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### FUTURE-READY: THE IMPACT OF THE TECHNICAL VOCATIONAL- LIVELIHOOD TRACK ON THE CAREER READINESS OF GRADE 12 STUDENTS

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#### ABSTRACT

This study investigates the impact of the Technical-Vocational-Livelihood (TVL) track on the career readiness of Grade 12 students at Holy Trinity College of General Santos City. The primary objective was to assess how TVL education influences students' preparedness for employment, focusing on their attitudes, knowledge, and practical skills. Utilizing a quantitative descriptive-correlational research design, data were collected from 30 Grade 12 TVL students through a validated questionnaire. Descriptive statistics and Pearson correlation analyses were employed to evaluate the relationship between perceived training quality and career readiness. Results indicated that students generally perceived their TVL training as highly relevant and effective, particularly in developing practical competencies and positive work attitudes essential for the labor market. There was a significant positive correlation between the quality of TVL training and students' self-assessed career readiness. Additionally, no significant differences in career readiness were observed based on age or gender, suggesting the program's equitable impact across demographic groups. However, some students noted resource limitations, such as access to updated equipment and materials, which may affect training outcomes. The study concludes that the TVL track substantially contributes to the career readiness of students, but recommends targeted improvements in resources and further research on long-term employment outcomes for TVL graduates to ensure sustained program relevance and effectiveness.

**Keywords:** *TVL track, career readiness, practical skills, employability, training quality, vocational education, student attitudes, education outcomes, resource limitations*

#### INTRODUCTION

In today's rapidly evolving global economy, the demand for a highly skilled and adaptable workforce has become more critical than ever. Vocational education, particularly the Technical-Vocational-Livelihood (TVL) track, plays a vital role in equipping students with practical skills and competencies necessary for immediate employment. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) has emphasized that vocational training not only reduces youth unemployment but also fosters sustainable economic growth by bridging the gap between education and industry needs. In the Philippines, the introduction of the K-12 educational reform and the TVL track was a strategic response to address persistent skills gaps and to enhance the employability of high school graduates. However, despite these reforms, questions remain regarding the adequacy and relevance of the training provided, especially in ensuring that students are truly prepared for the demands of various industries.



## KAALAM: A MULTIDISCIPLINARY JOURNAL

This issue is particularly significant in General Santos City, a region characterized by a diverse socio-economic landscape that includes agriculture, fishing, technology, construction, tourism, and other sectors. The effectiveness of the TVL track in preparing students for such a wide range of local industries is a matter of concern for educators, policymakers, and the community. Previous studies have produced mixed findings about the impact of the TVL track, with some highlighting strengths in practical skill development and others pointing to the need for better industry linkages and updated training materials. While government initiatives, such as the Enhanced Basic Education Act of 2013, have provided support for vocational education, challenges remain in maintaining consistent quality and relevance across different regions.

Given this context, there is a pressing need to evaluate how well the TVL track aligns with the specific industry requirements of General Santos City and whether it effectively prepares students for employment. This study, therefore, aims to assess the impact of the TVL track on the career readiness of Grade 12 students at Holy Trinity College of General Santos City. By identifying the strengths and weaknesses of the current curriculum, the research seeks to provide recommendations for enhancing the effectiveness of the TVL program. The findings are expected to contribute to the broader discourse on vocational education and to inform future policy decisions, ultimately supporting the development of a skilled and job-ready workforce in the Philippines.

### RESEARCH QUESTIONS

This study aims to assess how Technical-Vocational-Livelihood (TVL) track of education influences the preparedness of Grade 12 TVL students on their future careers.

Specifically, this study will answer the following questions:

1. What is the demographic profile of the Grade 12 TVL students in terms of:
  - 1.1 Age,
  - 1.2 Gender,
  - 1.3 and TVL Strand?
2. What is the extent of quality and relevance of the training and education perceived by Grade 12 TVL students in the TVL track?
3. What is the level of career readiness among Grade 12 TVL students required for employment in terms of:
  - 3.1 Attitude,
  - 3.2 Knowledge,
  - 3.3 and Skills?
4. Is there a significant relationship between the quality and relevance of the training and education perceived by Grade 12 TVL students in the TVL track and career readiness?
5. Is there a significant difference between the quality and relevance of the training and education perceived by Grade 12 TVL students in the TVL track and career readiness when the respondents are grouped according to demographic profile?

