

Factors Affecting the Employment of Senior High School Graduates Under the Technical-Vocational-Livelihood Track in the 6th District of Pangasinan

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ABSTRACT

This study examined the factors influencing the employment of Senior High School (SHS) graduates under the Technical-Vocational-Livelihood (TVL) track in the Sixth District of Pangasinan, Philippines. Specifically, it investigated the influence of technical skills competency, work immersion experience, employability skills, availability of local job opportunities, alignment of training with labor market needs, industry linkages and partnerships, career guidance and employment support, and socio-economic factors on graduates' employment. A descriptive-correlational research design was employed involving 200 SHS-TVL graduates from selected public and private secondary schools. Data were collected using a validated researcher-made questionnaire and analyzed using frequency counts, percentages, weighted mean, ranking, and inferential statistics at the 0.05 level of significance. The findings revealed that the respondents perceived all identified employment factors to have a high level of influence on their employment, with employability skills and work immersion experience obtaining the highest mean ratings. The most frequently reported employment challenges were limited availability of jobs related to their specialization, lack of vacancies, and insufficient work experience despite immersion. Significant relationships were found between selected profile variables and certain employment factors, indicating that demographic characteristics contribute to variations in perceived employability. Based on these findings, an Employment Enhancement Action Plan was developed to strengthen industry partnerships, enhance work immersion experiences, and promote competency-based training aligned with labor market needs. The study contributes empirical evidence on the employability of SHS-TVL graduates in rural and semi-urban communities and provides practical recommendations for educational institutions, policymakers, industry partners, and local government units to improve school-to-work transition and graduate employment outcomes.

Keywords: Senior High School graduates, Technical-Vocational-Livelihood, employability, employment factors, work immersion, industry linkages, Pangasinan

INTRODUCTION

Graduate employability has become a major indicator of educational quality and workforce readiness in the 21st century. Rapid technological advancement, globalization, and the Fourth Industrial Revolution (Industry 4.0) have transformed labor market demands, requiring graduates to possess not only occupation-specific technical competencies but also transferable skills such as communication, critical thinking, collaboration, adaptability, and digital literacy (International Labor Organization [ILO], 2024; UNESCO, 2023). In response, governments and educational institutions have strengthened Technical and Vocational Education and Training

(TVET) systems through competency-based curricula, authentic workplace learning, and closer collaboration with industry. Nevertheless, youth unemployment, underemployment, and skills mismatch remain persistent global concerns, suggesting that successful school-to-work transition depends on the interaction of educational preparation, institutional support, labor market conditions, and socio-economic factors rather than technical training alone (Organization for Economic Co-operation and Development [OECD], 2025; World Bank, 2023).

In the Philippines, the K to 12 Basic Education Program introduced the Senior High School (SHS) Technical-Vocational-Livelihood (TVL) Track to prepare learners for employment, entrepreneurship, and lifelong learning. Implemented through the Department of Education (DepEd) in partnership with the Technical Education and Skills Development Authority (TESDA), the program provides competency-based instruction, national certification opportunities, and mandatory work immersion to facilitate graduates' transition into the workforce. Despite these reforms, employment outcomes among SHS-TVL graduates continue to present challenges. National labor statistics indicate that youth unemployment and underemployment remain prevalent, and many young workers are employed in occupations unrelated to their acquired competencies (Philippine Statistics Authority [PSA], 2026). Previous studies also emphasize that employers value practical experience, adaptability, communication skills, work ethic, and problem-solving abilities alongside technical qualifications (O'Reilly, 2023; Rowe & Zegwaard, 2023).

Several determinants of graduate employability identified include technical skills competency, employability skills, work immersion experience, curriculum relevance, industry linkages, career guidance, labor market alignment, and socio-economic conditions (Kayyali, 2025; World Bank, 2022; Asian Development Bank [ADB], n.d.). High-quality work immersion enables learners to apply classroom learning in authentic workplace settings, while effective school-industry partnerships improve curriculum responsiveness and employment opportunities.

These concerns are particularly relevant in Pangasinan, where the local economy is largely driven by agriculture, fisheries, tourism, microenterprises, and service-oriented industries. Although these sectors provide employment opportunities, jobs directly aligned with the competencies developed through the SHS-TVL curriculum remain limited, particularly in rural and semi-urban municipalities. As a result, many graduates experience unemployment or underemployment, accept work unrelated to their specialization, or pursue additional training to improve their employability.

Despite the growing body of research on graduate employability, important gaps remain. Most previous studies have focused on higher education graduates, post-secondary technical-vocational institutions, or national labor market conditions, with relatively limited attention given to SHS-TVL graduates. Moreover, existing investigations have typically examined individual employability determinants independently rather than exploring the combined influence of these factors within a single analytical framework. Empirical evidence from rural and semi-urban settings, such as Pangasinan, also remains limited, and few studies have translated research findings into localized interventions that directly address the employment realities of SHS-TVL graduates.

Addressing these gaps, this study examined the factors influencing the employment of SHS-TVL graduates in the Sixth District of Pangasinan. By investigating the combined effects of educational, institutional, labor market, and socio-economic factors, the study contributes to the growing body of literature on graduate employability and provides empirical evidence to support curriculum enhancement, stronger school-industry collaboration, improved career guidance services, and evidence-based employment interventions for SHS-TVL graduates.

Statement of the Problem

This study aimed to examine the factors influencing the employment of Senior High School (SHS) graduates under the Technical-Vocational-Livelihood (TVL) Track in Pangasinan, Philippines.

