Journal of Business Studies, Vol. 7, No. 2, 33-46, July - December 2022 **ISSN: 1811-1556**

SOB SCHOOLOF BUSINESS
স্কুল অব বিজনেস

BOUJBS
Journal of Business Studies

THE ROLE OF SKILLS DEVELOPMENT TRAINING ON EMPLOYABILITY: A STUDY OF THE SKILLS FOR EMPLOYMENT INVESTMENT PROGRAM (SEIP) PROJECT IN BANGLADESH

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ABSTRACT

The current skills development system in Bangladesh has yet to effectively improve employability, primarily due to the inadequate alignment between training outcomes and labour market needs. The skilled workforce produced here is not focused and aligned with industry demand. This study examines the extent to which skills development training contributes to improving access to gainful employment.More specifically, the study provides an evidence-based assessment of the Skills for Employment Investment Program (SEIP), implemented under the auspices of the Ministry of Finance of Bangladesh. Adopting a mixed-methods research design, it examines the extent to which skills development training enhances participants' employability by improving employment prospects, earning potential, and the alignment of acquired competencies with labour market needs.Findings indicate that such training significantly contributes to employment generation, enhances employer satisfaction, boosts confidence, promotes decent work, and fosters economic growth, all crucial components of Sustainable Development Goal 8 (SDG-8). Recommendations are provided to strengthen demand-driven skills development training, aiming to mitigate skills mismatches and promote sustainable employability.

Keywords: Skills development training, skills mismatch,employability, Workforce

INTRODUCTION

The employment landscape in Bangladesh faces significant challenges due to a fundamental disconnect between the skills offered by the current systems and those demanded by the industries. This mismatch, as highlighted by Siddiky and Uh (2020) and Mazzoleni and Nelson (2007), undermines the nation's capacity to address employability effectively. Consequently, sectors are compelled to recruit foreign professionals at premium salaries, leading to a drain on foreign currency reserves (Islam 2011). Furthermore, the disparity in earnings between unskilled migrants and their counterparts from India and foreign professionals exacerbates socio-economic inequalities (Uddin 2024). Despite Bangladesh's increasing labor force, as evidenced by the Labour Force Survey 2023, with 73.69 million workers, including 2.1 million new entrants annually, a concerning proportion of 12.9 million young individuals are classified as inactive, perpetuating a cycle of underemployment and economic vulnerability (Khan 2023). This research evaluates the contribution of skills development training to addressing employability challenges in Bangladesh. It focuses on the Skills for Employment Investment Program (SEIP), implemented under the Ministry of Finance, to assess the extent to which the programme promotes sustainable employment through the development of labour market-relevant skills and competencies. Utilizing

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a mixed-methods approach, the research assesses the impact of skills development training on employment generation, employer preferences, and the confidence of graduates. This study offers valuable insights for policymakers, practitioners, and other stakeholders seeking to strengthen the responsiveness of skills development systems to labour market requirements. By evaluating how skills development training enhances workforce preparedness and supports access to sustainable employment, the research generates empirical evidence to inform policy formulation, programme design, and implementation strategies. In doing so, it advances the understanding of the contribution of skills development to inclusive economic growth and long-term labour market resilience.

PROBLEM STATEMENT

The current skills supply systems in Bangladesh do not address employability due to the existing mismatches between skills supply and skills demand (MR Siddiky, SB Uh 2020). The production of skilled workforces is not focused on industry demand (R Mazzoleni, RR Nelson 2007). This deficiency compels various sectors to seek foreign professionals at higher salaries, resulting in a substantial outflow of foreign currency, which impedes the nation's foreign reserves. Additionally, unskilled migrants from Bangladesh engaged in low-skilled jobs earn monthly incomes ranging from $200 to $400, which pale in comparison to their counterparts from India and foreign professionals working in Bangladesh, who earn significantly higher amounts. According to the Labour Force Survey 2023, Bangladesh's labour force has reached 73.69 million, comprising 48.25 million men and 25.44 million women. Approximately 2.1 million new entrants are joining the workforce every year. Moreover, among 31.6 million young people, 12.9 million are classified as inactive, meaning they are Not in Education, Employment, or Training (NEET). A high NEET population can perpetuate socio-economic disadvantage across generations. Without adequate education, relevant skills, and access to decent employment, young people are more likely to experience persistent economic insecurity, limiting opportunities for future generations. Consequently, an unaddressed NEET challenge may hinder human capital development and inclusive economic growth. This study demonstrates the demand for skills development training that equips the unskilled youth workforce by engaging them in different skills development training aimed at the competitive job market to gain employment. Furthermore, it highlights the gaps between skills supply and skills demand, and it underscores the importance of skills training in achieving employability.

To guide the investigation, the following research questions were formulated:

i. How important is SEIP and other skills training for creating jobs?

ii. Does skills training make people more employable?

iii. Do employers prefer hiring trainees with specific skills?

iv. Does gaining confidence through training help people find jobs?

