**INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY: APPLIED BUSINESS AND EDUCATION RESEARCH**
2026, Vol. 7, No. 6, 2749 – 2760
http://dx.doi.org/10.11594/ijmaber.07.06.29

**Research Article**

# Utilization of Entrepreneurial Skills and Economic Status Among Tesda Graduates

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*Article history*:
Submission 30 May 2026
Revised 16 June 2026
Accepted 23 June 2026

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**ABSTRACT**

This study aimed to assess the utilization of entrepreneurial skills and the socioeconomic impact of the Technical Education and Skills Development training program in the province of Camiguin, the island born of fire in Northern Mindanao. Among the graduates of the training programs, 117 agreed to participate and provide the necessary information to answer the inquiries of this undertaking. Quantitative descriptive research design was employed with a survey questionnaire as the main data gathering tool, supplemented with a casual interview for clarification purposes. Research protocols were observed, and appropriate statistical tools were employed to produce reliable results. Analysis revealed that the counts of females were a little higher than their male counterparts. Most of the respondents belonged to the young adults, and the rest were middle-aged adults. The participants possessed diverse educational backgrounds and were employed in their respective localities after the training. The respondents exhibited a moderate utilization of entrepreneurial skills in terms of persistence, innovation, networking, and financial management skills. By sub-domain, however, the respondents need more training in financial management. Inferential analysis confirmed a highly significant difference in both employment type and personal income before and after the training program. These significant improvements indicate the program's efficacy in impacting the socio-economic status of the TESDA graduates. Results also revealed no significant difference in the extent of utilization of entrepreneurial skills among the respondents when grouped by post-training income earned or by demographic variables like sex, age, educational attainment, and place of employment. The study concluded that the TESDA training programs are highly effective in driving economic mobility and improving job quality among the graduates. It also successfully nurtures entrepreneurial competencies across heterogeneous groups of training program

*How to cite:*
Margate, F. O. & Sanchez, M. R. (2026). Utilization of Entrepreneurial Skills and Economic Status Among Tesda Graduates. *International Journal of Multidisciplinary: Applied Business and Education Research*. *7*(6), 2749 – 2760. doi: 10.11594/ijmaber.07.06.29

recipients. These results strongly call for sustained support of the government as an investment to increase the economic mobility of the training program beneficiaries. Future researchers are encouraged to conduct further studies of this topic in terms of the financial strategies used by the TESDA graduates to have their own business activities.

***Keywords***: *Entrepreneurial Skills, Skill Utilization, Socioeconomic Status, TVET Outcomes*

## Background of the Study

One of the thrusts of the Philippine government is to increase the labor market development by prioritizing job quality, income enhancement, and inclusive growth, aligned with Sustainable Development Goal (SDG) 8. Although the unemployment rate already reduced to 3.24 percent as of late 2024 (PSA, 2025), substantial challenges still exist in achieving SDG Target 8.3, which focuses on advancing entrepreneurial skills of the potential labor sector and fostering the growth of micro, small, and medium enterprises (MSMEs) (NEDA, 2025). Studies showed the persistence of skills mismatch between the workforce competencies and the evolving market demands, a barrier to overcome to sustain progress (Majola, 2024).

In the Philippines, the Technical Education and Skills Development Authority (TESDA) has the mandate to close the gap or gradually address it so that it will never exist in the future. One of the strategies adopted by TESDA is the provision of training programs to improve the entrepreneurial competence of their graduates, and thereby impact economic mobility. More studies also confirmed that Technical-Vocational Education and Training (TVET) graduates already issued with National Certificates (NCs) usually experience faster workforce transitions, with a reported 70 percent employment within 8.5 months after the training program (Salazar & Garcia, 2022; IJAMR, 2024). In 2024, moreover, TESDA reported a record high employment rate of 83.34 percent, in which Northern Mindanao (Region 10) came out as one of the top-performing regions with an 88.53 percent employment rate (TESDA, 2025). However, this is aggregate regional data, which may often overshadow the unique economic realities of an island province. The province of Camiguin does not have the opulence of job opportunities that the mainland of Northern Mindanao has afforded to job seekers. This island province survives within a fluid, tourism-driven micro-economy. This seasonal, service-oriented ecosystem creates a vastly different skill-utilization profile among NC holders. Standard wage-employment options are scarce, and graduates must adapt their technical skills to self-directed micro-enterprises, hospitality demands, and local agri-business.