Specifically, it sought to answer the following questions:

1. What is the profile of senior high school graduates in terms of:
 - a. Age;
 - b. Sex;
 - c. Marital status;
 - d. Location;
 - e. TVL strand/specialization;
 - f. Year Graduated;
 - g. Type of school graduated from;
 - h. Number of relevant seminars or training attended;
 - i. Average family monthly income; and
 - j. Employment status?
2. What is the level of the following factors affecting the employment of Senior High School graduates as perceived by themselves and the teachers in terms of:
 - a. Technical skills competency;
 - b. Work immersion experience;
 - c. Employability skills;
 - d. Availability of local job opportunities;
 - e. Alignment of training with labor market needs;
 - f. Industry linkages and partnerships;
 - g. Career guidance and employment support; and
 - h. Socio-economic factors?
3. What are the problems encountered in the employment of senior high school graduates?
4. Is there a significant relationship between the level of the following factors affecting the employment of Senior High School graduates and their profile variables?
5. Based on the findings of the study, what employment enhancement plan can be proposed to address the employment gap among senior high school graduates under the Technical-Vocational-Livelihood track?

Scope and Delimitations of the Study

This study examined the factors affecting the employment of Senior High School (SHS) graduates under the Technical-Vocational-Livelihood (TVL) track in the Sixth District of Pangasinan. It involved graduates from selected public and private secondary schools who completed the TVL program from 2020 to 2023. The study focused on eight employment-related factors: technical skills competency, work immersion experience, employability skills, availability of local job opportunities, alignment of training with labor market needs, industry linkages and partnerships, career guidance and employment support, and socio-economic factors.

The concept of employment gap was limited to unemployment, underemployment, and job mismatch among SHS-TVL graduates. The study excluded graduates from other Senior High School tracks and was confined to selected schools within the Sixth District of Pangasinan. Findings were based on self-reported responses and did not include employer perspectives, labor market demand data, or broader macroeconomic factors. Consequently, the results and the

proposed Employment Enhancement Action Plan are context-specific and may require further validation before application to other settings.

Review of Related Literature and Studies

This section reviews the literature relevant to the employability of SHS-TVL graduates. It also presents empirical studies supporting the variables investigated and identifies the research gap addressed by the present study.

Technical-Vocational Education and Graduate Employability

Industry 4.0 has significantly transformed labor market requirements, increasing the demand for graduates who possess both technical expertise and transferable skills such as communication, critical thinking, adaptability, teamwork, and digital literacy (Turcan & Pojar, 2024; UNESCO, 2023). Consequently, TVET has shifted from preparing learners solely for occupation-specific tasks toward developing competencies that support lifelong employability in technology-driven workplaces (OECD, 2023).

In the Philippines, the K to 12 TVL Track was introduced to equip learners with industry-relevant competencies through competency-based instruction, national certification, and work immersion. Supported by the DepEd and TESDA, the program aims to prepare graduates for employment, entrepreneurship, or further technical education. However, evidence suggests that technical competence alone is insufficient for successful employment. Employers value graduates who demonstrate workplace readiness, communication skills, adaptability, and continuous learning (ILO, 2024; World Bank, 2023).

Graduate employability is therefore viewed as a multidimensional construct influenced by technical skills, employability skills, work immersion, curriculum relevance, industry collaboration, career guidance, and socio-economic conditions (Römgens et al., 2021; Agel-Urdinola, 2024).

Employment Gap and Labor Market Mismatch

Despite government initiatives to strengthen TVET, unemployment, underemployment, and skills mismatch remain major concerns among young graduates. Labor market mismatch occurs when graduates' competencies do not correspond with employer requirements, resulting in delayed employment or work unrelated to educational preparation (OECD, 2021; ILO, 2023).

The Philippine labor market reflects similar challenges. Recent labor statistics indicate that many SHS graduates remain unemployed or work outside their specialization because of limited opportunities, changing industry requirements, and insufficient work experience (PSA, 2026; DOLE, 2026). Technological change and automation have also increased employer expectations for digital competence, problem-solving, and adaptability (World Economic Forum, 2025).

Employment outcomes are also affected by regional economic conditions. Rural and semi-urban communities often provide fewer industry opportunities, limiting employment options for TVL graduates and contributing to migration and underemployment (NEDA, n.d.; UNDP, 2022).

Career Guidance, Industry Linkages, and Employment Support

Career guidance, work immersion, and industry partnerships facilitate graduates' transition from school to work. Effective career guidance helps students understand labor market opportunities and develop employment readiness, while meaningful work immersion strengthens technical competence, workplace behavior, and professional confidence (DepEd, 2022; Rowe & Zegwaard, 2017).

Industry partnerships also improve curriculum relevance by ensuring that schools respond to evolving workforce requirements. Collaboration among schools, industries, TESDA, and government agencies enhances work-based learning, competency certification, and employment opportunities (ADB, 2022; World Bank, 2022). However, the effectiveness of these initiatives depends on the availability of local industries, institutional resources, and sustained stakeholder collaboration.

Empirical Studies

Recent international and Philippine studies consistently identify employability as a multidimensional outcome influenced by educational preparation and external labor market conditions. International research has shown that employability skills, curriculum responsiveness, work-integrated learning, industry collaboration, and socio-economic factors significantly affect graduate employment (Kayyali, 2025; Daka et al., 2023; Agrawal & Dasgupta, 2020; Nghia et al., 2022).

Similarly, Philippine studies report that although the SHS-TVL curriculum enhances workforce preparation, graduates continue to experience employment challenges due to skills mismatch, limited work experience, weak industry partnerships, inadequate career guidance, and restricted local employment opportunities (Edralin & Pastrana, 2023; Relajo-Howell, 2024; Alinea et al., 2024; Jaime, 2023; Loquias & Bauyot, 2024; Valerio & Accad, 2025).

These findings support the inclusion of technical skills competency, employability skills, work immersion, labor market alignment, industry partnerships, career guidance, local job opportunities, and socio-economic factors as determinants of employment among SHS-TVL graduates.