OBJECTIVES OF THE STUDY

This research seeks to assess the contribution of skills development training to the attainment of gainful employment. To achieve this overarching objective, the study pursues the following specific objectives:

i. To assess the contribution of the SEIPand other skills development programmes to employment generation

ii. To find the impact of the skills development on employability.

iii. To find the impact of the employer preferences on employability.

iv. To find the impact of the graduates' confidence on employability

LITERATURE REVIEW

The time-oriented demand for skills development training and competencies has been pertinent in the demand-driven job market around the globe (Saini 2015). The imparting of employable skills focused on the competitive job market is missing in the education system in Bangladesh (Dewan and Sarkar 2017). Students' apprehensions have been recorded from a case study and found below ten percent of them felt skills along with a regular curriculum might be useful in finding a good job and performing tasks at the workplace (Dewan and Sarkar 2017). 47 percent of the school administrators acknowledged that industry involvement in drafting the training curricula would be a good idea (Dewan and Sarkar 2017). Good examples have been found in support of training and retraining as well. Many G20 countries have incorporated training in their responses to the employment encounters arising from the global financial crisis of 2008 (Juan Somavia 2011). Dewan and Sarkar cited 33% of manager's satisfactory comments of having experienced workforces. They have relatively better performances compared to the fresh ones. In support of skills development, schools should impart strong foundational and transferable skills that governments and the private sector can then help build providing pathways for young people (Dewan and Sarkar 2017). For reaping the advantages of demographic dividend skills development training is a must. (Shekh Farid 2019) strongly refer to 'it must undertake significant quality education reforms to strengthen the education to-skills training continuum'

The dependent variable of the study has been backed by recognized and established sources as well. The growing demand for high-calibre talent has intensified competition among employers to attract individuals with strong leadership potential. Educators need to integrate employability skills into courses and work more closely with employers (Syed Mehdi Momin 2019). Ahmadullah M. and Rezaul K., (2015) strongly and depict the role of skills training for employment. The Asian Development Bank (ADB)-financed skills development project aims to support poverty reduction and economic growth by increasing wage and self-employment opportunities for graduates of skills training programmes (Lee, 2020). The project is structured around four key objectives: (i) enhancing the relevance and accessibility of Technical and Vocational Education and Training (TVET); (ii) strengthening institutional capacity to deliver high-quality TVET; (iii) improving the effectiveness of skills training delivery; and (iv) ensuring efficient project management. In addition, the project places particular emphasis on women's economic empowerment through targeted skills development initiatives (Rahman, Chowdhury, & Chowdhury, 2000).

RESEARCH METHODOLOGY

A mixed-methods research design was adopted to generate a comprehensive understanding of how skills development training influences employability. Qualitative data were collected through interviews, observations, and document analysis to explore the demand for skills development training within the TVET ecosystem, while both primary and secondary data were analysed to fulfil the study's research objectives. Secondary data were obtained from the SEIP project's Trainee Management System (TMS), other TVET projects, government and non-government policy documents, and relevant literature on skills development. Qualitative data were collected through Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs), guided by the study's theoretical framework, to explore how skills development training contributes to sustainable employability in Bangladesh. Quantitative and qualitative data were integrated to provide a comprehensive analysis of the research objectives. Primary data were collected using structured and semi-structured questionnaires, enabling the collection of both numerical and narrative information. A five-point Likert scale was incorporated into the survey instrument to measure participants' perceptions and experiences of skills development training. Quantitative data were analysed using Microsoft Excel and SPSS (Version 20.0). Pearson correlation and multiple regression analyses were employed to examine the relationships between the independent and dependent variables. The study adopted a mixed-methods approach with an exploratory orientation, using inductive reasoning to interpret qualitative findings and complement the quantitative results. Qualitative data were analysed to capture participants' perceptions and

experiences, thereby providing deeper insights into the contribution of skills development training to employability. Six major skills development TVET projects that work throughout the country have been identified for the study. Among them, the ADB-funded SEIP project and World Bank-funded STEP project have been nominated. 360 skilled graduates from 64 districts including the representation of rural, urban, plain land, hilly regions, disadvantaged groups, ethnic minorities, and Persons with disabilities (PwD) have been interviewed face to face using formative questionnaires.

