

Technical Education and Skills Development Authority



2020
STUDY ON THE EMPLOYMENT
OF TVET GRADUATES

FULL REPORT



MESSAGE OF THE SECRETARY



At this time of pandemic, disruptions in different areas of lives is evident. And the education sector is one of the most affected as this affect the delivery of the training program. TESDA as an agency continues to deliver services and assistance to our kababayans by adopting flexible and dynamic approaches in the development and implementation of TVET policies and programs. TESDA focused on enhancement of the blended learning programs, expansion of partnerships, establishing of innovation training centers and special provisions of livelihood support and assistance to the communities.

It is with great hope to share with you the result of the 2020 Study on the Employment of TVET graduates (SETG). This report highlights the respondent's profile, assessment and certification, labor force participation, employment outcomes, satisfaction level and determinants of employability. Furthermore, this includes results on the impact of COVID-19 to TVET graduates specifically in terms of their livelihood. The 2020 SETG provides valuable inputs and recommendations are important in the formulation of sound policy decision making and reforms vital for human capital and development.

I acknowledge the participation and contribution of those who supported the conduct of this annual employment study. Let us continue to promote the role of TVET in nation building and economic progress.

Mabuhay tayong lahat!

SEC. ISIDRO S. LAPEÑA, PhD., CSEE

Director General



MESSAGE OF THE DEPUTY DIRECTOR GENERAL



The availability of evidence-based information through reliable data will identify significant factors to improve the existing TVET programs and policies and scope up TVET-related opportunities relevant in today's situation, including challenges brought by the changes in the technology digitalization and even the impact of the pandemic.

Despite of these challenges, TESDA as the government agency mandated to manage technical education and skills development remains relevant and responsive. Through the implementation of the various TVET programs, TVET delivery is able to adopt with the current. One of the indicators that can gauge the relevance of the acquired competencies, especially in this time wherein a lot of factors have to be considered, is the employment of the TVET graduates.

The 2020 Study on Employment of TVET Graduates (SETG) was realized despite the current state of the country that limits the movements. TESDA was able to deliver its commitment to monitor the progress of its graduates through the annual tracer study using the available platforms to collect the information needed in the development of the SETG.

Addressing the issues and challenges in employment and training delivery brought by the pandemic which is also captured in this report, other than the other major components that are covered, will serve as basis for policy decisions and development of initiatives. This annual report will be of great help to all TVET graduates, academe, industries, and stakeholders as we continue to work together for quality employment and empowerment of Filipinos.

OSANNA A. URDANE A, CESO II

Deputy Director Gereral Policies and Planning



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EXECUTIVE SUMMARY

TESDA produced 1,919,013 Technical-Vocational Education and Training (TVET) graduates in 2019. For this batch of graduates, the regions with the most number of graduates were the National Capital Region (NCR) at 17.35%, Region III (Central Luzon) at 12.84%, and Region IV-A (CALABARZON) at 11.62%. The graduates were generally dominated by females, with a six percent difference from males. On average, graduates were 30.25 years old with variability of 11.49 years. The youngest and oldest graduates were females aged 15 and 79 years old, respectively. Many of the 2019 TVET graduates were bachelor's degree holders before attending a TVET program. It was followed by those who were bachelor-level undergraduates. Graduates of secondary education from the old curriculum ranked third.

Institution-based program delivery continuously made up the biggest share among the TVET graduates at 56.25%, with males moderately outnumbering females. Additionally, about 514,956 graduates in 2019, which comprised 26.83% of the TVET graduates, were awarded scholarships while in TESDA. Consistent with the past surveys, the majority (56.48%) of this batch of graduates were scholars of the Training for Work Scholarship Program (TWSP). Tourism consistently bagged the top sector as the TVET clients' choice, while skills enhancement was consistently found as the primary reason for TVET clients taking a TESDA program.

About 49% took a career assessment test, wherein many were female. Many of the graduates were under the With Training Regulations (WTR), making up 58.71% of the graduates' population. About 74% of the graduates took a competency assessment, with almost a 1:1 distribution between males and females. Many of those in batch 2019 who did not take competency assessment were either busy at work or school or were working abroad (42.08%). A number of them (29.71%) also said that they were unaware of the assessment schedule. The passing rate among WTR takers of the competency assessment continued to increase based on the records from the past surveys, from 94% among the takers in 2016 to 97% in 2017 and 2018 to 98.71% in 2019. In this batch, a vast number of the competency passers were certified as NC II, which constituted 84.15% of the passers' population.

It was estimated that 71.2% of the 2019 graduates were active in the labor force. This signifies that 7 in 10 graduates were either employed or unemployed at the time of the survey. Almost half of those who were not active in the labor force said that this was because they were still attending schools, because of household/family, and because, according to a few, they were afraid of contracting COVID-19.

Of those in the labor force, about seven in every ten were working during the survey period. This is considerably lower than the 2018 estimate of 84.15%, with a percent decrease of about 16%. The highest employment rate was noted for those who were 55 to 64 years old (84.81%), somewhat higher than those who were 45 to 54 years old (82.89%) and in their retiring age (82.17%). TVET clients with post-college degrees posted the highest employment rate. The non-TTI graduates registered an employment rate of 71.51%, a bit higher than the overall estimate. Region XII bagged the highest employment rate at 82.38%, higher than the overall estimate. High estimates were also recorded in Region X (80.07%) and Region II (78.73%). In contrast, Region VIII posted the lowest employment rate at 56.34% (Table 36). High employment rates were registered among the enterprise-based programs in terms of the program delivery mode, with an estimated average of 74.24%. The decorative crafts (100%), utilities (100%), wholesale and retail trading (90.98), TVET (87.8%), garments (83.55%), and footwear and leather goods (82.9%) were the top sectors with high employment rates. On the other hand, low estimates were recorded for maritime (55.34%) and visual arts (50.5%). The graduates from groups such as RCEF-RESP, MILF beneficiaries, Balik Probinsiya, inmates and

detainees, drug dependents surrenderees/surrenderers, and family members of AFP and PNP wounded in-action were recorded to be employed during the survey period. Similarly, an overwhelming majority of those OFW dependents (92.09%) and uniformed personnel (91.7%) were also working at the time the survey was conducted. The 4P's beneficiaries (77.84%), displaced workers (74.13%), and TESDA alumni (71.18%) registered employment rates on par with the TVET national estimate of 70.51%. In particular, among the scholars, those under STEP and TWSP displayed the top two highest employment rates, higher than the national estimate, with estimates of 74.43% and 73.43%, respectively. A large number of TVET graduates already received certification for their competency. In every ten certified, seven were estimated to work when the survey was conducted. Alternatively, among the few graduates who were not yet certified, about 62% were employed.

Based on the statistical comparisons conducted, there was no significant difference in the employment rates between male and female graduates. Region XII, which was estimated to have the highest employment rate, was not significantly different from those in regions I, II, IV-A, V, XI, X, V, X, XI, and NCR. Alternatively, Region VIII, which posted the lowest rate, was not statistically different from those estimates generated for regions III, VI, VII, and CARAGA. The data collected supported the findings that the number of employed non-TTI araduates is significantly higher than employed TTI graduates. The industry-based program (enterprisebased) exhibited the highest employment rate among the reliable estimates and were found not significantly different with learnership and NGOs, POs, and CSR training (communitybased). Moreover, the estimate from the latter was found significantly higher than estimates of TESDA Provisional PTC's and mobile training programs. Wholesale and retail trading with considerably high employment rates was not significantly different from those with high and reliable estimates. Nonetheless, based on the 95% confidence interval estimates, the said sector was found to have a significantly higher estimate than electrical and electronics, information and communication technology, metals and engineering, social and community development, and tourism sectors. Consistently, certified TVET graduates were found to have a higher employment rate than non-certified graduates. Still, the difference was not significant enough to conclude that there were more certified than non-certified graduates who were gaining employment. Moreover, the proportion of employed certified TVET graduates were statistically compared across the levels of certification. The 95% confidence interval estimates showed that the proportion of employed graduates across the different levels was not significantly different.

About a quarter (25.16%) of the employed graduates in 2019 were in services and sales. Among the employed graduates, 65.37% were wage and salary workers, wherein males slightly outnumbered females. Nearly one-third (30.77%) of them were classified as own-account workers. There were some classified as unpaid family workers (3.53%); the majority were females. Meanwhile, very few were classified as online digital workers or entrepreneurs. More than half (56.46%) were working in a short-term or seasonal job/business, or as an unpaid family worker. Also, some 2019 graduates (38.59%) were already permanent in their jobs or businesses. A few (4.96%) worked with different employers on a day-to-day or week-to-week basis. The vast majority of the 2019 graduates (94.79%) were working within their province during the survey period. Only a few of them were working abroad, making up0.28% of the population of graduates. Many of the graduates were in retail trade, except for motor vehicles and motorcycles. Some were in public administration and defense, compulsory social security, and other personal service activities. Some worked at crop and animal production, hunting, and other related service activities.

Based on the survey, 35.41% of the 2019 graduates already had jobs before they attended a TVET program, indicating a large portion who were unemployed before attending training. After training, about half of the graduates were employed at the time of the survey.

On average, graduates were earning 17,133.41 pesos before the training, with a large variability among the earners having a standard deviation of 45,482.24 pesos. It is unfortunate to find that graduates during the survey period received a lower monthly income of 15,530.80 pesos, on average, with a much larger standard deviation of 49,161.13 pesos. Nonetheless, this decrease in the monthly income of the graduates, on average, was not found significant (p-value=0.2563).

An overwhelming majority of 2019 TVET graduates across the different program delivery modes believed that they possessed the required skills in their program after completing it. A little more than half of the graduates (55.46%) were pleased with the training they have attended, in which males who responded so slightly surpassed the females. Almost a quarter (25.88%) said that the training was somewhat helpful. Meanwhile, about 19% found their training to be of no use in their current work, of which around 57% were females. More than three-fourth (77.27%) of them said that they could not utilize the skills they learned from training in TESDA in their jobs because the skills needed in their current work were entirely different from what they have acquired from the training. There were a considerable number of them who had jobs somehow related to the training attended. Whereas a great portion of them found that their training was not relevant to their current job. Considering the whole experience of the graduates with TESDA, almost all (99.7%) of the graduates were satisfied with the training they attended.

Among the unemployed TVET graduates, nearly three-fourths of them said they became unemployed due to the COVID-19 pandemic, in which the female-to-male ratio was almost 1:1. The majority (80.21%) of them affected by the pandemic could not work due to travel restrictions. Some lost jobs because the employers' shops/businesses or their businesses had to close. Also, some said they became unemployed because of the reduction in the daily labor opportunities.

Based on the data collected among the 2019 TVET graduates, whether a graduate was employed or unemployed was statistically associated with the type of provider, educational attainment, the reason for taking up the program, program delivery mode, type of program registration, region, sector, age group, if the course is aligned with the result of a career test, and the satisfaction level of a graduate.

Moreover, a graduate older than 15 to 24 years old had a higher chance to be employed than to be unemployed. A graduate from Ilocos Region, Cagayan Valley, Bicol Region, Northern Mindanao, and SOCCKSARGEN, was 1.60, 1.54, 1.61, 1.89, and 2.0 times, respectively, more likely to gain employment than a graduate from NCR. Alternatively, a graduate from Central Luzon, Central Visayas, and Eastern Visayas were less likely to be employed compared to those from NCR. A graduate who attended a TVET program for promotion or to increase their income had a higher chance (2 and 2.8 times, respectively) of getting employed compared to those whose reason was for employment. A graduate from NTR or not monitored programs was less likely to be employed than a graduate from WTR Also, the odds of a TVET graduate being employed were reduced to about 31% if one was from TTI. A graduate whose course was in line with the results of a career assessment was more likely to gain employment compared to those whose course was not. Likewise, a greater chance to be employed was observed for the graduates who were overall satisfied with the TESDA program attended.



RESULTS AND DISCUSSION

1. Profile of 2019 TVET Graduates

In 2019, TESDA produced 1,919,013 Technical-Vocational Education and Training (TVET) graduates. This shows a decrease in the number of recorded graduates from 2,074,384 in 2018, which translates to around an 8% decrease. The reduction in the number of TVET graduates has been documented since 2017. For this batch of graduates, the regions with the most number of graduates were the National Capital Region (NCR) at 17.35%, Region III (Central Luzon) at 12.84%, and Region IV-A (CALABARZON) at 11.62%. These regions consistently posted the highest number of graduates for several consecutive years. On the other hand, the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) consistently had the least number of graduates (0.75%), relative to the graduate population. A similar distribution pattern of graduates across regions has been recorded for the past several surveys. The graduates were generally dominated by females, with a 6% difference from males (Table 1). The same distribution was observed in 2018 (Table 1).

Table 1. Weighted Distribution of TVET Graduates by Region, Philippines: 2019

			S	sex		
Region	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
BARMM	6,232	43.41	8,125	56.59	14,357	0.75
CAR	23,277	49.66	23,592	50.34	46,869	2.44
CARAGA	41,736	43.47	54,285	56.53	96,021	5.00
NCR	217,364	65.29	115,554	34.71	332,918	17.35
1	52,457	47.57	57,806	52.43	110,263	5.75
II	39,364	50.64	38,368	49.36	77,732	4.05
Ш	136,313	55.31	110,137	44.69	246,450	12.84
IV-A	115,761	51.90	107,293	48.10	223,054	11.62
IV-B	30,831	47.48	34,102	52.52	64,933	3.38
٧	36,696	51.11	35,109	48.89	71,805	3.74
VI	76,352	49.00	79,479	51.00	155,831	8.12
VII	58,552	62.25	35,508	37.75	94,060	4.90
VIII	27,011	48.62	28,550	51.38	55,561	2.90
IX	30,227	51.81	28,112	48.19	58,339	3.04
X	63,967	53.61	55,362	46.39	119,329	6.22
XI	43,746	54.48	36,546	45.52	80,292	4.18
XII	35,583	49.98	35,616	50.02	71,199	3.71
Philippines	1,035,469	53.96	883,544	46.04	1,919,013	100.00

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

In the past surveys, female TVET clients had continuously outnumbered male clients to a small degree. For this round, it was estimated that there were 117 female graduates for every 100 males, a larger gap compared to the sex ratio of 114 females per 100 males recorded in 2018 and 111 females per 100 males in 2017. A considerable gap in the female and male ratio was registered in NCR, Region VII (Central Visayas), and Region III (Central Luzon) with a female-to-male ratio of 188:100, 165:100, and 124:100, respectively. On the other hand, more male graduates were observed in BARMM and CARAGA Administrative Region, with a female-to-male ratio of 77:100. (Table 2). These regions consistently have shown more male graduates since the 2017 survey.

Table 2. Sex ratios per region of TVET graduates. Philippines: 2019.

Region	Female:Male
BARMM	77:100
CAR	99:100
CARAGA	77:100
NCR	188:100
1	91:100
II	103:100
III	124:100
IV-A	108:100
IV-B	90:100
٧	105:100
VI	96:100
VII	165:100
VIII	95:100
IX	108:100
X	116:100
XI	120:100
XII	100:100
Philippines	117:100

Most of the 2019 graduates were 15 to 24 years old, which registered about 43% of graduates' population, of which males slightly outnumbered females. This share in the population is on par with what was recorded in 2018 (40%). As expected, the number of graduates increased as the age group increased. The elderly group comprised almost 0.74% of TVET graduates, where most were female (74.14%). It can also be observed that the share of female graduates increased along with the age group (Table 3 and Figure 1).

Moreover, on average, graduates were 30.25 years old with variability of 11.49 years. Female graduates were four years older than males, on average. At least half of the graduate population was 27 years old or younger. The youngest and oldest graduates were females aged 15 and 79 years old, respectively (Table 4). The profile of the 2019 graduates, in terms of age and sex, did not differ from that of the 2018 graduates.

Table 3. Weighted Distribution of TVET Graduates by Age Group, by Sex, Philippines: 2019

	Sex								
Age group	Fem	nale	M	ale	Т	Total			
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b			
15 – 24	400,021	48.41	426,270	51.59	826,290	43.06			
25 – 34	262,864	49.55	267,630	50.45	530,495	27.64			
35 – 44	184,186	59.90	123,295	40.10	307,481	16.02			
45 – 54	118,438	72.79	44,283	27.21	162,721	8.48			
55 – 64	59,389	76.37	18,378	23.63	77,767	4.05			
65 and over	10,571	74.14	3,688	25.86	14,259	0.74			
Total	1,035,469	53.96	883,544	46.04	1,919,013	100.00			

aPercentage over the row total; bPercentage over the total number of TVET graduates

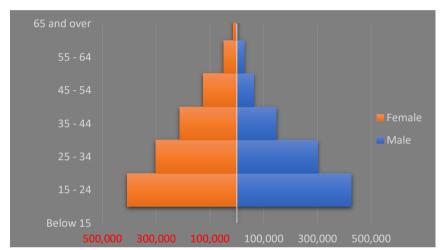


Figure 1. Weighted percent distribution of TVET graduates by age group and by sex. Philippines, 2019.

Table 4. Summary statistics for Age by Sex, Philippines: 2019

Chalistics	Se	x	Overall	
Statistics	Female	Male	Overali	
Minimum	15.00	16.00	15.00	
Maximum	79.00	73.00	79.00	
Mean	32.04	28.15	30.25	
Median	28.00	25.00	27.00	
Standard deviation	12.52	9.73	11.49	
Skewness	0.86	1.37	1.07	

Many of the 2019 TVET graduates were bachelor's degree holders before attending a TVET program. They comprised 28.84% of the TESDA's total graduate population, and more than half were female (61.35%). It was followed by those who were bachelor-level undergraduates at 21.89%, which were also dominated by females. Graduates of secondary education from the old curriculum ranked third with 12.19%, wherein 56.08% were male. Almost half of the graduates in 2019 were bachelor graduates or bachelor units, while very few were post-graduate holders. This might show that many Filipinos, even those with high educational attainment, believe that with TESDA training, more employment opportunities will come along their way (Table 5).

Table 5. Weighted distribution of TVET Graduates, by Sex, by Highest Grade Completed, Philippines: 2019

Philippines: 2019	Sex									
Highest Educational Attainment	Fe	male	٨	Nale	Т	otal				
Affainment	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b				
No grade completed	1,160	47.88	1,263	52.12	2,423	0.13				
Early childhood education	0	0.00	0	0.00	0	0.00				
Primary education (elementary) undergraduate	5,701	72.43	2,170	27.57	7,871	0.41				
Primary education (elementary) graduate	13,471	70.02	5,767	29.98	19,238	1.00				
Lower secondary education (junior HS) undergraduate (old curriculum)	45,793	66.28	23,295	33.72	69,088	3.60				
Lower secondary education (junior HS) undergraduate (K-12 curriculum)	14,749	34.16	28,432	65.84	43,181	2.25				
Lower secondary education (junior HS) graduate (old curriculum)	102,752	43.92	131,217	56.08	233,969	12.19				
Lower secondary education (junior HS) graduate (K-12 curriculum)	93,311	56.98	70,446	43.02	163,757	8.53				
Upper secondary education (senior HS) undergraduate	33,516	39.37	51,606	60.63	85,122	4.44				
Upper secondary education (senior HS) graduate	81,629	43.94	104,151	56.06	185,780	9.68				
Post-secondary non-tertiary education	52,822	52.51	47,777	47.49	100,599	5.24				
Short-cycle tertiary education	11,663	53.06	10,318	46.94	21,981	1.15				
Bachelor level education undergraduate	229,368	54.60	190,729	45.40	420,097	21.89				
Bachelor level education graduate	339,492	61.35	213,880	38.65	553,372	28.84				
Master level education	7,900	78.86	2,118	21.14	10,019	0.52				
Doctoral level education	2,142	85.13	374	14.87	2,516	0.13				
Total	1,035,469	53.96	883,544	46.04	1,919,013	100.00				

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

Institution-based program delivery continuously had the largest share among the TVET graduates at 56.25%, with males moderately outnumbering females (Figure 2). Nonetheless, this estimate was found lower compared to that of 62.37% among 2018 graduates. Similar to the past surveys, this was again followed by the graduates of community-based programs at 40.49%, which were mostly comprised of females. Of those programs classified as community-based, the LGU-oriented program had the greatest portion. Moreover, it can be observed that many of those from the enterprise-based programs were female (55.90%). Also, among the enterprise-based programs, the apprenticeship was observed to be the most prominent one (Table 6).

Table 6. Weighted Distribution of TVET Graduates by Delivery Mode of Training, by Sex

Philippines: 2019

	Sex									
Sector	Fe	male	٨	Nale	Т	otal				
333.3	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b				
Institution-based	517,958	47.98	561,471	52.02	1,079,429	56.25				
Enterprise-based	35,018	55.90	27,625	44.10	62,643	3.26				
Dual training system	2,189	75.42	713	24.58	2,902	0.15				
Apprenticeship	14,536	59.50	9,895	40.50	24,431	1.27				
Enterprise-based: Learnership	5,430	44.61	6,744	55.39	12,174	0.63				
PAFSE	1,099	100.00	0	0.00	1,099	0.06				
Supervised Industry Learning	185	11.94	1,368	88.06	1,553	0.08				
Industry-based/ in- company training	10,836	58.36	7,732	41.64	18,568	0.97				
Farm schools/ enterprise training	742	38.74	1,173	61.26	1,915	0.10				
Community-based	482,493	62.10	294,447	37.90	776,941	40.49				
Mobile training program	157,828	60.92	101,234	39.08	259,062	13.50				
TESDA Provisional PTCs/ Extension programs of TTIs	82,249	54.62	68,341	45.38	150,590	7.84				
LGU-oriented community-based programs	179,110	64.42	98,924	35.58	278,035	14.49				
NGOs, POs, CSR trainings	63,306	70.93	25,948	29.07	89,254	4.65				
Total	1,035,469	53.96	883,544	46.04	1,919,013	100.00				

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

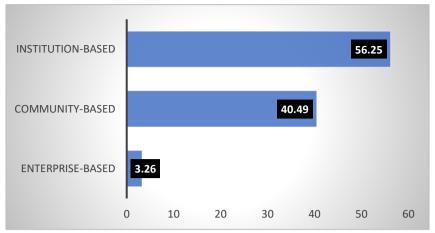


Figure 2. Weighted percent distribution of TVET graduates by program delivery mode. Philippines, 2019.

About 514,956 graduates in 2019, which comprised 26.83% of the TVET graduates, were awarded scholarships while in TESDA. This percentage of scholars was on par with those estimated in 2018 (27.83%). Nonetheless, there had been a continuous decrease in the number of scholars since 2016. Consistent with the past surveys, the majority (56.48%) of this batch of graduates were scholars of the Training for Work Scholarship Program (TWSP). The remaining graduates were recipients of scholarships from the Skills Training for Employment Program (STEP; 19.97%), Universal Access to Quality Tertiary Education Act (UAQTEA; 19.43%), and Private Education Students Fund Assistance (PESFA; 4.13%). Slightly more female graduates were recipients of PESFA and STEP compared to men, while it was the opposite for the recipients of TWSP and UAQTEA (Table 7 and Figure 3).

Table 7. Weighted Distribution of TVET Graduates by Scholarship Program, by Sex,

Philippines: 2019

Caladanahir	Sex									
Scholarship Program	Female		N	\ale	Total					
riogiani	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b				
PESFA	11,148	52.45	10,107	47.55	21,255	4.13				
STEP	59,501	57.87	43,310	42.13	102,811	19.97				
TWSP	136,816	47.04	154,016	52.96	290,832	56.48				
UAQTEA	32,293	32.27	67,765	67.73	100,058	19.43				
Total	239,758	46.56	275,198	53.44	514,956	100.00				

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

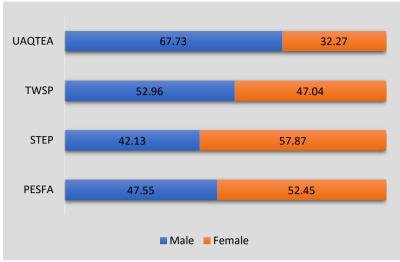


Figure 3. Weighted percent distribution of TVET scholars by their the program, by sex. Philippines, 2019.

The distributional pattern of TVET graduates across sectors has not changed since the 2016 survey. Tourism consistently bagged the top sector as the choice of TVET clients. Among the 2019 graduates, 28.79% were in the tourism sector, a little less than what was estimated in 2018 (31.84%) but was still considerably higher than the other sectors. For 2019, Tourism was followed by the Electrical and Electronics sector (11.14%) and then the Human Health/Health Care sector (9.23%) (Figure 4 and Table 8). Tourism is a female-dominated sector along with decorative crafts, footwear and leather goods, garments, human health/health care, processed food and beverages, social community development, and wholesale and retail trading sectors. In contrast, the sectors that were found outrageously dominated by males were automotive and land transportation; construction; heating, ventilation, air conditioning, and refrigerator; maritime; metals and engineering; and utilities (Table 4).

For the past several surveys, skills enhancement was consistently found as the primary reason for TVET clients taking a TESDA program. About four in every ten 2019 graduates took TVET programs to upgrade or enhance their skills, as indicated by a large number of female graduates. Employment was only the second-highest reason for attending a TVET program, regardless of the client's birth sex. A few took a program for personal reasons or to satisfy their hobby (Table 9). This distributional pattern has been consistent among graduates since the 2017 survey. Furthermore, based on the survey data, a few of the graduates took a TVET program for the following reasons: for academic requirements, to get NC certification, a requirement of employer, to get a license, as a program for women's month, and as a retirement activity.

Table 8. Weighted distribution of TVET Graduates by Sector and by Sex, Philippines: 2019

-				Sex		
Sector	Fer	nale	٨	Nale	To	otal
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Agriculture, Forestry, and Fishery	63,099	56.09	49,406	43.91	112,505	5.86
Automotive and Land Transportation	28,994	16.38	148,066	83.62	177,060	9.23
Construction	6,232	6.96	83,323	93.04	89,555	4.67
Decorative Crafts	1,016	100.00	0	0.00	1,016	0.05
Electrical and Electronics	68,525	32.05	145,267	67.95	213,792	11.14
Footwear and Leather goods	3,083	92.50	250	7.50	3,333	0.17
Garments	37,041	93.39	2,622	6.61	39,663	2.07
Heating, Ventilation, Airconditioning, and Refrigeration	187	1.52	12,074	98.48	12,261	0.64
Human Health/Health Care	128,048	77.13	37,972	22.87	166,020	8.65
Information and Communication Technology	52,551	57.75	38,447	42.25	90,998	4.74
Language	25,004	61.64	15,562	38.36	40,565	2.11
Maritime	2,270	17.97	10,367	82.03	12,637	0.66
Metals and Engineering	13,011	10.82	107,277	89.18	120,288	6.27
Processed Food and Beverages	55,534	80.77	13,225	19.23	68,759	3.58
Social, Community Development, and Other Services	79,201	79.68	20,202	20.32	99,402	5.18
Tourism (Hotel and Restaurant)	383,461	69.41	169,004	30.59	552,465	28.79
TVET	10,286	56.20	8,015	43.80	18,301	0.95
Utilities	0	0.00	1,044	100.00	1,044	0.05
Visual Arts	1,478	46.90	1,674	53.10	3,152	0.16
Wholesale and Retail Trading	4,295	83.54	847	16.46	5,142	0.27
Others	72,153	79.24	18,903	20.76	91,057	4.74
Total	1,035,469	53.96	883,544	46.04	1,919,013	100.00

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

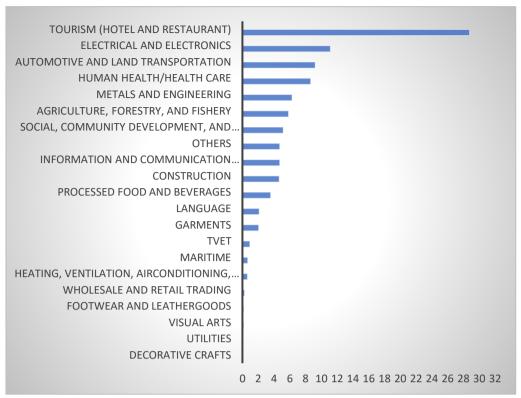


Figure 4. Weighted percent distribution of TVET graduates by the scholarship program, by sex. Philippines, 2019.

Table 9. Weighted distribution of TVET Graduates by their Reasons for Taking Up TVET

Programs, Philippines, 2019

	Sex								
Reasons for taking up the	Fe	emale		Male	Total				
program	Freq	Percentage ^a	Freq	Percentage ^a	Freq	Percentage ^b			
Employment/to get job	355,755	49.30	365,906	50.70	721,661	37.61			
Promotion	15,969	57.90	11,611	42.10	27,579	1.44			
To increase income	67,483	87.76	9,413	12.24	76,896	4.01			
Skills upgrading/enhancement	437,971	52.79	391,653	47.21	829,624	43.23			
TVET qualification is popular	1,570	23.65	5,067	76.35	6,637	0.35			
Personal use/ interest/ hobby	142,774	64.00	80,304	36.00	223,078	11.62			
Nothing to do	2,143	49.38	2,197	50.62	4,340	0.23			
Others	11,805	40.43	17,393	59.57	29,197	1.52			
Total	1,035,469	53.96	883,544	46.04	1,919,013	100.00			

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

Taking a career assessment test is beneficial to TVET clients to help them choose a training program that fits their needs. Among the 2019 graduates, only around 49% took the said assessment, wherein many were female (Table 10 and Figure 5). The 2019's estimate was somewhat higher than the 44% but still lower than the 53% estimates from 2018 and 2017, respectively. This shows a good promotion of the career assessment program in 2019, or many in that batch felt the need for such assessment for their career guide compared to the

previous years. It can be further observed that a larger portion of those who took such an assessment in 2019 were females who received the PESFA scholarship.

It is presented in Table 11 that many (46.42%) of those who took a career assessment were under the National Career Assessment Exam (NCAE). Specifically, about 35% took the Youth Profiling for Starring Careers (YP4SC). Meanwhile, among those in the other classification, the majority mentioned that they took the assessment through a paper-assisted test, while a few did so via interview and LTO exam.

Moreover, it is interesting to know that most (80.61%) of those who underwent the career assessment had assessments that were aligned with their target TVET program. The larger percentage was from those who took other career assessment programs at 98.24%. It is also worth knowing that many of those who considered taking NCAE (30.21%) had results that were not aligned with their TVET training program (Table 11).