Synthesis and Research Gap

The reviewed literature consistently demonstrates that graduate employability is influenced by the interaction of technical competencies, employability skills, work immersion, labor market alignment, industry partnerships, career guidance, and socio-economic conditions. While previous studies have examined these variables individually or within broader national contexts, limited research has investigated their combined influence among SHS-TVL graduates in the Sixth District of Pangasinan.

Furthermore, few studies have translated empirical findings into localized employment interventions. This study addresses these gaps by examining the multidimensional factors affecting the employment of SHS-TVL graduates within a single analytical framework and by developing an Employment Enhancement Action Plan grounded in the study findings.

Theoretical Framework

This study is anchored on three complementary theories that explain the factors influencing the employment of SHS graduates under the TVL Track: Human Capital Theory, Employability Theory, and Person–Environment Fit Theory.

The primary theoretical foundation of this study is Human Capital Theory, developed by Gary Becker (1964), which posits that education, training, and skills development constitute investments that enhance individuals' productivity and employability. The theory argues that individuals who acquire relevant knowledge, technical competencies, and workplace skills are more likely to obtain productive employment and contribute to economic development. Within the context of the SHS-TVL program, the theory supports the premise that competency-based instruction, technical skills development, and work immersion experiences strengthen graduates' workforce readiness and improve their transition from school to employment.

Complementing this perspective is the Employability Theory of McQuaid and Lindsay (2005), which conceptualizes employability as a multidimensional construct influenced by individual attributes, personal circumstances, and external labor market conditions. Beyond technical qualifications, the theory recognizes the importance of transferable skills, career guidance, socio-economic circumstances, and employment opportunities in determining an individual's capacity to obtain and sustain meaningful work. This framework provides theoretical support for examining employability skills, career guidance and employment support, socio-economic factors, and the availability of local job opportunities as significant determinants of employment among SHS-TVL graduates.

The study is further informed by Person–Environment Fit Theory, originally proposed by Holland (1997), which explains that successful employment outcomes occur when individuals' competencies, interests, and abilities correspond with the demands and expectations of their work environment. The theory emphasizes the importance of aligning educational preparation with labor market requirements to achieve favorable employment outcomes. In this study, Person–Environment Fit Theory supports the inclusion of labor market alignment, industry linkages and partnerships, and work immersion experience as essential factors that facilitate the compatibility between graduates' competencies and employers' expectations.

Conceptual Framework

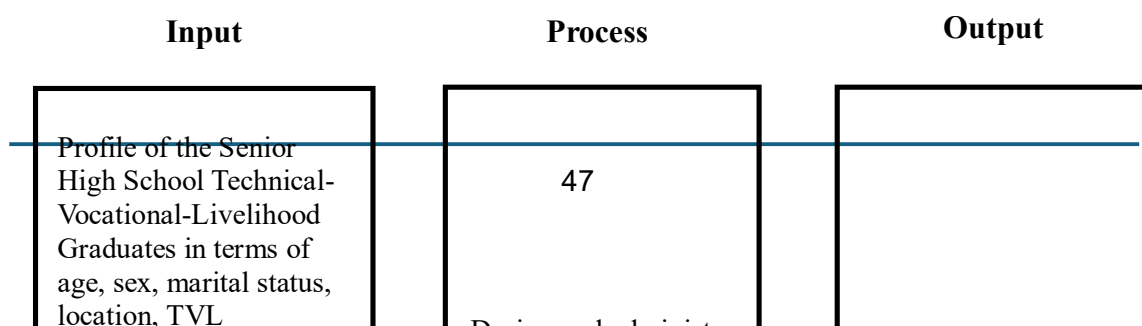
This study adopts the Input–Process–Output (IPO) Model as its conceptual framework to illustrate the systematic flow of the investigation into the factors influencing the employment of SHS graduates under the TVL Track in the Sixth District of Pangasinan.

The **Input** component consists of the respondents' demographic characteristics, including age, sex, marital status, municipality of residence, TVL specialization, year of graduation, type of secondary school attended, seminars and training attended, family monthly income, and employment status. It also includes the eight determinants of graduate employment examined in this study.

The **Process** component encompasses the systematic collection, organization, and analysis of data to determine the relationships between the identified variables and the employment outcomes of SHS-TVL graduates. Using appropriate quantitative research procedures, the study examines how the identified determinants influence graduate employment and identifies the employment-related challenges encountered by the respondents. The findings serve as the empirical basis for interpreting the relationships among the study variables.

The **Output** component is the development of an Employment Enhancement Action Plan designed to strengthen the employability of SHS-TVL graduates. The proposed action plan is anchored on the significant findings of the study and recommends strategies for enhancing technical-vocational instruction, improving work immersion programs, strengthening school-industry partnerships, reinforcing career guidance services, and addressing socio-economic barriers that affect graduates' transition from school to work.

Figure 1 illustrates the conceptual framework of the study using the Input–Process–Output (IPO) model.