But TESDA graduates faced challenges in the utilization of entrepreneurial skills. For instance, the workers in the rural and island economies in Mindanao were categorized as vulnerable, including the self-employed and micro producers, due to a lack of stable labor law coverage (World Bank, 2020). While TVET assures graduates the possibility of becoming economically active, evidence from regional assessments suggests that it does not always guarantee high-paying jobs unless paired with strong post-training support like seed capital to start a business and mentorship (Generalao et al., 2025). This requires financial literacy and business networking as the most significant focus of TVET and secondary graduates.

In the island province of Camiguin, the economy heavily relies on tourism and agribusiness of the constituents. The economic status of graduates is influenced by unique geographic and market constraints. Although data for Northern Mindanao speak for huge promises, there exists a distinct scarcity of empirical data about the long-term economic outcomes of the TESDA graduates, particularly in Camiguin. To address this, the present study is a critical inquiry to gain knowledge about the graduates' utilization of entrepreneurial skills to impact their socio-economic status in particular, and to the community in general. The evaluation of the efficacy of the TESDA training

programs is expected to provide evidence-based policy to transform technical expertise into sustainable entrepreneurial success, thereby meeting the vision of SDG 8.

## Methods

The study employed a quantitative descriptive-evaluative research design to determine the impact of entrepreneurial skills on the economic status of the graduates of the TESDA training program. This approach is appropriate for identifying patterns and trends in a population without manipulating variables (Creswell & Creswell, 2018). A survey questionnaire was used as the primary data collection tool, supplemented with online interviews as needed to verify responses. Prior to sharing the link to the online survey, the researcher secured the consent of the respondents.

The respondents came from the municipalities of Catarman, Guinsiliban, Mahinog, Mambajao, and Sagay, all in the province of Camiguin. This island province is characterized by the agri-business of the locals, a growing tourism-driven economy, and increasing private-sector investments, which create demand for skilled labor.

A total of 117 TESDA graduates who earned a National Certificate (NC) I or II before fiscal year 2025 consented to respond and participate in this inquiry. These respondents were identified through the TESDA-Camiguin database and contacted via social media (Facebook). Utilizing social media networks for data collection could be highly difficult due to digital contactability and follow-up friction. Hence, the number of respondents is not too large for this inquiry.

The researcher employed a voluntary response sampling technique. It was assumed that the completion of the online survey was a manifestation of the NC holder's consent to serve as a respondent in the study. Considering the given scenario, it is explicitly noted as a procedural limitation that this voluntary response sampling strategy may likely introduce selection bias, as graduates who secured employment or achieved entrepreneurial success may be more naturally inclined to respond to an online survey than those who are currently unemployed. This possibility can highly skew the findings toward more positive economic outcomes.

A modified survey questionnaire was developed, patterned, and contextualized from Liñán and Chen's (2009) Entrepreneurial Intention Questionnaire and TESDA's internal assessment tools. The research instrument had two sections: (1) explanatory (demographic) variables and (2) items measuring the extent of entrepreneurial skills utilization in terms of entrepreneurial skills for livelihood, economic benefits, and financial management, entrepreneurial mindset and persistence, innovation, networking, and continuous learning.

For the content validity, the researcher requested a panel of five experts from the TESDA provincial office, instructors from the Camiguin School of Arts and Trades (CSAT), and the quality assurance director from Camiguin Polytechnic State College (CPSC). Following Lynn's (1986) recommendations, expert judgment from at least five specialists was deemed sufficient to establish the instrument's relevance and clarity in the absence of a pilot test.

After the observance of the research protocols, the survey was administered via an online platform. The respondents were asked to complete the online survey during their vacant time at the soonest possible time. When the required number was reached, the responses were downloaded into a spreadsheet.

The respondents' responses on the extent of utilization of entrepreneurial skills were measured using a four-point Likert scale, as shown in Table 1.