Table 10. Weighted Distribution of TVET graduates as whether they took Career Profiling

Examination/ Career Assessment Test, by Scholarship, by Sex, Philippines: 2019

Scholarship	Exc	aminatio	er Profiling on/ Caree nent Test	-	Did not Take Career Profiling Examination/ Career Assessment Test				Total		
	Female		Ma	Male		Female		Male			
	Freq	% ª	Freq	%ª	Freq	%°	Freq	% ª	Freq	%b	
With Scholarship											
PESFA	10,208	48.03	3,051	14.35	940	4.42	7,056	33.20	21,255	1.11	
STEP	30,514	29.68	15,441	15.02	28,987	28.19	27,869	27.11	102,811	5.36	
TWSP	85,225	29.30	58,756	20.20	51,591	17.74	95,260	32.75	290,832	15.16	
UAQTEA	14,700	14.69	24,246	24.23	17,593	17.58	43,519	43.49	100,058	5.21	
Without Scholarship (Regular Program)	442,914	31.55	249,654	17.78	352,797	25.13	358,692	25.55	1,404,057	73.17	
Total	583,561	30.41	351,147	18.30	451,908	23.55	532,397	27.74	1,919,013	100.00	

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

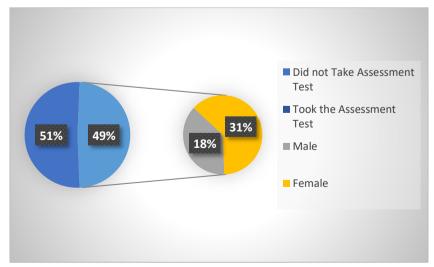


Figure 5. Weighted percent distribution of TVET graduates by whether or not they took assessment test. Philippines, 2019.

Table 11. Weighted Distribution of TVET graduates as whether the career assessment result is in line with the TVET program they enrolled in, by Career Assessment Tool, Philippines: 2019

Profiling/ Career Assessment Tool	In line	Total				
	Freq	% ª	Freq	%°	Freq	% ^b
YP4SC	276,409	85.46	47,026	14.54	323,436	34.60
NCAE	302,820	69.79	131,072	30.21	433,893	46.42
Others	174,259	98.24	3,121	1.76	177,380	18.98
Total	753,488	80.61	181,220	19.39	934,708	100.00

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

2. Competency Assessment and Certification

As anticipated, many of the graduates were under the With Training Regulations (WTR), with a share of 58.71% of the graduates' population. Unlike in the previous year, more males were recorded in 2019 (52.55%). Alternatively, more female graduates (64.38%) underwent monitored programs - programs with TVET content conducted by partners such as LGUs, NGOs, and other government agencies. The least share of graduates was found under the programs with No Training Regulations (NTR) - with more female graduates (Table 12).

Table 12. Weighted Distribution of TVET Graduates by Type of Program Provided, by Sex,

Philippines: 2019

	Sex								
Type of Program	Female		Μ	ale	Total				
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage			
WTR	534,631	47.45	592,082	52.55	1,126,713	58.71			
NTR	40,971	52.51	37,057	47.49	78,028	4.07			
Monitored Program	459,867	64.38	254,406	35.62	714,273	37.22			
Total	1,035,469	53.96	883,544	46.04	1,919,013	100.00			

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

It is a known fact among TVET graduates that they must comply with the competency assessment to guarantee that they possess the competencies needed for a particular qualification. However, only 73.77% of them took a competency assessment, with almost a 1:1 distribution between males and females (Table 13). Nonetheless, this estimate was recorded to be higher than the previous years, manifesting the effort of the management of TESDA to continuously promote the importance of the said assessment to their graduates.

Table 13. Weighted Distribution of TVET Graduates as Whether They Took Competency or Not

by Sex, Philippines: 2019

	Sex								
Took Competency	Female		М	ale	Total				
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage			
Yes	705,495	49.84	710,071	50.16	1,415,566	73.77			
No	329,974	65.54	173,473	34.46	503,447	26.23			
Total	1,035,469	53.96	883,544	46.04	1,919,013	100.00			

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

As for the WTR graduates alone, 91.21% took the competency assessment, and many were male (Table 7). This share is on par with that of in 2018 (91.59%). Although a vast number of WTR graduates complied with such requirements, a goal should be made to make it a hundred percent.

Table 14. Weighted Distribution of TVET Graduates under WTR Who Took Competency by Sex,

Philippines: 2019

	Sex								
Took Competency	Female		Μ	ale	Total				
Competency	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage			
Yes	484,945	47.19	542,690	52.81	1,027,635	91.21			
No	49,686	50.15	49,391	49.85	99,078	8.79			
Total	534,631	47.45	592,082	52.55	1,126,713	100.00			

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

For the same reasons as the previous graduates, many of those in batch 2019 who did not take the competency assessment were busy at work or school or were working abroad (42.08%). A number of them (29.71%) also said that they were not aware of the assessment schedule. The management of TESDA should enhance their promotion strategy to inform all of their graduates about the examination schedules. Moreover, there were still graduates who believed that such assessment was not mandatory (14.86%), which was twice as high compared to what was recorded in 2018 (7.75%) (Table 15). This is a bit alarming since it reflects that TESDA is not yet successful in addressing this issue. In addition, the other reasons for not taking the assessment that were identified included the COVID-19 pandemic, health, evaluation upon the commencement of the apprenticeship/learnership program, and being too old.

Table 15. Weighted Distribution of WTR Graduates By their Reasons for Not Taking

Competency Assessment, Philippines: 2019

	Sex						
Reasons for not taking competency assessment	Female		Male		Total		
	Freq	%	Freq	%"	Freq	%b	
Assessment tools/ test package not available	930	100.00	0	0.00	930	0.94	
Assessor is not available	0	0.00	400	100.00	400	0.40	
No assessment center in the area	0	0.00	56	100.00	56	0.06	
Assessment is not mandatory	8,313	56.45	6,413	43.55	14,726	14.86	
Skills and knowledge learned not sufficient	587	69.90	253	30.10	840	0.85	
No money/ financial constraints	2,195	55.39	1,768	44.61	3,962	4.00	
No time/ working/ schooling/ abroad	21,971	52.70	19,720	47.30	41,691	42.08	
Schedule not known	11,903	40.44	17,533	59.56	29,436	29.71	
Others	3,788	53.82	3,250	46.18	7,037	7.10	
Total	49,686	50.15	49,391	49.85	99,078	100.00	

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

The passing rate among WTR takers of the competency assessment continues to increase based on the records from the past surveys - from 94% among the takers in 2016 to 97% in 2017 and 2018 to 98.71% in 2019. More male WTR graduates than female graduates were recorded passers. Similarly, considering all the 2019 TVET graduates, nearly the same passing rate was estimated, in which there was a closely equal distribution of passers between males and females (Table 16). Moreover, it can be seen in Table 17 that all sectors for WTR graduates acquired high certification passing rates, showing evidence of meeting competency standards among these graduates.

Table 16. Weighted Distribution of TVET Graduates who Passed the Competency Assessment by Sex, Philippines: 2019

	Sex							
Type of Program	Female		٨	Nale	Total			
riogiani	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b		
WTR	478,321	47.16	536,027	52.84	1,014,348	98.71		
TVET	695,475	49.83	700,121	50.17	1,395,596	98.59		

^aPercentage over the row total; ^bPercentage over the total number of TVET/WTR graduates who took the competency assessment

Table 17. Certification Rates of TVET Graduates of WTR Programs, By Sector, Philippines: 2019

Table 17. Cerillication Rates of TVET Graduat	Took Assessment		Assessment Result			
Sector			Passed		Failed	
	Freq	% º	Freq	%b	Freq	%b
Agriculture, Forestry, and Fishery	58,048	5.65	57,017	98.22	1,031	1.78
Automotive and Land Transportation	101,931	9.92	100,356	98.45	1,575	1.55
Construction	72,530	7.06	72,192	99.53	337	0.47
Decorative Crafts	0	0.00	0	0.00	0	0.00
Electrical and Electronics	123,861	12.05	121,345	97.97	2,516	2.03
Footwear and Leather goods	250	0.02	250	100.0 0	0	0.00
Garments	21,287	2.07	20,424	95.95	862	4.05
Heating, Ventilation, Airconditioning, and Refrigeration	6,450	0.63	6,450	100.0 0	0	0.00
Human Health/Health Care	91,622	8.92	90,958	99.28	664	0.72
Information and Communication Technology	40,999	3.99	40,048	97.68	951	2.32
Language	2,919	0.28	2,919	100.0 0	0	0.00
Maritime	11,189	1.09	11,189	100.0 0	0	0.00
Metals and Engineering	94,576	9.20	93,927	99.31	649	0.69
Processed Food and Beverages	17,556	1.71	17,144	97.65	413	2.35
Social, Community Development, and Other Services	53,657	5.22	52,434	97.72	1,223	2.28
Tourism (Hotel and Restaurant)	314,843	30.64	311,778	99.03	3,064	0.97
TVET	14,213	1.38	14,213	100.0	0	0.00
Utilities	0	0.00	0	0.00	0	0.00
Visual Arts	0	0.00	0	0.00	0	0.00
Wholesale and Retail Trading	1,443	0.14	1,443	100.0 0	0	0.00
Others	262	0.03	262	100.0 0	0	0.00
TOTAL	1,027,635	100.0 0	1,014,34 8	98.71	13,28 7	1.29

^aPercentage over the total number of takers; ^bPercentage over the total number of takers per sector

Certification is awarded to the graduates after passing the competency assessment. This certification varies between National Certificate (NC) or Certificate of Competency

(COC). NC is given to a candidate who has demonstrated competence in all competency units that entail a particular qualification. On the other hand, COC is issued to those who have satisfactorily demonstrated competence on a specific or a cluster of competency units. National TVET Trainers Certificate (NTTC) is also given to Trainers Methodology Certificate (TMC) holders who have at least two years of experience in the industry and have proven to be skilled and proficient in their field of specialization. In this batch, a vast number of the competency passers were certified as NC II, which constituted 84.15% of passers' population. This is higher compared to an estimated 79.91% and 74.35% in 2018 and 2017, respectively. Like those years, very few of the 2019 graduates received NC I, NC III, COS, and TM (Table 18).

Table 18. Level of Certification of TVET Graduates by Sex, Philippines: 2019

	Sex									
Certification Level	Fe	male	٨	Nale	Total					
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b				
coc	31,060	64.76	16,901	35.24	47,962	3.44				
NC I	16,725	17.32	79,856	82.68	96,581	6.92				
NC II	606,253	51.62	568,125	48.38	1,174,378	84.15				
NC III	31,150	52.87	27,763	47.13	58,912	4.22				
NC IV	1,179	0.00	1,044	0.00	2,222	0.16				
TM1	9,109	58.61	6,432	41.39	15,540	1.11				
Total	695,475	49.83	700,121	50.17	1,395,596	100.00				

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

Moreover, an overwhelming majority of scholars across the different scholarship programs were already passers and were given a certification. The highest percentage was registered among STEP graduates, though only slightly higher than the other scholarships (Table 19). This year's batch of scholars posted the highest rate of certified passers compared to those recorded in the past years.

Table 19. Weighted Distribution of TVET Graduates, by Scholarship Programs, by Certification, Philippines: 2019

	Certification									
Scholarship	Cer	Certified		ertified	Total					
Program			Freq	%ª	Freq	%b				
PESFA	19,426	98.35	326	1.65	19,752	4.19				
STEP	90,812	98.91	1,005	1.09	91,817	19.46				
TWSP	259,794	98.60	3,681	1.40	263,474	55.84				
UAQTEA	94,695	97.83	2,104	2.17	96,799	20.52				
Total	464,727	98.49	7,116	1.51	471,843	100.00				

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

It is also interesting to know how many of the graduates were indeed asked for certification as one of the requirements of their employers. As seen in Table 20, slightly more than three-fourths of the graduates were required by their employers to have a competency certification. However, despite the significance of the certificate of competency to ensure the skilled workers' capabilities for the welfare of both workers and employers, some graduates

were not asked for it. This could be one reason why some of the graduates were not motivated to take the competency assessment.

Table 20. Weighted Distribution of TVET Graduates by Certification as a requirement of the

employer and by Sex, Philippines: 2019

employer unc		Sex									
Certification	Female		N	\ale	Total						
Requirement	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b					
Yes	767,290	50.77	744,107	49.23	1,511,397	78.76					
No	209,399	67.79	99,517	32.21	308,916	16.10					
I don't know	58,780	59.55	39,920	40.45	98,700	5.14					
Total	1,035,469	53.96	883,544	46.04	1,919,013	100.00					

3. Labor Force Participation

During the conduct of the survey, it was estimated that 71.2% of the 2019 graduates were in the labor force. This signifies that 7 in 10 graduates were either employed or unemployed at the time of the survey. This estimate is slightly higher than what was recorded among the 2018 graduates (70.43%), which was considerably higher than the batch of 2016 (62.2%), and a bit lower than the estimate among the 2017 graduates (72.33%). A large difference in the labor force participation rate (LFPR) can be observed between male and female graduates. About 8 in every 10 TVET male graduates (76.06%) and approximately 7 in every 10 TVET female graduates (67.06%) were estimated active in the labor force when the survey was conducted (Table 21). The gap in LFPR could be attributed to the COVID-19 pandemic, which shows that more female workers have been affected.

Table 21. Labor Force Participation Rate of TVET Graduates by Sex, Philippines: 2019

Cov	Not in the Labor Force		In the Labor	Force	Total Graduates		
Sex	Frequency	Percentagea	Frequency	LFPR ^b	Frequency	Percentage ^c	
Female	341,092	32.94	694,377	67.06	1,035,469	53.96	
Male	211,524	23.94	672,020	76.06	883,544	46.04	
Total	552,615	28.80	1,366,398	71.20	1,919,013	100.00	

^aPercentage over the row total; ^bLabor Force Participation Rate; ^cPercentage over the total number of TVET graduates

Graduates aged 25 to 54 years were continuously recorded as the most active in the labor force, with the highest rate posted to those at their 25-34 years (85.24), on par with those who belong in the age groups 35-44 and 45-54 years old. Additionally, about 6 out of 10 who were on their retirement age were still in the labor force. Those in the age group 15-24 years posted the lowest LFPR at 56.04% (Table 22 and Figure 6). This is perhaps because many of them were still actively attending school.

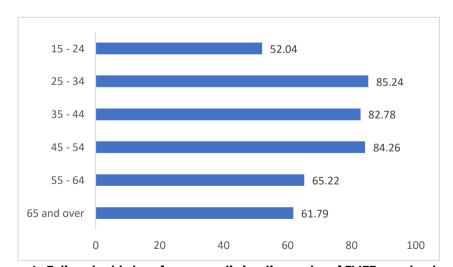


Figure 6. Estimated labor force participation rate of TVET graduates by age group. Philippines, 2019.

Table 22. Labor Force Participation Rate of TVET Graduates, By Age Group, Philippines: 2019

A	Not in the	Labor Force	In the Labor	Force	Total Graduates		
Age group	Frequency	Percentagea	Frequency	LFPR ^b	Frequency	Percentage ^c	
15 – 24	363,240	43.96	463,050	56.04	826,290	43.06	
25 – 34	78,323	14.76	452,172	85.24	530,495	27.64	
35 – 44	52,943	17.22	254,538	82.78	307,481	16.02	
45 – 54	25,617	15.74	137,105	84.26	162,721	8.48	
55 – 64	27,044	34.78	50,723	65.22	77,767	4.05	
65 and over	5,448	38.21	8,811	61.79	14,259	0.74	
Total	552,615	28.80	1,366,398	71.20	1,919,013	100.00	

^aPercentage over the row total; ^bLabor Force Participation Rate; ^cPercentage over the total number of TVET graduates

Unsurprisingly, most of the 2019 graduates who obtained a bachelor's degree and post-graduate studies were active in the labor force at the time of the survey, which registered in the top high LFPRs relative to other education groups. Likewise, high LFPRs were recorded for those graduates with no grade completed (98.35%) and who were primary education undergraduates (89.10%). This can be attributed to the possibility that these graduates already stopped attending schools to earn a living. On the other hand, low LFPRs were estimated among the groups of graduates whose highest educational attainment was either junior high school undergraduate (30.62%), senior high school undergraduate (51.50%), senior high school graduate (56.92%), or bachelor level undergraduate (58.52%) (Table 23). These groups of graduates are those who were still in school to earn a degree during the survey period. This distribution is the same as what were recorded in the past surveys.

The majority of the 2019 graduates across regions in the country actively participated in the labor force, with LFPRs ranging from 59.82% to 83.72%. BARMM, like in 2017 TVET graduates, bagged the highest estimated LFPR, signifying that approximately 8 out of 10 graduates were active in the labor force. BARMM showed a considerable increase in LFPR as compared to that of the last batch's 68.32%. Region X (Northern Mindanao) followed with 81.35%, which also demonstrated an increase in contrast to the previous year's 68.7%. Alternatively, for this round of the survey, it was Region IV-B that posted the lowest LFPR at 59.82% when it was 71.03% in 2018 (Figure 7 and Table 24). The distribution of LFPRs across regions changed greatly in every survey.

Table 23. Labor Force Participation Rate of TVET Graduates, By Highest Grade Completed, Philippines: 2019

Highest Educational Attainment	Not in the	Labor Force	In the Labo	•	· · · · · · · · · · · · · · · · · · ·	raduates
Highest Educational Attainment	Frequency	Percentage ^a	Frequency	LFPR ^b	Frequency	Percentage ^c
No grade completed	40	1.65	2,383	98.35	2,423	0.13
Primary education (elementary) undergraduate	858	10.90	7,013	89.10	7,871	0.41
Primary education (elementary) graduate	5,490	28.53	13,749	71.47	19,238	1.00
Lower secondary education (junior HS) undergraduate (old curriculum)	9,947	14.40	59,141	85.60	69,088	3.60
Lower secondary education (junior HS) undergraduate (K-12 curriculum)	29,959	69.38	13,222	30.62	43,181	2.25
Lower secondary education (junior HS) graduate (old curriculum)	45,128	19.29	188,841	80.71	233,969	12.19
Lower secondary education (junior HS) graduate (K-12 curriculum)	59,505	36.34	104,252	63.66	163,757	8.53
Upper secondary education (senior HS) undergraduate	41,284	48.50	43,839	51.50	85,122	4.44
Upper secondary education (senior HS) graduate	80,037	43.08	105,743	56.92	185,780	9.68
Post-secondary non-tertiary education	17,514	17.41	83,085	82.59	100,599	5.24
Short-cycle tertiary education	4,865	22.13	17,116	77.87	21,981	1.15
Bachelor level education undergraduate	174,260	41.48	245,837	58.52	420,097	21.89
Bachelor level education graduate	82,353	14.88	471,019	85.12	553,372	28.84
Master level education	1,377	13.74	8,642	86.26	10,019	0.52
Doctoral level education	0	0.00	2,516	100.00	2,516	0.13
Total	552,615	28.80	1,366,398	71.20	1,919,013	100.00

^oPercentage over the row total; ^bLabor Force Participation Rate; ^cPercentage over the total number of TVET graduates

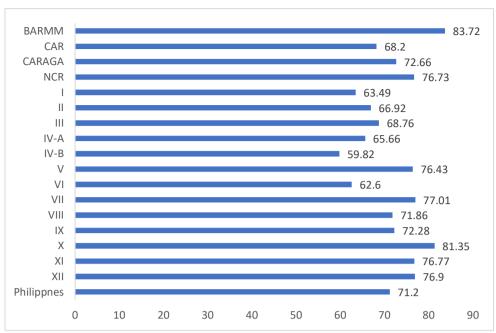


Figure 7. Estimated labor force participation rate of TVET graduates by region. Philippines, 2019.

Table 24. Labor Force Participation Rate of TVET Graduates, by Region, Philippines: 2019

rable 24. Labor force famicipation kale of tvir Graduates, by Region, Fillippine									
Not in the	Labor Force	In the Labor	r Force	Total G	raduates				
Frequency	Percentage ^a	Frequency	LFPR ^b	Frequency	Percentage ^c				
2,337	16.28	12,020	83.72	14,357	0.75				
14,903	31.80	31,966	68.20	46,869	2.44				
26,253	27.34	69,768	72.66	96,021	5.00				
77,479	23.27	255,439	76.73	332,918	17.35				
40,258	36.51	70,005	63.49	110,263	5.75				
25,712	33.08	52,020	66.92	77,732	4.05				
76,980	31.24	169,470	68.76	246,450	12.84				
76,607	34.34	146,447	65.66	223,054	11.62				
26,092	40.18	38,841	59.82	64,933	3.38				
16,924	23.57	54,881	76.43	71,805	3.74				
58,278	37.40	97,553	62.60	155,831	8.12				
21,628	22.99	72,432	77.01	94,060	4.90				
15,637	28.14	39,924	71.86	55,561	2.90				
16,169	27.72	42,170	72.28	58,339	3.04				
22,258	18.65	97,071	81.35	119,329	6.22				
18,654	23.23	61,638	76.77	80,292	4.18				
16,449	23.10	54,750	76.90	71,199	3.71				
552,615	28.80	1,366,398	71.20	1,919,013	100.00				
	Not in the Frequency 2,337 14,903 26,253 77,479 40,258 25,712 76,980 76,607 26,092 16,924 58,278 21,628 15,637 16,169 22,258 18,654 16,449	Not in the Labor Force Frequency Percentagea 2,337 16.28 14,903 31.80 26,253 27.34 77,479 23.27 40,258 36.51 25,712 33.08 76,980 31.24 76,607 34.34 26,092 40.18 16,924 23.57 58,278 37.40 21,628 22.99 15,637 28.14 16,169 27.72 22,258 18.65 18,654 23.23 16,449 23.10	Not in the Labor Force In the Labor Force Frequency Percentagea Frequency 2,337 16.28 12,020 14,903 31.80 31,966 26,253 27.34 69,768 77,479 23.27 255,439 40,258 36.51 70,005 25,712 33.08 52,020 76,980 31.24 169,470 76,607 34.34 146,447 26,092 40.18 38,841 16,924 23.57 54,881 58,278 37.40 97,553 21,628 22.99 72,432 15,637 28.14 39,924 16,169 27.72 42,170 22,258 18.65 97,071 18,654 23.23 61,638 16,449 23.10 54,750	Not in the Labor Force In the Labor Force Frequency Percentagea Frequency LFPRb 2,337 16.28 12,020 83.72 14,903 31.80 31,966 68.20 26,253 27.34 69,768 72.66 77,479 23.27 255,439 76.73 40,258 36.51 70,005 63.49 25,712 33.08 52,020 66.92 76,980 31.24 169,470 68.76 76,607 34.34 146,447 65.66 26,092 40.18 38,841 59.82 16,924 23.57 54,881 76.43 58,278 37.40 97,553 62.60 21,628 22.99 72,432 77.01 15,637 28.14 39,924 71.86 16,169 27.72 42,170 72.28 22,258 18.65 97,071 81.35 18,654 23.23 61,638 76.77	Not in the Labor Force In the Labor Force Total G Frequency Percentagea Frequency LFPRb Frequency 2,337 16.28 12,020 83.72 14,357 14,903 31.80 31,966 68.20 46,869 26,253 27.34 69,768 72.66 96,021 77,479 23.27 255,439 76.73 332,918 40,258 36.51 70,005 63.49 110,263 25,712 33.08 52,020 66.92 77,732 76,980 31.24 169,470 68.76 246,450 76,607 34.34 146,447 65.66 223,054 26,092 40.18 38,841 59.82 64,933 16,924 23.57 54,881 76.43 71,805 58,278 37.40 97,553 62.60 155,831 21,628 22.99 72,432 77.01 94,060 15,637 28.14 39,924 71.86 55,561				

^aPercentage over the row total; ^bLabor Force Participation Rate; ^cPercentage over the total number of TVET graduates

The graduates were classified as either a completer of TESDA Technology Institutions (TTIs) or non-TTIs. TTIs are those directly maneuvered by TESDA, which provide training through their schools and training centers. Conversely, those private institutions that offered TESDA-registered programs are referred to as non-TTIs. As seen in Table 25, the two types of providers

exhibited an LFPR on par with the overall estimate. Nonetheless, TTI graduates obtained a higher estimate than the non-TTIs with a point difference of 1.42 percent, lower than the computed difference in 2018 (2.15%) and 2017 (7.13%). As illustrated, the gap in the LFPR between the two types of providers continues to decline, leaning towards equality.

Table 25. Labor Force Participation Rate of TVET Graduates, By Type of Provider, Philippines: 2019

Type of Broydday	Not in the	Labor Force	In the Labor	Force	Total Graduates		
Type of Provider	Frequency	Percentagea	Frequency LFPR b		Frequency	Percentage ^c	
TTI	85,656	27.61	224,615	72.39	310,271	16.17	
Non-TTI	466,959	29.03	1,141,783	70.97	1,608,742	83.83	
Total	552,615	28.80	1,366,398	71.20	1,919,013	100.00	

^aPercentage over the row total; ^bLabor Force Participation Rate; ^cPercentage over the total number of TVET graduates

The different training delivery modes of TESDA are generally classified as institution-based, enterprise-based, and community-based. In this survey, it was estimated that for every 100 institution-based graduates, about 74 were active in the labor force, approximately 77 for every 100 enterprise-based graduates, and around 67 in 100 community-based graduates. The enterprise-based delivery mode had the least portion of graduates but continually showed high LFPR among its graduates (Figure 8 and Table 26).

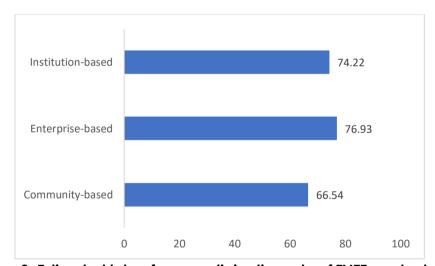


Figure 8. Estimated labor force participation rate of TVET graduates by training delivery mode. Philippines, 2019.

For the enterprise-based programs, apprenticeship and the supervised industry learning programs brought in the top two highest LFPR at 88.31% and 88.06%, respectively, while graduates from PAFSE at 21.70% and DTS at 36.72% exhibited low LFPRs. The high participation of graduates of enterprise-based programs can be attributed to the confidence of the graduates on acquired competencies during the training in the workplace. As for the community-based programs, the highest (84.01%) and lowest (50.78%) LFPR were recorded in LGU-oriented and mobile training programs, respectively (Table 26).

Table 26. Labor Force Participation Rate of TVET Graduates, by Training Delivery Mode.

Philippines, 2019

Program Delivery Mede		he Labor orce	In the Labor Force		Total Graduates		
Program Delivery Mode	Freq	Percentag e ^a	Freq	LFPR ^b	Freq	Percenta ge ^c	
Institution-based	278,231	25.78	801,198	74.22	1,079,429	56.25	
Enterprise-based	14,452	23.07	48,191	76.93	62,643	3.26	
Dual training system	1,836	63.28	1,066	36.72	2,902	0.15	
Apprenticeship	2,856	11.69	21,575	88.31	24,431	1.27	
Learnership	2,755	22.63	9,419	77.37	12,174	0.63	
PAFSE	861	78.30	239	21.70	1,099	0.06	
Supervised Industry Learning	185	11.94	1,368	88.06	1,553	0.08	
Industry-base/in-company training	5,732	30.87	12,836	69.13	18,568	0.97	
Farm schools/ enterprise training	226	11.82	1,689	88.18	1,915	0.10	
Community-based	259,932	33.46	517,009	66.54	776,941	40.49	
Mobile training program	127,511	49.22	131,551	50.78	259,062	13.50	
TESDA Provisional PTCs/ Extension programs of TTIs	55,755	37.02	94,835	62.98	150,590	7.84	
LGU-oriented community-based programs	44,449	15.99	233,585	84.01	278,035	14.49	
NGOs, POs, CSR trainings	32,217	36.10	57,038	63.90	89,254	4.65	
Total	552,615	28.80	1,366,398	71.20	1,919,013	100.00	

^aPercentage over the row total; ^bLabor Force Participation Rate; ^cPercentage over the total number of TVET graduates

A bit over half (54.37%) of the graduates was under the classification of students when they trained in TESDA. Meanwhile, less than half of them were classified into different groups, of which 16.91% were industry workers. A few of the graduates were TESDA alumni (2.73%), 4P's beneficiaries (2.58%), farmers and fishers (2.54%), returning OFWs (1.98%), and uniformed personnel (1.39%), among others (Table 27). Some other mentioned groups from which the graduates belonged to are listed in Table 28. It is apparent that the majority of the mentioned groups, aside from those identified, were classified as unemployed.

In terms of the type of clients, majority of the identified graduate groups in the survey exhibited a high labor force participation rate. The top groups were Cooperatives, Employees with Contractual/Job-Order status, RCEF-RESP, Balik Probinsiya, TVET trainers, Drug dependents surrenderees/surrenderers, and Agrarian Reform Beneficiary. The low participation rate was observed among the family members of AFP and PNP wounded-in-action, while no one was active for those belonging to the groups of family members of AFP and PNP killed-in-action and rebel returnees or decommissioned combatants (Figure 9 and Table 27)

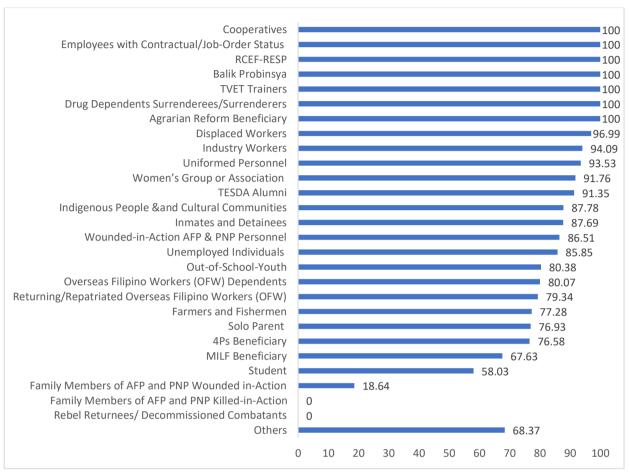


Figure 9. Estimated labor force participation rate of TVET graduates by group. Philippines, 2019.