### Hypothesis

**H<sub>01</sub>**. There is no significant relationship between the quality and relevance of the training and education



## KAALAM: A MULTIDISCIPLINARY JOURNAL

perceived by Grade 12 TVL students in the TVL track and career readiness.

**Ho2.** There is no significant difference between the quality and relevance of the training and education perceived by Grade 12 TVL students in the TVL track and career readiness when the respondents are grouped according to demographic profile.

### LITERATURE REVIEW

The Technical-Vocational-Livelihood (TVL) track under the K-12 curriculum in the Philippines aims to prepare students for employment or further education by equipping them with industry-relevant skills. According to Alarcon et al. (2024), the effectiveness of the TVL track lies in its practical and skills-based approach to learning, as seen in the positive perceptions of students regarding curriculum delivery and learning environment. However, their study also revealed challenges such as insufficient resources and facilities, which can hinder the full realization of the program's goals. This underscores the need for continuous improvements in infrastructure and support to optimize the learning experience and outcomes for TVL students.

In terms of aligning TVL education with industry demands, De Guzman and Cristobal (2021) emphasized the importance of curriculum relevance in ensuring that students are not only academically prepared but also competent in real-world job settings. Their study found that TVL graduates tend to possess strong communication, numeracy, and conceptual skills — attributes that are highly valued by employers. These findings suggest that when effectively implemented, the TVL track contributes significantly to the development of career-ready graduates who are capable of meeting the expectations of various industries.

Furthermore, Mercado (2023) reported that the TVL curriculum provides students with hands-on training and technical proficiency, particularly in fields such as agriculture, ICT, and culinary arts. These practical competencies, coupled with teamwork and problem-solving skills, enhance the employability of TVL graduates and position them as valuable contributors to the workforce. Collectively, these studies highlight the critical role of the TVL track in shaping future-ready students by fostering both technical expertise and workplace readiness.

### METHODOLOGY

#### Research Design

This study employed a quantitative research approach utilizing a descriptive-correlational design to assess the impact of the Technical-Vocational-Livelihood (TVL) track on the career readiness of Grade 12 students at Holy Trinity College of General Santos City. The research was conducted within the premises of the said institution, which is recognized for its commitment to delivering practical and industry-relevant education through its TVL program. The study population consisted of all 30 Grade 12 students enrolled in the TVL track for the academic year, and total enumeration was used to ensure comprehensive representation and eliminate sampling bias.

#### Research Instrument

The primary data-gathering tool was a validated questionnaire checklist, which was developed based on a review of relevant literature and expert input to ensure content validity and reliability. The instrument was structured to collect information on the students' demographic profiles, their perceptions of the quality and relevance of TVL training, and their self-assessed career readiness in terms of attitude, knowledge, and skills. The questionnaire used a five-point Likert scale for most items, allowing for quantitative analysis of responses. Prior to the main data collection, the instrument underwent pilot testing with a small group of students not included in the study, and necessary revisions were made based on their

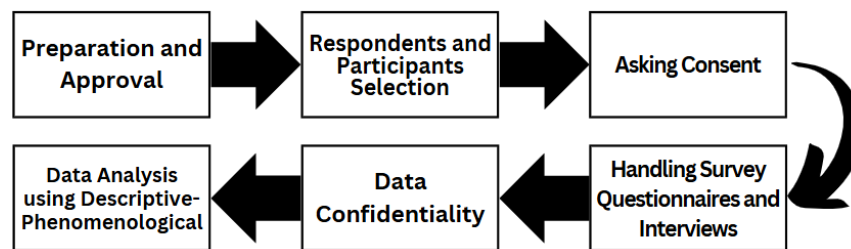


feedback.

### Data Gathering Procedure

The data collection process for this study was carefully organized to ensure the accuracy, reliability, and integrity of the information gathered from the respondents. Prior to the actual data gathering, the researchers sought permission from the school administration and coordinated with class advisers to schedule the distribution of the research instruments. All 30 Grade 12 students enrolled in the TVL track were identified as respondents, ensuring total enumeration and comprehensive representation of the target population. Each participant was provided with an informed consent form, which explained the purpose of the study, the voluntary nature of participation, and the assurance of confidentiality and anonymity.