FINDINGS AND ANALYSIS

Skilled workforces employed by the industries (Analysis-1)

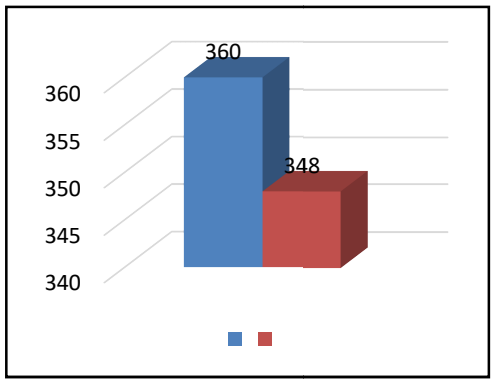


Figure 1: Employment Status

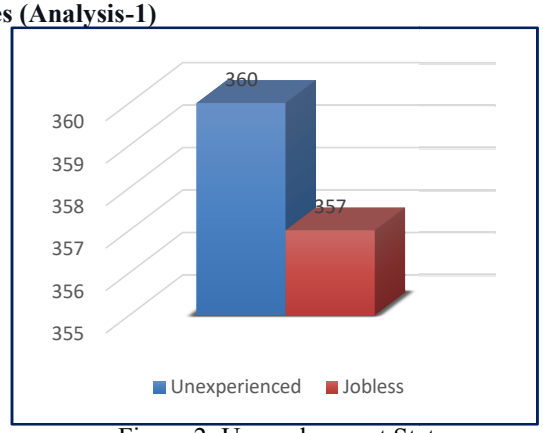


Figure 2: Unemployment Status

A survey was conducted among 360 graduates from various skills development projects gauge the impact of such training on their employability. A significant majority, 96.66% (Figure-1), indicated that the skills they gained through these projects were instrumental in securing employment in today's competitive job market. Interestingly, all 360 graduates noted that they had friends who lacked jobs due to a lack of skills development training. Figure-2 provides 99.16% of unemployed individuals who were without jobs because they lacked skills development training.

Employers expectations for employing skills workforces (Analysis-2).

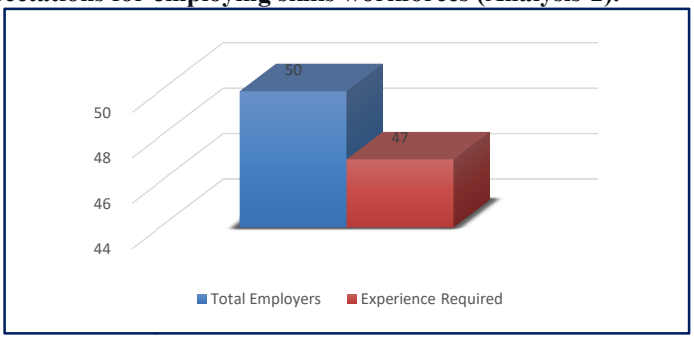


Figure 3: Employers' Comment

Employers in various industries prefer hiring skilled workers over those without skills. They value experience and expertise in their workforce. This preference poses a challenge for fresh graduates or unskilled individuals seeking employment, as employers prioritize skilled candidates. A survey (Figure 3) revealed that 94% of industry employers specifically seek skilled graduates for their workforce, believing it to be beneficial for their businesses.

Progressive Trend of Employment

Skilled graduates of the SEIP project quickly secure employment upon completing the skill development training, with a majority finding opportunities in various industries. The project has established a target of ensuring that at least 60% of trainees secure gainful employment within three months of completing the training. On average, it has been observed from SEIP TMS that 75% of trained graduates secure employment with industry employers.

In terms of diversity, female representation in job placements exceeds 31%, including transgender individuals, ethnic minorities, Persons with Disabilities (PwD), Orphans, and Abandoned Youth (OAY). In Tranche-3, the job placement rate was slightly lower at 67% compared to 79% in Tranche-1 and 78.9% in Tranche-2. This variance is attributed to the fact that enrollment progress in Tranche-3 was still underway during the study. However, the target enrollment in Tranche-3 is expected to surpass both Tranche-1 and Tranche-2.

Given the project's focus on demand-driven and market-oriented skills development, there is an optimistic assumption of achieving over 90% job placement for skilled graduates in Tranche- 3. Notably, the job placement rate for skilled graduates consistently outperforms that of non-skilled individuals. The accompanying graph illustrates the number of job placements in different Tranches of the Project, showcasing the positive impact of the SEIP project in facilitating employment for skilled graduates (Figure 4).