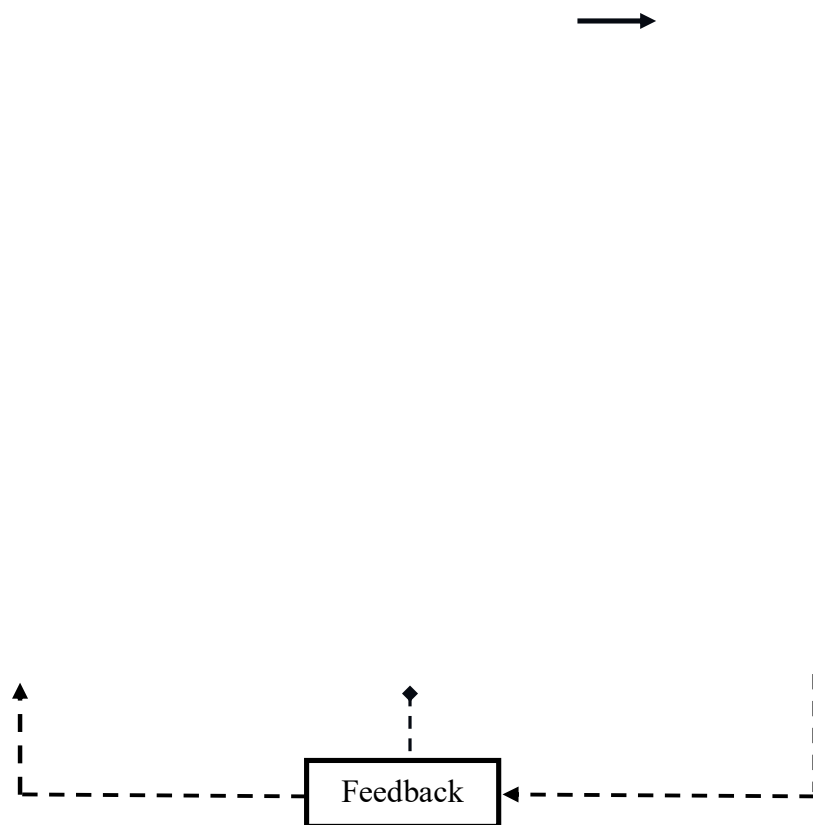


Figure 1. Paradigm of the Study

METHODOLOGY

This section describes the research design, participants, research instrument, data collection procedures, statistical analyses, and ethical considerations adopted in the study.

Research Design

A quantitative descriptive-correlational research design was employed. The descriptive component determined the respondents' profile, assessed the factors affecting employment, and identified employment-related challenges, while the correlational component examined the relationships between selected profile variables and the identified employment factors.

Research Steps

The study began with a review of related literature to establish the research framework and develop the survey questionnaire. The instrument underwent expert validation before administration. After securing the necessary approvals, data were collected from qualified SHS-TVL graduates, encoded, and analyzed statistically. The findings served as the basis for the proposed Employment Enhancement Action Plan.

Data Collection and Sample Selection

The respondents consisted of 200 SHS-TVL graduates from selected public and private secondary schools in the Sixth District of Pangasinan who graduated from 2019-2023. Participants represented the Home Economics, Information and Communications Technology, Industrial Arts, and Agri-Fishery Arts specializations. Because no consolidated database of TVL graduates was available, respondents were identified through school records, alumni networks, and referrals based on the study's inclusion criteria.

Data were gathered using a validated researcher-made questionnaire consisting of three sections: (1) respondents' profile, (2) factors affecting employment across eight dimensions, and (3) employment-related problems. The second section used a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

Data Analysis Methods

Descriptive statistics, including frequency, percentage, and weighted mean, were used to summarize the respondents' profile, employment-related problems, and perceived employment factors. Inferential statistics such as Chi-square Test of Independence, Pearson Product-Moment Correlation, Spearman Rank-Order Correlation, and Point-Biserial Correlation were used to determine significant relationships among variables. All hypotheses were tested at the 0.05 level of significance.

Research Hypothesis and Validation

The study tested the null hypothesis that no significant relationship exists between the respondents' profile variables and the factors affecting employment. The survey instrument underwent expert validation to ensure content validity and clarity prior to data collection.

Study Limitations and Ethical Considerations

The study was limited to 200 SHS-TVL graduates from selected public and private schools in the Sixth District of Pangasinan; thus, the findings should be interpreted within this context.

Ethical standards were strictly observed. Approval was obtained from the appropriate authorities and the university research ethics committee. Participation was voluntary, informed consent was secured, and respondents' anonymity and confidentiality were protected. All data

were used solely for academic purposes and managed in accordance with research ethics and data privacy guidelines.

RESULTS AND DISCUSSION

Summary of the Level of the Factors Affecting the Employment of Senior High School Graduates

Table 1 summarizes the respondents' assessment of the factors affecting the employment of SHS-TVL graduates. The overall mean of 4.25 (High Perceived Effect) indicates that all identified factors were perceived to significantly influence graduates' employment outcomes.

Table 1
Summary of the Level of the Factors Affecting the Employment of
Senior High School Graduates
***n* = 200**

Domain		Mean	Description
A.	Technical skills competency	4.21	High Perceived Effect
B.	Work Immersion Experience	4.32	High Perceived Effect
C.	Employability Skills	4.34	High Perceived Effect
D.	Availability of Local Job Opportunities	4.12	High Perceived Effect
E.	Alignment of Training with Labor Market Needs	4.26	High Perceived Effect
F.	Industry Linkages and Partnerships	4.27	High Perceived Effect
G.	Career Guidance and Employment Support	4.25	High Perceived Effect
H.	Socio-Economic Factors	4.25	High Perceived Effect
Overall Mean		4.25	High Perceived Effect
4.51 – 5.00	Very High Effect	1.51 – 2.50	Low Effect
3.51 – 4.50	High Effect	1.00 – 1.50	Very Low Effect
2.51 – 3.50	Moderate Effect		

Among the eight domains, Employability Skills obtained the highest mean (4.34), followed by Work Immersion Experience (4.32), Industry Linkages and Partnerships (4.27), Alignment of Training with Labor Market Needs (4.26), Career Guidance and Employment Support (4.25), Socio-Economic Factors (4.25), Technical Skills Competency (4.21), and Availability of Local Job Opportunities (4.12). Although all domains were rated as having a High Perceived Effect, the results indicate that respondents placed greater importance on workplace readiness, employability skills, and school-industry collaboration.

