The Alignment of Technical and Vocational Education and Training (TVET) with Labor Market Demand: A Survey of Employer's Satisfaction with TVET Graduates' Skills in The Gambia

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Abstract: This study investigates the alignment between Technical and Vocational Education and Training (TVET) programs and labor market demands in The Gambia, with a focus on employers' satisfaction with the skills of TVET graduates. Using a quantitative research approach, 125 employers from various industries, including agriculture, tourism, ICT, manufacturing, and construction, were surveyed. The results reveal that the agriculture sector employs the highest number of TVET graduates, while ICT, despite its global importance, remains underrepresented. Practical and digital skills were highly valued by employers, but satisfaction with these skills among TVET graduates was lower than expected, particularly in problem-solving and teamwork. Employers expressed higher satisfaction with graduates' time management and adaptability. The findings highlight the need for reforms in TVET curricula to better align with industry needs and for stronger collaboration between training institutions and labor market stakeholders. Recommendations include increasing practical training, investing in ICT facilities, and enhancing industry collaboration.

Keywords: Technical and Vocational Education and Training; Labor Market Demand; Employers' Satisfaction; Graduates.

I. INTRODUCTION

Technical and Vocational Education and Training (TVET) plays a significant role in ensuring a country's sustainable economic growth and human resource development (ITC, 2019). TVET is largely seen as a wide concept used to refer to formal and informal learning processes that focus on training people on practical skills, technical knowledge, and competencies needed for specific occupations (MoHERST, 2021). TVET education includes institution-based education, apprenticeship schemes, and internships designed to equip individuals with the practical skills needed for specific jobs (MoHERST, 2021). There is global recognition on the TVET's critical contribution to industrial productivity, raising income levels, and offering vital employment opportunities, more especially for the youth (ITC, 2019).

The importance of aligning TVET programs with the labor market is emphasized in a study by Manabete & Umar (2018). The authors stress the importance of Technical and Vocational Education and Training (TVET) in training young people with the skills necessary for obtaining employment. Biavaschi et al. (2012) in their study suggest that TVET colleges may better prepare students for employment opportunities by building closer collaboration with labor industry stakeholders and

regularly assessing emerging labor market demands. This is supported by Ali, Ahmad, and Shah (2017) research which identified education mismatch, market needs, relevant work experience, and skills proficiency as key factors influencing the employability of TVET graduates.

Generally, TVET is seen as a potential solution to addressing youth unemployment, illegal migration, and the underutilization of labor force. Other studies about TVET conducted in various contexts show the importance of TVET in enhancing employment opportunities and sustainable economic development. Ogbuanya and Michael (2015) in their study highlighted how TVET is essential for economic development and technological advancement in developing countries. Igberaharha (2021) also indicated in his study that improving the quality of TVET, through enhanced professional manpower and access to adequate facilities, is very vital for the attainment of sustainable growth and development. Nugraha et al. (2020) in their study found that interpersonal skills, technical knowledge, communication ability, technological competence, managerial aptitude, creativity, critical thinking, and problem-solving skills are major skill sets that most employers prioritized in hiring TVET graduaates.

Problem Statement

The government of The Gambia has recently placed significant emphasis on TVET education and youth employment. However, a significant issue that seems to be overlooked in this strive is the mismatch between labor supply and demand. The 2022-2023 Gambia Labour Force Survey that was conducted by GBoS revealed that the labor force participation rate is significantly lower in rural regions and among women leading to very high levels of informal employment. Although the official unemployment rate of The Gambia stands at 7.6%, it rises to 31.6% when factors such as discouraged job seekers and labor force underutilization are included (GBoS, 2023).

Studies in other countries also suggest that there is limited collaboration and consultation among TVET institutions and stakeholders in the labor industry leading to employers' dissatisfaction with the skill proficiency of most TVET graduates. A study by Mabunda and Frick (2020) on rural South Africa's TVET graduates revealed that a lot of employers held negative perceptions toward graduates' skill proficiency and employability. Their study also revealed that there is poor institutional planning and a lack of collaboration between TVET colleges and local industries thereby hindering the graduates' employment prospects. Shi & Bangpan (2022) in their study found that there is prevalent deficit in curriculum and substance in most TVET programs offered by developing countries. Their findings indicate that some TVET programs taught obsolete or irrelevant skills which do not match the needs of the local labor market demand.