The primary research instrument, a validated questionnaire checklist, was distributed to the students during a designated class period to minimize disruptions and maximize response rates. The researchers gave clear instructions and were present throughout the process to address any questions or clarifications from the participants. Students were allotted sufficient time to complete the questionnaire independently, ensuring thoughtful and honest responses. Upon completion, the questionnaires were immediately collected and checked for completeness. All completed forms were stored securely to maintain confidentiality.



**Figure 1. Research Flow Chart**

### Data Analysis

The study aims to evaluate the impact of the Technical-Vocational- Livelihood (TVL) track on the career readiness of Grade 12 students at Holy Trinity College of General Santos City. To achieve this objective, raw data collected through the survey questionnaire will be carefully processed and converted into quantitative data. The frequency distribution analysis, weighted mean, Pearson r correlation, One-Way Analysis of Variance, and Independent Sample T-Test will be used in this study.

**Frequency Distribution Analysis**, shows how often each value or category of a variable occurs in a data set. The formula for frequency distribution analysis in percentage is:

$$F = \frac{f}{n} \times 100$$

Where;

$F$  = relative frequency of demographic profile sub-variable

$f$  = frequency (number of Grade 12 TVL students) in demographic profile sub-



variable

$n$  = total number of Grade 12 TVL students

**Spearman's Rank Correlation Coefficient** measures the strength and direction of the association between two ranked variables, such as the perceived quality and relevance of TVL training and career readiness. The formula for

Spearman's Rank Correlation Coefficient is:

$$\rho = 1 - \frac{6 \sum d^2}{n(n^2 - 1)}$$

Where;

$\rho$  = Spearman's Rank Correlation Coefficient

$di$  = Difference between the ranks of each pair of observations

$n$  = number of observations

**One-Way ANOVA** will be used to assess the differences in the perceived quality and relevance of training and education, and career readiness based on demographic profiles (e.g., TVL strand). The formula for One-Way ANOVA is:

The formula for One-Way ANOVA is:

$$\frac{F}{MS_{bg}}$$

Where;

$F$  = F-statistic

$MS_{bg}$  = Mean Square Between (variance between groups)

$MS_{wg}$  = Mean Square Within (variance within groups)

**Independent Samples T-Test** will be used to assess whether there is a significant difference in the perceived quality and relevance of TVL training and career readiness between two groups (e.g., male vs. female).

The formula for the T-test is:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{s^2 \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

Where;

$\bar{x}_1$  = sample mean of the first group

$\bar{x}_2$  = sample mean of the second group

$s^2$  = pooled sample variance, which combines the variability of both groups' data

$n_1$  = sample size of the first group

$n_2$  = sample size of the second group

### Verbal Interpretation

The section presents the verbal interpretation for various statistical analyses, including the Likert scale, Spearman's Rank Correlation Coefficient, One-Way ANOVA, and Independent Samples T-Test.



## KAALAM: A MULTIDISCIPLINARY JOURNAL

**Table 1 Likert Scale Interpretation Table**

Scale	Range	Description	Interpretation
5	4.21 - 5.00	Strongly Agree	Highly Observed
4	3.41 - 4.20	Agree	Moderately Observed
3	2.61 - 3.40	Undecided	Fairly Observed
2	1.81 - 2.60	Disagree	Seldom Observed
1	1.00 - 1.80	Strongly Disagree	Not Observed

**Table 2. Spearman's Rank Correlation Coefficient Interpretation Table**

Correlation Coefficient	Strength of Association
1.0 to 0.9	Very strong positive correlation
0.89 to 0.7	Strong positive correlation
0.69 to 0.4	Moderate positive correlation
0.39 to 0.1	Weak positive correlation
0.09 to 0.0	Very weak or no correlation
-0.1 to -0.39	Weak negative correlation
-0.4 to -0.69	Moderate negative correlation
-0.7 to -0.89	Strong negative correlation
-0.9 to -1.0	Very strong negative correlation

**Table 3. One-Way ANOVA Interpretation Table**

F-Value Range	Significance (p-value)	Level	Interpretation
$F < F\text{-critical}$	$p > 0.05$	No	significant difference between group means (accept null hypothesis).
$F \geq F\text{-critical}$	$p \leq 0.05$	Significant	difference between group means (reject null hypothesis).

**Table 4. Independent Samples T-Test Interpretation Table**

T-Value Range	Significance Level (p-value)	Interpretation
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## KAALAM: A MULTIDISCIPLINARY JOURNAL

$t < t\text{-critical}$	$p > 0.05$	No significant difference between group means (accept null hypothesis).
$t \geq t\text{-critical}$	$p \leq 0.05$	Significant difference between group means (reject null hypothesis).