The findings suggest that employability is influenced by a combination of individual competencies, practical training, institutional support, and labor market conditions. While Availability of Local Job Opportunities received the lowest mean, it remained a significant factor, highlighting that employment outcomes depend not only on graduates' competencies but also on the availability of relevant jobs within the locality. This finding is consistent with Loquias and Bauyot (2024), who emphasized that local labor market opportunities play a critical role in graduate employment.

Problems Encountered in the Employment of Senior High School Graduates

Table 2 presents the employment-related problems encountered by SHS-TVL graduates. The findings indicate that the most common challenges are associated with labor market conditions rather than deficiencies in graduates' competencies.

Table 2
Problems Encountered in the Employment of Senior High School Graduates
n=200

Problems Encountered	Frequency	Percent	Rank
1. Limited job opportunities related to my TVL strand or specialization	92	46.0	1
2. Lack of available job vacancies within the locality.	86	43.0	2
3. Lack of work experience required by employers despite completing work immersion.	85	42.5	3
4. Low salary offers or unfavorable employment conditions.	79	39.5	4
5. Employers' preference for applicants with prior work experience.	67	33.5	5
6. Financial constraints that limit job searching, transportation, or compliance with employment requirements.	66	33.0	6
7. Competition with college graduates and other job applicants.	64	32.0	7
8. Family responsibilities or personal circumstances affecting employment decisions.	59	29.5	8
9. Limited partnerships between schools and industries that could provide employment opportunities.	58	29.0	9
10. Misalignment between the competencies acquired in school and current labor market requirements.	54	27.0	10
11. Insufficient career guidance, job placement assistance, or employment support from the school.	49	24.5	11.5
12. Limited information regarding available employment opportunities and recruitment activities.	49	24.5	11.5
13. Insufficient technical skills required by employers.	45	22.5	13
14. Inadequate employability skills such as communication, teamwork, problem-solving, or adaptability.	40	20.0	14.5
15. Limited access to skills training, professional certifications, or competency enhancement programs after graduation.	40	20.0	14.5

The most frequently reported problem was limited job opportunities related to the respondents' TVL specialization (92; 46.0%), followed by lack of available job vacancies within the locality (86; 43.0%) and lack of work experience required by employers despite completing work immersion (85; 42.5%). These findings suggest that although graduates possess relevant technical competencies, many struggle to secure employment aligned with their specialization due to limited local opportunities and employers' preference for applicants with prior work experience. Similar findings were reported by Kayyali (2025) and Relajo-Howell (2024), who identified labor market mismatch and limited specialization-related employment as persistent barriers to graduate employability.

Other commonly reported challenges included low salary offers or unfavorable employment conditions (79; 39.5%), employers' preference for experienced applicants (67; 33.5%), financial constraints affecting job search (66; 33.0%), and competition with college

graduates (64; 32.0%). These findings highlight the influence of economic and labor market conditions on graduates' employment outcomes.

The least reported concerns were insufficient career guidance or job placement assistance and limited employment information (both 49; 24.5%), insufficient technical skills (45; 22.5%), and inadequate employability skills and limited access to post-graduation training (both 40; 20.0%). The relatively low frequencies of these concerns are consistent with the earlier findings, where respondents rated technical skills, employability skills, work immersion, and career guidance as having a High Perceived Effect on employment.

Relationship Between the Level of Factors Affecting the Employment of Senior High School Graduates and Their Profile Variables (Part 1)

Table 3 shows that age, marital status, and year graduated were not significantly related to any employment factor or the overall mean ($p > .05$), indicating that these variables did not influence graduates' perceptions.

Table 3
Relationship Between the Level of Factors Affecting the Employment of
Senior High School Graduates and Their Profile Variables (Part 1)
***n* = 200**

Profile	Level of Factors Affecting the Employment									Overall Mean
		Technical skills competency	Work Immersion Experience	Employability Skills	Availability of Local Job Opportunities	Alignment of Training with Labor Market Needs	Industry Linkages and Partnerships	Career Guidance and Employment Support	Socio-Economic Factors	
Age	r_s	0.031	0.068	0.111	0.001	0.071	0.071	0.006	0.064	0.036
	Sig.	0.661	0.341	0.117	0.989	0.319	0.317	0.932	0.369	0.610
Sex	r_{pb}	-0.174*	-0.140*	-0.089	-0.139	-0.149*	-0.079	-0.122	-0.143*	0.144*
	Sig.	0.014	0.048	0.212	0.050	0.036	0.268	0.086	0.044	0.042
Marital Status	r_{pb}	-0.069	0.002	0.007	-0.077	-0.085	-0.056	-0.025	-0.045	-0.049
	Sig.	0.331	0.980	0.924	0.279	0.233	0.432	0.723	0.530	0.490
Year Graduated	r_s	-0.009	0.017	-0.010	0.023	-0.017	-0.053	0.033	0.007	0.012
	Sig.	0.897	0.812	0.890	0.742	0.813	0.458	0.639	0.921	0.862
Type of School Graduated	r_{pb}	0.054	0.148*	0.068	0.060	0.050	0.035	0.055	0.063	0.074
	Sig.	0.448	0.036	0.339	0.395	0.483	0.618	0.441	0.374	0.300
Relevant Seminars/Trainings Attended	r_s	0.111	0.056	0.100	0.174*	0.131	0.168*	0.136	0.107	0.131
	Sig.	0.116	0.432	0.157	0.014	0.064	0.017	0.055	0.131	0.063
Average Family Income	r_s	0.091	0.098	0.214**	0.129	0.153*	0.135	0.158*	0.188**	0.132
	Sig.	0.199	0.168	0.002	0.068	0.030	0.056	0.026	0.008	0.063

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

*. Correlation is significant at the 0.05 level (2-tailed).