*Table 1. Scoring Guide for the Extent of Utilization of Entrepreneurial Skills*

| Arbitrary Value | Statistical Limits | Qualitative Description | Interpretation |
|---|---|---|---|
| 4 | 3.26-4.00 | High Extent | Entrepreneurial skills are always utilized. |
| 3 | 2.51-3.25 | Moderate Extent | Entrepreneurial skills are sometimes utilized. |
| 2 | 1.76-2.50 | Less Extent | Entrepreneurial skills are seldom utilized. |
| 1 | 1.00-1.75 | No Extent | Entrepreneurial skills are never utilized. |

Similarly, Table 2 categorized respondents' economic status according to PIDS (2020) income brackets, adjusted for local subsistence levels.

*Table 2. Income Bracket of the Respondents of the Study*

| **Income Range** (per month) | **Qualitative Descriptor** | **Interpretation** |
|---|---|---|
| Below PhP 10,000 | Low Income / Poor | Income below subsistence level, limited access to basic needs, and vulnerable to poverty. |
| PhP 10,000 – PhP19,999 | Lower Middle Income | Earnings near the subsistence threshold; able to meet basic needs with some discretionary spending. |
| PhP 20,000 – PhP 29,999 | Middle Income | Steady income allowing for basic comforts, minor savings, and better living standards. |
| PhP 30,000 and above | Upper Middle Income or Comfortable Living | Stable financial situation with discretionary income, savings, and improved quality of life. |

Statistical analysis was performed using Jamovi software. Counts, percentages, means, and standard deviations were used to describe the respondents' profile and skill utilization. While the Stuart-Maxwell test was employed for paired-samples data, the Kruskal-Wallis test, a non-parametric alternative to ANOVA, was used to determine significant differences among variables (Field, 2018).

The study adhered to the Data Privacy Act of 2012 (R.A. 10173). All participants were informed of the study's purpose and their right to withdraw at any time. Anonymity was strictly maintained, and data were stored safely.

## Results and Discussion

The following section presents the analysis and interpretation of findings, offering insights to facilitate a comprehensive understanding of the study.

The demographic profile of the 117 respondents is detailed across Tables 3, 4, and 5. This multifaceted analysis provides a baseline for understanding how vocational training intersects with personal circumstances to influence economic outcomes.

*Table 3. Demographic Profile of the Respondents (N=117)*

| **Variables** | **Counts** | **Percentage** |
|---|---|---|
| **Sex** | | |
| Female | 64 | 54.70 |
| Male | 53 | 45.30 |
| **Total** | **117** | **100.00** |
| **Age Grouping (in years)** | | |
| 20 - 39 (Young Adulthood) | 102 | 87.18 |
| 40 – 64 (Middle Adulthood) | 15 | 12.82 |
| **Total** | **117** | **100.00** |
| **Highest Educational Attainment** | | |
| College Graduate | 52 | 44.44 |
| College Level | 35 | 29.91 |
| High School Graduate | 30 | 25.64 |
| **Total** | **117** | **100.00** |
| **Number of Years Employed After Completion of the Program** | | |

| Variables | Counts | Percentage |
|---|---|---|
| Less Than A Year | 70 | 59.83 |
| 1 to 2 Years | 27 | 23.08 |
| 3 to 4 years | 14 | 11.97 |
| 5 years and above | 6 | 5.13 |
| **Total** | **117** | **100.00** |
| **Place of Employment** | | |
| Outside Philippines | 2 | 1.71 |
| Outside the community but within the Philippines | 13 | 11.11 |
| Within the community/locality | 102 | 87.18 |
| **Total** | **117** | **100.00** |

***As to Sex and Age Distribution***

Table 3 shows that a slight majority of the respondents were females (54.70%), and the rest were males (45.30%). These figures follow the recent findings that TVET programs in the Philippines are increasingly serving as pathways to female empowerment, particularly in the service and tourism sectors. While Domogen (2022) suggested that since there is a high representation of women in TVET, there is a continued need for training in non-traditional "hard-tech" fields to dismantle cultural stigmas.

Moreover, the majority of the respondents were young adults (87.18%). This indicates that TESDA plays a primary role for the youth to engage in the labor market. According to Zenedeme (2020), young adults are most poised to adopt new entrepreneurial skills, their navigational tool to economic mobility.