### Ethical Consideration

This study strictly adhered to ethical standards to ensure the rights, safety, and well-being of all participants. Prior to data collection, approval was sought from the school administration and relevant authorities. All participants were provided with an informed consent form that clearly explained the purpose of the research, the voluntary nature of their participation, and their right to withdraw from the study at any time without penalty. The researchers emphasized that participation was entirely voluntary and that refusal to participate would not result in any negative consequences. Confidentiality and anonymity were maintained throughout the research process; no identifying information was attached to the responses, and all data were securely stored and accessible only to the research team. The questionnaire was designed to avoid sensitive or intrusive questions, and care was taken to ensure that all items were appropriate for the age and educational level of the respondents. Furthermore, the researchers were available to address any concerns or questions raised by the participants during the data collection process. Upon completion of the study, data were reported in aggregate form to prevent the identification of individual respondents. These measures ensured that the study was conducted with integrity, respect, and full consideration of ethical research principles.

### RESULTS AND DISCUSSIONS

The findings of this study provide valuable insights into the effectiveness of the Technical-Vocational-Livelihood (TVL) track in preparing Grade 12 students at Holy Trinity College of General Santos City for future employment. The demographic data revealed a diverse group of respondents in terms of age, gender, and chosen TVL strand, reflecting the inclusivity of the program and its appeal to a broad range of students. Analysis of the survey responses showed that the majority of students perceived the quality and relevance of their TVL training positively. Most respondents agreed that the curriculum was aligned with current industry standards and that instructors were knowledgeable and supportive. Furthermore, students indicated that the school provided adequate facilities and resources for hands-on learning, although some noted occasional shortages in equipment or materials, which could hinder practical training.

The results are systematically organized into tables and discussions to address the specific research questions and hypotheses outlined in the study.

#### I. Demographic Profile of Grade 12 TVL Students

Table 4, and 5 present the frequency and percentage distribution of the demographic profile of Grade 12 TVL students in terms of age, gender, and TVL strand, respectively. These tables specifically present the frequency counts and corresponding percentages for each category, providing an overview of the respondents' characteristics.

**Table 4. Frequency and Percentage Distribution of Demographic Profile of the Grade 12 Students in Terms of Gender**



## KAALAM: A MULTIDISCIPLINARY JOURNAL

Gender	Frequency	Percentage
Male	20	67%
Female	10	33%
<b>Total</b>	<b>30</b>	<b>100%</b>

Table 4 shows the frequency and percentage distribution of the Grade 12 TVL students in terms of gender. The table indicates that the majority of the respondents are male, with a frequency of 20, comprising 67% of the total population. Female respondents, on the other hand, have a frequency of 10, making up 33% of the total. Overall, the total population consists of 30 Grade 12 TVL students, highlighting a larger representation of male students compared to females.

**Table 5. Frequency and Percentage Distribution of Demographic Profile of the Grade 12 Students in Terms of TVL Strand**

Gender	Frequency	Percentage
CSS	16	53%
BPP	14	47%
<b>Total</b>	<b>30</b>	<b>100%</b>

Table 5 shows the frequency and percentage distribution of the Grade 12 TVL students in terms of TVL strand. The table indicates that the majority of the respondents, with a frequency of 16, or 53%, belong to the Computer System Servicing (CSS) strand. Meanwhile, 14 respondents, representing 47%, are enrolled in the Bread and Pastry Production (BPP) strand. This demonstrates a fairly balanced distribution between the two strands, with a slight predominance of students in the CSS strand.

## II. Extent of Quality and Relevance of the Training and Education Perceived by Grade 12 TVL Students in the TVL Track

Table 6 present the weighted mean of the quality and relevance of training and education as perceived by Grade 12 TVL students in the TVL track in terms of Educational Support, Family and Resources, Teaching and Learning, and Practical Training, respectively. Additionally, the tables provide the average weighted mean for each dimension, accompanied by a descriptive interpretation of the results.