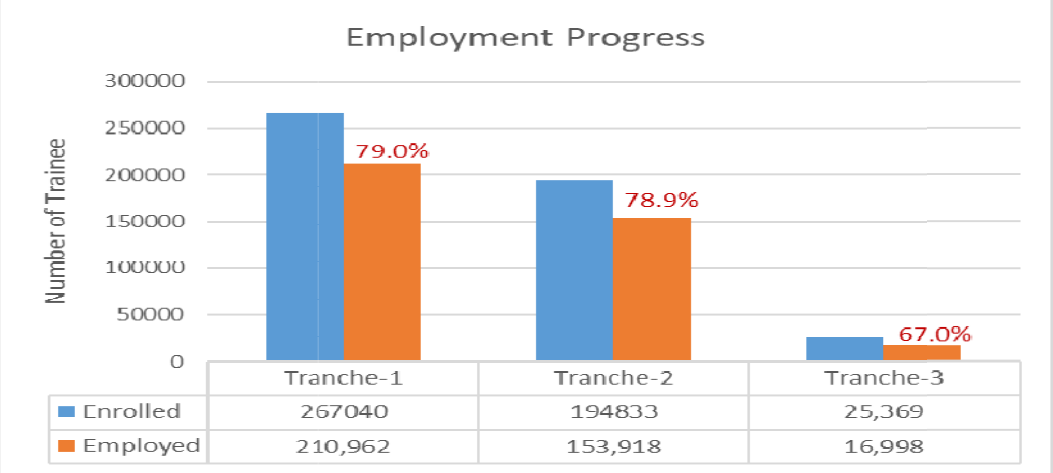


Figure 4: Employment Progress

The Employment Rate Increased Being Skilled

Untrained youths often experience unemployment until they undergo training at various skill development centers. Seeking employment, they approach different industries and institutions in search of opportunities. However, their lack of skills often leads to rejection by industries and companies. Subsequently, these youths undergo market-responsive skills development training at different Skill Training Providers (STPs). Equipped with the necessary skills, they can easily secure jobs.

Many skill development projects aim to ensure job placement after skills training at the STPs. The SEIP specifically addresses the job placement of trainees who undergo skills development training at its affiliated STPs. The project has estimated a 60% job placement rate for enrolled trainees at the STPs.

Reports from the STPs associated with the SEIP project indicate that many unskilled graduates struggle to secure jobs before undergoing skill development training. However, the situation changes when these individuals equip themselves through skill development training. This training significantly increases the likelihood of employment, with employers expressing a preference for skilled graduates over non-skilled ones.

Figure 5 illustrates progressive statistics of the job placement records of the SEIP project, ensured by partner STPs. According to recent studies (Figure 6), the average total job placement rate exceeds 79% for total certified graduates. This implies that more than 79 out of 100 certified skilled graduates secure employment after undergoing skills development training provided by the SEIP project.

The data further indicates that this success surpasses the initial target of 60% job placement set for the STPs. In other words, 79 certified skilled graduates out of 100 have secured employment after undergoing the skills development training provided by the SEIP project. This statistic suggests a positive outcome and success in terms of job placement for individuals who have participated in the skills development training under the SEIP project.