***As to Educational Inclusivity and Job Placement***

TESDA welcomes all interested parties from the communities to avail the training program. In fact, 44.44 percent of the respondents were college graduates. These degree holders see the opportunity to engage in educational upgrading and the favorable outcome of availing the TESDA training program. Lindner (2020) confirmed that these college graduates did not experience or gain technical certifications in the academic degrees they took. The previous finding also added that the inclusion of high school graduates (25.64%) affirms TESDA's mandate to provide an accessible avenue for those with limited education to get technical and vocational certifications.

Due to TESDA's training programs, a significant number of the graduates worked within their local communities. This is a manifestation of support for the "stay-at-home" economy, breaking the "brain drain" in rural areas. Reyes et al. (2019) declared that TESDA's training programs directly foster inclusive growth in the localities of the graduates.

Table 4 presents the employment type experienced by the respondents before and after availing the TESDA training program. The algebraic sign of the change column bears a meaning that needs deeper understanding.

*Table 4. Comparative Data on Employment Type*

| Employment Type | Before Training (%) | After Training (%) | Change |
|---|---|---|---|
| Regular | 17.09 | 31.62 | +14.53% |
| Part-Time | 35.90 | 26.50 | -9.40% |
| Casual | 11.97 | 9.40 | -2.57% |
| Contractual | 11.97 | 11.11 | -0.86% |

Table 4 reveals the nearly twofold increase in regular employment (from 17.09% to 31.62%). This improvement suggests that TESDA certification serves as a "signal of quality" to employers, thereby facilitating a transition from unwarranted, part-time work to

stable, permanent positions. Orbeta et al. (2021) agreed that the certifications (NC I or II) have greatly impacted the employment status of the respondents. It seals the job security among the workers, particularly those employed in the private sector.

Now, Table 5 presents the comparative monthly income of the graduates before and after availing TESDA training programs. This is a measure of the impact of the graduates' utilization of entrepreneurial skills, a foundation to become financially resilient.

*Table 5. Comparative Monthly Income of the Respondents*

| Income Bracket | Descriptor | Before (%) | After (%) |
|---|---|---|---|
| Below 10,000 | Low Income / Poor | 88.03 | 68.38 |
| 10,000 – 19,999 | Lower Middle Income | 7.69 | 21.37 |
| 20,000 – 29,999 | Middle Income | 2.56 | 4.27 |
| 30,000 and above | Upper Middle Income | 1.71 | 5.98 |

It can be seen that the respondents in the low-income bracket decreased by nearly 20 percent (from 88.03% to 68.38%). Similarly, the lower middle-income group almost tripled in number after graduation from the TESDA training program. However, the majority still earned below PhP 10,000. Still, the numbers indicate that the certifications from TESDA is a good ladder of economic mobility.

Dumaua-Cabauatan et al. (2018) revealed that those graduates who still earned below the threshold of poverty were hindered by the lack of opportunities to avail. Accordingly, technical skills alone may not be enough due to the limited industrial demand in the locality. Hence, the utilization of entrepreneurial skills can be a factor for the graduates to cross the border of poverty through self-employment.

***Entrepreneurial Skill Utilization***

Table 6 shows that the respondents had a "Moderate" utilization ($M = 3.25$) of the entrepreneurial skills. This implies that they sometimes utilized it. While the standard deviation ($SD = 0.73$) suggested a strong consensus among the respondents. Deeper analysis of the sub-domains revealed a high "Will" of their psychological readiness and social adaptability. This means that the respondents had a high motivation or internal drive to utilize entrepreneurial skills. However, the respondents encountered a plateau in the "Way" of executing the entrepreneurial skills. This can surely pose a problem in seeing the impact of the utilization of entrepreneurial skills on the respondents' economic mobility and resilience.

*Table 6. Extent of the Utilization of Entrepreneurial Skills Among the Respondents of the Study*

| Domains/Indicators | Mean | SD | Descriptor |
|---|---|---|---|
| **A. Entrepreneurial Skills for Livelihood** | | | |
| I actively seek opportunities to improve my products or services. | 3.28 | 0.69 | High Extent |
| I effectively manage my resources (money, materials, time) to maximize profitability. | 3.26 | 0.72 | High Extent |
| I regularly implement problem-solving techniques to overcome business challenges. | 3.24 | 0.72 | Moderate Extent |
| I consistently apply my entrepreneurial skills to generate income. | 3.22 | 0.77 | Moderate Extent |
| I engage in marketing activities to increase my business's visibility and sales. | 3.21 | 0.73 | Moderate Extent |
| **Area Mean** | **3.24** | **0.72** | **Moderate Extent** |