**Table 6. Extent of Quality, Relevance of Training and Education, and Career Readiness as Perceived by Grade 12 TVL Students**

Dimension	Highest	Indicator	Lowest Indicator ( $\bar{x}$ )	Average	Interpretation
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## KAALAM: A MULTIDISCIPLINARY JOURNAL

	$(\bar{x})$		Weighted Mean $(\bar{x})$	
<b>Educational Support</b>	The school helps students get a National Certificate (NC II) through skills enhancement programs (4.37)	There are sufficient facilities like televisions, projectors, and speakers for classroom instruction (3.80)	4.04	Agree
<b>Family and Resources</b>	TVL workshops and laboratories are readily available at the school (4.20)	The school provides adequate internet connectivity to support learning and research (3.53)	3.95	Agree
<b>Teaching and Learning</b>	The curriculum includes industry-specific skills that meet TESDA standards (4.20)	The learning environment encourages critical thinking and problem-solving skills (3.93)	4.09	Agree
<b>Practical Training</b>	Practical training improved student learning achievements (4.23)	Understanding learning objectives during work immersion (3.87)	4.09	Agree
<b>Career Readiness Attitude</b>	- Confidence in ability to succeed in chosen career (4.23)	Commitment to continuously improving in one's career (3.93)	4.05	Agree
<b>Career Readiness Knowledge</b>	- Strong understanding of theoretical concepts and safety protocols (4.20)	Awareness of latest developments and trends in the industry (3.77)	4.08	Agree

Table 6 presents the overall findings, which reflect that Grade 12 students in the TVL track perceive the quality and relevance of their training and education—as well as their career readiness—positively. Educational Support was rated highly due to the school's focus on helping students attain national certifications, although some limitations in classroom facility provisions were noted. Family and Resources received favorable feedback, especially regarding workshop availability, though internet connectivity was identified as a concern. In Teaching and Learning, the strong alignment of the curriculum with TESDA standards was appreciated, while students noted that critical thinking could be further emphasized. Practical Training received high marks, particularly for the learning gains achieved through immersion experiences.

Regarding career readiness, students reported strong confidence and motivation (attitude), a solid foundation of knowledge aligned with industry requirements (knowledge), and practical skills with notable proficiency in client interaction (skills). These results are consistent with several supporting studies (Alarcon et al., 2024; Casalone & Baici, 2023; De Guzman & Cristobal, 2021; Limon, 2016; Ramos, 2021; Vergara, 2023), all of which emphasize the importance of resource adequacy, curriculum alignment, practical exposure, and soft skill development in fostering employability. Overall, the findings suggest that while the TVL program is effectively preparing students for future employment, continuous improvements in facilities, curriculum updates, and support for personal and professional development are recommended to further enhance their readiness.



### III. Significant Relationship Between the Quality and Relevance of the Training and

#### Education and Career Readiness

Table 7 presents the results of Spearman's Rank Correlation Coefficient analysis, which examines the significant relationship between the quality and relevance of the training and education and the career readiness of Grade 12 TVL students. The table presents key details, including the source of relationship, the population or sample size of respondents (N), the Spearman's Rho correlation coefficient, the significance level (Sig. 2-tailed), and the decision regarding the null hypothesis.

**Table 7. *Spearman's Rank Correlation Coefficient Result for Quality and Relevance of the Training and Education Perceived by Grade 12 TVL Students***

Source of Relationship	N*	Spearman's Rho Correlation Coefficient	Sig. (2-tailed)	Decision
Training and Education Career Readiness	30	.592 <sup>a</sup>	.003	Reject $H_{01}$

\*Population/Sample of the Respondents

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

Table 7 presents the results of the Spearman's Rank Correlation Coefficient analysis, examining the relationship between the quality and relevance of training and education and the career readiness of Grade 12 TVL students. The computed Spearman's Rho value is 0.592, indicating a moderate positive correlation between the two variables. With a p-value of 0.003, which is less than the 0.05 level of significance, the result is deemed statistically significant, leading to the rejection of the null hypothesis. This suggests that improvements in the quality and relevance of training and education are associated with increased levels of career readiness among students.

This finding highlights the critical role of structured and industry-aligned training programs in preparing students for employment, emphasizing that enhancements in educational practices can directly impact students' workforce readiness. These results are consistent with the study of De Guzman and Cristobal (2021), which found a significant positive relationship between the quality of TVL education and graduate employability. Their research underscores the effectiveness of practical and relevant training in bridging the gap between academic learning and real-world demands, reinforcing the need for continuous improvements in TVL programs to optimize student outcomes.