Table 27. Labor Force Participation Rate of TVET Graduates, by Group, Philippines: 2019

Crawn	Not in the Lo	abor Force	In the Labo	r Force	Total Graduates	
Group	Freq	%ª	Freq	LFPR ^b	Freq	%
4Ps Beneficiary	11,579	23.42	37,860	76.58	49,439	2.58
Displaced Workers	118	3.01	3,788	96.99	3,905	0.20
Family Members of AFP and PNP Wounded in-Action	658	81.36	151	18.64	808	0.04
Industry Workers	19,184	5.91	305,416	94.09	324,601	16.91
Out-of-School-Youth	814	19.62	3,335	80.38	4,148	0.22
Rebel Returnees/ Decommissioned Combatants	118	100.00	0	0.00	118	0.01
TESDA Alumni	4,538	8.65	47,922	91.35	52,460	2.73
Agrarian Reform Beneficiary	0	0.00	1,521	100.00	1,521	0.08
Drug Dependents Surrenderees/Surrenderers	0	0.00	254	100.00	254	0.01
Farmers and Fishermen	11,081	22.72	37,699	77.28	48,780	2.54
Inmates and Detainees	233	12.31	1,662	87.69	1,895	0.10
Overseas Filipino Workers (OFW) Dependents	1,850	19.93	7,433	80.07	9,283	0.48
Returning/Repatriated Overseas Filipino Workers (OFW)	7,847	20.66	30,131	79.34	37,977	1.98
TVET Trainers	0	0.00	2,539	100.00	2,539	0.13
Wounded-in-Action AFP & PNP Personnel	103	13.49	659	86.51	762	0.04
Balik Probinsya	0	0.00	625	100.00	625	0.03
Family Members of AFP and PNP Killed-in-Action	206	100.00	0	0.00	206	0.01
Indigenous People & and Cultural Communities	1,241	12.22	8,907	87.78	10,147	0.53
MILF Beneficiary	204	32.37	426	67.63	630	0.03
RCEF-RESP	0	0.00	504	100.00	504	0.03
Student	437,921	41.97	605,519	58.03	1,043,440	54.37
Uniformed Personnel	1,725	6.47	24,941	93.53	26,666	1.39
Women's Group or Association	1,108	8.24	12,343	91.76	13,451	0.70
Unemployed Individuals	29,791	14.15	180,700	85.85	210,490	10.97
Employees with Contractual/Job-Order Status	0	0.00	291	100.00	291	0.02
Cooperatives	0	0.00	821	100.00	821	0.04
Solo Parent	2,344	23.07	7,815	76.93	10,159	0.53
Others	19,954	31.63	43,137	68.37	63,091	3.29
Total	552,615.00	28.80	1,366,398	71.20	1,919,013	100.00

^aPercentage over the row total; ^bLabor Force Participation Rate;

The reasons for those graduates who were not involved in the labor force are disclosed in Table 28. Almost half of them said that they were still attending schools, which supported earlier low LFPRs among TVET graduates whose educational attainment was either undergraduate high schools or undergraduate college. Many of the graduates, of which the majority were female (80.71%), also stated household/family duties (23.38%) as a key reason. There were a few (in which many were male) who mentioned that they were waiting for the results of their previous applications (7.09%), and a few were in fear of contracting COVID-19 (5.49%). Aside from the enumeration in Table 28, some other reasons included evaluation upon the commencement of the apprenticeship/learnership period, health reasons, and being too old.

Table 28. Reasons of TVET Graduates for Not Looking for Work, Philippines: 2019

			S	ех		
Reasons	Female		M	ale	Te	otal
Reasons	Frequen	Percenta	Frequen	Percenta	Frequen	Percenta
	су	geª	су	geª	су	ge ^c
Tired	238	39.20	369	60.80	607	0.11
No work available	1,716	45.96	2,018	54.04	3,734	0.67
Awaiting results of previous application	16,435	41.86	22,825	58.14	39,260	7.09
Temporary illness/disability	191	55.34	154	44.66	346	0.06
Waiting for rehire/job recall	1,000	24.27	3,121	75.73	4,121	0.74
Too young/old or retired	17,574	82.48	3,734	17.52	21,309	3.85
Permanent disability	2,090	100.00	0	0.00	2,090	0.38
Household/family duties	104,460	80.71	24,966	19.29	129,427	23.38
Schooling	178,534	56.52	137,346	43.48	315,880	57.07
Fear of contracting COVID-19	15,181	49.95	15,210	50.05	30,391	5.49
Others	3,517	55.40	2,832	44.60	6,349	1.15
Total	340,937	61.60	212,575	38.40	553,513	100.00

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

4. Employment

It is the goal of TESDA to ensure that their graduates can be considered world-class competent workers with their quality training. Knowing where their graduates are and how well they are with their jobs is essential for the management to improve their training programs and policies that would be beneficial to their clients.

4.1. Length of Job Search

Knowing how long a TVET graduate searches for a job is essential for the management since unemployment may have long-term employment consequences. Among the 2019 graduates, there were 323,798, which translates to only about 17% of the population of graduates, who searched for a job after attending TESDA training. The majority of the graduates did not search for a job because they were already employed, attending school, or attending a TVET program for skills enhancement or a hobby.

A greater proportion of those who searched for a job after training were able to land a job in less than a year, in which the majority (82.7%) were able to find a job in less than six months after completing a TVET program. Nonetheless, despite this high figure, it is still notable that a few of them (5.22%), of which many were female, took more than a year to be employed (Table 29). This share is higher than that of the previous year, which was only 2.17%, something that the management should be aware of.

In particular, a graduate waited, on average, for around three months to be employed, with a standard deviation of 5.56 months. It can be further observed that, on average, non-TTI graduates waited longer than TTI graduates to be called for a job with a mean time of 3.5 months and 2.52 months, respectively. Furthermore, at least half of the graduates searched for a job within at most one month. The shortest time recorded among the graduates was about seven days, while the longest was about four years (recorded among non-TTI graduates). The wide range in the length of job search is supported by skewness with a coefficient of 3.96, indicating very few extreme lengths of job search (Table 30). The extreme recorded time may imply that there were graduates who were a long time unemployed before attending a TVET program and remained unemployed even after the program.

Table 29. Weighted distribution of TVET graduates according to the Length of Job Search after the Training, Philippines: 2019

	Sex									
Length of Job Search	Fe	male	N	Male	Total					
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b				
Less than 6 months	145,618	54.32	122,465	45.68	268,083	82.79				
6 months to 1 year	24,005	61.86	14,799	38.14	38,804	11.98				
More than 1 year	10,095	59.70	6,816	40.30	16,911	5.22				
Total	179,718	55.50	144,080	44.50	323,798	100.00				

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

Table 30. Summary statistics for Length of Job Search (in months) by

Type of Provider and Overall, Philippines: 2019

	Type of	Provider	
Statistics	TTI	Non-TTI	Overall
Minimum	0.25	0.25	0.25
Maximum	16.00	48.00	48.00
Mean	2.52	3.50	3.36
Median	1.00	1.00	1.00
Standard deviation	3.26	5.86	5.56
Skewness	1.85	3.87	3.96

4.2. Employment Rate

Among the 2019 graduates, 71.2% were found active in the labor force. Of those in the labor force, about 7 in every ten were working when the survey was conducted. This is considerably lower than the 2018 estimate of 84.15%, with a percent decrease of about 16%. The reduction in the employment rate could be attributed to the COVID-19 pandemic that started in March 2020. During this period, many Filipinos have lost their jobs, and many businesses stopped operating, which caused many workers to be unemployed. Nonetheless, the employment rate in 2019 was still higher than in 2017 (68.58%) and nearly close to that of 2016 (71.87%) (Figure 10). Moreover, there was a point difference of 1.84 percent between males and females in terms of the employment rate, in favor of the former (Table 31).

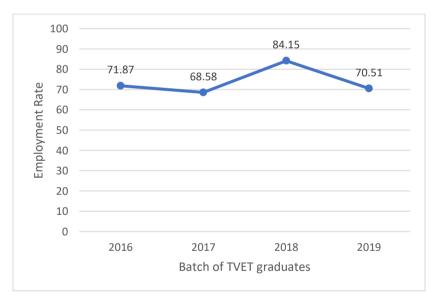


Figure 10. Estimated Employment Rates of 2016 to 2019 TVET Graduates.

Table 31. Estimated Employment Rate of TVET Graduates, By Sex, Philippines: 2019

Sex	Not emp	loyed	Emplo	yed	Total TVET Graduates in the Labor Force		
	Freq	%	Freq ERa		Freq	%	
Female	21,1056	30.40	483,321	69.60	694,377	67.06	
Male	19,1909	28.56	480,111	71.44	672,020	76.06	
Total	40,2965	29.49	963,433 70.51		1,366,398	71.20	

^aER – employment rate

As seen in Table 32, most of the graduates had jobs during the survey period regardless of age. Generally, the chance of being employed increases as the graduate gets older. The highest employment rate was noted for those who were 55 to 64 years old (84.81%), a bit higher than those who were 45 to 54 (82.89%) years and who were in their retiring age (82.17%). Many of those who were unemployed were in the younger age group.

It is not surprising that TVET clients with post-college degrees posted the highest employment rate (Masters level and Doctoral level at 100%). The same pattern was recorded in the last two years of SETG. Similarly, education groups with an employment rate that was on par with the overall estimated employment included primary level and secondary graduate (old and new curriculum). Alternatively, a low employment rate was noted for the graduates who were secondary undergraduate (new curriculum) and those in short-cycle tertiary (Table 33). As seen, those with higher educational attainment were not affected economically by the pandemic since most of them already had permanent status in their respective jobs.

Table 32. Estimated Employment Rate of TVET Graduates, By Age group, Philippines: 2019

Age group	Not emp	oloyed			Total TVET Great in the Labor	
	Freq	%	Freq	ER a	Freq	%
15 – 24	182,585	39.43	280,466	60.57	463,050	56.04
25 – 34	130,840	28.94	321,332	71.06	452,172	85.24
35 – 44	56,812	22.32	197,725	77.68	254,538	82.78
45 – 54	23,453	17.11	113,652	82.89	137,105	84.26
55 – 64	7,705	15.19	43,017	84.81	50,723	65.22
65 and over	1,571	17.83	7,239	82.17	8,811	61.79
Total	402,965	29.49	963,433	70.51	1,366,398	71.20

aER – employment rate

Table 33. Estimated Employment Rate of TVET Graduates, By Highest Educational Attainment, Philippines: 2019

Highest Educational Attainment	Not emp	oloyed	Employed		Total TVET Graduates in the Labor Force	
	Freq	%	Freq	ER a	Freq	%
No grade completed	867	36.37	1,517	63.63	2,383	98.35
Early childhood education	0	0.00	0	0.00	0	0.00
Primary education (elementary) undergraduate	1,650	23.53	5,362	76.47	7,013	89.10
Primary education (elementary) graduate	3,196	23.24	10,553	76.76	13,749	71.47
Lower secondary education (junior HS) undergraduate (old curriculum)	20,357	34.42	38,784	65.58	59,141	85.60
Lower secondary education (junior HS) undergraduate (K-12 curriculum)	7,206	54.50	6,016	45.50	13,222	30.62
Lower secondary education (junior HS) graduate (old curriculum)	52,567	27.84	136,274	72.16	188,841	80.71
Lower secondary education (junior HS) graduate (K-12 curriculum)	27,141	26.03	77,111	73.97	104,252	63.66
Upper secondary education (senior HS) undergraduate	20,868	47.60	22,970	52.40	43,839	51.50
Upper secondary education (senior HS) graduate	37,298	35.27	68,446	64.73	105,743	56.92

Highest Educational Attainment	Not emp	Not employed		Employed		Total TVET Graduates in the Labor Force	
	Freq	%	Freq	ER a	Freq	%	
Post-secondary non-tertiary education	31,665	38.11	51,421	61.89	83,085	82.59	
Short-cycle tertiary education	10,867	63.49	6,249	36.51	17,116	77.87	
Bachelor level education undergraduate	76,344	31.05	169,493	68.95	245,837	58.52	
Bachelor level education graduate	112,939	23.98	358,080	76.02	471,019	85.12	
Master level education	0	0.00	8,642	100.00	8,642	86.26	
Doctoral level education	0	0.00	2,516	100.00	2,516	100.00	
Total	402,965	29.49	963,433	70.51	1,366,398	71.20	

^aER – employment rate

Looking at graduates' employment status, Table 34 presents the employment rate of 2019 graduates by type of provider. It can be seen that non-TTI graduates registered an employment rate of 71.51%, a bit higher than the overall estimate. This was also higher than the TTI employment rate, with a point difference of 6.11%. The decrease in the employment rate in 2019 was deemed more apparent among TTI graduates.

Table 34. Estimated Employment Rate of TVET Graduates, By Type of Provider, Philippines: 2019

Type of Provider	Not emp	loyed	Employed Total TVET in the La					
1.	Freq	%	Freq	ER a	Freq	%		
TTI	77,708	0.00	146,906	65.40	224,615	72.39		
Non-TTI	325,257	28.49	816,526	71.51	1,141,783	70.97		
Total	402,965	29.49	963,433	70.51	1,366,398	71.20		

^aER – employment rate

Compared to the previous year's employment record, generally, the employment rate across regions decreased this round of SETG. Nonetheless, it is good to know that more than half of the 2019 graduates across regions, despite the pandemic, were employed during the survey period, with employment rates ranging from 56 to 82 percent. This year, Region XII bagged the highest employment rate at 82.38%, higher than the overall estimate. Region XII has consistently shown high employment since 2016. High estimates were also recorded in Region X (80.07%) and Region II (78.73%). Other regions with the employment rate at the same level as the overall estimate included BARMM, CAR, NCR, Region I, Region IV-A, Region IV-B, and Region XI. In contrast, Region VIII had the lowest employment rate at 56.34% (Table 35). Region VIII, which consistently got a record of low employment, replaced BARMM (constantly situated in the lowest employment rate for the past several years) for having the lowest rank.

High employment rates were registered among the enterprise-based programs in terms of the program delivery mode, with an estimated average of 74.24%. A considerably high number of employed graduates were recorded among those graduates under learnership (86.26%), industry-based/in-company training (91.14%), PAFSE (100%), and supervised industry learning (100%). Moreover, community-based programs, on average, registered employment rates on par with the overall estimate. Programs under this with high estimates included extension programs of TTIs (70.4%), LGU-oriented community-based programs (76.03%), and NGOs, POs, and CSR training (78.88%). Alternatively, institution-based programs posted an

estimate below the overall estimate with an employment rate of 69.51% (Figure 11 and Table 36).

Table 35. Estimated Employment Rate of TVET Graduates, By Region, Philippines: 2019

Region	Not emp		Emplo	oyed	Total TVET (
	Freq	%ª	Freq	ER a	Freq	%
BARMM	3,261	27.13	8,759	72.87	12,020	83.72
CAR	9,519	29.78	22,447	70.22	31,966	68.20
CARAGA	23,072	33.07	46,697	66.93	69,768	72.66
NCR	70,076	27.43	185,363	72.57	255,439	76.73
I	19,238	27.48	50,768	72.52	70,005	63.49
II	11,066	21.27	40,954	78.73	52,020	66.92
III	69,145	40.80	100,325	59.20	169,470	68.76
IV-A	37,951	25.91	108,497	74.09	146,447	65.66
IV-B	11,639	29.97	27,202	70.03	38,841	59.82
V	13,119	23.91	41,762	76.09	54,881	76.43
VI	31,465	32.25	66,089	67.75	97,553	62.60
VII	27,438	37.88	44,994	62.12	72,432	77.01
VIII	17,431	43.66	22,493	56.34	39,924	71.86
IX	13,470	31.94	28,700	68.06	42,170	72.28
X	19,349	19.93	77,722	80.07	97,071	81.35
XI	16,077	26.08	45,561	73.92	61,638	76.77
XII	9,650	17.62	45,101	82.38	54,750	76.90
Philippines	402,965	29.49	963,433	70.51	1,366,398	71.20

ER – employment rate

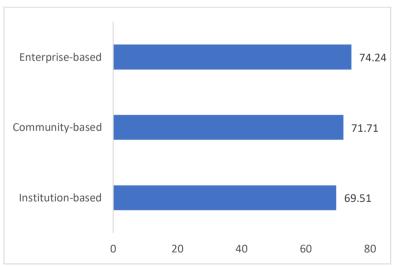


Figure 11. Estimated employment rate of TVET graduates by program delivery mode. Philippines, 2019.

Table 36. Estimated Employment Rate of TVET Graduates, By Program Delivery Mode, By Sex, Philippines: 2019

Program Delivery Mode	Not empl	loyed	Emplo	yed	Total TVET Graduates in the Labor Force	
, , , , , , , , , , , , , , , , , , , ,	Freq	%	Freq	ERa	Freq	%
Institution-based	244,270	30.49	556,928	69.51	801,198	74.22
Enterprise-based	12,415	25.76	35,775	74.24	48,191	76.93
Dual training system	507	47.55	559	52.45	1,066	36.72
Apprenticeship	8,961	41.54	12,613	58.46	21,575	88.31
Learnership	1,294	13.74	8,125	86.26	9,419	77.37
PAFSE	0	0.00	239	100.00	239	21.70
Supervised Industry Learning	0	0.00	1,368	100.00	1,368	88.06
Industry-based/ in-company training	1,138	8.86	11,698	91.14	12,836	69.13
Farm schools/ enterprise training	516	30.53	1,173	69.47	1,689	88.18
Community-based	146,280	28.29	370,729	71.71	517,009	66.54
Mobile training program	46,965	35.70	84,585	64.30	131,551	50.78
TESDA Provisional PTCs/ Extension programs of TTIs	31,280	32.98	63,555	67.02	94,835	62.98
LGU-oriented community- based programs	55,990	23.97	177,595	76.03	233,585	84.01
NGOs, POs, CSR trainings	12,045	21.12	44,993	78.88	57,038	63.90
Total	402,965	29.49	963,433	70.51	1,366,398	71.20

^aER – employment rate

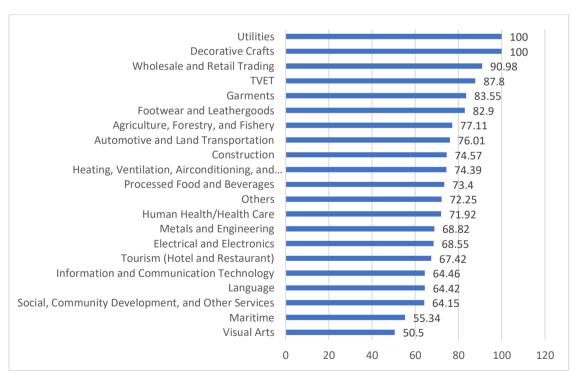


Figure 12. Estimated employment rate of TVET graduates by sector. Philippines, 2019.

Analyzing the employment rate across the different sectors, it is evident in Figure 12 that decorative crafts (100%), utilities (100%), wholesale and retail trading (90.98), TVET (87.8%), garments (83.55%), and footwear and leather goods (82.9%) were the top sectors with high

employment rates. These sectors consistently posted high rates based on the records of SETG except for the wholesale and retail trading sector, which was included as one of those at the bottom in the previous survey. Moreover, the estimated employment rates of the top female-dominated and top male-dominated sectors, which were tourism and electrical sectors, respectively, indicated that approximately 7 out of 10 graduates were actively working when the survey was conducted. On the other hand, low estimates were recorded for maritime (55.34%) and visual arts (50.5%) (Figure 12 and Table 37).

Table 37. Estimated Employment Rate of TVET Graduates, By Sector, Philippines: 2019

Table 37. Estimated Employment Rate of IVI	Not emp		Emplo		Total TVET G	
Sector	Freq	%	Freq	ER ^a	in the Labo Freq	r rorce %
Agriculture, Forestry, and Fishery	17,932	22.89	60,401	77.11	78,334	69.63
Automotive and Land Transportation	33,501	23.99	106,132	76.01	139,634	78.86
Construction	19,022	25.43	55,789	74.57	74,811	83.54
Decorative Crafts	0	0.00	1,016	100.00	1,016	100.00
Electrical and Electronics	46,821	31.45	102,031	68.55	148,852	69.62
Footwear and Leathergoods	423	17.10	2,049	82.90	2,472	74.18
Garments	4,064	16.45	20,641	83.55	24,706	62.29
Heating, Ventilation, Airconditioning, and Refrigeration	2,007	25.61	5,828	74.39	7,835	63.90
Human Health/Health Care	34,513	28.08	88,403	71.92	122,917	74.04
Information and Communication Technology	23,966	35.54	43,466	64.46	67,432	74.10
Language	13,352	35.58	24,174	64.42	37,526	92.51
Maritime	3,849	44.66	4,769	55.34	8,617	68.19
Metals and Engineering	29,060	31.18	64,151	68.82	93,212	77.49
Processed Food and Beverages	12,672	26.60	34,972	73.40	47,644	69.29
Social, Community Development, and Other Services	26,693	35.85	47,765	64.15	74,458	74.91
Tourism (Hotel and Restaurant)	114,745	32.58	237,458	67.42	352,203	63.75
TVET	1,964	12.20	14,140	87.80	16,104	88.00
Utilities	0	0.00	1,044	100.00	1,044	100.00
Visual Arts	617	49.50	630	50.50	1,247	39.57
Wholesale and Retail Trading	310	9.02	3,130	90.98	3,440	66.91
Others	17,453	27.75	45,442	72.25	62,894	69.07
Total	402,965	29.49	963,433	70.51	1,366,398	71.20

^aER – employment rate

Moreover, employment rates across sectors were estimated for male and female TVET graduates. Among female graduates, high rates were observed in Decorative Crafts, Wholesale and Retail Trading, Footwear and Leather goods, TVET, and Garments sectors. Meanwhile, Maritime, Metals and Engineering, Visual Arts, Utilities, and Heating, Ventilation and Air-conditioning sectors posted a low number of employed female graduates. On the other hand, Visual Arts and Utilities, which exhibited low employment rates among females, got high rates among the male graduates. Other sectors with a large number of male graduates were Garments, TVET, Agriculture, Forestry and Fishery, and Wholesale and Retail Trading. Alternatively, a low number of employed male graduates was recorded in Language, Social, Community Development and Services, Footwear and Leather Goods, and Decorative

goods, which were observed high among the female graduates. It can also be noticed that Maritime also exhibited a low employment rate among the male (Table 38 and Figures 13 and 14).

Table 38. Estimated Employment Rate of TVET Graduates, By Sector, By Sex, Philippines: 2019

Sector	Femo		Ма		Total Mal Graduate Labor F	e TVET s in the	Total Female TVET Graduates in the Labor Force		
	Freq	ER a	Freq	ERa	Freq	%	Freq	%	
Agriculture, Forestry, and Fishery	17,932	22.89	60,401	77.11	78,334	69.63	17,932	22.89	
Automotive and Land Transportation	33,501	23.99	106,132	76.01	139,634	78.86	33,501	23.99	
Construction	19,022	25.43	55,789	74.57	74,811	83.54	19,022	25.43	
Decorative Crafts	0	0.00	1,016	100.00	1,016	100.00	0	0.00	
Electrical and Electronics	46,821	31.45	102,031	68.55	148,852	69.62	46,821	31.45	
Footwear and Leathergoods	423	17.10	2,049	82.90	2,472	74.18	423	17.10	
Garments	4,064	16.45	20,641	83.55	24,706	62.29	4,064	16.45	
Heating, Ventilation, Airconditioning, and Refrigeration	2,007	25.61	5,828	74.39	7,835	63.90	2,007	25.61	
Human Health/Health Care	34,513	28.08	88,403	71.92	122,917	74.04	34,513	28.08	
Information and Communication Technology	23,966	35.54	43,466	64.46	67,432	74.10	23,966	35.54	
Language	13,352	35.58	24,174	64.42	37,526	92.51	13,352	35.58	
Maritime	3,849	44.66	4,769	55.34	8,617	68.19	3,849	44.66	
Metals And Engineering	29,060	31.18	64,151	68.82	93,212	77.49	29,060	31.18	
Processed Food and Beverages	12,672	26.60	34,972	73.40	47,644	69.29	12,672	26.60	
Social, Community Development, and Other Services	26,693	35.85	47,765	64.15	74,458	74.91	26,693	35.85	
Tourism (Hotel And Restaurant)	114,745	32.58	237,458	67.42	352,203	63.75	114,745	32.58	
TVET	1,964	12.20	14,140	87.80	16,104	88.00	1,964	12.20	
Utilities	0	0.00	1,044	100.00	1,044	100.00	0	0.00	
Visual Arts	617	49.50	630	50.50	1,247	39.57	617	49.50	
Wholesale and Retail Trading	310	9.02	3,130	90.98	3,440	66.91	310	9.02	
Others	17,453	27.75	45,442	72.25	62,894	69.07	17,453	27.75	
Total	402,965	29.49	963,433	70.51	1,366,398	71.20	402,965	29.49	

^aER – employment rate

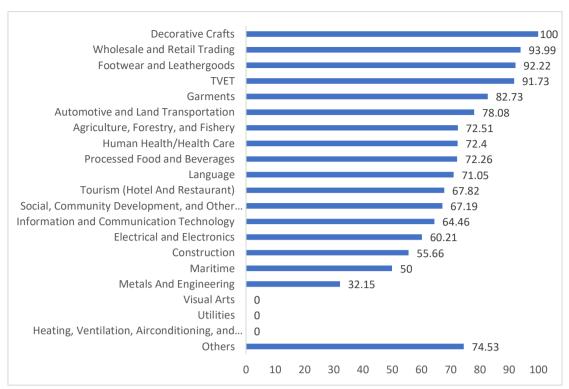


Figure 13. Estimated employment rate of Female TVET graduates by sector. Philippines, 2019.

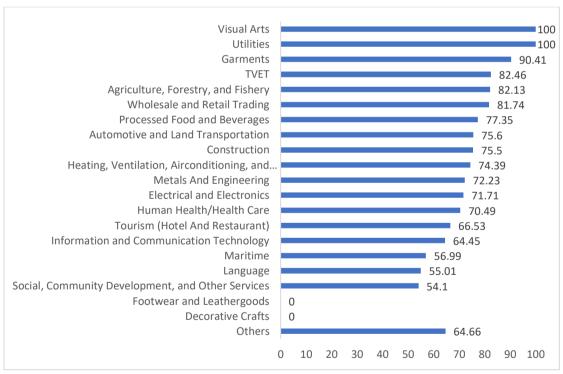


Figure 14. Estimated employment rate of Male TVET graduates by sector. Philippines, 2019.

A trend comparison was made for the employment rates across sectors from 2016 to 2019. No pattern could be established in the employment rates of different sectors across the years since the top sectors kept changing from one survey to another. Nonetheless, some sectors that were repeatedly recorded at the top included TVET, decorative, and footwear sectors. The sectors that were observed with continuous prosper in the employment rate from 2016 to 2018 were (1) automotive and land transportation; (2) heating, ventilation, air

condition; (3) human health/health care; (4) information and communication; (5) language; (6) social community development; and (7) wholesale and retail trading (Figure 15 and Table 39).

In general, there was a considerable improvement in the employment rates for all sectors from 2016 to 2018. However, a remarkable decline in the employment rates was noted for almost all sectors except utilities, which had increased from 47.85% (2018) to 100% (2019) and wholesale and retail trading from 88.69% (2018) to 90.98% (2019). A large reduction in the employment rates from 2018 to 2019 was noted in visual arts, maritime, heating, ventilation, air-condition, language, and social, community development sectors (Table 39).

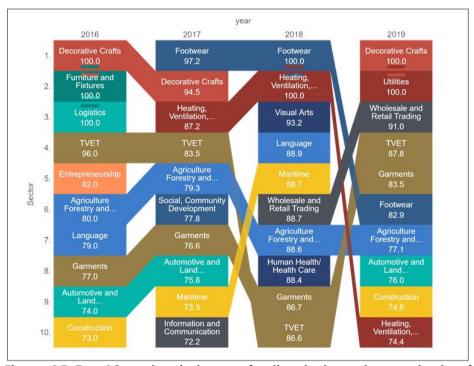


Figure 15. Top 10 sectors in terms of estimated employment rate of TVET graduates. Philippines: 2016. 2017, 2018, and 2019

Table 39. Estimated Employment Rate of TVET Graduates, By Sector, Philippines: 2016. 2017, 2018, and 2019

Sector	2016	2017	2018	2019
Agriculture Forestry and Fisheries	80	79.35	88.57	77.11
Automotive and Land Transportation	74	75.83	85.12	76.01
Construction	73	70	76.23	74.57
Decorative Crafts	100	94.46	0	100.00
Electrical and Electronics	71	65.89	82.61	68.55
Entrepreneurship	82	0	0	0
Footwear	0	97.24	100	82.90
Furniture and Fixtures	100	0	0	0
Garments	77	76.59	86.67	83.55
Heating, Ventilation, Aircondition	72	87.23	100	74.39
Human Health/Health Care	68	71.35	88.39	71.92
Information and Communication	69	72.23	83.54	64.46

Sector	2016	2017	2018	2019
Language	79	70.47	88.89	64.42
Logistics	100	0	0	0
Maritime	73	73.28	88.72	55.34
Metals and Engineering	73	64.24	82.56	68.82
Processed Food and Beverages	70	58.62	0	73.40
Social, Community Development	72	77.81	86.02	64.15
TVET	96	83.51	86.59	87.80
Tourism (Hotel and Restaurant)	70	60.14	82.43	67.42
Utilities	0	0	47.85	100.00
Visual Arts	0	0	93.22	50.50
Wholesale and Retail Trading	54	67.73	88.69	90.98
Others	67	66.44	72.73	72.25

Moreover, the employment status of graduates across their group classification as TVET clients was described. Most of the identified groups showed high employment rates. For groups such as Cooperatives, Employees with Contractual/Job-Order status, RCEF-RESP, MILF beneficiaries, Balik Probinsiya, inmates and detainees, dependents drua surrenderees/surrenderers, and family members of AFP and PNP wounded in-action, all graduates were recorded to be employed during the survey period. Similarly, an overwhelming majority of those OFW dependents (92.09%) and uniformed personnel (91.7%) were working at the time of the survey. The 4P's beneficiaries (77.84%), displaced workers (74.13%), and TESDA alumni (71.18%) registered employment rates on par with the TVET national estimate of 70.51%. The results remarkably show the possible impact of the programs different provided to the type of beneficiaries, like the drua dependents surrenderees/surrederers, MILF opportunities and inmates and detainees, among others. This also conveys the expand of reach that TVET programs wherein diverse clients are being served.

Meanwhile, only 26.42% of the out-of-school youth graduates were actively working at the time of the survey (Figure 14 and Table 40). TESDA has to consider of looking into how Out of School can also be bridged into employment.

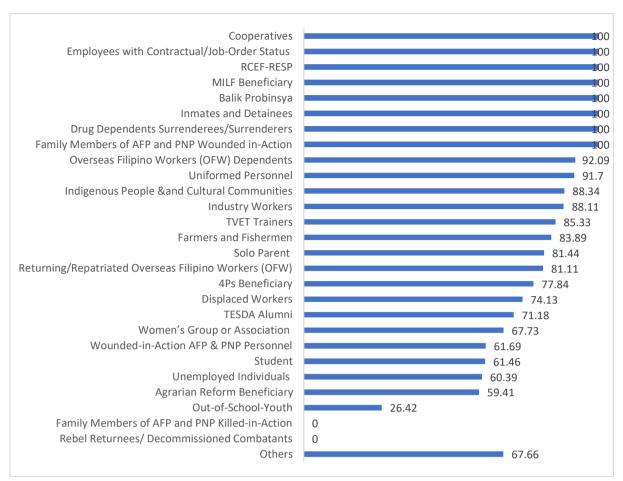


Figure 16. Estimated employment rate of TVET graduates by group. Philippines, 2019.