Note: Sex (1=Male, 2=Female), Marital Status (1=Male, 2=Female), and Type of School Graduated (1= Public Senior High School, 2= Private Senior High School)

In contrast, sex exhibited weak but significant negative relationships with technical skills competency ($r = -0.174$, $p = .014$), work immersion experience ($r = -0.140$, $p = .048$), alignment of training with labor market needs ($r = -0.149$, $p = .036$), socio-economic factors ($r = -0.143$, $p = .044$), and the overall mean ($r = -0.144$, $p = .042$). These findings suggest that male graduates generally rated these employment factors more favorably than female graduates, consistent with

Edralin and Pastrana (2023) and the International Labour Organization (2024), which noted that labor market opportunities often vary by gender.

The type of school graduated from was significantly associated only with work immersion experience ($r = 0.148$, $p = .036$), indicating that graduates from private schools perceived more favorable work immersion experiences, supporting the importance of strong school-industry partnerships in work-integrated learning (Rowe & Zegwaard, 2017).

Attendance in relevant seminars and training showed significant positive relationships with the availability of local job opportunities ($r = 0.174$, $p = .014$) and industry linkages and partnerships ($r = 0.168$, $p = .017$), supporting Becker's Human Capital Theory (1964) that investments in education and training enhance employability. Likewise, average family income was positively associated with employability skills ($r = 0.214$, $p = .002$), alignment of training with labor market needs ($r = 0.153$, $p = .030$), career guidance and employment support ($r = 0.158$, $p = .026$), and socio-economic factors ($r = 0.188$, $p = .008$). Although these relationships were weak, they suggest that graduates from higher-income families perceived these employment factors more positively, consistent with the Employability Theory of McQuaid and Lindsay (2005).

Relationship Between the Level of Factors Affecting the Employment of Senior High School Graduates and Their Profile Variables (Part 2)

Table 4 shows that location was significantly associated with technical skills competency ($\chi^2 = 7.848$, $p = .020$, Cramer's $V = 0.198$) and alignment of training with labor market needs ($\chi^2 = 6.259$, $p = .044$, Cramer's $V = 0.177$), although both relationships were weak.

Table 4
Relationship Between the Level of Factors Affecting the Employment of
Senior High School Graduates and Their Profile Variables (Part 2)
 $n=200$

Profile	Level of Factors Affecting the Employment								Overall Mean
		Technical skills competency	Work Immersion Experience	Employability Skills	Availability of Local Job Opportunities	Alignment of Training with Labor Market Needs	Industry Linkages and Partnerships	Career Guidance and Employment Support	
Location	χ^2	7.848*	0.268	5.120	2.696	6.259	5.609	1.923	3.338
	CV	0.198	0.037	0.160	0.116	0.177	0.167	0.098	0.129
	Sig.	0.020	0.875	0.077	0.260	0.044	0.061	0.382	0.188
Employment Status	χ^2	0.094	0.033	0.038	1.391	0.153	2.315	0.469	1.182
	CV	0.022	0.013	0.014	0.083	0.028	0.108	0.048	0.100
	Sig.	0.759	0.856	0.846	0.238	0.696	0.128	0.494	0.277
TVL Strand/Specialization	χ^2	8.205	5.693	14.793*	3.216	6.367	2.061	4.422	5.422
	CV	0.191	0.153	0.217	0.124	0.167	0.100	0.148	0.169
	Sig.	0.063	0.195	0.024	0.381	0.132	0.573	0.224	0.198

*. Correlation is significant at the 0.05 level (2-tailed).

CV=Cramer's V

Note: Location (1=Northern Cluster, 2=Central Cluster, 3=Southern Cluster), Employment Status (1=Employed, 2=Unemployed), and TVL Strand/Specialization (1= Home Economics, 2= Information and Communications Technology, 3= Industrial Arts, 4= Agri-Fishery Arts)

These findings suggest that graduates from different geographical clusters differed in their perceptions of these employment factors, possibly due to variations in local industries, employment opportunities, and access to learning resources. This supports the findings of Loquias and Bauyot (2024), who emphasized that local labor market conditions influence graduates' perceptions of workforce readiness and employment opportunities.

TVL strand/specialization was significantly associated only with employability skills ($\chi^2 = 14.793$, $p = .024$, Cramer's $V = 0.217$), indicating weak but significant differences across specializations. Graduates from different TVL strands may prioritize employability skills

differently depending on workplace expectations. Nevertheless, employability skills remain essential across all specializations, consistent with Agrawal and Dasgupta (2020), who highlighted communication, teamwork, professionalism, adaptability, and critical thinking as transferable competencies valued across industries.

No significant relationships were found between employment status and any employment factor or the overall mean ($p > .05$), suggesting that employed and unemployed graduates shared similar perceptions regarding the factors affecting employment. This implies that employment outcomes are influenced more by external labor market conditions, such as job availability and employer requirements, than by graduates' employment status alone.

PROPOSED EMPLOYMENT ENHANCEMENT ACTION PLAN FOR SENIOR HIGH SCHOOL TVL GRADUATES

I. Rationale

The proposed Employment Enhancement Action Plan was developed based on the study's findings, which revealed that the employability of SHS-TVL graduates is influenced by technical competencies, employability skills, work immersion, curriculum alignment, industry partnerships, career guidance, socio-economic conditions, and local employment opportunities. The study also identified key employment challenges, including limited specialization-related jobs, inadequate local employment opportunities, employer preference for experienced applicants, and employment mismatch. In response, the action plan provides strategic interventions that strengthen school-industry collaboration, improve workforce readiness, enhance career support services, and promote stronger alignment between TVL education and labor market needs.