According to ITC (2019), key sectors in TVET related labor market such as agriculture, ICT, and tourism are with significant skill shortages. It further reports that the demand for technical and business competencies such as agronomists, food processing and storage are not adequately provided by current training programs (ITC, 2019). In the context of The Gambia, there is limited literature about employers' views on TVET graduates' skills in meeting the emerging demand of the labor industry.

Research Objectives

1. To investigate the sectors of The Gambia's labor industry that employ TVET Graduates.

2. To examine the specific skills that employers prioritized in TVET graduates.

3. To examine whether the employers in the labor industry are satisfied with the skill set of TVET graduates.

II. LITERATURE REVIEW

Technical and Vocational Education and Training (TVET) plays a very important role in building a skilled labor force, industrial productivity, and sustainable employment opportunities (ITC, 2019). Research has established that TVET contributes to both economic empowerment and sustainable development by equipping people with relevant skills for various sectors in the labor market (Ogbuanya & Michael, 2015). TVET has the potential to transform individuals to gain skills set necessary for effective participation in the job industry (Inyiagu, 2014). The author argues that neglecting TVET has severe ramifications on the economic growth of a country because unemployment will continue to rise. In order to enhance employability of TVET graduates, Ahmad & Shah (2017) argue that factors such as policy, job creation, relevant experience, education mismatch, market requirement, and graduates' skills must be put into consideration at all time.

Moreover, Mabunda & Frick (2020) revealed that employability of graduates is also affected by the design and implemntation of TVET curricula. Even though generic employability skills are vital, Technological skill is emerging as a most valued by employers in the labor sector (Nugraha et al., 2020). Employers' involvement in designing and evaluating

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TVET curricular is very crucial because studies found that the employability of TVET graduates is also influenced by the attitudes and practices of employers (Mabunda & Frick, 2020). It is found that effective TVET systems, backed by adaptable Labor Market Information Systems (LMIS), can enhance job matching and sustainable employment (PARIS21, 2018). This suggests that it is crucial to engage the private sector and local expertise in aligning TVET programs with emerging job demands in the labor market (PARIS21, 2018). There should be equitable distribution of TVET resources across all regions and areas to meet labor market demands, most especially in rural areas where there is a high rate of informal employment (ITC, 2019).

Furthermore, several countries around the world have gone through a smooth implementation of TVET programs through targeted strategies and initiatives (ITC, 2019). There are various initiatives to improve the efficiency of programs as shown by cases from China, Korea, Indonesia, and Germany. The German dual system is believed to be one of the most effective models that Ogbuanya and Michael (2015) identify in their actionable recommendations for enhancing TVET delivery in Nigeria. In China, the establishment of Initial Vocational Education and Training (IVET) at the tertiary education level together with specialized vocational universities gives students the opportunity to further their skills at higher institution level (Ogbuanya & Michael, 2015). South Korea has established industrial technology zones and offering pay-increase-linked training programs facilitated by collaboration between the TVET institutions and labor industry (Ogbuanya & Michael, 2015).

In addition, Singapore and Japan exemplify TVET success through initiatives that integrate competency-based training into academic curricula and create frameworks for continuous job market reporting (Inyiagu, 2014). The Enabel's strategic evaluation of TVET interventions in Africa and the Middle East revealed that aligning TVET programs with employment goals enhances equality, equity, and social inclusivity (Calmand, Recotillet & Werquin, 2022). Research by Ali, Ahmad, and Shah (2017) in Pakistan explains the significance of aligning vocational curricula with job demands of the labor industry. A study by Talento et al. (2022) in Philippine found that TVET significantly increases female graduates' employment rates thereby bridging the inequality gap between male and female. According to Manabete and Umar (2021) effective TVET program is significant in promoting self-employment, particularly in the informal sectors such as agriculture where formal employment opportunities are limited.

TVET programs are widely viewed as means of equipping individuals with relevant up-to-date skills that can bridge the gap between education and employment thereby reducing the rate of poverty, inequality, and unemployment (Okoth, 2023). According to Shi and Bangpan (2022), in low- and middle-income countries (LMICs), TVET has significantly influenced various aspects of people's well-being beyond economic outcomes. While the role of TVET in creating sustainable employment remains on the center stage in most developing countries, the employability skills, such as social and communication skills, engineering knowledge, IT proficiency, management abilities, creativity, innovation, and problem-solving must also be given considerable priority when implementing TVET programs (Nugraha et al., 2020).