Table 40. Employment Rate of Graduates by Group, Philippines: 2019

Group	Not employed		Employed		Total TVET Graduates in the Labor Force	
	Freq	%	Freq	ER a	Freq.	%
4Ps Beneficiary	8,391	22.16	29,469	77.84	37,860	2.77
Displaced Workers	980	25.87	2,808	74.13	3,788	0.28
Family Members of AFP and PNP Wounded in- Action	0	0.00	151	100.00	151	0.01
Industry Workers	36,312	11.89	269,104	88.11	305,416	22.35
Out-of-School-Youth	2,454	73.58	881	26.42	3,335	0.24
Rebel Returnees/ Decommissioned Combatants	0	0.00	0	0.00	0	0.00
TESDA Alumni	13,813	28.82	34,109	71.18	47,922	3.51
Agrarian Reform Beneficiary	617	40.59	904	59.41	1,521	0.11
Drug Dependents Surrenderees/Surrenderers	0	0.00	254	100.00	254	0.02
Farmers and Fishermen	6,073	16.11	31,626	83.89	37,699	2.76
Inmates and Detainees	0	0.00	1,662	100.00	1,662	0.12
Overseas Filipino Workers (OFW) Dependents	588	7.91	6,846	92.09	7,433	0.54
Returning/Repatriated Overseas Filipino Workers (OFW)	5,693	18.89	24,438	81.11	30,131	2.21
TVET Trainers	373	14.67	2,167	85.33	2,539	0.19
Wounded-in-Action AFP & PNP Personnel	253	38.31	407	61.69	659	0.05

Group	Not employed		Employed		Total TVET Graduates in the Labor Force	
	Freq	%	Freq	ER a	Freq.	%
Balik Probinsya	0	0.00	625	100.00	625	0.05
Family Members of AFP and PNP Killed-in- Action	0	0.00	0	0.00	0	0.00
Indigenous People & and Cultural Communities	1,039	11.66	7,868	88.34	8,907	0.65
MILF Beneficiary	0	0.00	426	100.00	426	0.03
RCEF-RESP	0	0.00	504	100.00	504	0.04
Student	233,356	38.54	372,164	61.46	605,519	44.32
Uniformed Personnel	2,070	8.30	22,871	91.70	24,941	1.83
Women's Group or Association	3,983	32.27	8,360	67.73	12,343	0.90
Unemployed Individuals	71,569	39.61	109,130	60.39	180,700	13.22
Employees with Contractual/Job-Order Status	0	0.00	291	100.00	291	0.02
Cooperatives	0	0.00	821	100.00	821	0.06
Solo Parent	1,451	18.56	6,364	81.44	7,815	0.57
Others	13,952	32.34	29,185	67.66	43,137	3.16
Total	402,965	29.49	963,433	70.51	1,366,398	100.00

^aER – employment rate

4.3. Employment Rate by Scholarship Programs

As shown in Table 41 previously, the employment rate among scholars was negligibly higher than among those with no scholarship, with a point difference of 1.86 percent. Both groups' estimated employment rates much the same as with the national estimate of 70.51%.

Table 41. Employment Rate of TVET Graduates with and without Scholarship,

Philippines: 2019

Scholarship	Not employed		Emplo	yed	Total TVET Graduates in the Labor Force					
·	Freq.	%	Freq.	ERa	Freq.	%				
With Scholarship	109,713	28.16	279,924	71.84	389,638	75.66				
No Scholarship	293,252	30.02	683,508	69.98	976,760	69.57				
Total	402,965	29.49	963,433	70.51	1,366,398	71.20				

^aEmployment rate

In particular, among the scholars, those under STEP and TWSP displayed the top two highest employment rates – higher than the national estimate, with estimates of 74.43 and 73.43 percent, respectively (Table 42). In general, a reduction in the employment rates was noted for all the scholarship programs. Even so, PESFA scholars who were documented to place at the top in the past two consecutive years had an estimated rate of 67.72% in 2019's SETG – which demonstrated a considerable decrease compared to the previous year's estimate.

The exact distributional pattern was observed among WTR graduates. STEP bagged the highest employment rate at 75.47%, followed by TWSP (74.24%). Whereas UAQTEA garnered the lowest estimate at 65.09%. Overall, the employment rate among the WTR scholars was

estimated as 72.37% - a bit higher than the estimated rate for the general TVET scholars (Table 43).

Table 42. Estimated Employment Rate of TVET Graduates, By Type of Scholarship Program,

Philippines: 2019

Scholarship Program	Not employed		Emplo	yed	Total TVET Graduates (with Scholarship) in the Labor Force		
	Freq	%	Freq.	ER ª	Freq.	%	
PESFA	5,594	32.76	11,482	67.24	17,076	80.34	
STEP	19,360	25.57	56,341	74.43	75,700	73.63	
TWSP	60,303	26.57	166,631	73.43	226,934	78.03	
UAQTEA	24,457	34.98	45,470	65.02	69,927	69.89	
Total	109,713	28.16	279,924	71.84	389,638	75.66	

^aEmployment rate

Table 43. Estimated Employment Rate of WTR Graduates, By Type of Scholarship Program,

Philippines: 2019

Scholarship Program	Not employed		Emplo	yed	Total WTR Graduates (with Scholarship) in the Labor Force		
	Freq	%	Freq	ER a	Freq	%	
PESFA	5,594	34.36	10,684	65.64	16,278	79.57	
STEP	16,690	24.53	51,346	75.47	68,036	74.17	
TWSP	55,123	25.76	158,861	74.24	213,984	77.81	
UAQTEA	24,069	34.91	44,885	65.09	68,954	69.76	
Total	101,476 27.63		265,776 72.37		367,252	75.56	

^aEmployment rate

A comparison between the employment rate of male and female scholars across the different programs is displayed in Figure 17 and detailed in Tables 44 and 45. The employment rates under TWSP were on par between male and female scholars. There were more male than female STEP scholars who were employed when the survey was conducted. Moreover, a moderate difference in the employment rates of UAQTEA scholars was recorded between sexes, in which males (68.19%) overshadowed females (56%). Only in PESFA did females outnumber the males, with a small point difference of 2.37 percent.

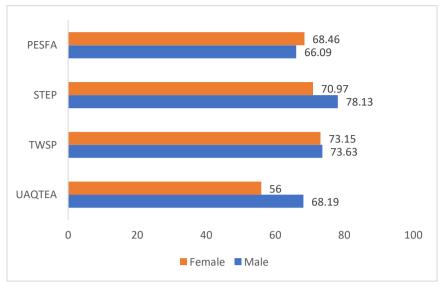


Figure 17. Estimated employment rate of scholar TVET graduates across the different scholarship programs, by sex. Philippines, 2019.

Table 44. Estimated Employment Rate of Male TVET Graduates, By Type of

Scholarship Programs, Philippines: 2019

Scholarship Program	Not em	Not employed		loyed	Total Male TVET Graduates (with Scholarship) in the Labor Force		
	Freq	%	Freq	ER a	Freq	%	
PESFA	2,977	33.91	5,802	66.09	8,779	86.86	
STEP	7,990	21.87	28,543	78.13	36,533	84.35	
TWSP	34,865	26.37	97,330	73.63	132,195	85.83	
UAQTEA	16,474	31.81	35,309	68.19	51,783	76.42	
Total	62,306	27.17	166,985	72.83	229,290	83.32	

^aEmployment rate

Table 45. Estimated Employment Rate of Female TVET Graduates, By Type of Scholarship Programs, Philippines: 2019

Scholarship Program	Not employed		Employed		Total Female TVET Graduates (with Scholarship) in the Labor Force		
	Freq	%	Freq	ER a	Freq	%	
PESFA	2,617	31.54	5,680	68.46	8,298	74.43	
STEP	11,369	29.03	27,798	70.97	39,167	65.83	
TWSP	25,438	26.85	69,301	73.15	94,739	69.25	
UAQTEA	7,983	44.00	10,161	56.00	18,144	56.19	
Total	47,408	29.57	112,940	70.43	160,347	66.88	

^aEmployment rate

Like the previous SETG records, higher employment was estimated among scholars from non-TTIs than TTIs regardless of the scholarship programs. Notably, a moderate point difference between providers was observed among STEP and UAQTEA scholars, with 11.89 and 9.71 percent, respectively. Meanwhile, there was a relatively small point difference of 1.28%

between TWSP scholars from TTIs and non-TTIs. Note that no PESFA scholars from TTIs were recorded in this survey (Figure 18 and Tables 46 and 47).

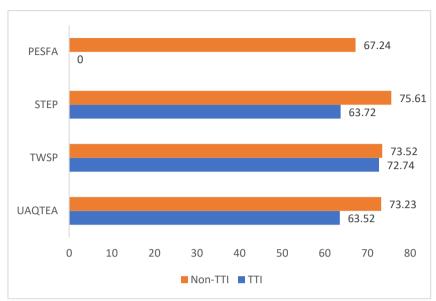


Figure 18. Estimated employment rate of scholar TVET graduates across the different scholarship programs, by sex. Philippines, 2019.

Table 46. Estimated Employment Rate of TVET Graduates under TTI, By Type of Scholarship

Program, Philippines: 2019

Scholarship Program	Not employed		Emplo	yed	Total TVET Graduates (TTI with Scholarship) in the Labor Force		
	Freq	%	Freq	ER a	Freq	%	
PESFA	0	0.00	0	0.00	0	0.00	
STEP	2,725	36.28	4,786	63.72	7,511	67.33	
TWSP	7,186	27.26	19,176	72.74	26,361	84.14	
UAQTEA	21,551	36.48	37,522	63.52	59,073	67.93	
Total	31,462	33.85	61,483	66.15	92,945	71.80	

^aEmployment rate

Table 47. Estimated Employment Rate of TVET Graduates under Non-TTI, By Type of

Scholarship Program, Philippines: 2019

Scholarship Program	Not emp	oloyed	Emplo	yed	Total TVET Graduates (Non-TTI with Scholarship) in the Labor Force		
	Freq	%	Freq	ER a	Freq	%	
PESFA	5,594	32.76	11,482	67.24	17,076	80.34	
STEP	16,635	24.39	51,555	75.61	68,190	74.40	
TWSP	53,117	26.48	147,455	73.52	200,573	77.29	
UAQTEA	2,906	26.77	7,948	73.23	10,853	82.90	
Total	78,251	26.37	218,441	73.63	296,692	76.96	

^aEmployment rate

TWSP provides immediate interventions to satisfy the required skills for their graduates. The clients were directed to training programs connected to existing jobs for immediate employment locally and globally. For this reason, Figure 19 and Table 48 presented, in particular, the employment rates of TWSP scholars across different sectors.

As presented earlier, 7 out of 10 TWSP scholars were actively working at the time of the survey period. The wholesale and retail trading sectors (100%) posted the highest employment rate among the TWSP scholar-graduates. Such sector was followed by the garment sector (95.63%) and the TVET sector (92.69%). Meanwhile, among the sectors with sampled TWSP scholars, information and communication technology registered the lowest estimate at 57.64%. No TWSP scholar-graduates were sampled under the decorative crafts, maritime, utilities, and visual arts sectors.



Figure 19. Estimated employment rate of TWSP-scholar TVET graduates across sectors. Philippines, 2019.

Table 48. Employment Rate of Graduates Under TWSP by Sector, Philippines: 2019

Sector	Not employed		Employed		Total TVET Graduates (TWSP) in the Labor Force	
	Freq	%	Freq	ERa	Freq	%
Agriculture, Forestry, and Fishery	5,096	20.46	19,809	79.54	24,906	82.97
Automotive and Land Transportation	3,447	22.60	11,802	77.40	15,249	80.49
Construction	6,501	23.99	20,600	76.01	27,101	91.06
Decorative Crafts	0	0.00	0	0.00	0	0.00
Electrical and Electronics	8,313	28.21	21,157	71.79	29,470	87.53
Footwear and Leather goods	0	0.00	0	0.00	0	0.00
Garments	40	4.37	873	95.63	913	28.88
Heating, Ventilation, Air conditioning, and Refrigeration	141	100.00	0	0.00	141	28.20
Human Health/Health Care	4,288	33.87	8,372	66.13	12,661	64.55
Information and Communication Technology	11,032	42.36	15,012	57.64	26,043	75.72
Language	838	27.75	2,181	72.25	3,019	74.74
Maritime	0	0.00	0	0.00	0	0.00

Sector	Not employed		Employed		Total TVET Graduates (TWSP) in the Labor Force	
	Freq	%	Freq	ERa	Freq	%
Metals and Engineering	6,234	30.27	14,360	69.73	20,594	79.28
Processed Food and Beverages	245	25.09	733	74.91	978	79.38
Social, Community Development, and Other Services	1,606	20.46	6,242	79.54	7,848	69.31
Tourism (Hotel and Restaurant)	11,687	24.04	36,935	75.96	48,622	71.68
TVET	584	7.31	7,408	92.69	7,993	92.65
Utilities	0	0.00	0	0.00	0	0.00
Visual Arts	0	0.00	0	0.00	0	0.00
Wholesale and Retail Trading	0	0.00	322	100.00	322	75.25
Others	250	23.22	826	76.78	1,076	81.73
Total	60,303	26.57	166,63 1	73.43	226,934	78.03

^aEmployment rate

4.4. Employment Rate of Certified WTR and TVET Graduates

TESDA graduates need to have a certification of competencies that will signify their qualification as skilled workers in their chosen field. In this regard, the Philippine TVET Competency Assessment and Certification System are implemented to determine whether a graduate can render the competency standards required in a workplace.

As seen earlier, a large number of TVET graduates already received certification for their competency. In every ten graduates certified, seven were estimated to work at the time the survey was conducted. Alternatively, among the few graduates who were not yet certified, about 62% were employed (Table 49).

Assessment and certifications are being implemented in all qualifications with promulgated training regulations. Among the certified WTR graduates, 70.55% were at work during the survey period. This is considerably higher than the reported employment rate (59.33%) posted by those who were not yet able to satisfy the competency standards (Table 50).

Table 49. Estimated Employment Rate of TVET Graduates with Competency assessment by Certification, Philippines: 2019

Cerimeanon, Frimppines. 2017									
Certification	Not emp	loyed	Emplo	yed	Total TVET ((with Com Assessi in the Lab	petency nent)			
	Freq	%	Freq	ER a	Freq	%			
Certified	299,184	29.81	704,381	70.19	1,003,564	71.91			
Non-Certified	5,575	37.88	9,142	62.12	14,717	73.69			
Total	304,758	29.93	713,523	70.07	1,018,281	71.93			

^aEmployment rate

Table 50. Estimated Employment Rate of WTR Graduates with Competency assessment by

Certification, Philippines: 2019

Certification	Not employed		Emplo	yed	Total WTR Graduates (with Competency Assessment) in the Labor Force	
	Freq	%	Freq	ER a	Freq	%
Certified	224,615	29.45	538,129	70.55	762,743	75.20
Non-Certified	4,306	40.67	6,282	59.33	10,589	79.69
Total	228,921	29.60	544,411	70.40	773,332	75.25

^aEmployment rate

Further examining the certified graduates, the employment rates across some characteristics were also estimated. Both groups of graduates, TVET and WTR, had more employed males than females. In particular, there was a point-difference of 3.04% and 4.09% between sexes for the TVET and WTR graduates, respectively (Tables 51 and 52).

Table 51. Estimated Employment Rate of Certified TVET Graduates, By Sex, Philippines: 2019

Sex	Not emp	loyed	Emple	oyed	Total Certif Gradue in the Labo	ates
	Freq	%	Freq.	ER a	Freq	%
Female	146,739	31.44	320,046	68.56	466,785	67.12
Male	152,444	28.40	384,335	71.60	536,779	76.67
Total	299,184	29.81	704,381	70.19	1,003,564	71.91

^aEmployment rate

Table 52. Estimated Employment Rate of Certified WTR Graduates, By Sex, Philippines: 2019

Sex	Not employed		Emplo	yed	Total Certified WTR TVET Graduates in the Labor Force		
	Freq.	%	Freq.	ER ª	Freq	%	
Female	107,017	31.73	230,290	68.27	337,307	70.52	
Male	117,598	27.64	307,839	72.36	425,436	79.37	
Total	224,615	29.45	538,129	70.55	762,743	75.20	

^aEmployment rate

Specifically, the TVET certified and] WTR certified graduates registered a high employment rate from those graduates under non-TTIs. The certified TVET from non-TTI recorded 71.17% higher than that of 65.79% under TTIs. Similarly, there were more certified WTR under non-TTIs than TTIs that were employed during the survey period, with estimated rates of 71.77% and 65.93%, respectively (Tables 53 and 54).

Table 53. Estimated Employment Rate of Certified TVET Graduates under TTIs and Non-

TTIs, Philippines: 2019

Provider	Not empl	oyed	Employ	/ed	Total Certified TVET Graduates in the Labor Force		
	Freq.	%	Freq.	ER a	Freq	%	
TTI	62,674	34.21	120,511	65.79	183,185	72.48	
Non-TTI	236,510	28.83	583,870	71.17	820,380	71.78	
Total	299,184	29.81	704,381	70.19	1,003,564	71.91	

^aEmployment rate

Table 54. Estimated Employment Rate of Certified WTR Graduates under TTIs and Non-TTIs,

Philippines: 2019

Provider	Not employed		Employ	yed	Total Certified WTR TVET Graduates in the Labor Force					
Fre	Freq.	%	Freq.	ER ª	Freq	%				
TTI	54,328	34.07	105,119	65.93	159,447	74.08				
Non-TTI	170,287	28.23	433,010	71.77	603,297	75.49				
Total	224,615	29.45	538,129	70.55	762,743	75.20				

^aEmployment rate

In terms of location, the largest number of certified TVET graduates working during the survey period was observed in Region X (Northern Mindanao), with an estimated 80.5%. Region XII (SOCCKSARGEN) was the second-highest with an estimate of 79.03%. Region VIII (Eastern Visayas), on the other hand, was placed at the lowest with an estimate of 57.92% (Table 55). Figure 20 gives the top ten regions with high employment rates among the TVET graduates from 2016 to 2019. Region XI, CAR, Region IV-A, and Region X bagged the highest estimated rates among the graduates in 2016, 2017, 2018, and 2019, respectively. Additionally, it can be seen that Regions IV-A, XI, and CAR were consistently in the top 10 for the four consecutive years of SETG.

Table 55. Estimated Employment Rate of Certified TVET Graduates, By Region, Philippines: 2019

Region	Not emp	loyed	Emplo	yed	Total Certified TVET Graduates in the Labor Force	
	Freq	%	Freq	ER a	Freq	%
BARMM	2,288	26.20	6,443	73.80	8,730	0.87
CAR	7,842	30.51	17,864	69.49	25,706	2.56
CARAGA	15,151	32.05	32,127	67.95	47,278	4.71
NCR	51,726	27.66	135,294	72.34	187,020	18.64
1	17,572	28.93	43,163	71.07	60,735	6.05
II	8,879	23.03	29,677	76.97	38,557	3.84
Ш	49,403	39.92	74,348	60.08	123,751	12.33
IV-A	27,048	25.92	77,290	74.08	104,338	10.40
IV-B	10,025	32.21	21,102	67.79	31,127	3.10
V	8,670	22.77	29,412	77.23	38,082	3.79
VI	24,422	33.99	47,437	66.01	71,858	7.16
VII	17,701	35.89	31,613	64.11	49,314	4.91
VIII	15,244	42.08	20,978	57.92	36,222	3.61

Region	Not employed		Emplo	yed	Total Certified TVET Graduates in the Labor Force	
	Freq	%	Freq	ER a	Freq	%
IX	10,606	32.80	21,729	67.20	32,335	3.22
X	12,258	19.50	50,599	80.50	62,857	6.26
ΧI	11,962	26.20	33,692	73.80	45,654	4.55
XII	8,387	20.97	31,613	79.03	40,000	3.99
Philippines	299,184	29.81	704,381	70.19	1,003,564	100.00

^aEmployment rate



Figure 20. Top 10 regions in terms of estimated employment rate of TVET graduates. Philippines: 2016. 2017, 2018, and 2019

As for the WTR-certified graduates, the employment rates across regions ranged from 57.27% to 81.52%, with the highest rate observed in Region XII and the lowest in Region III (Central Luzon) (Table 56). The observed ranking of regions in terms of certified employed graduates was different from what were documented in the past surveys (Figure 21). Similar to TVET graduates, WTR graduates from Region XI, CAR, and IV-A exhibited the highest estimated rates among the graduates in 2016, 2017, and 2018, respectively. However, it is Region XII that registered the highest estimated rate among the 2019 WTR graduates. Likewise, Regions IV-A and XI have constantly been part of the top 10 employment rates since 2016.

Table 56. Estimated Employment Rate of Certified WTR Graduates, By Region, Philippines: 2019

Region	Not employed		Em	ployed	Total Certified WTR TVET Graduates in the Labor Force		
	Freq	%	Freq	ER□	Freq	%	
BARMM	1,896	25.07	5,667	74.93	7,563	0.99	
CAR	7,079	32.02	15,027	67.98	22,106	2.90	
CARAGA	8,861	30.50	20,196	69.50	29,057	3.81	
NCR	38,755	25.30	114,412	74.70	153,167	20.08	
I	11,539	27.27	30,770	72.73	42,309	5.55	
=	6,303	21.11	23,558	78.89	29,861	3.91	
III	40,895	42.73	54,813	57.27	95,709	12.55	
IV-A	16,370	26.72	44,889	73.28	61,259	8.03	
IV-B	7,613	34.21	14,639	65.79	22,252	2.92	
٧	6,445	20.57	24,885	79.43	31,330	4.11	
VI	17,236	31.41	37,639	68.59	54,875	7.19	
VII	16,121	36.27	28,324	63.73	44,445	5.83	
VIII	13,553	40.49	19,917	59.51	33,469	4.39	
IX	8,086	32.97	16,437	67.03	24,522	3.22	
X	9,688	21.13	36,167	78.87	45,855	6.01	
XI	8,827	24.50	27,196	75.50	36,023	4.72	
XII	5,348	18.48	23,593	81.52	28,941	3.79	
Philippines	224,615	29.45	538,129	70.55	762,743	100.00	

^aEmployment rate



Figure 21. Top 10 regions in terms of estimated employment rate of WTR graduates. Philippines: 2016. 2017, 2018, and 2019

Considering the certified TVET scholar-graduates, around seven in every ten were estimated employed during the survey period. STEP got the highest employment rate among the scholarship programs, at 75.96% – a bit higher than those under TWSP (73.30%). The lowest employment rate among certified scholars was observed in PESFA (64.38%) – albeit close to that of UAQTEA (65.72%) (Table 57).

The same pattern was noted among certified WTR scholar-graduates, with its estimate (72.2%) nearly alike with certified TVET scholars. STEP scholars also bagged the highest employment rate of 76.26%, slightly higher than TWSP (73.71%). PESFA had likewise registered the lowest estimate (64%) on par with UAQTEA (65.81%) (Table 58).

Table 57. Estimated Employment Rate of Certified TVET Graduates, By Type of Scholarship

Program, Philippines: 2019

Type of Program	Not employed		Emplo	yed	Total Certified TVET Graduates (with Scholarship) in the Labor Force		
	Freq	%	Freq	ER a	Freq	%	
PESFA	5,594	35.62	10,111	64.38	15,704	80.84	
STEP	16,382	24.05	51,723	75.95	68,106	75.00	
TWSP	53,921	26.70	148,043	73.30	201,964	77.74	
UAQTEA	23,193	34.28	44,474	65.72	67,667	71.46	
Total	99,091	28.04	254,351	71.96	353,441	76.05	

^aEmployment rate

Table 58. Estimated Employment Rate of Certified WTR Graduates, By Type of Scholarship

Program Philippines: 2019

Type of Program	Not emp	oloyed	Emplo	yed	Total Certified WTR TVET Graduates (with Scholarship) in the Labor Force		
	Freq	%	Freq	ER a	Freq	%	
PESFA	5,594	36.00	9,944	64.00	15,537	80.68	
STEP	14,814	23.74	47,584	76.26	62,398	74.56	
TWSP	52,141	26.29	146,196	73.71	198,337	78.03	
UAQTEA	22,805	34.19	43,889	65.81	66,695	71.16	
Total	95,354	27.80	247,613	72.20	342,967	76.07	

^aEmployment rate

Moreover, the employment rate of certified TVET graduates by different levels of certification was estimated. Of these levels, all those that were sampled with NC IV certification were working when the survey was conducted. High employment was also calculated for those already awarded TM 1 (87.24%) and NC III (80.68%). The lowest employment rate at 65% was observed for those who received COC (Table 59).

A similar pattern was also observed for the certified WTR graduates per se. NC IV got the highest employment rate (100%), followed by TM 1 (94.45%) level, and then by NC III (84.10%). COC again was the lowest rank for the certified WTR graduates at 62.47% - a lower estimate than the certified TVET (Table 60).

Table 59. Estimated Employment Rate of TVET Graduates, By Level of Certification,

Philippines: 2019

Level of Certification	Not employed		Emplo	yed	Total Certified TVET Graduates in the Labor Force		
	Freq	%	Freq	ER a	Freq	%	
coc	11,166	35.00	20,738	65.00	31,905	66.52	
NC I	18,980	27.96	48,907	72.04	67,888	70.29	
NC II	259,817	30.59	589,639	69.41	849,456	72.33	
NC III	7,515	19.32	31,377	80.68	38,892	66.02	
NC IV	0	0.00	2,060	100.00	2,060	92.68	
TM 1	1,705	12.76	11,658	87.24	13,364	85.99	
Total	299,184	29.81	704,381	70.19	1,003,564	71.91	

^aEmployment rate

Table 60. Estimated Employment Rate of TVET Graduates under WTR, By Level of Certification,

Philippines: 2019

Level of Certification	Not emp	loyed	Emplo	yed	Total Certified WTR TVET Graduates in the Labor Force		
	Freq	%	Freq	ER ª	Freq	%	
COC	4,185	37.53	6,968	62.47	11,153	70.09	
NC I	14,522	28.30	36,795	71.70	51,317	71.93	
NC II	200,453	30.55	455,665	69.45	656,119	75.95	
NC III	4,791	15.90	25,335	84.10	30,126	64.29	
NC IV	0	0.00	2,060	100.00	2,060	92.68	
TM 1	664	5.55	11,306	94.45	11,970	84.61	
Total	224,615	29.45	538,129	70.55	762,743	75.20	

^aEmployment rate

Among the certified WTR graduates, high employment rates were observed in Language, Wholesale and Retail Trading, TVET, Garments, and Processed Food and Beverage sectors. In contrast, low rates (though still more than 50%) were recorded in Maritime, Information and Communication Technology, Tourism, and Electrical and Electronics sectors. On the other hand, high employment rates were estimated among the non-certified WTR graduates in sectors such as Garments, Information and Communication Technology, Processed Food and Beverages, and Agriculture, Fishery and Forestry. This shows that these sectors were not strictly requiring their skilled workers to take competency assessments. In addition, a considerably low number of employed non-certified WTR graduates were recorded in Social, Community Development, and other services, Tourism, and Construction (Table 61).

Table 61. Estimated Employment Rate of TVET Graduates (WTR), By Sector, By Certification,

Philippines: 2019

Philippines: 2019					Total Not	Certified		
Sector	Not Certified		Certified		Total Not Certified TVET Graduates (WTR) in the Labor Force		Total Certified TVET Graduates (WTR) in the Labor Force	
	Freq	ER a	Freq	ERa	Freq	%	Freq	%
Agriculture, Forestry, and Fishery	600	80.99	33,328	78.72	740	6.99	42,338	5.55
Automotive and Land Transportation	606	70.31	59,248	73.90	861	8.13	80,179	10.51
Construction	181	53.74	49,095	77.81	337	3.19	63,097	8.27
Decorative Crafts	0	0.00	0	0.00	0	0.00	0	0.00
Electrical and Electronics	1,243	66.13	65,621	68.51	1,880	17.75	95,779	12.56
Footwear and Leathergoods	0	0.00	0	0.00	0	0.00	250	0.03
Garments	708	100.00	10,872	83.83	708	6.68	12,970	1.70
Heating, Ventilation, Airconditioning, and Refrigeration	0	0.00	2,812	71.30	0	0.00	3,943	0.52
Human Health/Health Care	335	70.14	50,288	71.80	477	4.51	70,040	9.18
Information and Communication Technology	951	100.00	19,669	64.71	951	8.98	30,395	3.98
Language	0	0.00	2,058	100.00	0	0.00	2,058	0.27
Maritime	0	0.00	4,769	55.34	0	0.00	8,617	1.13
Metals And Engineering	275	64.07	50,751	68.22	430	4.06	74,393	9.75
Processed Food and Beverages	206	100.00	10,185	80.01	206	1.95	12,730	1.67
Social, Community Development, and Other Services	358	29.31	28,628	66.26	1,223	11.55	43,209	5.66
Tourism (Hotel And Restaurant)	819	29.52	138,063	65.98	2,775	26.20	209,238	27.43
TVET	0	0.00	11,403	93.69	0	0.00	12,171	1.60
Wholesale and Retail Trading	0	0.00	1,338	100.00	0	0.00	1,338	0.18
Total	6,282	59.33	538,129	70.55	10,589	100.00	762,743	100.00

^aEmployment rate

4.5. Statistical Comparison of Employment Rates across Subgroups

The employment rate among the 2019 graduates was previously estimated and interpreted. Employment rates across various characteristics were also generated to describe the employment status of the graduates concerning their profile. In this section, the reliability of the generated estimates was assessed in terms of their coefficient of variation (CV). An estimate with a CV of at most 10% is considered reliable, and those with a CV of greater than 10% but less than 20% are acceptable. Moreover, a statistical comparison of the employment rates was made between or among identified groups of students based on the 95% confidence interval estimates.

As revealed, the male employed graduates slightly outnumbered the female graduates. Both sexes' estimates were found reliable, with CVs of 1.28 and 1.35 percent for males and females, respectively. The slight point difference in the estimates could not support the idea that generally, there were more male than female graduates who were working during the survey period. This is further shown by the overlapping interval estimates between males and females (Table 62 and Figure 22). This finding is similar to what were tested in the previous surveys, wherein the sex of the graduates could not be considered a factor for the employability of the graduates.