II. Guiding Principles

The implementation of the proposed Employment Enhancement Action Plan shall be guided by the following principles:

-  **Industry Relevance** – ensuring that TVL programs remain responsive to current and emerging workforce needs.
-  **Collaboration** – strengthening partnerships among schools, industries, government agencies, and community stakeholders.
-  **Technology Integration** – promoting digital employability and Industry 4.0 competencies.
-  **Equity and Inclusiveness** – providing employment support opportunities regardless of graduates' socio-economic background.
-  **Continuous Improvement** – utilizing graduate tracer studies and evidence-based evaluation to improve program implementation.

III. General Objective

To enhance the employability and employment outcomes of SHS-TVL graduates through collaborative, labor market-responsive, and technology-supported interventions involving educational institutions, industry partners, government agencies, and other stakeholders.

IV. Specific Objectives

- Strengthen school-industry partnerships to expand work immersion, apprenticeship, and employment opportunities.

- Improve curriculum responsiveness by aligning TVL competencies with current labor market and Industry 4.0 requirements.
- Enhance career guidance, employment preparation, and job placement services through technology-assisted career development.
- Increase graduates' technical competencies and industry-recognized certifications through competency enhancement programs.
- Improve the quality and relevance of work immersion experiences aligned with TVL specializations.
- Expand employment support services that address socio-economic barriers affecting graduates.
- Institutionalize graduate tracer studies and labor market monitoring to support continuous program improvement.

V. Employment Enhancement Action Plan Matrix

The Employment Enhancement Action Plan serves as a strategic framework for Senior High Schools offering the TVL track. It integrates school-industry partnerships, strengthened work immersion, career guidance, competency enhancement, graduate tracking, and technology-supported employment services to improve graduates' transition from school to work. The plan likewise promotes collaboration among schools, industries, TESDA, DOLE, PESO, local government units, and other stakeholders to ensure that TVL programs remain responsive to evolving labor market demands and contribute to improved graduate employability.

EMPLOYMENT ENHANCEMENT ACTION PLAN MATRIX

Priority Area	Strategic Objective	Program / Project	Key Activities	Technology Integration	Means of Verification / Data Source	SMART Performance Indicator	Persons Responsible	Timeline
Industry Linkages	Expand sustainable industry partnerships	TVL Industry Alliance	MOAs, employer forum, advisory board, annual skills consultation	Digital partnership database	Signed MOAs, attendance sheets, employer reports	Increase active industry partners from current baseline to at least 15 within one year	Principal, SHS Head, TVL Coordinator	Year-round
Local Employment	Increase graduate employment opportunities	Local Employment Caravan	Job fairs, PESO recruitment, employer matching	Online job portal and digital vacancy board	PESO placement records, employer reports	Increase graduate employment rate by 20% within one year	PESO, Guidance Office	Semiannual
Experience Gap	Improve workplace readiness	Extended Immersion Plus	Internship, apprenticeship, alumni mentoring	Digital internship logbook	Employer evaluation forms, immersion reports	At least 90% of participating graduates receive satisfactory employer ratings annually	Industry Partners	Annual
Career Support	Enhance employability preparation	Career Readiness and Digital Employability Program	Resume writing, mock interviews, LinkedIn optimization, ATS simulation, digital credential orientation	AI-assisted resume screening, ATS simulators, LinkedIn Learning, TESDA digital badges	Attendance records, competency assessments, participant portfolios	100% of graduating TVL learners complete AI-based resume screening and ATS workshop before graduation	Guidance Office, ICT Coordinator	Quarterly
Curriculum Alignment	Maintain curriculum responsiveness	Curriculum Review and Industry Consultation	Competency mapping, employer consultation	Labor market analytics dashboard	Curriculum review reports	Curriculum reviewed annually with at least 80% employer satisfaction	School Industry Board	Annual
Certification	Increase industry-recognized credentials	Skills Passport Program	TESDA NC assessment, microcredentials, digital badges	TESDA Online Program, digital credential platforms	TESDA certification records	Increase certified graduates by 25% annually	TVL Teachers, TESDA	Annual
Equity	Reduce socio-economic barriers	Employment Assistance Fund	Transportation subsidy, document assistance	Online application system	Beneficiary records	Assist at least 50 economically disadvantaged	LGU, School	As Needed

Factors Affecting the Employment of Senior High School Graduates Under the Technical-Vocational-Livelihood Track in the 6th District of Pangasinan
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						graduates annually		
Graduate Monitoring	Institutionalize evidence-based decision-making	Graduate Tracking System	Annual tracer study, employer survey, labor market analysis	Online graduate tracer system and employment dashboard	Tracer reports, employer surveys	Achieve at least 85% tracer response rate annually	Research Coordinator, ICT Coordinator	Annual

VI. Monitoring and Evaluation

The implementation of the proposed Employment Enhancement Action Plan shall be monitored through a results-based monitoring and evaluation framework. Baseline data shall first be established using graduate tracer study results, employment records, TESDA certification reports, and employer feedback collected before program implementation. Thereafter, quarterly and annual monitoring shall be conducted to assess progress toward the established SMART performance indicators.

Data shall be collected through graduate tracer surveys, employer satisfaction surveys, industry partner reports, TESDA certification records, attendance records from career development activities, and employment placement reports from PESO and partner industries. The collected information shall be analyzed by the school research coordinator and the TVL coordinators to determine program effectiveness, identify implementation gaps, and recommend necessary improvements.

Program success shall be evaluated using the following key performance indicators (KPIs):

- Graduate employment rate
- Percentage of graduates employed in TVL-related occupations
- TESDA National Certification pass rate
- Number of active industry partners
- Employer satisfaction rating
- Graduate tracer response rate
- Participation rate in career readiness activities
- Number of graduates completing AI-enabled employment preparation workshops
- Percentage of graduates with digital portfolios and ATS-compliant résumés

Annual evaluation results shall serve as the basis for revising the action plan to ensure its continued relevance to changing labor market demands and emerging Industry 4.0 workforce requirements.