| Domains/Indicators | Mean | SD | Descriptor |
|---|---|---|---|
| **B. Economic Benefits and Financial Management** | | | |
| Since starting my business/livelihood, my economic status and quality of life have improved. | 3.16 | 0.81 | Moderate Extent |
| My entrepreneurial activities provide sufficient income to support my livelihood. | 3.14 | 0.75 | Moderate Extent |
| I am confident in handling unexpected financial setbacks through entrepreneurial skills. | 3.14 | 0.81 | Moderate Extent |
| I allocate a portion of my earnings to reinvest in business growth and sustainability. | 3.12 | 0.82 | Moderate Extent |
| I maintain financial records and use budgeting to keep my business financially healthy. | 3.12 | 0.83 | Moderate Extent |
| **Area Mean** | **3.13** | **0.80** | **Moderate Extent** |
| **C. Entrepreneurial Mindset and Persistence** | | | |
| I learn from failures and adjust my approach to avoid repeating mistakes. | 3.33 | 0.71 | High Extent |
| I stay resilient and persistent despite difficulties in earning a living. | 3.32 | 0.69 | High Extent |
| I am motivated to face and overcome challenges to sustain my economic activities. | 3.3 | 0.70 | High Extent |
| I regularly take the initiative to explore new business or livelihood opportunities. | 3.29 | 0.71 | High Extent |
| I am willing to take calculated risks to expand and enhance my business. | 3.28 | 0.69 | High Extent |
| **Area Mean** | **3.31** | **0.69** | **High Extent** |
| **D. Innovation, Networking, and Continuous Learning** | | | |
| I pursue additional learning or training opportunities to enhance my entrepreneurial competencies. | 3.36 | 0.65 | High Extent |
| I seek and value customer and peer feedback to enhance my entrepreneurial skills. | 3.33 | 0.68 | High Extent |
| I build professional networks or partnerships that support business growth. | 3.32 | 0.67 | High Extent |
| I adapt to market changes by modifying my business strategies as needed. | 3.31 | 0.66 | High Extent |
| I proactively introduce innovative ideas to improve my products or services. | 3.28 | 0.64 | High Extent |
| **Area Mean** | **3.31** | **0.69** | High Extent |
| **Overall Mean** | **3.25** | **0.73** | **Moderate Extent** |

For the first sub-domain, the respondents posted an area mean ($M = 3.24$) for a "product-centric" approach to business at a moderate level, while the standard deviation ($SD = 0.72$) indicates the similarities of the responses. On top of the indicators of this sub-domain, the respondents had a high level of usage in terms of product improvement ($M = 3.28$) and resource management ($M = 3.26$), which are necessary in establishing a robust livelihood. However, the respondents had a moderate level of marketing activities ($M = 3.21$) which may result in reliance on passive sales strategies. The standard deviation of this indicator suggests a collective reluctance to engage in aggressive market problem-solving. Confirming this finding, Aborot (2023) found that Filipino micro-entrepreneurs most of the time give priority to product refinement as their competitive edge in the market. While

Dacera and De Guzman (2021) had the same observations that small-scale entrepreneurs lack formal sales training, and are dependent on passive visibility and word of mouth.

On the sub-domain of Economic Benefits and Financial Management, the respondents had the lowest perception at a moderate level with a mean of 3.13 and the highest standard deviation of 0.80, implying "fragmented" or inconsistent responses among the respondents. This can be understood as while some of them recognize economic improvement, there is a significant lack of consistent financial discipline. Furthermore, the observed wider variation of responses explicitly shows that while graduates possess strong psychological resilience and determination, or the "Will", the respondents heavily lack the structural financial toolkits, or the "Way", seriously needed to transform motivation into lasting stability. The low appreciation of record-keeping (M= 3.12, SD = 0.83) and strategic reinvestment (M = 3.12, SD = 0.82) proves that graduates encounter significant barriers in basic financial mechanics. It can be also understood that the respondents practiced "subsistence entrepreneurship", in which business funds are used in the immediate needs of the family. Lozada (2022) documented the practice of money-mixing among the entrepreneurs, in which personal and business funds were placed in the same account or safekeeping box. This can be a barrier for auditing purposes. Abenoja et al. (2021) also found that neophytes in business prioritize immediate consumption needs over long-term reinvestment.