Table 62. Estimate of the Employment Rate of TVET Graduates, By Sex, Philippines: 2019

Say	Proportion of	Standard	Coefficient of Variation (Estimate,	95% Confidence Interval		
Sex	Employed	Error	%)	Lower Limit	Upper Limit	
Female	0.70	0.01	1.35	0.67	0.72	
Male	0.71	0.01	1.28	0.69	0.74	

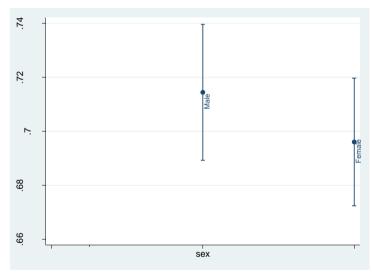


Figure 22. Confidence Interval Estimate of the Proportion of Employed TVET Graduates, By Sex. Philippines: 2019

The regional estimates of employment are also reliable, with all CVs less than 10%. Region XII, which was estimated to have the highest employment rate, was not significantly different from those in regions I, II, IV-A, V, XI, X, V, X, XI, and NCR, as reflected by the overlapping interval estimates in these regions. Alternatively, Region VIII, which posted the lowest rate, was not statistically different from the estimates generated for regions III, VI, VII, and CARAGA (Table 63 and Figure 23).

Table 63. Estimate of the Employment Rate of TVET Graduates, By Region, Philippines: 2019

rable 66: Estimate of the Employment Rate of 1721 oradoctes, by Region, 1 milphiles. 20								
	Proportion of Standard		Coefficient of	95% Confidence Interval				
Region	Employed	Error	(Estimate, %)	Lower Limit	Upper Limit			
BARMM	0.73	0.03	3.71	0.68	0.78			
CAR	0.70	0.03	4.33	0.64	0.76			
CARAGA	0.67	0.03	4.51	0.61	0.73			
NCR	0.73	0.03	3.81	0.67	0.78			

	Proportion of	Standard	Coefficient of	95% Conf	idence Interval
Region	Employed	Error	Variation (Estimate, %)	Lower Limit	Upper Limit
I	0.73	0.03	4.19	0.67	0.78
II	0.79	0.03	3.53	0.73	0.84
III	0.59	0.03	5.42	0.53	0.65
IV-A	0.74	0.03	4.17	0.68	0.80
IV-B	0.70	0.03	4.65	0.64	0.76
٧	0.76	0.03	3.47	0.71	0.81
VI	0.68	0.03	4.72	0.61	0.74
VII	0.62	0.03	4.74	0.56	0.68
VIII	0.56	0.03	5.62	0.50	0.63
IX	0.68	0.03	4.69	0.62	0.74
X	0.80	0.02	2.90	0.76	0.85
XI	0.74	0.03	3.72	0.69	0.79
XII	0.82	0.02	2.88	0.78	0.87

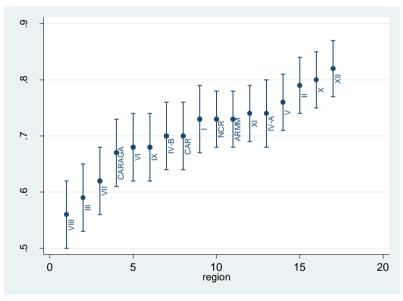


Figure 23. Confidence Interval Estimate of the Proportion of Employed TVET Graduates by Region. Philippines: 2019

In the past surveys, non-TTI graduates had always been estimated with a higher employment rate than TTIs. But such a difference cannot be supported with sufficient evidence. In this year's survey, wherein many workers were affected by the COVID-19 pandemic, the data collected supported the finding that the number of employed non-TTI graduates was significantly higher than employed TTI graduates. This is evident in their 95% confidence intervals, which indicated that the true proportion of employed TTI graduates was between 0.62 and 0.69, and it was between 0.70 and 0.73 for non-TTIs. Furthermore, both of the estimates produced in TTI and non-TTI were considered reliable (Table 64 and Figure 24).

Table 64. Estimate of the Employment Rate of TVET Graduates, By Type of Provider,

Philippines: 2019

Type of	Proportion of	Standard	Coefficient of	95% Confider	nce Interval
Provider	Employed	Error	Variation (Estimate, %)	Lower Limit	Upper Limit
TTI	0.65	0.02	2.75	0.62	0.69
Non-TTI	0.72	0.01	1.39	0.70	0.73

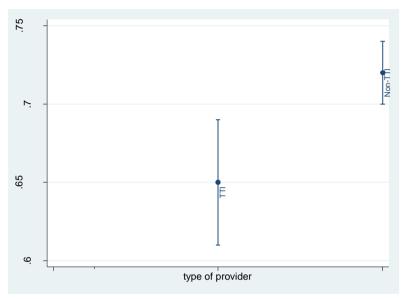


Figure 24. Confidence Interval Estimate of the Proportion of Employed TVET Graduates by Type of Provider. Philippines: 2019

The estimated employment rates among the scholars under different programs and non-scholars are reliable, with a non-scholarship estimate as the most reliable with a CV of 1.55%. While STEP and UAQTEA registered the highest and lowest estimates, respectively, employment rates across these programs were not significantly different, as reflected by their overlapping estimates (Table 65 and Figure 25).

Table 65. Estimate of the Employment Rate of TVET Graduates, By Type of Scholarship

Program, Philippines: 2019

Scholarship Program	Proportion of	Standard	Coefficient of Variation	95% Confidence Interval		
	Employed	Error	(Estimate, %)	Lower Limit	Upper Limit	
PESFA	0.67	0.06	8.25	0.56	0.78	
STEP	0.74	0.03	4.46	0.68	0.81	
TWSP	0.73	0.02	2.69	0.70	0.77	
UAQTEA	0.65	0.03	4.99	0.59	0.71	
Regular Program (No Scholarship)	0.70	0.01	1.55	0.68	0.72	

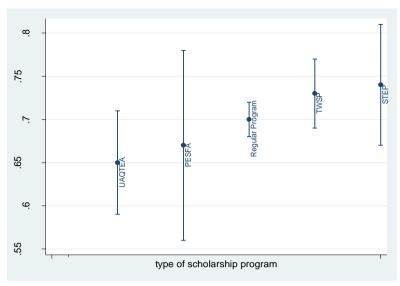


Figure 25. Confidence Interval Estimate of the Proportion of Employed TVET Graduates by Type of Scholarship Program. Philippines: 2019

In terms of the program delivery modes, employment rates among institution-based and community-based graduates were found reliable. However, estimates generated for DTS and farm school/enterprise training could not be considered acceptable and used with risk. Meanwhile, the apprentice's estimate was deemed not reliable but acceptable. Nonetheless, the industry-based program (enterprise-based) exhibited the highest employment rate among the reliable estimates and found not significantly different with learnership and NGOs, POs, and CSR training (community-based). Moreover, the estimate from the latter was found significantly higher than estimates of mobile training programs (Table 66 and Figure 26).

Table 66. Estimate of the Employment Rate of TVET Graduates, By Program Delivery Mode,

Philippines: 2019

Program Delivery Mode	Proportion of Employed	Standard Error	Coefficient of Variation	95% Confidence Interval	
	Linployed	LITOI	(Estimate, %)	Lower Limit	Upper Limit
Institution-based	0.70	0.01	1.65	0.67	0.72
Enterprise-based	0.74	0.05	6.60	0.65	0.84
Dual training system	0.52	0.27	51.25	0.00	1.00
Apprenticeship	0.58	0.09	15.36	0.41	0.76
Learnership	0.86	0.08	8.95	0.71	1.00
PAFSE*	1.00	-	-	-	-
Supervised Industry Learning*	1.00	-	-	-	-
Industry-based/ in-company training	0.91	0.04	4.50	0.83	0.99
Farm schools/ enterprise training	0.69	0.20	28.45	0.31	1.00
Community-based	0.72	0.01	2.01	0.69	0.75
Mobile training program	0.64	0.03	4.74	0.58	0.70
TESDA Provisional PTCs/ Extension programs of TTIs	0.67	0.03	4.48	0.61	0.73

Program Delivery Mode	Proportion of Employed	Standard Error	Coefficient of Variation		5% dence rval
	Employed	EIIOI	(Estimate, %)	Lower Limit	Upper Limit
LGU-oriented community- based progams	0.76	0.02	2.93	0.72	0.80
NGOs, POs, CSR trainings	0.79	0.03	3.90	0.73	0.85

no standard error, CV and 95% CI due to absence of variability

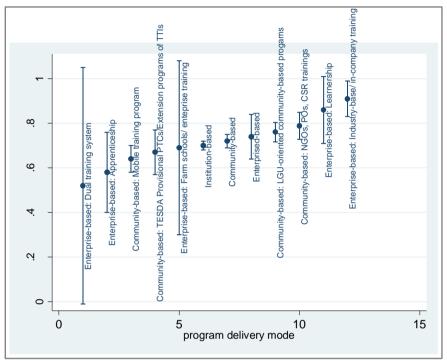


Figure 26. Confidence Interval Estimate of the Proportion of Employee TVET Graduates by Program Delivery Mode. Philippines: 2019

For sectors, estimates on footwear and leather goods, heating, ventilation, air conditioning, and refrigeration were not reliable but could be considered acceptable. Whereas, estimated employment rates in visual arts and maritime sectors were not reliable nor acceptable; hence these estimates could be used with risk. Moreover, wholesale and retail trading with considerably high employment rates were not significantly different from those with high and reliable estimates. Based on the 95% confidence interval estimates, the said sector, however, was found to have a significantly higher estimate than electrical and electronics, information, and communication technology, metals and engineering, social and community development, and tourism sectors (Table 67 and Figure 27).

Table 67. Estimate of the Employment Rate of TVET Graduates, By Sector, Philippines: 2019

Salar	Proportion of	Standard	Coefficient of Variation	95% Confidence Interval	
Sector	Employed	Error	(Estimate, %)	Lower Limit	Upper Limit
Agriculture, Forestry, and Fishery	0.77	0.03	3.78	0.71	0.83
Automotive and Land Transportation	0.76	0.02	2.89	0.72	0.80
Construction	0.75	0.03	4.39	0.68	0.81
Decorative Crafts*	1.00	-	-	-	-
Electrical and Electronics	0.69	0.03	3.72	0.64	0.74
Footwear and Leather goods	0.83	0.15	18.59	0.53	1.00
Garments	0.84	0.06	6.78	0.72	0.95
Heating, Ventilation, Airconditioning, and Refrigeration	0.74	0.11	14.26	0.54	0.95
Human Health/Health Care	0.72	0.03	4.31	0.66	0.78
Information and Communication Technology	0.64	0.04	6.91	0.56	0.73
Language	0.64	0.07	10.16	0.52	0.77
Maritime	0.55	0.17	30.46	0.22	0.88
Metals and Engineering	0.69	0.03	4.71	0.62	0.75
Processed Food and Beverages	0.73	0.04	5.26	0.66	0.81
Social, Community Development, and Other Services	0.64	0.04	6.47	0.56	0.72
Tourism (Hotel and Restaurant)	0.67	0.02	2.76	0.64	0.71
TVET	0.88	0.06	7.28	0.75	1.00
Utilities*	1.00	-	-	-	-
Visual Arts	0.51	0.33	66.32	0.00	1.00
Wholesale and Retail Trading	0.91	0.07	7.72	0.77	1.00
Others	0.72	0.05	6.36	0.63	0.81

^{*}no standard error, CV and 95% CI due to absence of variability

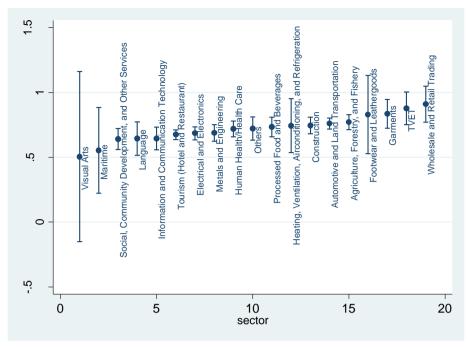


Figure 27. Confidence Interval Estimate of the Proportion of Employed TVET Graduates by Sector. Philippines: 2019

Consistently, certified TVET graduates were found to have a higher employment rate than non-certified. Still, the difference is not significant enough to conclude that certified graduates were more employable than non-certified. At a 95% level of confidence, the true proportion of employed certified graduates was between 0.68 and 0.72, and it was between 0.45 and 0.79 for non-certified. Note that a certified estimate is identified as reliable. However, a non-certified estimate's reliability cannot be guaranteed but could be considered acceptable (Table 68a and Figure 28a).

Table 68a. Estimate of the Employment Rate of TVET Graduates, By Certification, Philippines: 2019

Certification	Proportion of	Standard	Coefficient of Variation	95% Confidence Interval		
	Employed	Error	(Estimate, %)	Lower Limit	Upper Limit	
Certified	0.70	0.01	1.46	0.68	0.72	
Non-Certified	0.62	0.09	13.95	0.45	0.79	



Figure 28a. Confidence Interval Estimate of the Proportion of Employed TVET Graduates by Whether Certified or Not. Philippines: 2019

Since competency assessment is required among WTR graduates, certified and non-certified WTR graduates' employment rates were likewise statistically compared. As observed in the overlapping interval estimates between the two groups, there is no sufficient evidence to support the finding that employment rate among certified WTR graduates is higher than the non-certified. Also, a certified estimate is reliable, and a non-certified estimate is acceptable with coefficients of variation of 1.64 and 18.10 percent, respectively (Table 68b and Figure 28b).

Table 68b. Estimate of the Employment Rate of WTR Graduates, By Certification, Philippines: 2019

Certification Proportion of Employed	Proportion of	Standard	Coefficient of Variation		nfidence rval
	Error	(Estimate, %)	Lower Limit	Upper Limit	
Certified	0.71	0.01	1.64	0.68	0.73
Non- Certified	0.59	0.11	18.10	0.38	0.80

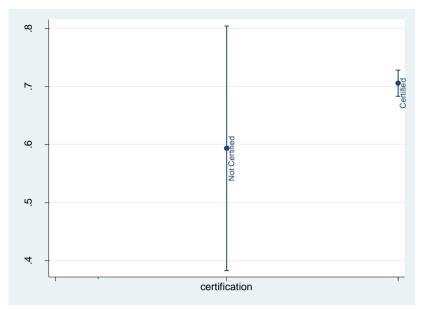


Figure 28b. Confidence Interval Estimate of the Proportion of Employed WTR Graduates by Whether Certified or Not. Philippines: 2019

Moreover, the proportion of employed certified TVET graduates were statistically compared across the levels of certification. All estimates were identified as reliable, with their coefficient of variation at less than 10%. The 95% confidence interval estimates show that the proportion of employed graduates across the different levels was not significantly different (Table 69 and Figure 29).

Table 69. Estimate of the Employment Rate of TVET Graduates, By Level of Certification,

Philippines: 2019

Level of	Dranarlian	Standard Error	Coefficient of	95% Confidence Interval		
Certification	ication Proportion Standard Error	Variation	Lower Limit	Upper Limit		
COC	0.65	0.06	8.78	0.54	0.76	
NC I	0.72	0.04	5.61	0.64	0.80	
NC II	0.69	0.01	1.61	0.67	0.72	
NC III	0.81	0.05	5.83	0.71	0.90	
NC IV*	1.00	•	•	-	-	
TM 1	0.87	0.08	8.65	0.72	1.00	

no standard error, CV and 95% CI due to absence of variability

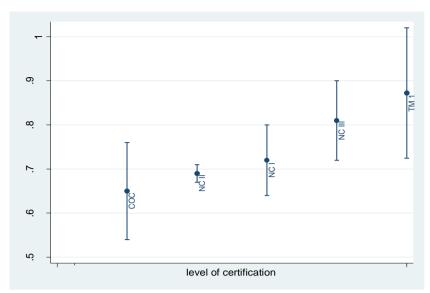


Figure 29. Confidence Interval Estimate of the Proportion of Employed TVET Graduates by Whether Certified or Not. Philippines: 2019

4.6. Characteristics of Employed TVET Graduates

As discussed, there were 7 in every ten graduates active in the labor force who were working when the survey was conducted. In addition, among the 1,919,013 TESDA graduates in 2019, about half (963,433) were employed during the survey period. In this section, further characterization of employed TVET graduates was done.

By Occupational Group

About a quarter (25.16%) of the employed graduates in 2019 were in services and sales. This occupational group constantly had the largest share among the different classifications – in which females surpassed males. There were also many employed graduates in the professional group (13.81%), clerical support (11.23%), and craft and related trade (11.1%). Alternatively, very few of the graduates were employed in the armed forces (1.06%) and agriculture, forestry, and fishery (2.96%) (Figure 30 and Table 70).

Additionally, many female graduates were under the group of professionals (64.02%), managers (58.97%), technicians and associate professionals (62.56%), and clerical support (60.74%). Expectedly, occupational groups in which the majority were males included plant machine operators and assemblers (95.75), skilled agricultural, forestry and fishery (72.14%), craft and related trade (78.02%), and armed forces (94.08%) (Table 70).

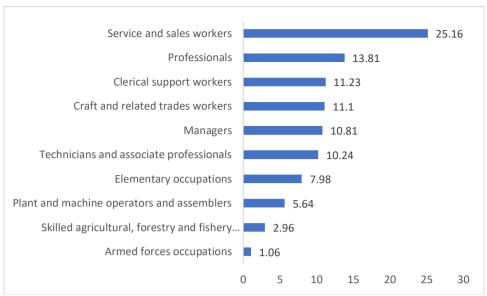


Figure 30. Weighted percent distribution of Employed TVET graduates by occupational group. Philippines, 2019.

Table 70. Weighted distribution of employed TVET graduates by occupational group, by sex,

Philippines: 2019

			Se	X		
Occupational Group	Fem	Female		Male		al
	Freq	% ª	Freq	% º	Freq	%ь
Armed forces occupations	605	5.92	9,620	94.08	10,226	1.06
Managers	61,417	58.97	42,732	41.03	104,149	10.81
Professionals	85,170	64.02	47,867	35.98	133,037	13.81
Technicians and associate professionals	61,707	62.56	36,929	37.44	98,636	10.24
Clerical support workers	65,735	60.74	42,480	39.26	108,215	11.23
Service and sales workers	153,745	63.42	88,664	36.58	242,410	25.16
Skilled agricultural, forestry and fishery workers	7,947	27.86	20,582	72.14	28,529	2.96
Craft and related trades workers	23,516	21.98	83,469	78.02	106,984	11.10
Plant and machine operators and assemblers	2,305	4.24	52,054	95.76	54,359	5.64
Elementary occupations	21,172	27.54	55,715	72.46	76,887	7.98
Total	483,321	50.17	480,111	49.83	963,433	100.00

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

As presented in Table 71, the distribution of employed graduates across the occupational group was considered for each training delivery mode. Similarly, the service and sales group registered the largest portion of graduates from institution, enterprise, and community-based programs at 23.17%, 34%, and 27.31%, respectively. This was also followed by a professional group of workers for institution and community-based programs, while it was craft and related trades for enterprise-based programs. Moreover, the armed forces group of workers ranked last for all delivery modes in terms of the number of TESDA graduate workers.

Table 71. Weighted distribution of employed TVET graduates by occupational group, by

training delivery mode, Philippines: 2019

	Training Delivery Mode									
Occupational Group	Institut base		Enterp bas		Community- based		Total			
	Freq	% ª	Freq	%ª	Freq	%ª	Freq	%b		
Armed forces occupations	5,695	1.02	212	0.59	4,318	1.16	10,226	1.06		
Managers	53,362	9.58	3,626	10.14	47,161	12.72	104,149	10.81		
Professionals	83,676	15.02	1,192	3.33	48,169	12.99	133,037	13.81		
Technicians and associate professionals	55,843	10.03	2,776	7.76	40,017	10.79	98,636	10.24		
Clerical support workers	68,349	12.27	3,716	10.39	36,150	9.75	108,215	11.23		
Service and sales workers	129,017	23.17	12,165	34.00	101,228	27.31	242,410	25.16		
Skilled agricultural, forestry and fishery workers	13,657	2.45	1,319	3.69	13,553	3.66	28,529	2.96		
Craft and related trades workers	64,551	11.59	6,096	17.04	36,337	9.80	106,984	11.10		
Plant and machine operators and assemblers	34,777	6.24	1,637	4.58	17,946	4.84	54,359	5.64		
Elementary occupations	48,002	8.62	3,035	8.48	25,850	6.97	76,887	7.98		
Total	556,928	57.81	35,775	3.71	370,729	38.48	963,433	100.00		

^aPercentage over the column total; ^bPercentage over the total number of TVET graduates

The distribution of employed certified and non-certified TVET graduates was also determined throughout the occupational groups. Many of the certified 2019 graduates were employed as service and sales workers (25.65%). There were also professionals (14.12%), craft and related trade workers (11.83%), and clerical support workers (11.46%), among others. Alternatively, many employed graduates who were not yet certified were found as professionals, which made up the largest portion at 31.54%. About 17% of this group were clerical support workers, while close to 14% were technicians and associate professionals (Table 72)

Table 72. Weighted Distribution of Employed Certified and Non-Certified TVET Graduates, By Occupational Group, Philippines: 2019

	Certification							
Occupational Group	Certified Gradu		Non-Certifi Gradu		Total			
	Freq	%ª	Freq	%	Freq	%ь		
Armed forces occupations	8,806	1.25	0	0.00	8,806	1.23		
Managers	61,544	8.74	732	8.01	62,276	8.73		
Professionals	99,465	14.12	2,883	31.54	102,348	14.34		
Technicians and associate professionals	68,222	9.69	1,257	13.75	69,478	9.74		
Clerical support workers	80,687	11.46	1,567	17.14	82,254	11.53		
Service and sales workers	180,651	25.65	1,091	11.93	181,742	25.47		
Skilled agricultural, forestry and fishery workers	20,400	2.90	38	0.42	20,438	2.86		
Craft and related trades workers	83,338	11.83	565	6.18	83,904	11.76		
Plant and machine operators and assemblers	42,083	5.97	606	6.63	42,689	5.98		
Elementary occupations	59,185	8.40	405	4.43	59,590	8.35		
Total	704,381	98.72	9,142	1.28	713,523	100.00		

^aPercentage over the column total; ^bPercentage over the total number of TVET graduates

The same distribution of certified and noncertified graduates across occupational groups was observed among employed WTR graduates. The service and sales group were still found to have the largest certified WTR graduates, with 23.74%. Again, this was followed by the group of professionals (13.68%), clerical group of workers (11.92%), and craft and related trade workers (11.74%). Constantly, the top occupational groups for the non-certified WTR graduates were professionals, technicians and associate professionals, and clerical support workers at 20.74%, 10.91%, and 8.16%, respectively (Table 73).

Table 73. Weighted Distribution of Employed Certified and Non-Certified WTR Graduates, By

Occupational Group, Philippines: 2019

	Certification							
Occupational Group	Certifie Gradu		Non-Certif		Total			
	Freq	% ª	Freq	% ª	Freq	%b		
Armed forces occupations	6,265	1.16	0	0.00	6,265	1.15		
Managers	50,498	9.38	732	8.01	51,230	9.41		
Professionals	73,610	13.68	1,896	20.74	75,507	13.87		
Technicians and associate professionals	54,114	10.06	997	10.91	55,112	10.12		
Clerical support workers	64,169	11.92	746	8.16	64,915	11.92		
Service and sales workers	127,770	23.74	483	5.28	128,253	23.56		
Skilled agricultural, forestry and fishery workers	13,551	2.52	38	0.42	13,589	2.50		
Craft and related trades workers	63,197	11.74	565	6.18	63,762	11.71		
Plant and machine operators and assemblers	37,458	6.96	606	6.63	38,063	6.99		
Elementary occupations	47,495	8.83	220	2.41	47,714	8.76		
Total	538,129	98.85	6,282	1.15	544,411	100.00		

^aPercentage over the column total; ^bPercentage over the total number of TVET graduates

By Class of Workers

Among the employed graduates, 65.37% were wage and salary workers, wherein males slightly outnumbered females. Nearly one-third (30.77%) of the graduates were classified as own-account workers. There were some classified as unpaid family workers (3.53%) – the majority were females. Meanwhile, very few were classified as online digital workers or entrepreneurs (Table 74).

As seen in Table 75, most employed graduates from the different program delivery modes were wage and salary workers. The largest share of own-account workers and unpaid family workers were from the enterprise-based programs. The few online digital workers were under the institution-based programs, while those classified as individual entrepreneurs were from the institution and community-based programs.

Table 74. Weighted Distribution of Employed TVET Graduates by Class of Worker, by Sex,

Philippines: 2019

			S	ex			
Class of worker	Fer	male	M	ale	Total		
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b	
Wage and Salary Worker	298,731.0	47.44	331,027.0	52.56	629,757.0	65.37	
Own account workers	156,767.0	52.89	139,652.0	47.11	296,419.0	30.77	
Unpaid family work	25,802.0	75.86	8,209.0	24.14	34,011.0	3.53	
Online Digital Worker	0.0	0.00	382.0	100.00	382.0	0.04	
Individual Entrepreneur	2,021.0	70.60	842.0	29.40	2,863.0	0.30	
Total	483,321.0	50.17	480,111.0	49.83	963,433.0	100.00	

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

Table 75. Weighted Distribution of Employed TVET Graduates by Class of Worker, By Training

Delivery Mode, Philippines: 2019

	Program Delivery Mode									
Class of Worker	Institution-based		Enterprise-based		Community-based		Total			
	Freq	% ª	Freq	% ª	Freq	% ª	Freq	%b		
Wage and Salary Worker	379,997	68.23	20,126	56.26	229,635	61.94	629,757	65.37		
Own account workers	160,454	28.81	13,501	37.74	122,464	33.03	296,419	30.77		
Unpaid family work	14,719	2.64	2,149	6.01	17,143	4.62	34,011	3.53		
Online Digital Worker	382	0.07	0	0.00	0	0.00	382	0.04		
Individual Entrepreneur	1,376	0.25	0	0.00	1,487	0.40	2,863	0.30		
Total	556,928	100.00	35,775	100.00	370,729	100.00	963,433	100.00		

^aPercentage over the column total; ^bPercentage over the total number of TVET graduates

Most of the TVET graduates, certified or non-certified, were wage and salary workers. If not wage workers, many were classed as own-account workers, a higher percentage among certified workers. A higher portion among the few unpaid workers was non-certified. On the other hand, those identified as online digital workers and individual entrepreneurs were already certified. (Table 76). The same distribution pattern of the class of workers, whether certified or not, can be observed among the specific WTR graduates (Table 77).

Table 76. Weighted Distribution of Employed Certified and Non-Certified TVET Graduates, By Class of Worker, Philippines: 2019

	Certification									
Class of Worker	Certified TVET Graduates		_	Certified TVET Graduates	Total					
	Freq	%	Freq	%"	Freq	%b				
Wage and Salary Worker	473,830	67.27	6,882	75.27	480,712	67.37				
Own account workers	209,810	29.79	2,052	22.44	211,862	29.69				
Unpaid family work	18,620	2.64	209	2.29	18,830	2.64				

			Certi	fication									
Class of Worker	Certified TVET Graduates			Certified TVET traduates	Total								
	Freq	%	Freq	% º	Freq	%							
Online Digital Worker	327	0.05	0	0.00	327	0.05							
Individual Entrepreneur	1,793	0.25	0	0.00	1,793	0.25							
Total	704,381	100.00	9,142	100.00	713,523	100.00							

^aPercentage over the column total; ^bPercentage over the total number of TVET graduates

Table 77. Weighted Distribution of Employed Certified and Non-Certified WTR Graduates, By Class of Worker, Philippines: 2019

	Certification								
Class of Worker	Certified WTR	Graduates	Non-Certified	Total					
	Freq	%	Freq	%	Freq	%b			
Wage and Salary Worker	362,758	67.41	4,763	75.82	367,521	67.51			
Own account workers	160,596	29.84	1,310	20.85	161,905	29.74			
Unpaid family work	13,272	2.47	209	3.33	13,482	2.48			
Online Digital Worker	327	0.06	0	0.00	327	0.06			
Individual Entrepreneur	1,176	0.22	0	0.00	1,176	0.22			
Total	538,129	100.00	6,282	100.00	544,411	100.00			

^aPercentage over the column total; ^bPercentage over the total number of TVET graduates

By Nature of Work

It is shown in Table 78 that among the employed graduates, more than half (56.46%) were working in a short-term or seasonal job/business or unpaid family worker, considerably higher than in 2018, which was 38.42%. Also, some of the 2019 graduates (38.59%) were already permanent in their jobs or business. A few (4.96%) worked with different employers on a day-to-day or week-to-week basis – higher than the 1.32% among the 2018 graduates. The increment in the rate of graduates working for a short-term or working with different employers might be attributed to the economic impact of the COVID-19 pandemic, where many of the workers were seriously affected.

Table 78. Weighted distribution of employed TVET graduates, by nature of work, Philippines: 2019

Nature of Work	Employed TVET Graduates	% Share
Permanent job/business/unpaid family work	371,743	38.59
Short-term or seasonal job/business/unpaid family work	543,948	56.46
Worked different employers on a day-to-day or week-to-week basis	47,741	4.96
Total	963,433	100.00

The majority of the certified TVET and WTR graduates, in particular, were working in a short-term or seasonal job/business/unpaid family work comprising 59.27% and 60.94% of their respective populations. Meanwhile, it was apparent that among the non-certified graduates, more than half of the employed population were estimated to have a permanent job or

business. In contrast, among the WTR certified, the largest share belongs to those who worked on a short-term or seasonal basis (Tables 79 and 80)

Table 79. Comparison of Employed Certified and Non-Certified TVET Graduates, by Nature of Work, Philippines: 2019

	Certification								
Nature of Work	Certifie Grad	ed TVET uates	Non-Ce TVET Gra		Total				
	Freq	%	Freq	%	Freq	%b			
Permanent job/business/unpaid family work	251152	35.66	4935	53.98	256087	251152			
Short-term or seasonal job/business/unpaid family work	417471	59.27	3892	42.57	421363	417471			
Worked different employers on a day-to- day or week-to-week basis	35757	5.08	315	3.45	36073	35757			
Total	704381	98.72b	9142	1.28 ^b	713523	704381			

^aPercentage over the colum total; ^bPercentage over the total number of TVET graduates

Table 80. Comparison of Employed Certified and Non-Certified WTR Graduates, by Nature of

Work, Philippines: 2019

	Certification							
Nature of Work	Certific Grad	ed WTR vates	Non-Certified WTR Graduates		Total			
	Freq	%	Freq	%	Freq	%b		
Permanent job/business/unpaid family work	178,936	33.25	2,902	46.20	1,81,838	33.40		
Short-term or seasonal job/business/unpaid family work	327,957	60.94	3,065	48.79	331,022	60.80		
Worked different employers on a day-to- day or week-to-week basis	31,236	5.80	315	5.01	31,551	5.80		
Total	538,129	98.85 ^b	6,282	1.15 ^b	544,411	100.00		

^aPercentage over the colum total; ^bPercentage over the total number of TVET graduates

By Location of Work

The vast majority of the 2019 graduates (94.79%) were working within their province during the survey period. Only a few of them were working abroad, making up only 0.28% of the population of graduates (Table 80). Additionally, it can be observed that the portion of graduates working outside their province, still within the country, were primarily male. However, more than half of those working abroad were female (Figure 31 and Table 81).