VII. Expected Outcomes

- ✓ Increased employment rate among SHS-TVL graduates within one year after graduation.
- ✓ Increased proportion of graduates employed in occupations aligned with their TVL specialization.
- ✓ Expanded and sustained school-industry partnerships that provide quality work immersion, internship, and employment opportunities.

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- ✓ Improved graduate competencies through increased participation in TESDA National Certification, micro-credentialing, and other industry-recognized training programs.
 - ✓ Enhanced career readiness through AI-enabled employment preparation, ATS-friendly résumé development, digital portfolio creation, and digital credential utilization.
 - ✓ Reduced employment barriers among economically disadvantaged graduates through targeted employment support initiatives.
 - ✓ Institutionalized graduate tracer studies and labor market monitoring systems that generate reliable data for continuous curriculum improvement and strategic decision-making.

SUMMARY

This study examined the factors affecting the employment of Senior High School Technical-Vocational-Livelihood (TVL) graduates in the Sixth District of Pangasinan. Using a descriptive-correlational design, data were collected from 200 TVL graduates through a validated questionnaire and analyzed using descriptive and inferential statistics.

The respondents were predominantly female, single, aged 21–24 years, graduates of the Home Economics specialization, and mostly from public senior high schools. Many belonged to Batch 2023, had attended one to three relevant seminars or trainings, came from families with monthly incomes below ₱10,000, and were employed in jobs not directly related to their TVL specialization.

All eight employment factors were rated as having a High Perceived Effect (overall mean = 4.25). Among the domains, Employability Skills obtained the highest mean (4.34), followed by Work Immersion Experience (4.32), Industry Linkages and Partnerships (4.27), Alignment of Training with Labor Market Needs (4.26), Career Guidance and Employment Support and Socio-Economic Factors (4.25 each), Technical Skills Competency (4.21), and Availability of Local Job Opportunities (4.12).

The most frequently reported employment problems were limited job opportunities related to graduates' TVL specialization (46.0%), lack of local job vacancies (43.0%), and insufficient work experience required by employers despite completing work immersion (42.5%). Other concerns included low salary offers, employers' preference for experienced applicants, financial constraints, competition with college graduates, and limited school-industry partnerships.

Correlation analyses revealed that age, marital status, year graduated, and employment status were not significantly related to the employment factors ($p > .05$). However, sex, type of school graduated from, attendance in relevant seminars or trainings, average family income, location, and TVL strand/specialization showed significant relationships with selected employment domains, indicating that educational and socio-economic characteristics influenced graduates' perceptions of employability.

Based on these findings, an Employment Enhancement Action Plan was developed to strengthen school-industry partnerships, improve work immersion and career guidance, align the curriculum with labor market needs, expand competency enhancement opportunities, increase local employment linkages, address socio-economic barriers, and establish a sustainable graduate employment monitoring and support system.

CONCLUSIONS

Based on the findings of the study, the following conclusions were drawn:

1. The employment outcomes of SHS-TVL graduates are influenced not only by the competencies acquired in school but also by the interaction of educational preparation, labor market conditions, and socio-economic circumstances. This suggests that employability is a multidimensional construct that extends beyond individual capability.
2. The consistently high ratings across all employment factors indicate that graduates recognize both school-based interventions and workplace-related experiences as essential in facilitating their transition to employment. This implies that effective TVL education requires the integration of technical competence, employability skills, industry exposure, curriculum relevance, and career support.
3. The predominance of labor market-related problems, such as limited specialization-related jobs, insufficient local employment opportunities, and employers' preference for experienced applicants, indicates that employment challenges are largely structural rather than instructional. This suggests that improving graduate employability requires stronger alignment between education and labor market demands.
4. The significant relationships observed between selected profile variables and specific employment factors imply that employability is influenced by educational experiences and socio-economic contexts. However, the generally weak associations indicate that these characteristics explain only a limited portion of graduates' employment perceptions. Moreover, conclusions regarding differences among TVL specializations should be interpreted cautiously because the Agri-Fishery Arts strand had limited representation in the sample.
5. The findings underscore the importance of sustained collaboration among educational institutions, industries, government agencies, and other stakeholders in creating responsive school-to-work transition mechanisms that can enhance employment opportunities for SHS-TVL graduates.

RECOMMENDATIONS

In light of the conclusions of the study, the following recommendations are offered:

1. Senior High Schools offering the TVL track are encouraged to strengthen graduate tracer systems to generate reliable employment data that can inform curriculum enhancement, program evaluation, and employment support initiatives.
2. School administrators and TVL program implementers are encouraged to continuously enhance technical instruction, employability skills development, work immersion experiences, career guidance services, and industry engagement to sustain graduates' workforce readiness.
3. Schools, local government units, PESO, TESDA, industries, and private sector partners are encouraged to expand collaborative initiatives that provide apprenticeships, employment referrals, job fairs, and workplace-based learning opportunities aligned with TVL specializations.
4. Educational institutions are urged to develop inclusive employability interventions that consider graduates' varying socio-economic backgrounds, geographical contexts, and

- specializations to promote equitable access to employment opportunities and career development services.
5. The proposed Employment Enhancement Action Plan may be adopted, contextualized, and periodically evaluated by Senior High Schools offering the TVL track to determine its effectiveness in improving graduate employability and strengthening school-to-work transition programs.

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AI DECLARATION STATEMENT

Artificial intelligence (AI)-supported tools were used solely to assist with language editing, grammar, sentence structure, and the organization of the manuscript. The AI tools were not used to generate research data, collect data, perform statistical analyses, interpret findings, formulate conclusions, or make research decisions. All research activities, including the study design, data collection, data analysis, interpretation of results, and the final review and approval of the manuscript, were conducted by the author(s), who assume full responsibility for the accuracy, integrity, and originality of the work.

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