### VI. Significant Difference between the Quality and Relevance of the Training and Education and Career Readiness

Table 8, Table 9, Table 10, Table 11, Table 12, and Table 13 present the significant difference between the quality and relevance of the training and education and career readiness when respondents are grouped according to their demographic profile. Specifically, the analysis for Age utilizes One-Way ANOVA to determine variations among age groups, while Gender and TVL Strand are analyzed using Independent Samples T-Test to compare differences between the groups.

**Table 8. *Analysis of Variance Result for Quality and Relevance of the Training and Education***



## KAALAM: A MULTIDISCIPLINARY JOURNAL

*when the Respondents are Group According to Age*

Source of Variation	SS*	df	MS**	F***	F Crit	P-value	Decision
Between Groups	.980	3	.327	<b>1.818</b>	2.98	<b>.169</b>	Accept $H_{o2}$
Within Groups	4.672	26	.180				
<b>Total</b>	<b>5.652</b>	<b>29</b>					

\* Sum of Squares

\*\* Mean Square

\*\*\* F-Statistic

Table 16 shows the Analysis of Variance (ANOVA) results for the quality and relevance of the training and education when the respondents are grouped according to age. The computed F-value is 1.818, which is lower than the critical F-value of 2.98, while the P-value of 0.169 exceeds the standard significance level of 0.05. These results indicate that there is no statistically significant difference in how respondents across different age groups perceive the quality and relevance of training and education. In other words, students from various age brackets share similar evaluations of the training they receive, suggesting that the program is consistently delivered and equally effective for learners regardless of age. This uniformity implies that the training design addresses the needs of a diverse age group effectively, promoting inclusivity and equity in educational delivery.

This finding aligns with the study conducted by Ramos (2021), which emphasized that the perceived quality of vocational education is often independent of demographic factors such as age. Ramos' research concluded that well-structured TVL programs cater equally to students across age groups, ensuring that educational outcomes remain consistent and effective regardless of the learners' age differences.

**Table 9. Analysis of Variance Result for Career Readiness when the Respondents are Group According to Age**

Source of Variation	SS*	df	MS**	F***	F Crit	P-value	Decision
Between Groups	.867	3	.289	<b>1.278</b>	2.98	<b>.303</b>	Accept $H_{o2}$
Within Groups	5.877	26	.226				
<b>Total</b>	<b>6.743</b>	<b>29</b>					

Table 17 shows the Analysis of Variance (ANOVA) results for career readiness when the respondents are grouped according to age. The table presents an F-value of 1.278, which is lower than the critical F-value of 2.98. Additionally, the P-value of 0.303 exceeds the standard significance threshold of 0.05. These results indicate that there is no statistically significant difference in the career readiness of respondents across different age groups, meaning that students from varying age brackets perceive their readiness for employment at relatively similar levels. This implies that the skills, knowledge, and attitudes cultivated within the TVL track are consistently effective for students irrespective of their age. The uniformity in career readiness suggests that the TVL curriculum is designed and delivered in a way that addresses the general needs of all learners, regardless of their age, ensuring equitable preparation for future careers.

These findings are supported by the study conducted by Roble (2021), which analyzed career readiness among TVL students across diverse demographics. Roble's research concluded that age did not significantly influence students' readiness for employment, emphasizing the inclusivity and adaptability of well-structured vocational programs. This consistency underscores the robustness of the TVL curriculum in equipping students for the workforce, regardless of their demographic differences.



## KAALAM: A MULTIDISCIPLINARY JOURNAL

**Table 10. Independent Samples T-Test Result for Quality and Relevance of the Training and Education when the Respondents are Group According to Gender**

Variance	df	F*	t**	Sig. (2-tailed)	Decision
Equal Variances Assumed	28	1.011	.353	.727	Accept $H_{o2}$
Equal Variances Not Assumed	13.906		.317	.756	

Table 18 shows the Independent Samples T-Test results for the quality and relevance of the training and education when respondents are grouped according to gender. Under the Equal Variances Assumed condition, the calculated t-value is 0.353, with a Sig. (2-tailed) value of 0.727. Similarly, under Equal Variances Not Assumed, the t-value is 0.317, with a Sig. (2-tailed) value of 0.756. In both scenarios, the Sig. (2-tailed) values exceed the standard significance level of 0.05. Consequently, the null hypothesis is accepted, indicating that there is no statistically significant difference in the perceived quality and relevance of the training and education between male and female respondents. This suggests that both genders share a similar evaluation of the training and education they received, demonstrating a consistent perception across these groups.