Diverging, the respondents perceived the sub-domain of Entrepreneurial Mindset and Persistence at high extent ($M = 3.31$), implying that they always utilized it. The standard deviation ($SD = 0.69$) suggested that almost all respondents, regardless of their financial achievements, adopted the "growth mindset" in business. Under this sub-domain, the respondents also perceived at high extent their commitment to learning from failure ($M = 3.33$) and staying persistent despite the difficulties ($M = 3.32$). Laguador (2013) supported these findings based on the observation that courage and perseverance are dominant psychological traits among Filipinos. These are significant assets as cushions against failures. Perez (2022) also discovered that local entrepreneurs considered failure as a stepping stone toward learning and eventual success, and not a deterrent to keep going.

Finally, the respondents perceived Innovation, Networking, and Continuous Learning at high extent ($M = 3.31$), indicating their continuous utilization. While the standard deviation ($SD = 0.69$) suggested that most of them consistently utilized or practiced social engagements to promote business. Among the indicators, the respondents perceived at high extent the pursuit of additional learning or training opportunities ($M = 3.36$) and professional networks ($M = 3.32$). Their standard deviations also indicated that most of them have a similar perception. Tenedero (2021) supported the findings that social capital and community partnerships are very important for Filipino micro-enterprises to address risks and expand market coverage. While Santos (2020) pointed out that consistent participation in government-sponsored trainings helps boost the technical competencies in business undertakings.

### *Significant Difference in Employment Type Before and After Training*

The Stuart-Maxwell test for marginal homogeneity was used to determine if there was a significant transition of the employment status among the respondents of the study. This was selected specifically because it assesses changes in paired data for which traditional tests, such as the paired-samples t-test, are not applicable.

*Table 7. Test of Significant Difference of the Employment Type of the Respondents*

| Variable | $X^2$ | df | *p*-value | Decision |
|---|---|---|---|---|
| Employment Type Before vs After Training | 42.492 | 7 | .000*** | Highly Significant |

Table 7 shows that there was a highly significant transition or difference between the employment status of the respondents before and after the completion of TESDA training program ($x^2(7) = 42.492, p < .001$ ). This means that there was a significant number of respondents who moved from unstable to stable jobs, particularly those from part-time to regular positions. This finding aligns with the report of TESDA National Tracer Surveys (2023), which claimed a hike in post-training employment rate from 37 percent to 58 percent, a substantial gain of the training program. The studies of Ignacio and Tabu (2019) and Generalao (2025) pointed out the increase in job opportunities due to the improved workforce readiness to compete and engage in the labor markets.

### *Significant Difference in Income Before and After Training*

Again, the Stuart-Maxwell test for marginal homogeneity was used to compare the respondents' income distributions before and after the training program. Table 8 displays that there was a significant increase in the income of the respondents before and after the completion of the TESDA training program ($x^2(6) = 35.210, p < .001$). Although there was 68.38 percent (from 88.03 percent) of the respondents whose income remained below the threshold of poverty, there was still a significant number of respondents who moved to higher income levels. This indicates that the TESDA training program helped respondents in their economic mobility.

*Table 8. Test of Significant Difference in the Income of the Respondents*

| Variable | $X^2$ | df | $p$-value | Decision |
|---|---|---|---|---|
| Income Range Before vs After Training | 35.210 | 6 | .000*** | Highly Significant |

Pascual (2024) supported the present findings when this previous work found a positive correlation between TESDA certifications of graduates and graduates' salary scales. This implies that the standardized skill development serves as a determinant of the TESDA graduates' bargaining power in the labor market. Moreover, TESDA-CAR (2023) found similar results in which the income shifts serve as a "multiplier effect" in the local economies. However, Dumaua-Cabauatan et al. (2018) cautioned that external factors like local labor saturation and broader economic conditions may influence the outcomes or impact of the TESDA training programs.