Table 81. Weighted distribution of employed TVET graduates, by location of work, Philippines: 2019

	Sex							
Location of Work	Femo	Male	е	Total				
	Freq	%	Freq	%ª	Freq	%b		
Within the province	468,153	51.26	445,124	48.74	913,277	94.79		
Outside the province but within the region	3,115	27.86	8,066	72.14	11,182	1.16		
Outside the region	10,351	28.52	25,947	71.48	36,299	3.77		
Outside the country	1,702	63.61	974	36.39	2,675	0.28		
Total	483,321	50.17	480,111	49.83	963,433	100.00		

[°]Percentage over the row total; bPercentage over the total number of TVET graduates

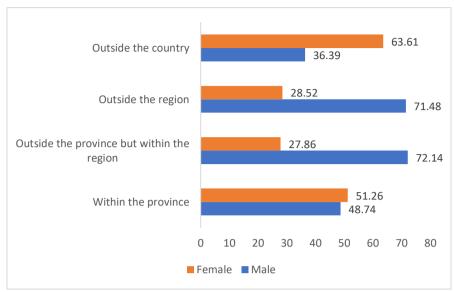


Figure 31. Weighted percent distribution of Employed TVET graduates by Location of work, by Sex. Philippines, 2019.

Industries/Businesses and Services

Figure 32 presents the different industries or businesses that 2019 graduates were engaged in. Many were in retail trade, except motor vehicles and motorcycles. Some were in public administration and defense, compulsory social security, and other personal service activities. Some worked at crop and animal production, hunting, and other related service activities.

On the other hand, Figure 33 shows the services offered by the companies/businesses from which the graduates were working. Among the services, the most cited were administration of state and the economic and social policy, education, and retail trade. Other services included building completion and finishing, general merchandise, and restaurants and mobile food service activities.

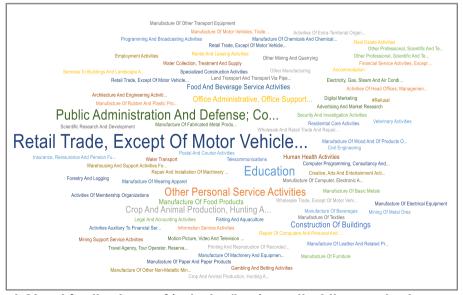


Figure 32. Word Cloud for the type of industry/business that the graduates were engaged in



Figure 33. Word Cloud for the major product or type of service of your company/business

Terms of Employment and Contributions

Only half of the employed TVET graduates were under a contract. It is evident that many of the males were protected by a contract, while the opposite can be said for females (Table 82).

Table 82 . Weighted Distribution of Employed TVET Graduates by Terms of Employment

and by Sex, Philippines: 2019

	Sex					
Covered by a Contract	Female		Male		Total	
Commuci	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Yes	230,434	47.40	255,680	52.60	486,114	50.46
No	252,887	52.98	224,432	47.02	477,318	49.54
Total	483,321	50.17	480,111	49.83	963,433	100.00

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

Moreover, Table 83 reveals that more than half of the employed graduates were not receiving subsidies from their employers for their contributions to GSIS/SSS, Pag-Ibig, and PhilHealth.

Table 83. Weighted Distribution of Employed TVET Graduates whether their employers pay for

their contributions, by Sex, Philippines: 2019

F	Sex						
pays for the	Employer Female		Male			Total	
contribution	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b	
GSIS/SSS							
Yes	228,854	50.61	223,362	49.39	452,216	46.94	
No	254,467	49.78	256,749	50.22	511,216	53.06	
Pag-Ibig							
Yes	203,938	49.56	207,599	50.44	411,537	42.72	
No	279,383	50.62	272,513	49.38	551,896	57.28	

Philhealth						
Yes	238,667	51.26	226,953	48.74	465,620	48.33
No	244,654	49.15	253,158	50.85	497,813	51.67
Total	483,321	50.17	480,111	49.83	963,433	100.00

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

Incentives Given

Since having certified skilled workers is a pride for a firm, employers are expected to encourage their employees to undergo competency assessments and become certified. One way to motivate workers is to give them incentives. Based on the findings, only a number of the certified employed graduates were provided incentives by their employers. Nonetheless, an overwhelming majority (87.11%) of the employed certified graduates opted to take the assessment even without incentives (Table 84). Among those granted an incentive, over half (65.58%) were promised job security, while a number of them were given assurance on salary increase (47.11%) and guaranteed a promotion (46.34%). Meanwhile, about 7% were vowed to be given 13th-month pay and other bonuses, allowance, and more points in the evaluation and would gain the employer's trust (Table 85).

Table 84. Incentives Given to Employed Certified Graduates, Philippines: 2019

Employers provide incentives	Frequency	Percentage
Yes	124,223	12.89
No	839,209	87.11
Total	963,432	100.00

Table 85. Types of Incentives Provided by Employer, Philippines: 2019

Types of Incentives	Frequency	Percentage ^a
Salary increase	58,519	47.11
Promotion	57,566	46.34
Job security	81,468	65.58
Others	8,710	7.01
Total	124,223	100.00

^aPercentage over the total number of TVET graduates with employers who provide incentives.

4.7. Employment Before and After the TVET Training

It was shown that many of the TVET clients attended a TESDA program aiming to be more skilled and be more competent to increase the chance of employment. Based on the survey, 35.41% of the 2019 graduates already had jobs before attending a TVET program, indicating a large portion who were unemployed before attending training. After training, about half of the graduates were employed when the survey was conducted (Table 86). This increase is said to be significant based on the McNemar test with a *p-value* of <0.0001.

Nonetheless, despite the significant increase in the percentage of employed in the general population of 2019 graduates, it can be seen that there were only a few of the unemployed before who got employed after attending a training (16.87%). A considerably high portion of them (47.72%) were unemployed before and could not find a job after training (Table 86). This finding is something that the TESDA should consider. As seen in Table 87, many of these clients took training for employment purposes, yet a considerable number of them were still unemployed after. The results of this survey may also be attributed to the impact of

COVID-19 as many of the workers experienced difficulties in finding jobs since many businesses paused their hiring process.

Table 86. Estimated Percentage of TVET Graduates who are employed before and after the

training, Philippines: 2019

Employment Status	After Training					
Before Training	Employed		Unemployed		Total	
	Freq	% ⁰	Freq	% ª	Freq	%°
Employed	640,544	33.38	38,940	2.03	679,484	35.41
Unemployed	323,798	16.87	915,731	47.72	1,239,529	64.59
Total	964,342	50.25	954,671	49.75	1,919,013	100.00

^aPercentage over the total number of TVET graduates

Table 87. Reasons for enrolling TESDA of those who were unemployed before and after

training, Philippines: 2019

Reason for Taking up the Program	Unemployed Graduates Before and After the Program		
	Freq	%"	
For employment/to get job	309,759	33.83	
For promotion	6,601	0.72	
To increase in income	21,077	2.30	
For skills upgrading/enhancement	432,251	47.20	
TVET qualification is popular	2,588	0.28	
Personal use/interest/hobby	123,851	13.52	
Nothing to do	2,455	0.27	
Others	17,148	1.87	
Total	915,731	100.00	

When asked about the requirement of their employers, about 75% of them said that having work experience was one of the job requirements (Table 88).

Table 88. Weighted Distribution of TVET Graduates who Got a Job After Employment by Work experience as a requirement of the employer and by Sex. Philippines: 2019

Warls	Sex								
Work Experience	Female		N	Nale	T	Total			
Requirement	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b			
Yes	131,085	53.86	112,318	46.14	243,402	75.17			
No	47,485	61.74	29,428	38.26	76,913	23.75			
I don't know	1,149	32.98	2,334	67.02	3,483	1.08			
Total	179,718	55.50	144,080	44.50	323,798	100.00			

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

With income as the significant indicator of the economic status of TVET graduates, this section also presents the summary statistics of the monthly income of the graduates before and after attending a TESDA program. Also, a comparison of the current monthly income across some characteristics was made.

The most considerable portion of the graduates was earning lower than 10,000 pesos a month before and after attending a training consisting of 44.74% and 47.17% of their corresponding populations. A number of them were gaining 10,000 pesos and more but less than 20,000 pesos a month from their work, with a share of 31.88% and 32.99% in the populations of earning graduates before and after the training, respectively. Only a few of the graduates were making at least 30,000 pesos a month before and after training (Table 89).

In particular, before and after training, some graduates were earning extremely high relative to the population of the graduates. Some received as low as 250 pesos a month, and a few received as much as 960,000 and 1,320,000 pesos a month before and after training, respectively. At least half of the graduates were earning at most 10,000 pesos a month before and after training. On average, graduates were earning 17,133.41 pesos before the training, with a large variability among the earners having a standard deviation of 45,482.24 pesos. It is unfortunate to find that graduates at the time of the survey received a lower monthly income of 15,530.80 pesos, on average, with a much larger standard deviation of 49,161.13 pesos (Table 90). Nonetheless, this decrease in the monthly income of the graduates, on average, was not found significant (p-value=0.2563). The great variability in the earnings of the graduates is further described in Figure 34, which is verified by the large coefficient of skewness both before and after training.

Table 89. Weighted Distribution of TVET Graduates by Monthly Income Before and After a TESDA training, Philippines: 2019

Magn Income	Before 1	raining .	After Training		
Mean Income	Freq	%	Freq	%	
Below 10,000	303,995	44.74	454,488	47.17	
10,000 - 19,999	216,529	31.87	317,823	32.99	
20,000 - 29,999	81,828	12.04	111,240	11.55	
30,000 - 39,999	28,596	4.21	29,895	3.10	
40,000 - 49,999	20,169	2.97	19,561	2.03	
50,000 and over	24,516	3.61	24,242	2.52	
Not indicated	3,852	0.57	6,183	0.64	
Total	679,484	100.00	963,433	100.00	

^aPercentage over the column total

Table 90. Summary statistics of monthly income before the training and at the time of the survey, Philippines: 2019

Statistics	Monthly Income (Pesos)			
Statistics	Before Training	Current		
Minimum	250.00	250.00		
Maximum	960,000.00	1,320,000.00		
Median	10,000.00	10,000.00		
Mean*	17,133.41	15,530.80		
Standard deviation	45,482.24	49,161.13		
Skewness	15.73	20.62		

Mean income before and after are significantly different at α =5%.

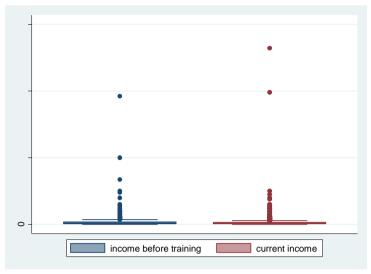


Figure 34. Boxplot of the Monthly Income of TVET graduates before training and at the time of the survey. Philippines:2019

The economic characteristic of the graduates at the time of the survey was further described by looking across the graduates' profile. It is revealed in Table 91 that the lowest (Php 250) and highest (Php 1,320,000) monthly income were both recorded in the group of female graduates. The females were receiving a higher monthly income than males, with an average of 16,887.75 and 14,157.37 pesos, respectively. However, the observed high mean income among females can be attributed to the observed extremely high income shown in Figure 35 as outliers. Likewise, such a difference in the mean is not significantly different (p-value=0.3332) at a 5% level of significance. At least fifty percent of the population earners in both sexes were gaining at most 10,000 pesos a month.

Table 91. Summary statistics of Current Monthly Income of Employed TVET graduates

by Sex. Philippines: 2019

Chatiation	Se	Sex			
Statistics	Female	Male	Overall		
Minimum	250	500	250.00		
Maximum	1,320,000.00	250,000.00	1,320,000.00		
Median	10,000.00	10,000.00	10,000.00		
Mean	16,887.75	14,157.37	15,530.80		
Standard deviation	66,499.18	19,626.17	49,161.13		
Skewness	16.33	7.39	20.62		

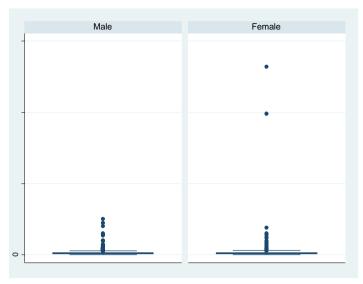


Figure 35. Boxplot of the Current Monthly Income of TVET graduates by Sex. Philippines: 2019

The recorded lowest and highest earners were graduates from non-TTI. The income of non-TTI graduates was observed to exhibit larger variability than the TTIs, as revealed by their coefficients of skewness and shown in Figure 36. With a higher coefficient of skewness in non-TTI, it is expected that the group of non-TTI graduates would reveal a higher monthly income (as compared to TTI) with an average of 16,131.55 pesos with a large variability of 53,152,66 pesos. On the other hand, TTI graduates were receiving, on average, a monthly income of 12,182 pesos, with a standard deviation of 11,361.46 pesos. In terms of median, at least half of the TTI graduates were earning at most 9,000 pesos a month, lower than the estimated at most 10,000 among non-TTI graduates (Table 92). Also, as revealed by the statistical comparison between the two types of providers, it can be said that, on average, at a 5% level of significance, non-TTI graduates significantly earned higher than TTI's with a p-value of 0.0233 and 0.0384 for comparing two means and medians, respectively.

Table 92. Summary statistics of Current Monthly Income of Employed TVET graduates by Type of Provider, Philippines: 2019

Statistics	Type of	Overall	
Sidiistics	TTI	Non-TTI	Overdii
Minimum	450	250	250.00
Maximum	150,000.00	1,320,000.00	1,320,000.00
Median	9,000.00	10,000.00	10,000.00
Mean	12,182.68	16,131.55	15,530.80
Standard deviation	11,361.46	53,152.66	49,161.13
Skewness	3.89	19.21	20.62

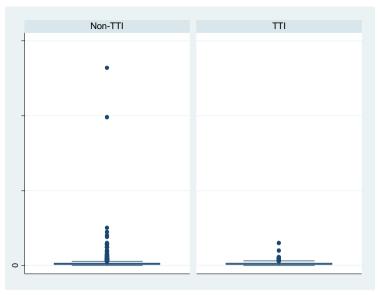


Figure 36. Boxplot of the Current Monthly Income of TVET Graduates by Type of Provider. Philippines:2019

Region II registered the lowest monthly income of 250 pesos, while it was in Region IV-A that the maximum income of 1,320,000 pesos was recorded. The highest average monthly income was estimated in NCR with a mean of 24,245.87 and a standard deviation of 76,320.06 pesos. Region IV-A followed this with a mean income of 22,977.04 pesos and variability of 101,512,75 pesos. Alternatively, Region X posted the lowest monthly income with a mean of 9,697.71 pesos and a standard deviation of 9,324.37 pesos. As revealed in Figure 37, all regions exhibited large variability in the monthly earnings of TESDA graduates. But, a considerably large variation was observed in NCR and Region IV-A, with a coefficient of skewness of 11.48 and 12.09, respectively. Using the F-test procedure, it can be said that there is a difference in the mean income of at least two regions with a p-value of 0.0011. Alternatively, because of outliers, average income can be better described in terms of the median. Using median, it is apparent that NCR posted higher earnings among its graduates with a median income of 14,000 pesos. This is again followed by Region IV-A with a median income of 12,000 pesos a month. The lowest estimated median income is 8,000 pesos, which was registered in Regions VI, X, and XII (Table 93). Similarly, the test comparing all regional medians revealed a significant difference (p-value=<0.0001).

Table 93. Summary statistics of Current Monthly Income of Employed TVET graduates by Region. Philippines: 2019

Region	Minimum	Maximum	Median	Mean	Standard deviation	Skewness
BARMM	800	135,000.00	7,200.00	12,004.09	15,021.74	4.79
CAR	1,200.00	56,000.00	9,600.00	11,540.27	8,870.38	2.10
CARAGA	400	140,000.00	8,400.00	12,978.84	14,338.74	4.67
NCR	1,200.00	990,000.00	14,000.00	24,245.87	76,320.06	11.48
I	700	50,000.00	9,600.00	12,147.36	9,158.43	1.29
II	250	150,000.00	9,000.00	12,124.48	13,906.71	5.14
III	1,800.00	50,000.00	9,600.00	11,467.81	9,530.65	2.02
IV-A	1,200.00	1,320,000.00	12,000.00	22,977.04	101,512.75	12.09

Region	Minimum	Maximum	Median	Mean	Standard deviation	Skewness
IV-B	1,500.00	60,000.00	10,000.00	12,729.69	9,627.59	1.90
V	500	100,000.00	9,000.00	12,738.71	12,514.45	3.28
VI	500	120,000.00	8,000.00	10,720.67	13,991.49	6.22
VII	500	190,000.00	10,504.00	15,996.58	21,189.57	5.09
VIII	450	40,000.00	8,400.00	11,461.43	8,829.49	1.26
IX	500	140,000.00	7,000.00	10,256.44	13,292.70	5.80
X	500	96,000.00	8,000.00	9,697.71	9,324.37	4.26
XI	500	100,000.00	10,000.00	13,537.15	14,285.97	3.43
XII	500	224,000.00	8,000.00	11,639.33	18,120.47	7.88
Philippines	250	1,320,000.00	10,000.00	15,530.80	49,161.13	20.62

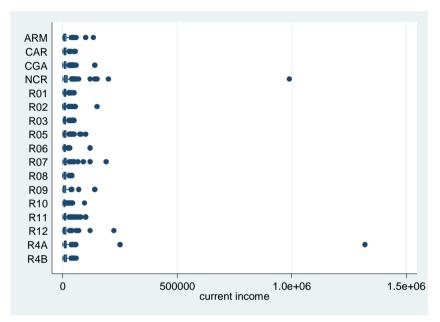


Figure 37. Boxplot of the Current Monthly Income of TVET graduates by Region. Philippines: 2019

In terms of scholarship, Table 94 presents that the recorded 250 and 1,320,000 pesos in this survey were from those graduates who were not a recipient of any scholarship. Unsurprisingly, due to the presence of extremely high income, this group bagged the highest mean income of 16,838.78 pesos with an enormous variability of 57,698.59 pesos. Among the programs, TWSP scholars received the highest income of 14,639.08 pesos with a standard deviation of 15,912.92 pesos. The monthly income of the graduates, in general, varied greatly, with the greatest variation found in the group of non-scholars and followed by the TWSP scholars, as demonstrated in Figure 38. In this regard, average income can be more accurately described using the median. On average, TWSP scholars were the highest earners with a median monthly income of 10,500 pesos, a bit higher than the estimated median of 10,000 pesos among non-scholars. Meanwhile, the lowest median was recorded among STEP scholars. Furthermore, the test comparison of median monthly income among the scholarship programs resulted in a significant difference in the average income of the scholars from different programs (p-value=<0.0001).

Table 94. Summary statistics of the Current Monthly Income of Employed TVET graduates by

Type of Scholarship. Philippines: 2019

Statistics	PESFA	STEP	TWSP	UAQTEA	Regular Program (No Scholarship)	Overall
Minimum	500	500	800	450	250	250
Maximum	30,000	50,000	224,000	40,000	1,320,000	1,320,000
Median	8,000.00	6,000.00	10,500.00	8,000.00	10,000.00	10,000.00
Mean	9,091.69	9,140.02	14,639.08	8,751.98	16,838.78	15,530.80
Standard deviation	6,365.26	7,899.91	15,912.92	5,481.47	57,698.59	49,161.13
Skewness	1.03	1.80	6.39	1.36	17.89	20.62

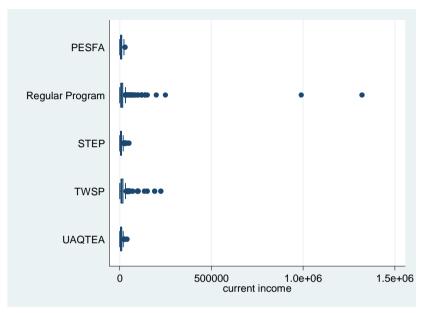


Figure 38. Boxplot of the Current Monthly Income of TVET graduates by Scholarship. Philippines: 2019

As for the sectors, the lowest and highest recorded monthly income of 250 and 1,320,000 pesos were both under the processed food and beverage sector. Unexpectedly, due to extremely high income in this sector, it gave the highest mean income of 36,661.59 pesos with a considerable variation among the graduates' income, yielding a standard deviation of 174,907.9 pesos. The TVET sector was also revealed to have a high income relative to the other sectors, with a mean income of 24,469.07 pesos and with a standard deviation of 14,540.62 pesos. On the contrary, the lowest mean income was posted among graduates under the decorative craft (Php 2,800) and footwear and leather goods (Php 4,123.19) sectors. The observed monthly income among graduates differed greatly, in which the most significant deviation was noted among graduates under processed food and beverage and tourism sectors (Figure 39). Hence, using the median as a better alternative to describe the center of the income distribution, Table 95 shows that the high average monthly income was observed among the graduates in TVET (Php 22,500) and visual arts (Php 16,758) sectors. In contrast, graduates from the footwear and leather goods sector were estimated to have the lowest median monthly income of 2,000 pesos. Similarly, a test on the comparison of several medians revealed a significant difference in the monthly income in at least two sectors.

Table 95. Summary statistics of the Current Monthly Income of Employed TVET graduates by

Sector. Philippines: 2019

Sector	Minimum	Maximum	Median	Mean	Std Dev	Skewness
Agriculture, Forestry, and Fishery	450.00	100,000.00	9,384.00	12,158.11	11,832.56	2.90
Automotive and Land Transportation	900.00	150,000.00	9,000.00	13,758.14	14,071.79	3.99
Construction	1,000.00	70,000.00	10,000.00	12,027.10	10,646.64	2.54
Decorative Crafts*	2,800.00	2,800.00	2,800.00	2,800.00	-	-
Electrical and Electronics	800.00	100,000.00	10,000.00	12,604.47	9,258.67	3.03
Footwear and Leathergoods	1,200.00	8,000.00	2,000.00	4,123.19	4,048.67	0.31
Garments	500.00	90,000.00	7,000.00	9,309.62	13,018.31	5.03
Heating, Ventilation, Airconditioning, and Refrigeration	4,800.00	60,000.00	12,000.00	17,022.51	13,204.78	2.39
Human Health/Health Care	400.00	120,000.00	10,000.00	13,236.22	15,105.87	4.56
Information and Communication Technology	775.00	120,000.00	14,000.00	15,594.19	14,141.98	4.21
Language	1,000.00	100,000.00	12,000.00	15,808.67	14,631.83	2.73
Maritime	7,000.00	30,000.00	15,000.00	17,749.07	8,344.91	0.45
Metals and Engineering	500.00	96,000.00	10,000.00	10,595.55	8,849.85	5.07
Processed Food and Beverages	250.00	1,320,000.00	6,000.00	36,661.59	174,907.90	7.10
Social, Community Development, and Other Services	500.00	190,000.00	10,000.00	12,120.42	15,590.15	8.17
Tourism (Hotel and Restaurant)	300.00	990,000.00	10,000.00	18,538.40	68,097.52	12.88
TVET	3,000.00	50,000.00	22,500.00	24,469.07	14,540.62	0.52
Utilities*	13,000.00	13,000.00	13,000.00	13,000.00	_	
Visual Arts	8,500.00	33,000.00	16,758.00	20,473.72	13,251.70	0.15
Wholesale and Retail Trading	2,000.00	74,440.00	4,500.00	10,923.81	19,322.69	2.74
Others	400.00	150,000.00	8,000.00	18,685.80	30,883.14	3.32

^{*}no standard deviation and skewess due to the absence of variability

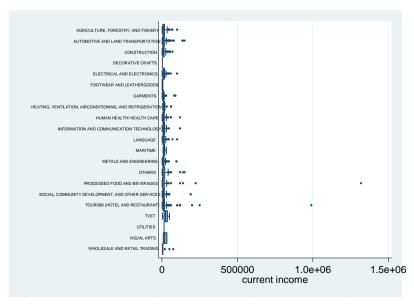


Figure 39. Boxplot of the Current Monthly Income of TVET graduates by Sector. Philippines: 2019

About 61% of the graduates got their income from their employment, while about 33% were not earning during the survey period. Some were also earning from commissions, tips, bonuses, and honoraria. Meanwhile, a few were getting support in any form, dependent on pensions, royalties, and dividends from investments, and making money from rentals (Table 96).

Table 96. Weighted Distribution of TVET Graduates by their Sources of Income and by Sex,

Philippines: 2019

			S	Sex			
Sources of Income	Fe	male	٨	Nale	Total		
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b	
Salaries and wages from employment	633,182	54.40	530,835	45.60	1,164,017	60.66	
Commissions, tips, bonuses and honoraria	35,132	39.42	53,997	60.58	89,129	4.64	
Imputed rental values of owner-occupied dwelling units	1,860	53.46	1,619	46.54	3,479	0.18	
Interests	0	0.00	0	0.00	0	0.00	
Rentals including landowner's share of agricultural products	3,197	42.34	4,354	57.66	7,551	0.39	
Pensions, royalties and dividends from investments	14,859	76.65	4,527	23.35	19,386	1.01	
Gifts, support in any form	16,742	48.07	18,087	51.93	34,829	1.81	
Others	0	0.00	0	0.00	0	0.00	
None	350,014	55.10	285,267	44.90	635,281	33.10	
Total	1,035,469	53.96	883,544	46.04	1,919,013	100.00	

4.9. Skills Utilization

Continuous refinement of TVET programs and policies is the unending goal of management to provide the best training they can offer to their clients. For additional relevant information, it is also one of the interests of TESDA to know the graduates' perceptions on whether they were able to gain the competency required from them and on the usefulness of the program they attended in their current work. This information is essential since workers who better use their skills tend to earn better, adapt to the increasing changes in work, and become satisfied with their job. Similarly, the utilization of skills may benefit employers by having a more productive and innovative workforce.

An overwhelming majority of 2019 TVET graduates across the different program delivery modes believed that they possessed the required skills in their program after completing it. The lowest portion observed was 87.69% (still more than half), recorded among the graduates from mobile training programs. A large share of female graduates who said that they gained the required skills expected from the training includes those from dual training system, NGOs, POs and CST training, LGU-oriented training, apprenticeship, mobile training, and extension program of TTIs, and industry-based programs. Alternatively, findings show that a high portion of males who believed that they absorbed the needed skills can be noted in the programs

such as institution-based, learnership, supervised industry learning, farm schools/enterprise training, and TESDA provincial PCTs (Table 97).

Table 97. Weighted Distribution of <u>TVET Graduates Who Perceived that they Possess Skills</u> After

Completing a Program, By Sex and Program Delivery Mode, Philippines: 2019

Completing a Frogram, by sex and		,	Se			
Program Delivery Mode	Fem	ale	Mal	е	Tota	I
	Freq	% ª	Freq	% ª	Freq	%b
Institution-based	498,134	47.68	546,625	52.32	1,044,759	96.79
Enterprise-based	33,336	54.82	27,471	45.18	60,807	97.07
Dual training system	2,189	75.42	713	24.58	2,902	100.00
Apprenticeship	14,363	59.59	9,740	40.41	24,103	98.66
Learnership	5,430	44.61	6,744	55.39	12,174	100.00
PAFSE	1,099	100.00	0	0.00	1,099	100.00
Supervised Industry Learning	185	11.94	1,368	88.06	1,553	100.00
Industry-based/in-company training	9,327	54.67	7,732	45.33	17,059	91.88
Farm schools/ enterprise training	742	38.74	1,173	61.26	1,915	100.00
Community-based	437,486	60.86	281,372	39.14	718,857	92.52
Mobile training program	133,178	58.62	94,001	41.38	227,179	87.69
TESDA Provisional PTCs/ Extension programs of TTIs	75,685	53.00	67,116	47.00	142,801	94.83
LGU-oriented community-based programs	166,755	63.79	94,663	36.21	261,419	94.02
NGOs, POs, CSR trainings	61,867	70.74	25,591	29.26	87,458	97.99
Total	968,956	53.11	855,467	46.89	1,824,423	95.07

TVET graduates were further classified in terms of their programs as either WTR or NTR. A lion's share of two groups of graduates signified that they possessed the required skills after attending a training, with NTR's percentage (97.10%) slightly higher than WTR's (98.29%), regardless of their delivery mode (as presented in Figure 39). Among WTR graduates, the lowest record was 85.05%, which came from industry-based/in-company training graduates. Moreover, most male graduates who perceived that they gained the necessary skills were observed among those under learnership, farm schools/enterprise training, and TESDA provisional PTCs/Extension programs of TTIs. In comparison, it was under the DTS and LGU-oriented programs where many females were positive enough to say that they acquired the needed skills. Similarly, more females under institution-based and enterprise-based believed that they have the skills, while more males under community-based, in general, said the same (Figure 40 and Tables 98 and 99).