These findings are consistent with the study by De Guzman and Cristobal (2021), which emphasized that gender differences do not significantly impact the perceived quality of education in technical-vocational tracks. Their study highlighted that the design and delivery of such programs aim to provide equal opportunities and experiences to all students, ensuring that gender does not affect educational outcomes. This alignment underscores the inclusivity of the TVL track in catering to diverse learners.

**Table 11. Independent Samples T-Test Result for Career Readiness when the Respondents are Group According to Gender**

Variance	df	F*	t**	Sig. (2-tailed)	Decision
Equal Variances Assumed	28	.004	.353	.727	Accept $H_{o2}$
Equal Variances Not Assumed	13.906		.317	.756	

Table 19 shows the Independent Samples T-Test results for career readiness when the respondents are grouped according to gender. Under the Equal Variances Assumed condition, the calculated t-value is 0.353, with a Sig. (2-tailed) value of 0.727. Similarly, under Equal Variances Not Assumed, the t-value is 0.317, with a Sig. (2-tailed) value of 0.756. Both Sig. (2-tailed) values are greater than the standard significance threshold of 0.05. This result indicates that there is no statistically significant difference in the career readiness of male and female respondents, meaning that both genders perceive themselves as equally prepared for employment based on the skills, knowledge, and attitudes they have developed through the TVL track. This suggests that the TVL curriculum is structured in a way that provides equitable opportunities for career preparation to male and female students alike, ensuring inclusivity and fairness in fostering readiness for future employment.

The findings align with the study conducted by De Guzman and Cristobal (2021), which evaluated gender differences in career readiness among TVL students. Their research concluded that vocational education programs designed with inclusivity and gender neutrality effectively prepare students for the workforce, regardless of their demographic differences. This supports the notion that the TVL track is robust in its approach to equitable training and development across genders.



## KAALAM: A MULTIDISCIPLINARY JOURNAL

**Table 12. Independent Samples T-Test Result for Quality and Relevance of the Training and Education when the Respondents are Group According to TVL Strand**

Variance	df	F*	t**	Sig. (2-tailed)	Decision
Equal Variances Assumed	28	.002	2.283	.030 <sup>a</sup>	Reject $H_{02}$
Equal Variances Not Assumed	27.087		2.276	.031 <sup>a</sup>	

a. Cohen's d = 0.835, 95% CI [0.079, 1.578]

Table 20 presents the Independent Samples T-Test results for the quality and relevance of the training and education when the respondents are grouped according to their TVL strand. Under the Equal Variances Assumed condition, the calculated t-value is 2.283, with a Sig. (2-tailed) value of 0.030. Similarly, under the Equal Variances Not Assumed condition, the t-value is 2.276, with a Sig. (2-tailed) value of 0.031. In both cases, the Sig. (2-tailed) values are less than the standard significance level of 0.05, indicating that the results are statistically significant. The decision is to reject the null hypothesis, signifying that there is a significant difference in the perceived quality and relevance of training and education among respondents grouped according to their TVL strand. This suggests that students' evaluations of the training vary depending on the TVL strand they are enrolled in, potentially reflecting differences in the resources, instruction, or curriculum design specific to each strand. The reported effect size, Cohen's d = 0.835, indicates a large effect size, suggesting that the difference in perception between TVL strands is substantial. This further emphasizes the need to address disparities to ensure all students, regardless of their strand, benefit equally from high-quality training and education.

These findings are consistent with the study by Ramos (2021), which highlighted discrepancies in resource allocation and curriculum effectiveness among TVL strands. Ramos' research underscored the importance of equitable distribution of resources and continuous assessment of strand-specific training programs to enhance the overall quality and relevance of education. This alignment reinforces the idea that targeted interventions are necessary to address the unique needs of each strand, ensuring that all students are adequately prepared for their future careers.

**Table 13. Independent Samples T-Test Result for Career Readiness when the Respondents are Group According to TVL Strand**

Variance	df	F*	t**	Sig. (2-tailed)	Decision
Equal Variances Assumed	28	.209	.813	.423	Accept $H_{02}$

Table 21 presents the Independent Samples T-Test results for career readiness when the respondents are grouped according to their TVL strand. Under the "Equal Variances Assumed" condition, the calculated t-value is 0.813, with a Sig. (2-tailed) value of 0.423. Similarly, under the "Equal Variances Not Assumed" condition, the t-value is 0.810, with a Sig. (2-tailed) value of 0.425. Both Sig. (2-tailed) values exceed the standard significance threshold of 0.05. This result indicates that there is no statistically significant difference in the career readiness of respondents when grouped by TVL strand, meaning that students from different strands perceive themselves as equally prepared for their future careers. This implies that the TVL curriculum's approach to fostering career readiness is consistent and effective across various strands, ensuring equitable preparation for students regardless of their field of specialization.