Further still, sustainability concepts are increasingly integrated into TVET curricula to address environmental challenges and foster green jobs (Paryono, 2017). According to Okoth (2023) there is urgent need to assess employers' satisfaction with TVET graduates' skills in order to ensure that there is alignment with the labor market's evolving needs. For instance, studies shown that in Malaysia, polytechnic graduates' employability has rose to the rate of 96.7%, tourism management programs show significantly lower rates at 51%, (Ismail, Chik, & Hemdi, 2021). This suggest that there is the need for thorough scrutiny of what is needed in the labor market. Brewer and Comyn (2015) also in their review of case studies from six countries indicated the need for continuous improvement and systemic integration of relevant skills to better align with employer expectations and emerging job demands in the labor market.

Major Gaps in the TVET Sector

Existing literature identifies critical sectors such as agriculture, ICT, and tourism as facing significant skill shortages. According to International Trade Centre [ITC] (2019), the agricultural sector is in high demand for professionally trained TVET graduates who can perform roles such as food processing operators, agronomists, and marketing staff. The ICT sector is another field where demand for skilled workers is increasing daily. The World Economic Forum (2020) highlights that automation, artificial intelligence (AI), and the Internet of Things (IoT) are revolutionizing the world labor market. It further states that the sector is creating new job roles and making others obsolete. TVET institutions must include these emerging digital competencies into their training programs to ensure that TVET graduates possess the skills necessary to meet the demands of a technology-driven labor market (World Bank, 2019). This is corroborated by Oviawe, Uwameiye, & Uddin

(2017) who said TVET programs must be reformed by updating the curricula to reflect industry demands and fostering stronger connections between training institutions and the private sector. Most positions in the tourism sector's management and operations require technical and soft skills which need to be integrated into the TVET curricula (Ismail, Chik, & Hemdi, 2021).

According to Nugraha et al. (2020), many TVET programs fail to adequately develop graduates with social skills, engineering knowledge, ICT skills, and creativity skills which are among the key competencies demanded by employers. A study by Mabunda and Frick (2020) on National Certificate (Vocational) [NC(V)] graduates in rural South Africa reveals that there is a disconnect between TVET programs and labor market needs. This limited alignment between TVET programs and industry demands reinforces the need for stronger collaboration among stakeholders in the sector (Oviawe, Uwameiye, and Uddin, 2017). Also, the global shift toward sustainability is rapidly influencing the labor market, with rising demand for green jobs in areas like renewable energy, waste management, and sustainable agriculture (International Labour Organization [ILO], 2019). For example, Germany has been a leader in integrating green skills into its TVET programs to align with national goals of reducing carbon emissions and promote renewable energy (Federal Institute for Vocational Education and Training [BIBB], 2020).

The Skills Ecosystem Theory

Skills ecosystems as a concept originates from the influential work of David Finegold in 1999 which was built upon the earlier research he conducted with David Soskice in the 1980s (Lotz-Sisitka, Openjuru, & Zeelen, 2023). According to the authors, the theory evolved as a response to the challenge of breaking out of what Finegold and Soskice described as a "low-skill equilibrium"—a situation in which economies are marked by poorly trained workers. The propounds of the theory argued that this equilibrium was reinforced by societal and institutional interactions that obstructed the demand for improved skills (Finegold & Soskice, 1988). In the view of Finegold's early work, systemic issues of skills supply and demand were also among the major problems affecting the labor industry, not only inadequacies in education and training.

As a result, Finegold expanded his concentration in the late 1990s to regional skills systems in parallels with Marshall's (1890) work on industrial districts. This effort led to the introduction of the term "skills ecosystem" as a more comprehensive and evolutionary theory than the previously used "equilibrium" concept (Lotz-Sisitka, Openjuru, & Zeelen, 2023). In his later work, Finegold defined four essential elements for developing a sustainable high-skill ecosystem: a catalyst to spark development, nourishment to sustain growth over time, a supportive host environment, and a high degree of interdependence among stakeholders within the system (Finegold, 1999). With this, the theory suggests that skills development should be viewed as an emerging process where various stakeholders such as employers, TVET institutions, policymakers, and employees play interdependent roles in promoting skill growth.

According to Lotz-Sisitka, Openjuru, & Zeelen, 2023), one of the strongest empirical explorations of skills ecosystems came from Australia. They argued that over 100 pilot projects examined how interlocking networks of enterprises, markets, and institutions in different regions models skill competencies across various sectors of TVET. Buchanan et al. (2001) suggested that technical and vocational education and training (VET) policy should address broader issues about labor market conditions and sustainability as enshrined in the skills ecosystem theory. These arguments highlight the significance of collaboration among stakeholders in the sector.