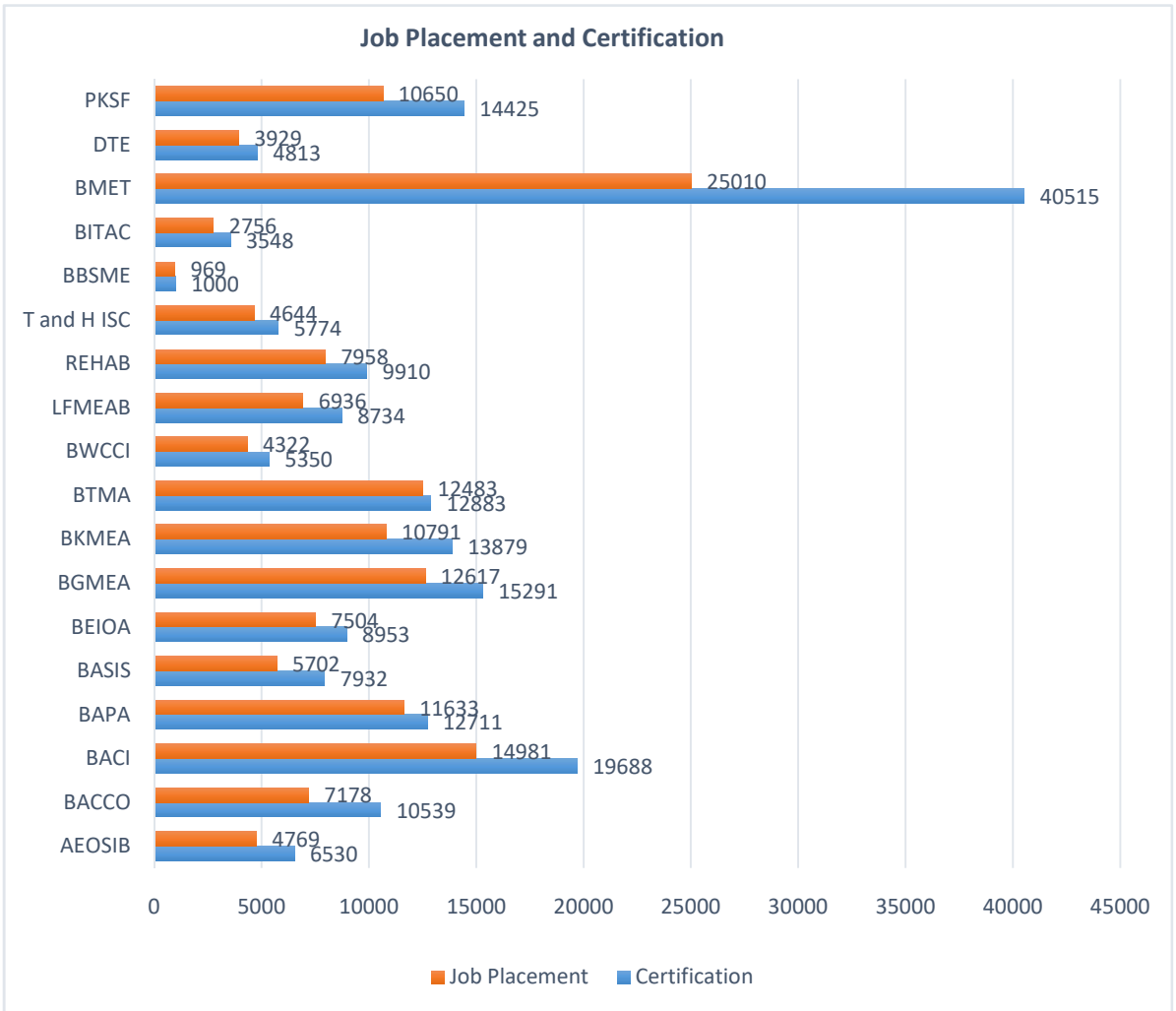


Figure 5: Number of certification and job placement after certified.

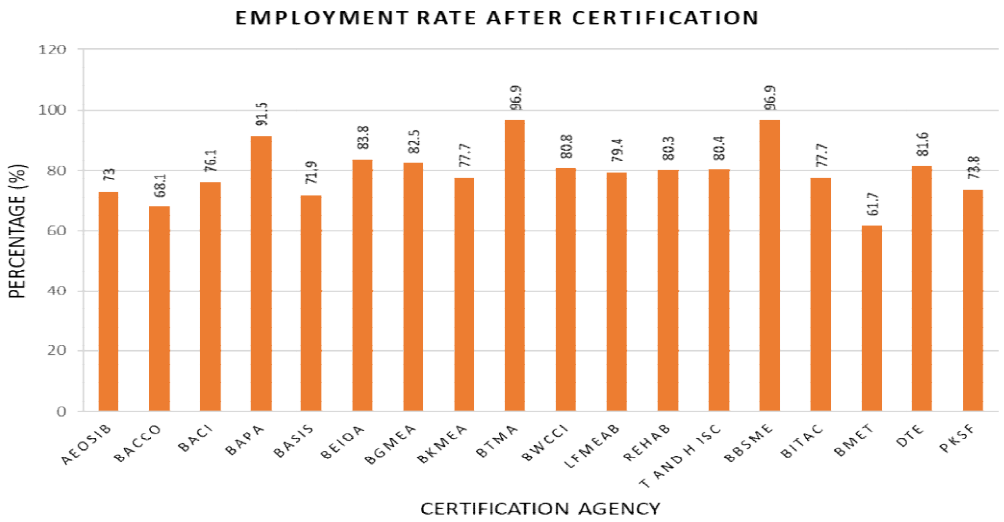


Figure 6: Employment rate of the trainees after certification.

Similarities of Different Projects for Increased Employability

The main objectives of different projects for enhancing the employability skills of unemployed youths are similar. The design and development of several skills' development projects have been analyzed and found similarities in their key components (Table 1). The projects developed the key aspects based on the National Skill Development Policy (NSDP). It has been observed that the major skill development projects in Bangladesh set key objectives that overlap with one another. Besides, some of the projects have almost the same agenda which is aligned with others. In addition, the objectives defined by the skill development project so far have been aimed at the unemployed youth workforces and equip them to cope with the rising technology shifts. However, the similarities in the main activities of different projects imply an idea of increasing employability through skills development training.

Table 1: Similarities of Different Projects for Increased Employability

#	Components	SEIP	STEP	B-SEP	B-Skillful	Sudukkho
1.	Market Responsive Inclusive Skills Training Delivered	✓	✓	✓		
2.	Strengthening of Quality Assurance System	✓				✓
3.	Strengthening of Institutions for Skills Development System	✓	✓	✓		✓
4.	Effective Program Management Ensured	✓	✓	✓	✓	
5.	Equitable access to skills	✓		✓		
6.	Specialized Business Development Service targeting production methods and working conditions in SMEs	✓			✓	

Data Reliability and Validity (Primary Data)

Cronbach‟ 's alpha is an accepted test for internal reliability of latent variables (Bagozzi, 1980; Bell et al., 2022). It is proposed to be higher than 0.70 (Sarstedt et al., 2023; Urbach & Ahlemann,

2010). Even though the values were <0.7 (Amirrudin et al., 2021), 0.7 should not be the only standard used to assess reliability, whereby the shorter scale, with the lower alpha value, actually demonstrates higher interrelatedness among items. Furthermore, (Amirrudin et al., 2021; Hinton et al., 2014) value of 0.90 and above shows excellent reliability,0.7 to 0.90 conveys high reliability,0.50 to 0.70 shows moderate reliability, and value of 0.5 and below shows low reliability. Table 2 indicates that all constructs demonstrate excellent internal consistency, with Cronbach's alpha coefficients exceeding 0.90. These results confirm that the measurement scales used for all variables are highly reliable.

