in the future. Accordingly, universities should improve the process of education delivery by emphasizing practice-based learning.

This study demonstrates that effective cooperation between universities, industry actors, and policy-makers is needed in order to overcome graduates' skills mismatch. This cooperation will assist in reducing the existing skills gap and increasing the employability rate of graduates. Furthermore, it will help achieve sustainable development in the future. Consequently, the researcher strongly suggests that certain actions be taken to solve the problem of graduates' skills mismatch in Sri Lanka.

6. REFERENCES

Amabile, T. M. (1996). *Creativity in context: Update to the social psychology of creativity*. Westview Press.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191–215.

Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. National Bureau of Economic Research.

Carnevale, A. P., Smith, N., & Strohl, J. (2013). *Recovery: Job growth and education requirements through 2020*. Georgetown University Center on Education and the Workforce.

European Centre for the Development of Vocational Training (Cedefop). (2010). *The skill matching challenge: Analysing skill mismatch and policy implications*. Publications Office of the European Union.

Fugazza, M., & Jacques, J. M. (2018). Skills mismatch and returns to education in Sri Lanka. *Journal of Asian Economics, 59*, 35–49.

Goleman, D. (2006). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.

Hirschi, A. (2012). The role of chance events in the school-to-work transition: The influence of demographic, personality and career development variables. *Journal of Vocational Behavior, 80*(1), 41–52.

Hmelo-Silver, C. E. (2004). Problem-based learning: An instructional model and its constructivist framework. *Educational Psychology Review, 16*(3), 235–266.

Institute of Policy Studies. (2020). *Skills demand and supply study in Sri Lanka*. Institute of Policy Studies of Sri Lanka.

Jayaweera, S. (2018). Skills mismatch in the Sri Lankan labor market: A review. *Journal of Economic Perspectives, 25*(3), 45–62.

Ministry of Education. (2019). *Annual report on higher education in Sri Lanka*. Government Press.

Ministry of Higher Education. (2021). *Strategic plan for higher education in Sri Lanka 2021–2025*. Ministry of Higher Education.

Perera, N. (2020). Graduate skills and employability: A case study of Sri Lankan universities. *Asia-Pacific Journal of Education, 37*(2), 201–218.

Savickas, M. L. (2005). The theory and practice of career construction. In S. D. Brown & R. W. Lent (Eds.), Career Development and Counseling: Putting Theory and Research to Work (pp. 42-70). John Wiley & Sons.

Schultz, T. W. (1961). Investment in human capital. *The American Economic Review, 51*(1), 1–17.

Senarath, S. A. C. L., Patabendige, S. S. J., & Amarathunga, S. (2017). Sri Lankan graduate labour market: A status mismatch. *Journal of Economics, Business and Management, 5*(1), 63–68.

Sloane, P. J. (2003). *Mismatch: Why our world no longer fits our bodies*. Oxford University Press.

Department of Census and Statistics. (2022). *Sri Lanka labor force statistics quarterly bulletin 2022*. Department of Census and Statistics.

Department of Census and Statistics. (2022). *Sri Lanka labor force survey annual report 2022*. Department of Census and Statistics.

Suarta, I. M., Suwintana, I. K., Sudhana, I. F. P., & Hariyanti, N. K. D. (2017). Employability skills required by the 21st century workplace: A literature review of labor market demand. In *Proceedings of the International Conference on Technology and Vocational Teachers (ICTVT 2017)* (pp. 337–342). Atlantis Press.