However, the skills ecosystem theory has been criticized by some people who argued that it operates within a neoliberal growth model which limits its potential due to the lack of strong trade unions, well-regulated labor markets, and active industrial policies (Payne, 2008). Other critics like Hall and Lansbury (2006) and Anderson and Warhurst (2012) submitted that the model's theoretical foundation remain underdeveloped – suggesting that it relies heavily on applied policy-based research rather than fundamental theory.

Method and Procedure

The research was conducted using quantitative research approach to assess the proficiency of the skills possessed by TVET graduates from the viewpoints of their employers. The target population for this study were employers in industries hiring workers who acquired TVET education. The population included employers with formal enterprises and those without formal enterprises across the country. This diversity was believed to be important because it would represent a diverse perspective of employers from key labor industries. The sectors included in the study were tourism and hospitality, Agriculture, fashion and tailoring, ICT, manufacturing and engineering, and construction and infrastructure. The scope was

limited to these sectors because employers who filled in the survey were from these sectors. The inclusion of both formal and informal employers was intentional so as to represent the reality in the labor industry.

Sampling Technique and Sample Size

The sampling technique used to recruit participant in the study was convenient sampling – entirely based on the accessibility and willingness of the respondents to participate in the study. The researcher did not include any specific criteria for selecting participants from both formal and informal sectors and each region. The respondents were given maximum time frame of two weeks for completing the survey at the convenience within this period. Upon collecting the tool, a total of 126 respondents participated in the study.

Demographic Profile of Respondents

The table below presents the summary of the demographic profile of the respondents. The data shows that the sample consisted of a diverse group of employers, both in terms of gender and age.

Table 1: Demographic profile of the Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Gender	**Male**	65	52.0	52.0	52.0
	Female	60	48.0	48.0	100.0
Age	**18-27**	2	1.6	1.6	1.6
	28-37	13	10.4	10.4	12.0
	38-47	40	32.0	32.0	44.0
	48-57	53	42.4	42.4	86.4
	>57	17	13.6	13.6	100.0

The information on table1 reveals a fair balanced representation between male and female with 52% and 65 respectively. In terms of age, the majority of respondents fall within 48-57 and 38-47 age brackets. The data showed that 32% of the employers are between the ages of 38 and 47, and 42.4% are between the ages of 48 and 57. The information further showed that the age group 28-37 consisted 10.4% and the age group 18-27 makes up only 1.6%. This shows that the majority of employers who participated in the survey have some valuable experience in their fields. Lastly, 13.6% (17 individuals) of respondents are over the age of 57 who are almost closed to reaching their official retirement age.

Data Collection

The study involved 125 employers across different employment fields in The Gambia. Questionnaire tool was design based on the research objectives. The tool was printed and deliver to respondents physically, but an electronic version was also made available to those who preferred the electronic. The instrument used to collect the data was multidimensional, divided into part 1 and 2, while part 1 focuses on the demographic and the part 2 focus on items about the study. Section A of the tool required employers to choose from the options, section B and C required respondents to rate their level of agreement with each statement.

Reliability and Validity

Cronbach's alpha was used to assess the reliability of the instrument. The calculated Cronbach's alpha value for the 20 items was 0.766 which implies an acceptable level of internal consistency. The instrument was revised by seasoned researchers for content validation, and piloting. The validity of the items was measured using KMO which yielded a value of 0.743 which is above the commonly accepted value of 0.6. The correlations between the items are large for factor analysis because the Bartlett's Test of Sphericity was significant at ($\chi^2 = 1133.854$, df = 190, $p < 0.001$)

III. DATA ANALYSIS

The demographic information and the job demand sectors were analyzed using frequency distribution analysis. This method enabled the researcher to tally the number of occurrences for each demographic factor as well as for each job demand identified by the employers. Descriptive statistics, mainly mean and standard deviation were used to analyze the skills prioritized by employers of TVET graduates. The employers' satisfaction with the proficiency of the skill sets possessed by TVET graduates was analyzed using descriptive statistics as well, mainly focusing on the mean and standard deviation.

IV. RESULTS

1. What sectors of The Gambia's labor industry employ TVET Graduates?

The table below shows information about the various industries that do hire TVET graduates.