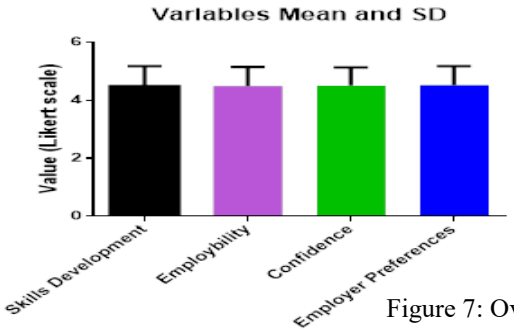
Table 2. Reliability and Validity Assessment of the Measurement Constructs Using Cronbach's Alpha, Kaiser–Meyer–Olkin (KMO), and Bartlett's Test of Sphericity.

Variables	Cronbach's alpha test	Kaiser-Meyer-Olkin test	Bartlett's Test		
	A	KMO	Chi-Square	Df	Sig.
Skills Development	.991	.922	4790.2	15	.000
Employability	.980	.822	3202.4	10	.000
Confidence	.958	.726	1381.1	3	.000
Employer Preferences	.984	.866	2584.7	6	.000

The Kaiser–Meyer–Olkin (KMO) measure assesses sampling adequacy and determines whether the data are suitable for factor analysis. Validity evaluates the accuracy level of an instrument while its reliability of an instrument evaluates the quality and consistency of the instrument (Napitupulu et al., 2017). The Kaiser–Meyer–Olkin (KMO) measure evaluates the adequacy of the sample for factor analysis. KMO values range from 0 to 1, with higher values indicating greater suitability of the data for factor analysis. Generally, KMO values between 0.80 and 1.00 are considered to represent good to excellent sampling adequacy. The sample is sufficient if KMO value is more than 0.5 Bartlett‟s test is significant, and the P-value is less than 0.05.KMO Values close to 0 mean that there are large partial correlations compared to the sum of correlations (Yusoff, 2010). Table 2 shows that the KMO values for all constructs exceed 0.50, indicating adequate sampling for factor analysis. Furthermore, Bartlett's Test of Sphericity is statistically significant for all constructs ($p < 0.05$), confirming that the correlation matrices are suitable for factor analysis.

Overall Description of the Variables

In this study, within the 360 participants, we found the highest positive responses (4.52±0.66) from the participants on the statement of employer preference. The averages 4.51±0.62, 4.49±0.66, and 4.48±0.69 were found for the statements of confidence, employability, and skills development (Figure 7) which means that the participants are positive and agree with these statements. However, since the highest positive value is considered on the 5 Likert scale, and based on these results very few of the participants are unsatisfied and disagree with some of the statements, the training authority should investigate the reason for their dissatisfaction or negative response and thereby they can resolve it. The details of descriptive data are in the supplementary file (Appendix).



Variables	Mean	Standard Deviation
Skill Development	4.48	0.69
Employability	4.49	0.66
Confidence	4.51	0.62
Employer Preference	4.52	0.66

Figure 7: Overall descriptive statistics of the variables.

Correlation Analysis

The Pearson correlation coefficient ranges from −1 to +1. Values closer to −1 indicate a strong negative linear relationship, whereas values closer to +1 indicate a strong positive linear relationship. Coefficients approaching zero suggest little or no linear association between the variables. According to the criterion proposed by Check and Schutt (2011), correlation coefficients greater than 0.30 represent a meaningful relationship. As shown in Table 3, skills development, employability, confidence, and employer preferences are all positively and significantly correlated with one another ($p < 0.001$).

Table 3: Pearson Correlation among the variables

	Skills Development	Employer Preferences	Confidence	Employability
Skills Development				
Pearson Correlation		.980**	.974**	.984**
Sig. (2-tailed)		.000	.000	.000
Employability				
Pearson Correlation			.973**	.992**
Sig. (2-tailed)			.000	.000
Confidence				
Pearson Correlation				.978**
Sig. (2-tailed)				.000

**. Correlation is significant at the 0.01 level (2-tailed).

Multiple Regression Analysis

This Multiple linear regression analysis was conducted to examine the influence of the three independent variables—skills development, employer preferences, and confidence—on employability. As presented in the Model Summary (Table 4), the multiple correlation coefficient (R) is 0.986, indicating a very strong relationship between the observed and predicted values of employability. The coefficient of determination (R^2) is 0.972, suggesting that 97.2% of the variation in employability is explained jointly by skills development, employer preferences, and confidence. This high R^2 value demonstrates the model's strong explanatory power.