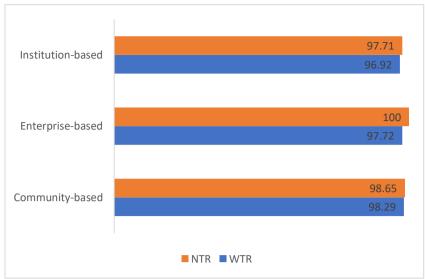


Figure 40. Weighted percentage distribution of employed WTR and NTR graduates by the usefulness of the program. Philippines: 2019

Table 98. Weighted Distribution of <u>WTR Graduates Who Perceived that they Possess Skills</u> After Completing a Program, by Sex and Program Delivery Mode, Philippines: 2019

			Se	ex		
Program Delivery Mode	Fem	ale	Мс	ıle	Toto	al
	Freq	%"	Freq	%	Freq	%b
Institution-based	436,168	46.45	502,826	53.55	938,994	96.92
Enterprise-based	10,635	38.24	17,179	61.76	27,815	97.72
Dual training system	1,484	78.59	404	21.41	1,888	100.00
Apprenticeship	4,612	40.84	6,681	59.16	11,293	100.00
Learnership	2,434	29.04	5,946	70.96	8,380	100.00
PAFSE	239	100.00	0	0.00	239	100.00
Supervised Industry Learning	0	0.00	1,115	100.00	1,115	100.00
Industry-based/ in-company training	1,641	44.51	2,045	55.49	3,686	85.05
Farm schools/ enterprise training	226	18.65	987	81.35	1,213	100.00
Community-based	69,523	54.66	57,661	45.34	127,185	98.29
Mobile training program	13,472	53.94	11,505	46.06	24,977	99.06
TESDA Provisional PTCs/ Extension programs of TTIs	14,249	39.20	22,098	60.80	36,346	99.28
LGU-oriented community-based programs	38,995	63.95	21,982	36.05	60,977	97.96
NGOs, POs, CSR trainings	2,807	57.47	2,078	42.53	4,885	92.50
Total	516,327	47.20	577,667	52.80	1,093,993	97.10

^aPercentage over the row total; ^bPercentage over the total number of graduates per program delivery mode

Table 99. Weighted Distribution of <u>NTR Graduates Who Perceived that they Possess Skills</u> After Completing a Program, By Sex and Program Delivery Mode, Philippines: 2019

		-	S	ex		
Program Delivery Mode	Fer	nale	M	ale	Toto	al
	Freq	% ª	Freq	%a	Freq	%b
Institution-based	23,068	59.48	15,713	40.52	38,780	97.71
Enterprise-based	4,638	66.76	2,309	33.24	6,948	100.00
Dual training system	0	0.00	0	0.00	0	0.00
Apprenticeship	2,917	84.73	526	15.27	3,443	100.00
Learnership	0	0.00	650	100.00	650	100.00
PAFSE	0	0.00	0	0.00	0	0.00
Supervised Industry Learning	0	0.00	0	0.00	0	0.00
Industry-base/ in-company training	1,721	64.50	947	35.50	2,669	100.00
Farm schools/ enterprise training	0	0.00	186	100.00	186	100.00
Community-based	12,842	41.47	18,126	58.53	30,968	98.65
Mobile training program	3,687	38.41	5,913	61.59	9,600	95.78
TESDA Provisional PTCs/ Extension programs of TTIs	3,380	25.27	9,995	74.73	13,375	100.00
LGU-oriented community-based programs	4,946	69.03	2,219	30.97	7,165	100.00
NGOs, POs, CSR trainings	829	100.00	0	0.00	829	100.00
Total	40,548	52.87	36,148	47.13	76,696	98.29

^aPercentage over the row total; ^bPercentage over the total number of graduates per program delivery mode

Similar to previous surveys, many of the 2019 graduates were able to find a job by walk-in applications (33.30%), while some were through referrals from friends and relatives (19.98%). A number of them (8.28%) were absorbed by their employers. There were a few who got the job by participating in the job fair (0.14%), via the internet (2.75%), and Public Employment Service Office (PESO) (0.16%). From the survey, others mentioned that they owned the business or that they were a freelancer. Whereas a few said that they got their job through internship and TESDA referral (Table 100).

Table 100. Means for Getting the present job of TVET Graduates by Sex, Philippines: 2019

	Sex								
Acquirement of Job	Fe	male	٨	Nale	Total				
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b			
Job fair	1,186	88.48	154	11.52	1,340	0.14			
Public Employment Service Office (PESO)	374	24.81	1,134	75.19	1,508	0.16			
Internet Job Posting	14,676	0.00	11,811	0.00	26,486	2.75			
Newspaper Advertisements	577	26.27	1,619	73.73	2,196	0.23			
Referral from friends/relatives	83,249	43.25	109,236	56.75	192,485	19.98			
Walk-in application	160,910	0.00	159,890	0.00	320,800	33.30			
Recruited by the employer	30,659	0.00	49,102	0.00	79,761	8.28			
Others	191,690	56.57	147,165	43.43	338,855	35.17			
Total	483,321	50.17	480,111	49.83	963,433	100.00			

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

When asked about the usefulness of the training attended, a little more than half of the graduates (55.46%) were pleased with the training they have attended, in which males slightly surpassed females. Almost a quarter (25.88%) said that the training was somewhat helpful. Meanwhile, about 19% found their training to be of no use in their current work, of which, around 57% were females (Table 101). This is lower than 29%, which was recorded in the previous survey. Despite the reduction, it is still remarkable that there were graduates who chose a training program that were not suitable for their work.

The same pattern can be seen among TTI and non-TTI graduates. More than half were delighted that their completed training was beneficial in their current job, of which, more males under TTI said so, while both sexes from non-TTIs shared the same opinion. It can also be observed that more graduates from TTI than from non-TTI, albeit not substantial, expressed their dissatisfaction with the training attended as they found it to have no use at all (Figure 41 and Tables 102 and 103).

Table 101. Skills Utilization of Employed TVET Graduates, Philippines: 2019

able 101: Skiils diilizalion of Employed 1421 Oradodies, 1 milppines: 2017								
		Se	T. L. I					
Skills Utilization	Fe	Female		Nale	Total			
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b		
Very useful	259,449	48.55	274,917	51.45	534,366	55.46		
Some use	122,258	49.04	127,060	50.96	249,318	25.88		
No use at all	101,615	56.53	78,134	43.47	179,749	18.66		
Total	483,321	50.17	480,111	49.83	963,433	100.00		

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

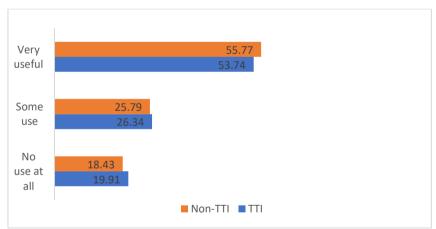


Figure 41. Weighted percentage distribution of employed graduates by the usefulness of the program, by type of providers, Philippines: 2019

Table 102. Skills Utilization of Employed TVET Graduates under TTI, Philippines: 2019

			Talai				
Skills Utilization	Skills Female		N	Nale	Total		
Omizanon	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b	
Very useful	27,936	35.38	51,018	64.62	78,954	53.74	
Some use	14,707	38.00	23,993	62.00	38,700	26.34	
No use at all	13,046	44.60	16,206	55.40	29,252	19.91	
Total	55,689	37.91	91,218	62.09	146,906	100.00	

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

Table 103. Skills Utilization of Employed TVET Graduates under Non-TTI, Philippines: 2019

		Se	Takal				
Skills Utilization	Fe	Female		\ale	Total		
	Frequency	Percentage ^a	Frequency	Frequency Percentagea		Percentage ^b	
Very useful	231,513	50.84	223,899	49.16	455,411	55.77	
Some use	107,551	51.06	103,067	48.94	210,618	25.79	
No use at all	88,569	58.85	61,928	41.15	150,497	18.43	
Total	427,632	52.37	388,894	47.63	816,526	100.00	

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

As revealed, many TVET clients spent time for training to upgrade their skills, mainly for employment, job promotion, and better income. Hence, possessing the skills needed for competency standards and the training's usefulness is essential for these opportunities. Based on the findings, about 19% of the graduates found their training not helpful. Table 104 displays the reasons for such. More than three-fourth (77.27%) of them cited that they could not utilize the skills they learned from training in TESDA in their jobs because the skills needed in their current work were entirely different from what they have acquired from the training. Therefore, it is evident that employed graduates gained some skills that end up either getting underutilized or not beneficial at all in current work demands. Perhaps, it could be because the clients were not properly guided on what course will fit their job requirements. Many of those in this condition were females; hence, it is suggested that those female-dominated sectors should be given utmost attention. In the same manner, some expressed that the skills they acquired were not needed in their actual work. This calls for the revisit of TVET programs for better utilization of gained skills in the workplace.

Table 104. Reasons of TVET Graduates for considering his/her Skills acquired is No Use at All by Sex, Philippines: 2019

	Sex								
Reason	Fen	nale	Mo	ale	Total				
	Freq	Percenta	Freq	Percenta	Freq	Percentb			
Skills acquired from training/course not needed in actual work	17,861	44.15	22,592	55.85	40,452	22.50			
Occupation is entirely different with training/course completed	83,622	60.21	55,270	39.79	138,891	77.27			
Others	132	32.66	273	67.34	406	0.23			
Total	101,615	56.53	78,134	43.47	179,749	100.00			

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

Moreover, when asked about the relevance of the course completed in TESDA in their current job, only slightly more than half (54.34%) of the employed graduates thought that the course was relevant. There were a considerable number of graduates who had jobs somehow related to the training attended. However, a great portion of graduates found their training irrelevant to their current job (Table 105).

Table 105. Weighted Distribution of Employed TVET Graduates by Relevance of Course to the Current Job and by Sex, Philippines: 2019

-	Sex									
Relevance to the current job	Fei	male	N	Nale	Total					
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b				
Very much related or relevant	253,972	48.51	269,544	51.49	523,516	54.34				
Somewhat related or relevant	104,980	47.72	114,993	52.28	219,972	22.83				
Not related or relevant	124,370	56.55	95,574	43.45	219,944	22.83				
Total	483,321	50.17	480,111	49.83	963,433	100.00				

^aPercentage over the row total; ^bPercentage over the total number of TVET graduates

Satisfaction Level of TVET Graduates

TVET clients' satisfaction is one way to influence the quality of services that TESDA provides to its clients. Satisfied graduates are more likely to succeed in their program and are likely to support the visions and missions of the institution. Knowing the opinion of graduates about their experiences in the course of their training could potentially help management holistically improve their programs.

This portion intends to describe the satisfaction level of the 2019 graduates on their experiences with TESDA training. The lion's share of the graduates signified their satisfaction towards attending a TVET program, considering the different elements related to the training (Figure 42). More than half of the population of graduates were indeed very satisfied in almost all the components of the training attended, in which the highest percentage was noted for the knowledge/expertise of the trainer. This shows the graduates' appreciation for their TESDA mentors. Meanwhile, a component with the highest dissatisfaction was recorded in the assessment methods (Table 106).

In particular, a considerably large portion of graduates had no difficulty in processing the requirements for entry, while very few (0.15%) expressed their setback. This portion is higher than last year's 0.06%. In terms of the training methodologies implemented, more than half of them were very satisfied (61.68%), while there were some (0.07%) who were unhappy with the methodologies used. Around 91% were delighted with the tools and equipment used during their training. However, there were 0.18% of them who were disappointed with these tools and equipment. A little over half of the graduates were very satisfied with the learning materials provided to them, whereas a tiny percentage (0.27%) were convinced that better materials could have been used. In the same manner, the overwhelming majority were happy (very satisfied – 61.93% and satisfied – 32.59%) with the training activities carried out as well as with the training facilities, in which many gave a high rating of gratification (very satisfied – 612.57% and satisfied – 31.72%). Trainers, as mentioned, being experts in their field, got the highest rating from the graduates. This element also received tremendous appreciation from the 2018 graduates. A large portion of the graduates considered the duration of the training fair enough for them to acquire the expected essential skills for their program (Table 106).

With all these elements that impact learning, the goal is for the graduates to obtain the knowledge, skills, and attitudes vital in their employment. This component received the lowest rate of very satisfied graduates (49.6%); a lot expressed their satisfaction, and only 0.02% were very dissatisfied. Moreover, the assessment methods implemented in training were just acceptable and not annoying to most graduates. Nonetheless, as revealed earlier, assessment methods, compared to the others, garnered the highest poor rating, constituting 1.12% of the population of graduates (Table 106).

Considering the whole experience of the graduates with TESDA, almost all (99.7%) of the graduates were satisfied with the training they have attended (Table 107). This result may serve as evidence for the enduring effort of the management to provide the best training according to the needs of their clients.

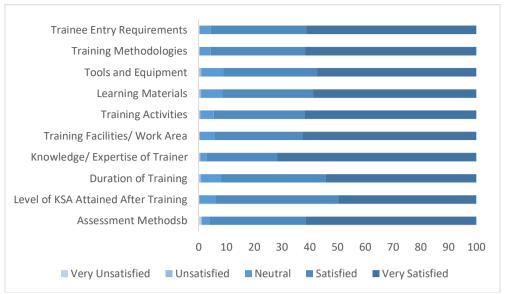


Figure 42. Weighted percentage distribution of employed graduates by satisfaction level per element. Philippines: 2019

Table 106. Weighted distribution of TVET graduates by satisfaction level per element.

Philippines: 2019

Element	Very Satisfied		Satisfied		Neutral		Unsatisfied		Very Unsatisfied	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Trainee Entry Requirements	1,175,831	61.27	660,548	34.42	75,293	3.92	4,503	0.23	2,838	0.15
Training Methodologies	1,183,712	61.68	651,367	33.94	76,157	3.97	6,526	0.34	1,251	0.07
Tools and Equipment	1,100,648	57.35	645,972	33.66	154,326	8.04	14,598	0.76	3,469	0.18
Learning Materials	1,127,011	58.73	626,844	32.66	148,965	7.76	10,987	0.57	5,206	0.27
Training Activities	1,188,480	61.93	625,454	32.59	94,421	4.92	7,484	0.39	3,174	0.17
Training Facilities/ Work Area	1,200,647	62.57	608,796	31.72	99,756	5.20	7,809	0.41	2,005	0.10
Knowledge/ Expertise of Trainer	1,375,909	71.70	486,754	25.36	45,458	2.37	7,156	0.37	3,736	0.19
Duration of Training	1,040,988	54.25	723,536	37.70	138,371	7.21	12,140	0.63	3,978	0.21
Level of KSA Attained After Training	951,907	49.60	846,576	44.12	115,783	6.03	4,354	0.23	393	0.02
Assessment Methods ^b	870,744	61.51	489,322	34.57	39,693	2.80	1,137	0.08	14,671	1.04

^aPercentage over the total number of TVET graduates; ^bApplicable only for those who took the competency assessment.

Table 107. Overall Satisfaction level of TVET Graduates with the Program attended By Sex,

Philippines: 2019

· · · · · · · · · · · · · · · · · · ·											
	Sex										
Overall Satisfaction	Fer	nale	M	ale	Total						
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage					
Yes	1,027,049	53.52	877,969	45.75	1,905,018	99.27					
No	8,420	0.44	5,575	0.29	13,995	0.73					
Total	1,035,469	53.96	883,544	46.04	1,919,013	100					

^aPercentage over the total number of TVET graduates

The solicited suggestions from the graduates for the improvement of TESDA training are shown in Figure 43. It is evident that most of the graduates were satisfied with the training attended since a considerable portion did not identify any areas that TESDA should improve on. Even so, there were suggestions to provide more training opportunities, improve instruction and facilitation, provide tool/training kit, extend training duration, provide additional and upgraded tools and equipment, and others.

Furthermore, being satisfied with the training attended, an overwhelming majority of them, as seen in Table 108, still intended to participate in other TESDA programs to be trained and discover their other skills.



Figure 43. Word cloud for the suggestions to improve the program

Table 108. Weighted Distribution of Employed TVET Graduates by whether they intend to be trained in other skills and by Sex, Philippines: 2019

	Sex							
Intend to be trained in other	Female			Male	Total			
skills	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b		
Yes	439,245	50.54	429,883	49.46	869,128	90.21		
No	44,076	46.74	50,229	53.26	94,305	9.79		
Total	483,321	50.17	480,111	49.83	963,433	100.00		

^aPercentage over the row total; ^bPercentage over the grand total

6. Repercussions of COVID-19 Pandemic

The COVID-19 pandemic has been affecting everyone's life around the world. Aside from the fact that it continues to threaten an individual's health and safety, it led to disruptions of schools, businesses, and works, among others. The pandemic has ruined jobs and put the people's livelihood at stake, especially the vulnerable groups, such as the middle-skilled workers.

Among the unemployed TVET graduates, nearly three-fourths of them said that they became unemployed due to the COVID-19 pandemic, in which the female-to-male ratio is almost 1:1 (Table 109). The majority (80.21%) of those who were affected by the pandemic could not work due to travel restrictions. Some lost jobs because the employers' shops/businesses or their businesses had to close. Also, some attributed the loss of jobs to the reduction in daily labor opportunities (Table 110). Lastly, others said it was their personal decision to stop working and was decided for family duties.

Table 109. Weighted distribution of Unemployed TVET Graduates whether their being unemployed is due to COVID 19 pandemic and by Sex, Philippines:

	Sex							
Unemployment due to COVID 19 pandemic	Female		Male		Total			
pandemic	Freq	% °	Freq	% °	Freq	%⁰		
Yes	153,950	49.87	154,741	50.13	308,691	76.60		
No	57,106	60.57	37,168	39.43	94,274	23.40		
Total	211,056	52.38	191,909	47.62	402,965	100.00		

^aPercentage over the row total; ^bPercentage over the total number of Unemployed TVET graduates

Table 110. Reasons of TVET Graduates for being unemployed due to COVID 19 pandemic by Sex, Philippines: 2019.

			Se	ex		
Reasons	Female		Male		Total	
	Freq	%ª	Freq	%°	Freq	%⁵
Could not work due to travel/movement restrictions	131,380	53.06	116,235	46.94	247,615	80.21
Employer had to close shop/business	45,801	43.66	59,107	56.34	104,908	33.98
Had to close shop/business	32,844	48.53	34,832	51.47	67,676	21.92
Household members working are sick or in quarantine	1,772	50.99	1,703	49.01	3,476	1.13
Employer's decision to downsize or reduce number of employees	12,131	0.00	14,168	0.00	26,299	8.52
Daily labor opportunities reduced	25,816	43.54	33,480	56.46	59,296	19.21
Other	2,323	51.05	2,227	48.95	4,550	1.47

^aPercentage over the row total; ^bPercentage over the total number of unemployed TVET graduates due to COVID 19 pandemic

Among the employed TVET graduates, regardless of sex, a vast majority were able to retain their jobs during this pandemic (Table 111). However, about 40% of them experienced a reduction in their income. Alternatively, a few earned better prior to the COVID-19 pandemic (Table 112).

Table 111. Weighted Distribution of Employed TVET Graduates by the current job being the

same prior to COVID 19 pandemic and by Sex, Philippines: 2019

Current	\$ex								
Job is	Fe	male	٨	Nale	Total				
the Same	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b			
Yes	453,594	49.99	453,733	50.01	907,327	94.18			
No	29,727	52.98	26,378	47.02	56,106	5.82			
Total	483,321	50.17	480,111	49.83	963,433	100.00			

^aPercentage over the row total; ^bPercentage over the grand total

Table 112. Weighted Distribution of Employed TVET Graduates by Income being affected with the COVID -19 Crisis and by Sex. Philippines: 2019

	Sex							
Current Job is the	Fe	male	N	Nale	Ţ	Total		
Same	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b		
Reduced income	196,569	51.30	186,635	48.70	383,203	39.77		
Increased income	38,039	51.25	36,186	48.75	74,225	7.70		
No change	236,840	49.24	244,140	50.76	480,980	49.92		
Do not know	11,874	47.45	13,150	52.55	25,024	2.60		
Total	483,321	50.17	480,111	49.83	963,433	100.00		

^aPercentage over the row total; ^bPercentage over the grand total

Graduates were also asked about their conditions during this pandemic. As anticipated, a large portion (68.84%) were worried about getting sick and being infected by the said virus, in which the female-to-male ratio is nearly 1:1. Many were also worried about the travel restrictions, which might make them unable to go to work, limiting their access to their daily needs. More than one-third were distressed by the increase in food prices, lack of work, and how to pay their bills (Figure 44 and Table 113). In most of these concerns, it was the female graduates who were mainly worried. Other circumstances cited were primarily raised by students who were concerned about academics and internet connection.

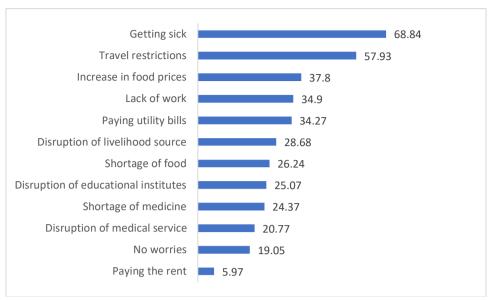


Figure 44. Weighted distribution of TVET graduates based on their primary concern in the current pandemic situation. Philippines. 2019.

Table 113. Weighted Distribution of TVET Graduates by their primary concern in the current

pandemic situation and by Sex, Philippines: 2019

				Sex			
Worries	Fema	Female		le	Total		
	Freq	% ª	Freq	% ª	Frequency	Percentage ^b	
No worries	178,407	48.81	187,100	51.19	365,507	19.05	
Shortage of food	311,636	61.89	191,896	38.11	503,532	26.24	
Increase in food prices	499,023	68.79	226,384	31.21	725,407	37.80	
Shortage of medicine	319,786	68.39	147,835	31.61	467,620	24.37	
Disruption of medical service	291,175	73.06	107,376	26.94	398,551	20.77	
Disruption of educational institutes	342,620	71.23	138,398	28.77	481,018	25.07	
Getting sick	759,754	57.51	561,220	42.49	1,320,974	68.84	
Lack of work	385,326	57.54	284,333	42.46	669,659	34.90	
Disruption of livelihood source	346,233	62.90	204,218	37.10	550,451	28.68	
Travel restrictions	642,066	57.76	469,606	42.24	1,111,672	57.93	
Paying the rent	84,188	73.49	30,375	26.51	114,563	5.97	
Paying utility bills	458,333	69.70	199,294	30.30	657,627	34.27	
Others	11,944	39.63	18,192	60.37	30,136	1.57	
Total	1,035,469	53.96	883,544	46.04	1,919,013	100.00	

^aPercentage over the row total; ^bPercentage over the grand total

All the institutions, agencies, and humankind are adjusting to march forward with their lives and mandates amidst this pandemic. TESDA should rethink and redesign its programs and policies to alleviate the repercussions of this crisis to its clients and graduates. The survey findings regarding the skills useful to the graduates in this time of pandemic could be significant

in the management in prioritizing training needed now in the labor market. It is evident in Figure 45a that cooking, computer, baking, farming, driving, and selling were the most valuable skills for many of the graduates during the pandemic. Furthermore, when asked about the recommended skills that the management should prioritize, unsurprisingly, the same skills were mentioned since these are what they deemed useful based on their experiences (Figure 45b).



Figure 45a. Word cloud for the skills useful to the graduates in the time of pandemic. Philippines. 2019

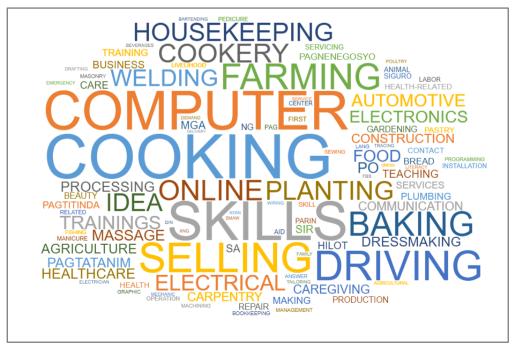


Figure 45b. Word cloud for the TVET skills the graduates believed would be very useful in the time of pandemic. Philippines. 2019

7. Determinants of TVET Employability

Knowing the factors associated with the employability of TVET graduates might help in the continuous renovation of TESDA training programs. Moreover, identifying significant determinants of TVET employability could be used as basis in determining areas that shall be prioritized by the management.

7.1. Factors Associated with Employability

Table 114 reveals the factors found significantly associated with the graduate's employability at a 10% level of significance. Based on the data collected among the 2019 TVET graduates, whether a graduate was employed or unemployed was statistically associated with the type of provider, educational attainment, the reason for taking up the program, program delivery mode, type of program registration, region, sector, age group, whether the course was aligned with the result of a career test, and satisfaction level of a graduate. In particular, these factors were found weakly associated with the employment status of a TVET graduate. These findings were similar to that of the previous survey, in which the same factors were found significantly associated with the employment status of the 2018 graduates.

Table 114. Measure of Association TVET graduates' employability with some Factors

Factor	Rao-Scott Test statistic	p- value*	Cramer's V
Type of Provider	9.2900	0.0023	0.0350
Educational Attainment	5.3704	< 0.0001	0.0266
Reason for Taking up the Program	4.0375	<0.0001	0.0231
Program Delivery Mode	3.2786	<0.0001	0.0208
Type of TVET Program Registration	4.4126	0.0124	0.0241
Overall Satisfaction of Training Attended	5.4739	0.0193	0.0269
Enrolled in line with the Profiling/ Career Assessment results	4.4866	0.0342	0.0243
Region	5.7730	<.0001	0.0276
Sector	1.5651	0.0626	0.0144
Age group	16.1492	<.0001	0.0462

^{*}significant at p-value ≤ 0.10

To further analyze the association between those significant factors and whether a graduate is employed or unemployed, employment rates across these factors are shown in Figures 46 to 55. More employed graduates were recorded among non-TTI than TTI graduates. Enterprise-based programs posted higher employment rates than other program delivery modes. Generally, as a graduate's age increases, he/she tends to be employed. However, the chance of employment decreases when he/she reaches a retiring age. Age factor recorded the highest correlation coefficient, implying that among the factors, this has somehow the most discriminating attribute.

Also, higher employment rates can be observed among graduates from WTR and not-monitored programs than those from NTR. It was shown that as a graduate's educational attainment got higher, they were more inclined to be employed. On the other hand, high school and undergraduate college students were more inclined to be unemployed. These are the group of clients who were still attending school. The region was also found a significant factor. There were regions wherein graduates tended to be more employed, such as XII, X, II, V, and IV-A. The sector was found the least significant among the identified factors. The

graduates from utilities, decorative crafts, wholesale and retail trading, and TVET garments sectors were more disposed to be employed than those from sectors with low employment rates.

Moreover, it was apparent that a graduate who was enrolled in a TVET program for promotional purposes or to increase income was more inclined to be employed than whose primary reason was for employment. In addition, a graduate whose course is in line with the result of a career assessment and a graduate who was satisfied with the program attended were more likely to be employed than those who were not.

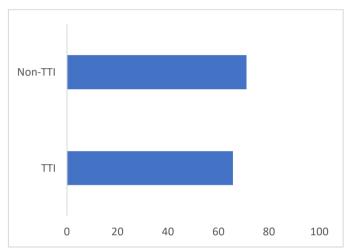


Figure 46. Weighted distribution of Employed TVET graduates by Type of Provider.

Philippines:2019

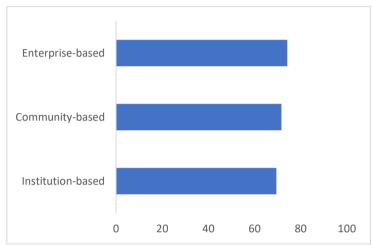


Figure 47. Weighted distribution of Employed TVET graduates by Program Delivery Mode.

Philippines:2019

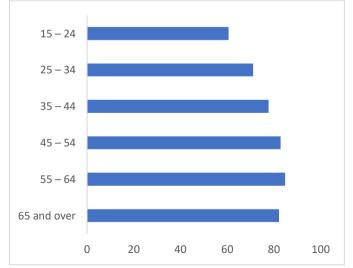


Figure 48. Weighted distribution of Employed TVET graduates by Age Group. Philippines:2019

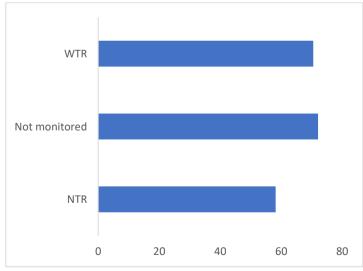


Figure 49. Weighted distribution of Employed TVET graduates by Type of Program Registered.

Philippines:2019

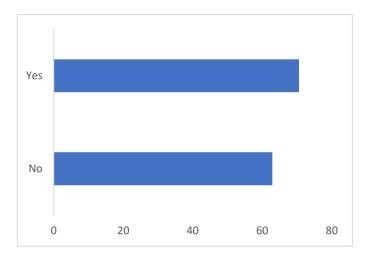


Figure 50. Weighted distribution of Employed TVET graduates by Whether the Course Enrolled in was aligned with the Carreer assessment result. Philippines:2019

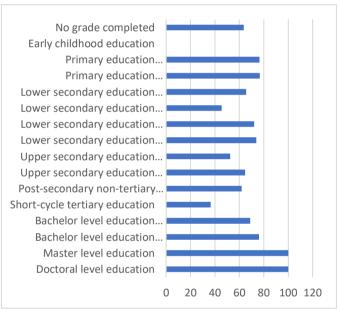


Figure 52. Weighted distribution of Employed TVET graduates by Educational Attainment Philippines:2019

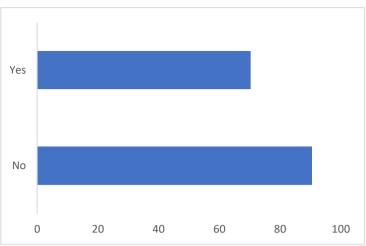


Figure 51. Weighted distribution of Employed TVET graduates by their Satisfaction Level.

Philippines:2019

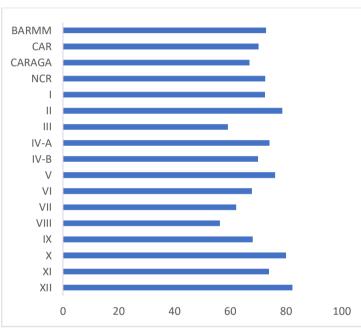


Figure 53. Weighted distribution of Employed TVET graduates by Region . Philippines:2019

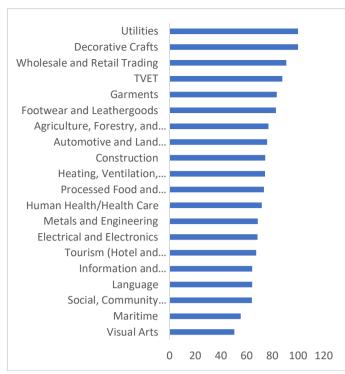


Figure 54. Weighted distribution of Employed TVET graduates by Sector Philippines:2019

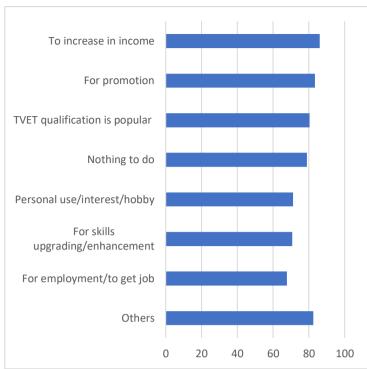


Figure 55. Weighted distribution of Employed TVET graduate Reasons for Taking Up a Program.

Philippines:2019

7.2. Logistic Model for the Employability

Model building was done to identify significant factors that further determine the likelihood of a graduate to be employed. As seen in Table 115, age group, region, the main reason for taking a TVET program, program registration, type of provider, and overall satisfaction with TESDA were found to be significant determinants.

A graduate who was older than 15 to 24 years old was more likely to be employed than to be unemployed with an odds ratio of 1.62, 2.41, 2.89, and 2.66 for those belonging in the age group of 25-34, 35-44, 45-54, and 55-64 years, respectively. The odds to be employed increased as a graduate got older but diminished as one reached the elderly age. The likelihood of those at the retiring age was not significantly different to the youngest group of 15-24 years.