Table 2: industries that do hire TVET graduates

Industry	Frequency	Percent	Valid Percent	Cumulative Percent
Tourism & Hospitality	20	16.0	16.0	16.0
Agriculture	31	24.8	24.8	40.8
Manufacturing & Engineering	27	21.6	21.6	62.4
Construction & Infrastructure	20	16.0	16.0	78.4
Fashion and Tailoring	17	13.6	13.6	92.0
ICT	10	8.0	8.0	100.0
Total	125	100.0	100.0	

The finding on table 2 shows that Agriculture has the highest frequency, and also suggesting that it has the highest demand for labor from TVET graduates. It is indicated that 31 respondents (24.8%) operate their businesses in this sector. This suggests that agriculture is a major employer of TVET graduates in The Gambia. It is followed by Manufacturing & Engineering with 27 respondents (21.6%) showing they have their businesses in this sector. Both Tourism & Hospitality and Construction & Infrastructure both account for 20 respondents each (16.0%). The frequency percentages of these two sectors suggest that these industries are equally important in terms of labor demand. Fashion and Tailoring sector received 17 respondents (13.6%) which implies that this industry is also a significant giving out jobs to TVET graduates. ICT which is receiving special recognition in the developed world as indicated in the literature review has the lowest representation, with 10 respondents (8.0%). This suggests that the digital sector currently recruits fewer TVET graduates when compared to other sectors like agriculture or manufacturing. Investors and government should consider diversifying their investment to cater for employment chances for TVET graduates in this sector.

2. What specific skills are prioritized by employers in the TVET sectors?

The table below presents the descriptive statistics of the various skills prioritized by employers when they are hiring TVET graduates.

Table 3: Skills prioritized by employers in the TVET sectors

Skills	N	Minimum	Maximum	Mean	Std. Deviation
Technical	125	1	5	3.01	1.125
Practical	125	1	5	3.90	1.349
Problem solving	125	1	5	2.96	1.011
Communication	125	1	5	3.03	1.047
Teamwork	125	1	5	2.88	1.202
Adaptability	125	1	5	3.25	1.182
Customer service	125	1	5	3.61	1.197
Leadership	125	1	5	3.66	1.143
Time management	125	1	5	3.42	1.252
Digital	125	1	5	3.89	1.339

The findings on table 3 show that practical and digital skills are the most valued by employers in the labor sector. It has a mean value of 3.90 and 3.89, and a standard deviation of 1.349 and 1.339 respectively. This implies that employers place a strong demand on practical and technical proficiency the work and technology. Another highly valued skill by employers is leadership skills with a value of mean 3.66. This followed by customer service skill with a mean value of 3.61. Time management has a mean of 3.42 and adaptability has a mean of 3.25. Communication skill has the mean 3.03, while technical skill has a mean of 3.01. Surprisingly, problem-solving with a mean value of 2.96 appears not be highly valued by the respondents. Teamwork also has a moderate mean of 2.88 which is rated lower than expected. However, it is safe to suggest that employers may have already assumed that these skills were already inherent in TVET graduates.

3. How satisfied are employers with the skill set of TVET graduates?

This table below is a presentation of the descriptive statistics for employers' satisfaction with various skill sets of TVET graduates they already hired.

Table 4: Employers' Satisfaction with Various Skill Sets of TVET Graduates

Items	N	Minimum	Maximum	Mean	Std. Deviation
satisfaction level with the technical skill of TVET graduate	125	1	5	2.95	1.046
satisfaction level with the practical skill of TVET graduate	125	1	5	2.72	1.317
satisfaction level with the problem-solving skill of TVET graduate	125	1	5	2.67	1.203
satisfaction level with the communication skill of TVET graduate	125	1	5	3.06	1.312
satisfaction level with the teamwork skill of TVET graduate	125	1	5	2.48	1.189
satisfaction level with the adaptability skill of TVET graduate	125	1	5	3.26	.899
satisfaction level with the customer service skill of TVET graduate	125	1	5	3.02	1.020
satisfaction level with the leadership skill of TVET graduate	125	1	5	2.77	1.315
satisfaction level with the time management skill of TVET graduate	125	1	5	3.37	1.125
satisfaction level with the digital skill of TVET graduate	125	1	5	2.53	1.036

The findings shown in table 4 revealed that time management received the highest satisfaction score, with a mean of 3.37 and a standard deviation of 1.125. This suggests that employers generally view TVET graduates' skills in time management as proficient. Employers are also found to be satisfied with the adaptability skills of TVET graduates because it has the second highest value (3.26). Similarly, communication skill has a mean value of 3.06 while customer service has a mean of 3.02. These are various skill sets which have been highly rated as proficient among TVET graduates who are employed.