The ANOVA results presented in Table 4 further show that the regression model is statistically significant ($F = 4084.254$, $p < 0.05$). This indicates that the independent variables collectively provide a significant explanation of variations in employability and that the overall regression model fits the data well.

Table 4: Multiple regression output of the independent variables with the dependent variable.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.986[a]	.972	.972	.10482
a. Predictors: (Constant), Confidence, Skills development, Employer preferences				

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	134.630	3	44.877	4084.254	.000[b]
	Residual	3.912	356	.011		
	Total	138.541	359			

a. Dependent Variable: Employability

b. Predictors: (Constant), Confidence, Skills development, Employer preferences

Coefficients[a]					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.200	.044		4.579	.000
Skills development	.145	.047	.163	3.082	.002
Employer preferences	.162	.054	.173	3.006	.003
Confidence	.654	.045	.656	14.647	.000

a. Dependent Variable: Employability

The third panel of Table 4 presents the regression coefficients. The unstandardized coefficients (B) indicate the expected change in the dependent variable (employability) associated with a one-unit increase in each independent variable, while holding all other variables constant. The standardized coefficients (Beta) provide a basis for comparing the relative influence of the independent variablesskills development, employer preferences, and confidenceon employability.

The regression results indicate that confidence is the strongest predictor of employability ($\beta = 0.656$, $t = 14.647$, $p < 0.01$). Employer preferences ($\beta = 0.173$, $t = 3.006$, $p < 0.01$) and skills development ($\beta = 0.163$, $t = 3.082$, $p < 0.01$) also exhibit positive and statistically significant associations with employability. As all three predictors are significant at the 1% level, the corresponding research hypotheses are supported. These findings suggest that higher levels of skills development, employer preference alignment, and trainee confidence are associated with improved employability outcomes.

CONCLUSION

A workforce lacking relevant skills poses a significant challenge to economic development and labour market competitiveness. Investing in skills development can transform this workforce into productive human capital, substantially improving employment opportunities and economic participation. This study shows the predominant role of skills development training over employability. The hypothesis and objectives along with the findings of the study show the prime need for skills development training towards gaining employment. Investment in skills development for the youth workforce is essential for enhancing human capital, improving employability, and enabling the country to maximise the economic gains associated with its demographic dividend. This study will lead the path of further researchers to determine the role of occupation-wise skills development training towards employability and economic development of the country.

RECOMMENDATION

The findings of this study underscore the critical role of skills development training in enhancing employability in Bangladesh. The evidence indicates that labour market outcomes can be significantly improved when unemployed and under-skilled young people receive market-oriented Technical and Vocational Education and Training. By equipping trainees with industry-relevant competencies, skills development programmes strengthen workforce readiness and improve access to gainful employment.The study further demonstrates that employers place a high value on skilled workers because they contribute to higher productivity, operational efficiency, and organisational performance. Consequently, sustained investment in market-responsive skills development is essential to meeting the evolving needs of industry while improving employment prospects for the country's growing youth population.Bangladesh's demographic dividend presents a unique opportunity to accelerate economic development. Expanding access to quality, demand-driven skills development programmes can strengthen the productive capacity of young people and enhance their competitiveness in both domestic and international labour markets. Harnessing this demographic advantage requires coordinated efforts to align training provision with labour market demand and emerging industry requirements.The findings also highlight the importance of strengthening the national skills development ecosystem. Government initiatives, together with skills development projects implemented by development partners, have made important contributions to workforce development through upskilling and reskilling initiatives. As the apex institution for skills development, the National Skills Development Authority (NSDA) has a pivotal role in promoting a coordinated, demand-driven and quality-assured skills system that supports economic growth and improved productivity.Based on the empirical evidence, greater recognition and adoption of the National Skills Qualifications Framework (NSQF) certification system by employers would facilitate the identification of competent workers and strengthen confidence in nationally recognised qualifications. Furthermore, establishing a dedicated ministry responsible for skills development could enhance policy coordination, institutional governance, and strategic oversight across the skills development ecosystem. Such an institutional arrangement would strengthen collaboration among government agencies, training providers, industry, and development partners, enabling Bangladesh to respond more effectively to evolving labour market demands and advance sustainable employability.

REFERENCES

Andrews, G., & Russell, M. (2012). Employability skills development: strategy, evaluation and impact. Higher Education, Skills and Work-Based Learning, 2(1), 33-44.

Amirrudin, M., Nasution, K., & Supahar, S. (2021). Effect of variability on Cronbach alpha reliability in research practice. *Jurnal Matematika, Statistika Dan Komputasi*, *17*(2), 223–230.

Bagozzi, R. P. (1980). Performance and satisfaction in an industrial sales force: An examination of their antecedents and simultaneity. *Journal of Marketing*, *44*(2), 65–77.