The findings are consistent with the study by Roble (2021), which highlighted the inclusivity of the





## KAALAM: A MULTIDISCIPLINARY JOURNAL

TVL track in addressing the career preparation needs of students across diverse strands. Roble's study emphasized that equitable training and curriculum design play a vital role in ensuring that all students, irrespective of their specialization, achieve similar levels of readiness for employment. This alignment reinforces the effectiveness of the TVL program in providing balanced and comprehensive career preparation.

### CONCLUSIONS

In light of the results of the study, the research concludes that the Technical- Vocational-Livelihood (TVL) track has a positive and significant impact on the career readiness of Grade 12 students. Therefore, the study highlights that the quality and relevance of TVL training and education effectively equip students with the necessary skills, knowledge, and attitudes for employment, fostering their confidence and readiness for the workforce. However, while the curriculum generally addresses industry standards, discrepancies in resource availability and strand-specific training reveal the need for targeted improvements in TVL programs to ensure equitable opportunities for all learners.

Moreover, the findings underscore the inclusivity of the TVL track, as demographic factors such as age and gender do not significantly influence students' perceptions of training quality or career readiness. The study also identified a positive correlation between the quality of training and career readiness, emphasizing the critical role of industry-relevant education in preparing students for their chosen careers. Additionally, the research highlights significant differences in training quality perceptions among TVL strands, pointing to the need for strand-specific interventions to enhance curriculum delivery and resource allocation.

Despite these insights, further exploration is needed to analyze the long- term career outcomes of TVL graduates, particularly in diverse industry settings. The study leaves a gap in assessing the effectiveness of TVL programs in developing soft skills such as communication, adaptability, and teamwork, which are crucial for future employment. Future researchers can build on this study by exploring these areas and examining the evolving needs of industries to ensure that TVL programs remain relevant and effective.

### Recommendations

Based on the findings of the study, the researchers therefore recommend the following:

1. TVL students are encouraged to actively engage in training opportunities and utilize the available school resources to maximize their learning experience. They should also seek continuous personal and professional development by exploring additional certifications, staying updated on industry trends, and actively participating in extracurricular activities that enhance their skills.
2. School administrators should continuously evaluate and update the TVL curriculum to ensure alignment with current industry standards. They are also recommended to provide regular training to instructors to enhance their teaching methods and competency-based approaches. Furthermore, addressing gaps in facilities, including internet connectivity and teaching aids, will further improve the quality of education.
3. Holy Trinity College of General Santos City, the institution should focus on fostering equitable distribution of resources across all TVL strands to ensure that students receive consistent and high-quality training. Strengthening industry partnerships to offer more on-the-job training opportunities and workshops can significantly enhance students' employability.
4. Teachers are encouraged to foster a classroom environment where students actively participate in learning activities. By using available school resources, teachers can create engaging lessons that





## KAALAM: A MULTIDISCIPLINARY JOURNAL

cater to diverse learning styles, maximizing each student's educational experience.

5. The Department of Education should support periodic assessments of TVL programs to ensure their effectiveness and relevance to the evolving job market. Increasing funding allocations to schools for updated equipment, facilities, and internet access can address existing resource limitations.

6. Technical Education and Skills Development Authority (TESDA) is encouraged to intensify its involvement in monitoring and aligning TVL programs with industry certifications and requirements. Expanding the availability of TESDA-

accredited trainers and assessors will also help improve the consistency and quality of education across regions.

7. Local businesses and industries should collaborate with educational institutions by offering internships, work immersion opportunities, and career talks. This partnership will help create a more skilled and employable workforce, contributing to economic growth.

8. Future researchers are recommended to explore long-term career outcomes of TVL graduates and investigate the impact of soft skills such as communication, teamwork, adaptability, problem-solving, time management, and interpersonal skills, training in enhancing career readiness. They may also consider studying TVL education in other schools or regions for comparative analysis and further insights.

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