Technical and practical skills have mean values of 2.95 and 2.72 respectively suggesting that employers are not highly satisfied with the graduates' skill sets in these areas. Problem-solving and digital skills have mean values of 2.67 and 2.53 respectively. Team work skill receives the lowest mean value (2.48) indicating that even though it was not part of the highly prioritized skills, employers are not very satisfied with proficiency of graduates in this skill.

V. DISCUSSION

The research has revealed that agriculture as a sector has the highest demand for TVET graduates. Out of total employers surveyed, 24.8% of the employers are in the sector. This suggest that agriculture should be highly valued for its role in creating employment among the youths. The very high number of employers present in this sector implies that TVET programs should prioritize agricultural training. Manufacturing and engineering field accounts for 21.6% indicating a strong number of employers also. This means TVET institutions should also tailor their enrolment to the labor demand so as to minimize redundancy and unemployment among TVET graduates.

The findings of the study also suggest that TVET programs could be diversified because there is potential number of employers present in tourism and hospitality sector, along with construction and infrastructure. This diversity suggests that TVET programs should maintain a broad focus training students in various skills that would made them easily absorbed in the labor industry. The finding further suggests that in The Gambia, ICT sector is not yet having a significant number of employers despite the importance and attention it is receiving across the globe. The sector is represented by on 8%) which indicates very low presents of employers who can offer jobs to TVET graduates. This could further suggest that both government and private sector should invest in this sector so as to make the country to earn its place in the global stage for economic development.

Moreover, the study also found that employers are highly interested in TVET graduates with a strong practical and digital skills as indicated by high mean values of 3.90 and 3.89 respectively. This implies that TVET institutions should really endeavor to ensure that their graduates' skills in these sectors are very proficient. It means that even though there are few employers specifically available for ICT only, other sectors are also interested in ICT skills. The study's finding also means that there is evolution in the nature of workforce expectation as indicated by the high valuation of leadership and customer service skills which are all very important. This could further suggest that beside technical and practical skills which are core in this sector, other social skills are highly valued in the labor industry. Problem-solving and teamwork (mean values of 2.96 and 2.88 respectively) received low valuation from the respondents perhaps because employers either assume TVET graduates.

Furthermore, the employers' satisfaction levels in the skills of TVET graduates reveal both strengths and areas for improvement. Generally, there is high satisfaction with time management (3.37) and adaptability (3.26) which may imply that TVET graduates are proficient in managing their time and adjusting to varying work conditions and using new tools. However, the low satisfaction with technical and practical skills (mean values of 2.95 and 2.72, respectively) is alarming because these are core to most TVET-related jobs. The gap between the skills TVET programs is expected to provide and employer satisfaction levels clearly show that there is the need to evaluate the TVET programs in the country.

VI. CONCLUSION

The study has shown the need for continuous reform in TVET education to ensure that graduates are well-prepared for the emerging and diverse labor market in The Gambia. Training programs should more aligned with industry needs most especially in high-demand sectors like agriculture and manufacturing. The research further indicates the urgent need for curriculum reform and increased collaboration and cooperation between TVET institutions and labor industry stakeholders. Such collaboration would help to address these gaps thereby ensuring that graduates are not only employable but also capable of contributing significantly to economic development of the country.

VII. RECOMMENDATIONS

The findings have led to several recommendations to be made in order to enhance the alignment between TVET programs and labor market demands in The Gambia. The recommendations include the following below.

1. Stakeholders such as TVET institutions and government should collaborate with industry players to design programs that offer more practical and experiential training in areas like mechanical engineering, electrical engineering, agricultural engineering, and industrial maintenance. This will help to bridge the gap between the skills possessed by TVET graduates and the employers' expectations.

2. TVET institutions, government and, labor industry players should collaborate to establish state-of-the-art ICT facilities where students will be trained in digital literacy, coding, data analysis, and emerging technologies like artificial intelligence and cybersecurity.

3. The mean score received by practical skills implies that there is a need for reform in how technical competencies are taught to TVET graduates. There should be more industry placements, internships, and experimentations integrated into TVET programs.

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