Bell, E., Bryman, A., & Harley, B. (2022). *Business research methods*. Oxford University Press.

Behizadeh, N. (2014). Xavier's take on authentic writing: Structuring choices for expression and impact. *Journal of Adolescent & Adult Literacy*, *58*(4), 289-298.

Camerer, C. F. (1998). *Prospect theory in the wild: evidence from the field. California*

Institute of Technology, Division of the Humanities and Social Sciences (No. 1037). Working Papers.

Check, J., & Schutt, R. K. (2011). *Research methods in education*. Sage publications.

Dewan, S., & Sarkar, U. (2017). From education to employability: Preparing South Asian youth for the world of work. *JJN, UNICEF*.

Dewan, S., & Sarkar, U. (2017). From education to employability: a case study ofBangladesh. *Just Jobs/ UNICEF Report, Available at: www. justjobsnetwork. org*.

Elias, M. J., & Clabby, J. F. (1992). *Building social problem-solving skills: Guidelines*

from a school-based program. Jossey-Bass.

Field, J. (2000). Skills and employability in the limelight: exploring the public presentation of the New Deal. *Research in Post-Compulsory Education*, *5*(3),255-270.

Hinton, P. R., McMurray, I., & Brownlow, C. (2014). *SPSS explained*. Routledge.

Hossain, A. (2010). Youth Problems, Their Development and Empowerment inBangladesh. *Antrocom*, *6*(1), 65-77.

Islam, M. N. (2011). Bangladesh expatriate workers and their contribution to national development. Bureau of Manpower Employment and Training, The People's Republic of Bangladesh, Dhaka, Bangladesh.

Khan, W. S. (2023). Factors Affecting Labor Force Participation Decision in Bangladesh: An Empirical Study Using Microdata. Journal of Humanities and Social Sciences Studies, 5(3), 01-05.

Lee, S. (2020). Challenges and opportunities for transforming skills development in Bangladesh: the case of the skills for employment investment program. In *Anticipating and Preparing for Emerging Skills and Jobs* (pp. 133-141). Springer, Singapore.

Mazzoleni, R., & Nelson, R. R. (2007). Public research institutions and economic catch-up. *Research policy*, *36*(10), 1512-1528.

Mia, A., & Karim, M. R. (2015). Survey of TVET providers Bangladesh.

Napitupulu, D., Kadar, J. A., & Jati, R. K. (2017). Validity testing of technology acceptance

model based on factor analysis approach. *Indonesian Journal of Electrical Engineering and Computer Science*, *5*(3), 697–704.

Rahman, R. I., Chowdhury, O. H., Chowdhury, N., Case, A., Note, A., & September,

S. E. S. (2000). Bangladesh institute of development studies. *Poverty alleviation and empowerment through microfinance: two decades of experience in Bangladesh*, *20*.

Rahman, M., Farooq, M. O., & Selim, M. (2021). Mitigating educated youth unemployment in Bangladesh. The Journal of Developing Areas, 55(1).

Raihan, A. (2014). Collaboration between TVET institutions and industries in Bangladesh to enhance employability skills. *International Journal of Engineering and Technical Research (IJETR)*, *2*(10), 50-55.

Saini, V. (2015). Skill development in India: Need, challenges and ways forward. Abhinav National Monthly Refereed Journal of Research in Arts & Education, 4(4), 1-9.

Sarstedt, M., Hair Jr, J. F., & Ringle, C. M. (2023). "PLS-SEM: indeed, a silver bullet"–retrospective observations and recent advances. *Journal of Marketing Theory and Practice*, *31*(3), 261–275.

Shahiduzzaman K. (2017): 'Boosting skilled manpower', *The Financial Express*, 14 January, *Available at:*https://www.thefinancialexpress.com.bd/

Shahiduzzaman, M. (2017). Customer satisfaction of Direct Fresh Ltd, *Available at:http://dspace.bracu.ac.bd/xmlui/handle/10361/8483*

Shekh F. (2019) 'Making the most of our demographic dividend' *The Daily Star,*

Somavia, J. (2011). Statement on Fiji, by ilo Director-General Juan Somavia. International Labor Organization website, 13 September.

Syed M. (2019) 'Employability and education', *The Independent*, 31 March, *Available at: https://m.theindependentbd.com/magazine/details/193785*

Siddiky, M. R., & Uh, S. B. (2020). Linking tvet with industries in bangladesh: Need for supportive policies and an approach to tvet. *Journal of Technical Education and Training*, *12*(3), 1-21.

Uddin, M. B. (2024). Remittances, Socio-economic Inequality and Development: Insights from Rural Bangladesh (Doctoral dissertation, UNSW Sydney).

Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *Journal of Information Technology Theory and Application (JITTA)*, *11*(2), 2.

Yusoff, M. S. B. (2010). *The reliability and validity of the postgraduate stressor questionnaire (psq) among postgraduate medical trainees*.