### *Significant Difference in the Utilization of Entrepreneurial Skills by Income Category*

This study also intended to determine if the utilization of entrepreneurial skills varies among the respondents when grouped by income bracket. Finding the abnormality of the distribution of data using the Shapiro-Wilk test, one-way analysis of variance non-parametric (Kruskal-Wallis test) was decided the appropriate tool to analyze the data.

Table 8 displays that there was no significant difference in the utilization of entrepreneurial skills among the respondents grouped by post-training income ($H(3) = 5.82, p = .121$). The effect size ($\varepsilon^2$) of 0.050 points out that only 5 percent of the variance of the income variable can be explained by the entrepreneurial skills of the respondents (Vandenberg & Laranjo, 2020). Hence, the utilization of entrepreneurial skills among the respondents did not vary regardless of their income. It can be understood that the income of the respondents was not dictated by the level of utilization of entrepreneurial skills.

*Table 9. Test of Significant Difference in the Utilization of Entrepreneurial Skills Among Respondent Groups Grouped by Income Bracket Earned After Training*

| Variable | $H$ | df | p | $\varepsilon^2$ | Decision |
|---|---|---|---|---|---|
| Earnings After Training | 5.82 | 3 | 0.121 | 0.050 | Not Significant |

These findings are corroborated by the study of Abing et al. (2024), which found that post-training income levels do not depend on the entrepreneurial utilization of the graduates of the training program. Although the training program significantly improved the income of some respondents, this does not necessarily mean a significant variation in the utilization of the entrepreneurial skills. This finding suggested that the utilization of entrepreneurial skills cannot be a good predictor of the income scales of the graduates of the training programs. Hence, the graduates need post-training support for them to maximize the utilization of the significant learnings from the TESDA training program.

### *Influence of Demographic Variables on Entrepreneurial Skill Utilization*

This study also determined the influence of demographic variables on the utilization of entrepreneurial skills. Before this, the Shapiro-Wilk test examined the data and found that it was not normally distributed ($p < .05$). As a consequence, the Kruskal-Wallis test was employed as a robust nonparametric alternative to assess differences across the explanatory variables.

Table 10 revealed that there was no significant difference in the utilization of entrepreneurial skills among the respondents grouped by sex ($H(1) = 0.03, p = .853$), age ($H(1) = 2.14, p = .143$), the highest educational attainment ($H(2) = 1.03, p = .596$), and place of employment $\big((2) = 0.58, p = .748\big)$. This implies that the groupings by variable did not pose variation in the utilization of entrepreneurial skills among the respondents. This suggested uniformity of the application of the said skills across the diverse demographic profile of the respondents.

*Table 10. Test of Significant Difference in the Utilization of Entrepreneurial Skills Among Respondent Groups Grouped by Explanatory Variable*

| Variable | *H* | df | *p* | Decision |
|---|---|---|---|---|
| Sex | 0.03 | 1 | .853 | Failed to Reject $H_o$ |
| Age | 2.14 | 1 | .143 | Failed to Reject $H_o$ |
| Highest Educational Attainment | 1.03 | 2 | .596 | Failed to Reject $H_o$ |
| Place of Employment | 0.58 | 2 | .748 | Failed to Reject $H_o$ |

The local study of Caliat (2024) confirmed that sex and age had minimal influence on entrepreneurial practices, implying that these variables do not have predictive power on the utilization of skill sets. Similarly, Angeles (2024) concluded that predictors like field of study or marital status did not significantly predict variation in entrepreneurial application in the field. On the same vein, Tan (2021) clearly emphasized that the educational levels and the geographical location of employment did not have the power to predict the skill utilization among vocational graduates. Meaning, the internalization of the skills gained from the training is a more powerful factor than the demographic variables of the graduates. This finding suggested that future training programs must set aside intrinsic and extrinsic support for the graduates to optimize the utilization of significant learnings.

## Conclusion

This study concluded that the TESDA training program has significantly transitioned the employment to secure job status and improved the income of the graduates. These significant improvements are likely due to the NC I and II certifications received by the graduates, and not the moderate utilization of the skills set, since demographic variables and income brackets showed no significant variation in the practice of entrepreneurial skills. This study also concluded that TESDA training program should include the bridging of the gap from survivalist livelihood to sustainable entrepreneurship by providing extrinsic support systems like financial opportunity and a specialized mentoring program to fully unlock the potential of the graduates, thereby contributing significantly to the local or community economy.

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