A graduate from Ilocos Region, Cagayan Valley, Bicol Region, Northern Mindanao, and SOCCKSARGEN, was 1.60, 1.54, 1.61, 1.89, and 2.0 times, respectively, more likely to be employed than a graduate from NCR. Alternatively, the odds of a graduate being employed was reduced to about 33%, 35%, and 42% if one was from Central Luzon, Central Visayas, and Eastern Visayas, respectively, compared to those from NCR.

A graduate whose reason for attending a TVET program was for promotion or to increase income was twice and 2.8 times, respectively, more likely to be employed compared to those whose reason was for employment. This is an expected result since those aiming for promotion and increase in income were already employed before attending a program. Based on the results, it can be said that a graduate from NTR is less likely to be employed than a graduate from WTR with a reduction in the odds of about 48 and 18 percent, respectively. Also, the odds of a TVET graduate being employed are reduced to about 31% if one is from

TTI. This could be attributed to the previous result, in which there were more employed non-TTI than TTI graduates.

Likewise, a graduate whose course was aligned with the results of a career assessment was more likely to be employed than those who are not. Moreover, a greater chance to be employed was observed for a graduate who was overall satisfied with the TESDA program attended. A graduate who was satisfied was 3.5 times more likely to be employed than those who were not.

The fitted model was found to be significant based on the likelihood-ratio chi-square goodness-of-fit test with a p-value of <0.0001. Likewise, the Receiver Operating Characteristic (ROC) revealed about 67% area under the curve (Figure 56). Since it covered more than 50% of the reference line, the model is said to have a fair predicting power.

Table 115. Estimated coefficients, odds ratio, and p-values of the fitted Logistic regression model.

Factor	Estimate	Odds Ratio	p-value*
Age Group ^a			
25 – 34	0.4831	1.6211	<.0001
35 – 44	0.8795	2.4096	<.0001
45 – 54	1.0629	2.8946	<.0001
55 – 64	0.9799	2.6643	0.0052
Region ^b			
llocos Region	0.4689	1.5982	0.0305
Cagayan Valley	0.4336	1.5427	0.0549
Central Luzon	-0.3968	0.6725	0.0556
Bicol Region	0.4766	1.6106	0.0285
Central Visayas	-0.4241	0.6544	0.0315
Eastern Visayas	-0.5497	0.5771	0.0098
Northern Mindanao	0.6384	1.8935	0.0021
SOCCKSARGEN	0.6907	1.9951	0.0016
Main Reason for Taking the Program ^c			
For promotion	0.7390	2.0938	0.0818
To increase income	1.0322	2.8071	0.0008
TVET program registration ^d			
No Training Regulation (NTR)	-0.6472	0.5235	0.0070
Not Monitored	-0.1970	0.8212	0.0586
Type of Providere			
TTI	-0.3640	0.6949	0.0007
Overall Satisfaction with TVET program ^f			
Yes	1.2559	3.5111	0.0516

REFERENCE GROUP: a15-24 years old; bNCR; cFor employment; dWTR; eNon-TTI; fNo significant at p-value ≤ 0.10

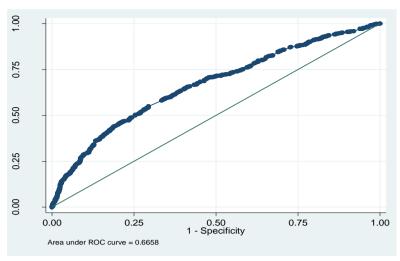


Figure 56. ROC curve of the fitted model for employability of TVET graduates.

Conclusion and Recommendation

1. TVET policies should consider the characteristics of its clientele.

Similar to the results of the previous survey, the 2020 SETG shows that majority of TVET graduates remains to be degree holders, who also accounted high employment rate. This prevalent characteristic of the TVET graduates can be attributed to the following: 1) entry requirements of the companies/industries in terms of educational attainment, and 2) human resource development mechanisms/strategies of the companies/industries to enhance the capabilities of their employees. It can be further concluded that the results can be an indication that educational attainment remains a concern in terms of employment as this contributes in the chance of an individual to be recognized by the industry.

On a positive note, the results show that TVET programs influence the development or career progression of an individual, which validates the significance of TVET in the lifelong learning process, specifically in the changing landscape of the industry. Likewise, this substantiates the need for TVET to provide assistance to industries including MSMEs, to support the development of their workers specific to their needs.

On the other hand, the results present the disadvantage of this scenario to other TVET clients including Out of School Youth, non-completers of basic education or the vulnerable groups and those not reached by the formal education. The social equity aspect which TVET is also catering will not be supported if this will continue. TESDA may consider looking into the different employment landscape for those who will not be considered if this industry requirements will not be addressed.

While TVET continuously work towards the demand of the industries, the balance of everything should be considered in the development of TVET policies to make it more inclusive. This prevailing result should be considered as one of the spheres that TESDA has to communicate to the industry and other concerned stakeholders to ensure that TVET programs can respond its diverse clients.

- 2. TESDA to workout with the Industry Boards concerns that are affected of the recognition and requirements of the industries/companies. The following results remains to be an issue over the years:
 - Recognition on the National Certificate of TESDA. The agency can consider this basis in
 the implementation of program in partnership with industries including in the allocation
 of the scholarship. This is to encourage the industries to give credit/regards to the
 National Certificate
 - Recruitment policy on the educational attainment of the applicants, or issue on hiring of TVET graduates who are not holder of degree program over those who are degree holder. As discussed in this paper, this concern should be addressed as this will limit the employment for TVET graduates who are holder of bachelor degree.
 - Low compensation on TVET graduates. The competencies/skills obtained by the TVET graduate is not significantly contributing to the compensation of the TVET graduates.

Further, it is suggested that the employment aspect of graduates and recognition of its graduates is one of the areas that should be discussed by the Industry Boards.

3. Enterprise-Based Training Program should be purposively advocate by TESDA

In general, Enterprise-Based Training obtained the highest employment. Among the EBT program, Supervised Industry Learning and PAFSE got the highest employment rate, while apprenticeship and Dual Training System have low employment rate.

The high employment rate obtained by graduates of the EBT programs, high percentage share of TVET graduates who took EBT program that perceived they acquired the required skills and as well as the industry requirement for work experience that become an advantage of those who are employed, indicate the need for TESDA to really look into advocating the conduct of enterprise-based training program. This will include the development of clear policies in incentivizing the participating enterprises.

Further, the low employment rate of DTS graduates has been recorded for two consecutive survey rounds, which is totally different from other survey rounds wherein this usually obtained the highest employment rate. It is recommended that the concern office handing the program to look into the reasons and how it should be addressed.

4. Intervention should be undertaken to make the TVET providers responsive to the labor market requirements

While there are initiatives that the agency is working to make its program more responsive to the current and future needs of the industry, it is still evident in the survey results that there are programs with the most number of graduates that accounted low employment rate. TESDA needs to become more aggressive in communicating the labor market requirements including the TVET providers. Along with the agency's thrust to become agile and flexible, TVET providers should also act on the changing requirements of the industry. The TVET offerings of the TVET providers should also be aligned with the current industry requirements, which can be reflected in their curriculum as well as in the supplies and equipment being used in the implementation of the program. It is suggested that a policy that would serve as basis in linking the set standards and the flexibility of the curriculum to address the industry requirements should be established.

Moreover, the change in the requirements given the new development brought by new normal, Fourth Industrial Revolution, among others, as well as the initiative of the agency towards area-based and demand driven TVET, there might be existing programs in the area that will be no longer needed. It will be a challenge for TESDA to encourage TVET providers to align their programs with the current trends as this will require investment on their part. Further, TESDA has to look into the implication of this in the registration process and in providing assistance to TVET providers to align TVET program offering with the fast-changing labor market requirements.,

5. Decrease in employment rate of TVET graduates is affected by COVID-19 pandemic.

Compared to the 2019 ER which obtained the highest since the agency started conducting the tracer study, the 2020 results show a percent decrease of about 16%. It is concluded that this is merely influenced by the challenges brought by the COVID-19 pandemic wherein 73% of the respondents shared that they are affected by the pandemic. This is also evident in the decrease in the average income for those who are already employed before taking up TVET program. As the end of this current situation is still unknown, the agency

should consider determining factors that will make its graduates to have an advantage in the new normal, like the inclusion of digital skills in the TVET programs.

6. Consider review and capability building program on development of learning materials

In general, TVET program obtained high satisfaction rate based on the responses of the respondents. However, among the factors that were considered, learning materials recorded the poorest rating. TESDA should conduct evaluation on the development of learning materials to determine the corresponding action, like conduct of capability-building program for the trainers, that should be undertaken.

7. Review the exiting Certificate of Competencies

Among the Certified graduates, those who are holder of COC obtained the lowest employment rate. This can be attributed to the preference given to those who are holder of full qualifications. Likewise, the competencies covered for COC programs can also be evaluated/reviewed to determine whether this can be a stand-alone program that should be given with a corresponding certification.

8. Low Employment of the Out of School Youth has to be addressed

One of the identified clienteles of TVET are the Out of School Youth, with the low employment rate obtained by this sector, TESDA has to act on this specifically in bridging them to employment. Again, the consideration on the requirements of the industry and recognition of TVET graduates should be considered as this will highly influence the employment of the graduates.

ANNEXES





Reference No. 20SS02-193

19 November 2020

Sec. ISIDRO S. LAPEÑA, Ph.D., CSEE
Director General
Technical Education and Skills Development Authority
East Service Road, SLEX
Fort Bonifacio, Taguig City

SUBJECT: Statistical Survey Review and Clearance System (SSRCS)
Form 3 of the 2020 Study on the Employment of Technical
Vocational Education and Training (TVET) Graduates (SETG)

Dear Secretary Lapeña:

This refers to your request for clearance of the 2020 Study on the Employment of Technical Vocational Education and Training (TVET) Graduates (SETG). We acknowledge with thanks receipt of the following documents which were used as basis for the evaluation.

PSA Ref. No	Title of Document	Format Received	Date Received
SSRCS-20SS02-193-01	Endorsement Letter	Hard copy	30 Oct 2020
SSRCS-20SS02-193-02	Accomplished SSRCS Form 1	Hard copy	30 Oct 2020
SSRCS-20SS02-193-03	2020 SETG Proposed Methodology	Hard copy	30 Oct 2020
SSRCS-20SS02-193-04	2020 SETG Questionnaire	Hard copy	30 Oct 2020
SSRCS-20SS02-193-05	2020 SETG Guidelines	Hard copy	30 Oct 2020
SSRCS-20SS02-193-06	2020 SETG Table Formats	Hard copy	30 Oct 2020
SSRCS-20SS02-193-07	2019 SETG Report	Hard copy	30 Oct 2020



Reference Number: 20SS02-193
Subject: Statistical Survey Review and Clearance System (SSRCS) Form 3 of the 2020 Study on the Employment of TVET Graduates (SETG)

Date: 19 November 2020

Please find in the attached SSRCS Form 3 the clearance number and expiration date which should be printed or stamped on the upper right corner of the first page of the final questionnaire.

Should you have other queries, kindly contact the Statistical Standards Division of the Standards Service (SSD-SS) with telephone numbers (02) 8376-1928 and (02) 8376-1931, and email addresses ssdss.staff@gmail.com and ssd.staff@psa.gov.ph.

Thank you for your cooperation and support in our endeavor to improve the quality of surveys conducted by government agencies.

Very truly yours,

DENNIS S. MAPA, Ph.D.

Undersecretary

National Statistician and Civil Registrar General

MEPE/SBDC/CCV/JBC

Attachment:

SSRCS Form 3 (PSA Action Notification Form) of the 2020 Study on the Employment of Technical Vocational Education and Training (TVET) Graduates (SETG)

Reference Number: 20SS02-193 SSRCS Form 3 (Revised February 2014)

Subject: Statistical Survey Review and Clearance System (SSRCS) For of TVET Graduates (SETG)	orm 3 of the 2020 Study on the Employmen
19 November 2020	
Title of statistical survey	

Tit			cal survey ly on the Employment (TVE		nical Vocation nates (SETG)	nal Education and Tra	ining	
Pr			ency cal Education and Ski ment Authority (TESC		Conducting a	agency TESDA		
1	i)	All in upper	nformation enclosed in er right corner of the firs stionnaire Title: 2020 Educ	the box/ost page of Study on cation and	to the following final action: e box/es below must be printed or stamped on the bage of the statistical survey form. addy on the Employment of Technical Vocationation and Training (TVET) Graduates			
		PSA A	oproval No.: TESDA-20)49	Ехр	ires on 31 November	2021	
	 ii) Submit copies of the Manuals for Field Operations and the forms/questionnaires with the clearance number to the Philippine Statistics A (PSA), 30 days upon receipt of this form. iii) Others. (Specify) 						printed Authority	
	,	 Substitution SSR Form 	mit the accomplished S CS Form 6 (Feedback n 3.	Form) wi	thin 15 workin	ng days upon receipt o	orm) and f SSRCS	
		• The	se furnish the PSA cop survey design and ins ald there be any change	strument s	shall be subje	ct to review under the	SSRCS granted.	
2		DISAPE	PROVED, for the follow	ing reasor	ns:			
3		CLEAR	ANCE IS PUT ON-HOI	LD, for the	following rea	son/s:		
4	\boxtimes	REMAR						
	A.	1. It is	onnaire Design/Forms suggested to revise the stionnaire for easy refer	e survey	form numbers		on of the	
			Form No.		Forr	m Title		
			TESDA-SETVETG		Study on	the Employment of		

Form 1a Technical Vocational Education and Training (TVET) Graduates 2. There is a need to provide an Introduction which should include the objectives of the survey, importance of the survey, authority for the survey, and confidentiality of

information.

3. It is recommended to include multiple answers allowed after every applicable question in the questionnaire.

- 19 November 2020
 - 4. In compliance with Republic Act No. 10173 (Data Privacy Act of 2012), it is suggested to put a Data Privacy statement on the Confidentiality of Information in the questionnaire to assure that individual personal information collected from respondents are secured and protected. Necessary data security measures, such as, but not limited to, data encryption, data anonymity, and other data protection methods should be employed to prevent unintended disclosure and data theft.
 - 5. On data item Name, the data item is suggested to be revised as follows:

Name of the Respondent:						
Family Name	First Name	Middle Name				

Name of the December

6. On the section "To be accomplished by enumerator", it is suggested to revise the section title to "Interview Record". The format is also recommended to be revised as follows:

Interview Re	cord		
	1st time	2 nd time	3 rd time
Date of Interview (mm/dd/yyyy)			
Time Started (hh:mm)	:	:	:
Time Ended (hh:mm)	:	: :	:
Status of Response			
01 - Valid			
02 - Invalid, specify reason for			
replacement:			
02a - Dropped out			
02b - Training is on-going			
02c - Not a graduate of CY 2019			
02d - Never took a TVET program			
02e - Cannot be interview due to			
medical or debilitating condition			
02f - Cannot be reached/make a			
contact			
02g - Deceased			
02h - Refused to interview			
02i - Others, specify			
Type of Interview			
1 - Phone			
2 - Email			
3 - Social Media			
Contact Information			
Phone:			
Email:			
Social Media			

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- 7. On Part A (Graduate's Profile), kindly consider the following recommendations:
 - a. Item A.1 (Age) is suggested to be revised as "Age as of last birthday".
 - On Item A5 (Group belong when availing the TVET program), it is suggested to revise "Out-of-School-Youth" as "Out-of-School Youth".
- 8. On Item B.6.1 (What type of scholarship program?), it is suggested to revise the categories as follows:
 - 1. Training for Work Scholarship Program (TWSP)
 - 2. Special Training for Employment Program (STEP)
 - 3. Private Education Special Fund Assistance (PESFA)
 - 4. Universal Access to Quality Tertiary Education Act (UAQTEA)
- On Item B.8.2 (What is the level of certification?), it is suggested to revise the categories as follows:
 - 1 Certificate of Competency (CoC)
 - 2 National Certificate I (NC I)
 - 3 National Certificate II (NC II)
 - 4 National Certificate III (NC III)
 - 5 National Certificate IV (NC IV)
 - 6 Trainers Methodology Level 1
 - 7 Trainers Methodology Level 2 (TM 2)
- On Item B.11 (Have you taken a career profiling examination/career assessment test?), it is suggested to revise the skipping pattern as "1 Yes (proceed to B.11.1.1 and B.11.1.2)".
- 11. On Item B.13 (Satisfaction with TVET program), it is suggested to include a predetermined category or response for the "2. No".
- 12. On Item C.1 of Part C (Employment Status of Graduate before training), kindly consider the following recommendations:
 - a. On Item C.1.1., kindly revise "occupational title" as "Occupation"
 - b. On Item C.1.2, kindly revise "monthly gross income" as "Monthly Gross Income".
- 13. On Part D (Employment Status of Graduate after Training), the following are our recommendations:
 - a. On item D.1.1. (Retain Job after training), kindly consider the following recommendations:
 - Item D.1.1.2 is suggested to be revised as "Occupation".
 - b. Item D.1.1.3 is suggested to be revises "Monthly Gross Income".
 - c. Item D.1.2.2 is suggested to be revised as "Occupation".
 - Item D.1.2.3 is suggested to be revised as "Monthly Gross Income".
 - b. On Item D.2.2 (Time to get employment after completing the course), it is suggested that the category of response will be revised as follows, and the subitems D.2.2.1 and D.2.2.2 will be removed.
 - 1 Less than a month
 - 2 1-5 months
 - 3 more than 5 months to 12 months

Subject: Statistical Survey Review and Clearance System (SSRCS) Form 3 of the 2020 Study on the Employment of TVET Graduates (SETG)

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4 - Over a year

- 14. On Part E (Employment Status of Graduate at the Time of the Survey), Item E.1.3 (Complete Name of Establishment/Business) is suggested to be divided into two questions:
 - a. E.1.3.1. Business Name (e.g. Enter the business name of the enterprise. If there is no business name, enter the name of the owner with surname first followed by the given name and the business activity.)
 - b. E.1.3.2. Registered Name (e.g. Enter the enterprise's name registered with the Securities and Exchange Commission (SEC), Cooperative Development Authority (CDA) or Department of Trade and Industry (DTI). If the name of the enterprise is neither registered with SEC, CDA or DTI, enter the name registered with the Bureau of Internal Revenue (BIR), Mayor's Permit or Barangay Permit. Otherwise, enter name of owner. the same as indicated in Item 1, write "SAME" in the space provided.).
- 15. On F.1 (Worries in the current pandemic situation), the question is suggested to be revised as "What are your worries in the current pandemic situation? Please put a check (✓) for your response: (multiple response)."
- 16. On item F.2 (Feelings and Thoughts during the previous month) on Part F (Additional Questions), it is suggested to use "Previous Month" instead of "Last Month".

B. Other Comments

- We would like to reiterate our recommendation in 2019 to include the following in the SETG Manual:
 - a. Foreword from the head of agencies involved;
 - b. Table of Contents;
 - c. Sampling Design; and
 - d. List of Appendices, List of Figures, List of Illustrations, List of Abbreviations, Acronyms, and Glossary.
- It is recommended that the chapters will be rearranged in accordance with the Generic Statistical Business Process Model (GSBPM) as follows:
 - a. Introduction
 - b. Survey Design
 - c. Concepts and Definition of Terms
 - d. Duties and Responsibilities
 - e. Field Enumeration Procedures
 - f. Instructions in Accomplishing the PCSS Questionnaire
 - g. Post-Survey Activities
- The PSA would like to thank and commend the TESDA for taking heed of the necessary process with regard to the survey review and clearance of the 2020 Study on the Employment of TVET Graduates. Consequently, as the said survey is

19 November 2020

mandated to be conducted annually by virtue of Rule 14 Section 10(c) of Republic Act 7796, we would like to reiterate our recommendation in 2019 that the proponent agency undergo SSRCS at least 45 days before the scheduled field operations for the future conduct of the survey.

- 4. In view of the recent public health emergency due to Coronavirus Disease 2019 (COVID-19) which could affect the field operations, we would like to commend TESDA for establishing an online data collection that could avoid direct contact with the respondents. In this regard, we would like to further request the Planning Office of TESDA to provide protection for field enumertors and staff, among others, while this pandemic persists. We also advice the Planning Office to include strategies and action plans to address this kind of risk.
- 5. The PSA undertakes survey review through the SSRCS as part of its function (as stipulated in Republic Act No. 10625 or otherwise known as the "Philippine Statistical Act of 2013") in the promotion and adoption of the statistical standards in the Philippine Statistical System. In the performance of its function, the PSA is not responsible and liable for any untoward incidents, negative consequences, and/or damages to any person, establishment, organizations, and/or entities that may arise during the conduct of a survey by a proponent or third-party organization. In the training of enumerators, we recommend that the roles of the PSA, TESDA and third-party organization (if any) in the survey be made clear.

REVIEWING OFFICIAL RECOMMENDING OFFICIAL

Cherily C. Valdey CHERILYN C. VALDEZ

(Supervising Statistical Specialist)
Officer-in-Charge
Statistical Standards Division

11 November 2020

SEVERA B. DE COSTO (Chief Statistical Specialist) Officer-in-Charge Standards Service 11 November 2020



2020 Study on the Employability of TVET Graduates

Proposed Methodology

Sampling Design

The target population in this study is the set of all 2019 TVET graduates of regular programs and scholarship programs. The list of graduates from the MIS 03-02 submitted to the Central Office by the regional/provincial offices will serve as the sampling frame wherein the sample of graduates will be selected.

For the 2019 national TVET survey, the country's regions were considered as domains of the study. In each region, graduates will be randomly selected using stratified random sampling with type of provider (TTI and Non-TTI), sex (Male and Female) and type of program (TWSP, STEP, PESFA, UAQTEA, and regular program) as stratification variables. The number of graduates to be selected was determined per region employing the formula for sample size determination given as:

$$n_o = \left(\frac{Z_{\alpha/2}PQ}{d}\right)^2$$

where P is the proportion of employed TVET graduates, Q is computed as 1-P, d is the margin of error and Z is the standard normal variate based on a level of significance (α). Hence, with a 95% level of confidence, margin of error of 4%, and proportion of 0.8415 (based on the 2019 TVET study), a sample size of 374 graduates was computed per region.

The determined sample size was adjusted per region using:

$$n = \frac{n_o}{1 + \frac{n_o}{N}}$$

with *N* defined as the total number of graduates per region. Moreover, the final target number of sample graduates was determined by considering a design effect of 1.0 and nonresponse of 14% (based on the results of data collection in 2019). The target sample size per region was proportionally allocated among the 20 strata formed in the study. With all these considerations, the actual number of graduates to be randomly selected per stratum across the 17 regions is given in Table 1, yielding a total samples of 6,488 TVET graduates.

Table 1. Number of samples of graduates by type of program, sex and scholarship program per region.

Region	Non-	TTI	TTI	TTI		
Keglon	Female	Male	Female	Male	Total	
NCR						
PESFA	1	1	0	0	2	
STEP	18	7	0	0	25	
TWSP	31	31	2	2	66	
UAQTEA	1	1	1	1	4	
Regular Program	189	88	6	3	286	
					383	
CAR						
PESFA	2	2	0	0	4	
STEP	18	10	1	1	30	
TWSP	19	24	4	5	52	
UAQTEA	2	2	7	29	40	
Regular Program	125	91	12	28	256	
					382	
REGION 1						
PESFA	2	2	0	0	4	
STEP	7	8	1	2	18	
TWSP	15	20	1	2	38	
UAQTEA	1	1	5	10	17	
Regular Program	114	129	37	26	306	
					383	
Region II - Cagayan Valley						
PESFA	2	2	0	0	4	
STEP	4	6	4	5	19	
TWSP	17	21	8	9	55	

Pagion	Non-	TTI	ТТІ	Total	
Region	Female	Male	Female	Male	iotai
UAQTEA	2	3	11	18	34
Regular Program	112	88	33	37	270
					382
REGION III					
PESFA	2	2	0	0	4
STEP	12	10	1	1	24
TWSP	33	39	1	2	75
UAQTEA	2	2	4	10	18
Regular Program	151	94	7	12	264
					385
Region 4A					
PESFA	1	1	0	0	2
STEP	8	5	1	1	15
TWSP	19	22	3	4	48
UAQTEA	2	1	4	6	13
Regular Program	154	133	8	10	305
					383
REGION 4B					
PESFA	3	3	0	0	6
STEP	8	6	2	3	19
TWSP	29	30	4	6	69
UAQTEA	1	2	8	13	24
Regular Program	96	101	30	35	262
					380
Region V - Bicol					
PESFA	8	6	0	0	14
STEP	15	12	5	3	35
TWSP	36	36	6	8	86

Region	Non-	ΓΤΙ	TTI	Total	
Region	Female	Male	Female	Male	iotai
UAQTEA	2	3	19	34	58
Regular Program	80	53	25	32	190
					383
REGION VI					
PESFA	4	3	0	0	7
STEP	10	7	2	4	23
TWSP	14	15	2	3	34
UAQTEA	2	3	6	19	30
Regular Program	132	110	16	32	290
					384
Region VII - Central Visayas					
PESFA	4	3	0	0	7
STEP	13	9	2	1	25
TWSP	25	26	2	3	56
UAQTEA	1	2	4	11	18
Regular Program	175	78	11	12	276
					382
Region VIII					
PESFA	9	5	0	0	14
STEP	10	7	3	3	23
TWSP	28	28	8	11	75
UAQTEA	1	1	13	21	36
Regular Program	80	80	33	39	232
					380
Region IX - Zamboanga Peninsula					
PESFA	4	4	0	0	8
STEP	8	5	1	1	15

Docion	Non-	TTI	TTI	Total	
Region	Female	Male	Female	Male	Total
TWSP	24	24	3	3	54
UAQTEA	1	1	10	22	34
Regular Program	85	74	61	50	270
					381
REGION X					
PESFA	3	3	0	0	6
STEP	7	6	2	2	17
TWSP	21	24	6	8	59
UAQTEA	2	6	10	21	39
Regular Program	131	87	22	21	261
					382
Region XI					
PESFA	3	3	0	0	6
STEP	7	6	2	2	17
TWSP	32	28	7	10	77
UAQTEA	1	4	9	13	27
Regular Program	128	94	17	16	255
					382
REGION XII - SOCCSKSARGEN					
PESFA	4	4	0	0	8
STEP	15	17	0	0	32
TWSP	27	37	2	3	69
UAQTEA	1	1	3	5	10
Regular Program	128	112	11	13	264
					383
Caraga					
PESFA	2	3	0	0	5
STEP	7	6	2	2	17

Region	Non-1	TI	тті	Total			
Negion	Female	Male	Female	Male	Total		
TWSP	9	11	2	2	24		
UAQTEA	2	4	4	11	21		
Regular Program	117	139	21	37	314		
					381		
BARMM							
PESFA	13	14	0	0	27		
STEP	16	27	0	0	43		
TWSP	37	59	4	8	108		
UAQTEA	0	0	12	20	32		
Regular Program	66	77	10	9	162		
					372		
Total Sample Size							

The survey will be done through the use of a computer-aided telephone interview (CATI) or self-administered questionnaire using a structured questionnaire. The individual TVET graduate is the unit of enumeration for the survey in which strict verification of the identity of selected graduates will be implemented.

Estimation and Data Analyses

TVET graduates will be characterized by constructing weighted percentage distributions and by computing appropriate numerical descriptive measures. Proportion of employed TVET graduates, P, will be estimated in the k^{th} region, where k is from 1 to 17, using:

$$\hat{P}_k = rac{\sum\limits_{i=1}^{L}\sum\limits_{j=1}^{n_i}W_{ij}Y_{ij}}{\sum\limits_{i=1}^{L}\sum\limits_{j=1}^{n_i}W_{ij}}$$

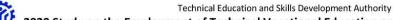
where Y_{ij} is equal to 1 if the j^{th} graduate from the i^{th} stratum is employed, and 0 otherwise, W_{ij} is the survey weight computed for the j^{th} graduate in the i^{th} stratum, in which $\sum_{i=1}^{L}\sum_{j=1}^{n_i}W_{ij}$ is equal to N_k for the k^{th} region, and L is the number of strata which is equal to 16.

Likewise, characterization of employed graduates will be done based on the different factors considered in the study. Correlation analysis will be performed to determine factors associated with the employability of the graduates. Furthermore, logistic regression will be considered to identify determinants of the employability of TVET graduates.



TESDA-SETVETG Form 1a

PSA Approval No.: TESDA-2049
Expires on: 31 November 2021



2020 Study on the Employment of Technical Vocational Education and Training (TVET) Graduates

Sir/Madam:

The Technical Education and Skills Development Authority is conducting the 2020 Study on the Employment of TVET Graduates, to gather information regarding your employment and skills utilization.

You are one of the randomly selected 6,488 TVET graduates in 2019. With your cooperation, this survey will give TESDA data useful in gauging the relevance and effectiveness of the TVET programs last year.

Please be assured that all your answers shall be held STRICTLY CONFIDENTIAL (as specified in the Data Privacy Act of 2012, RA 10173). The report cannot be used for purposes of taxation, investigation or law enforcement procedure, not will be published except in the form of statistical summaries in which no reference to any individual shall appear. Further, this survey had been approved by the Philippine Statistics Authority.

May we earnestly solicit your cooperation for this undertaking.

				PSGC Code		
		Re	gion:			
Case ID:		Pro	ovince:			
Name of respondent:		Dis	trict (for NCR only):			
3						
(family name)	(first nan	ne)	(middle	name)		
Interview Record)						
•	1st time		2nd time	3rd time		
Date of interview (mm dd yyyy)						
Time started (hh:mm)	:		;	·		
Time started (hh:mm)	;		:	;		
Status of response		Туре	of interview:			
01 Valid			1 Phone			
02 Invalid			2 Email			
02a Dropped-out		3 Social media				
02b Training is on-going		Conta	ct information			
02c Not a graduate of CY 2019	9	Phone:				
02d Never took a TVET progra	ım	Email:				
02e Cannot be interviewed du	ue to medical	Social media:				
or debilitating condition						
02f Cannot be reached/make	a contact	Remo	arks:			
02g Deceased						
02h Refused to be interviewe	d					
02i Others, specify:						
Certification						
5011110011011						
I hereby certify that the data gather	red in this questionnair	e were	obtained/reviewed by me per	rsonally and in accordance		
with the instructions:				•		
signature over printed name of enur	merator		date			
a sala pinasanana di dila						
signature over printed name of supe	ervisor		date			
aignature ever printed flame of supe			date			

Instructions: Please answer the questions below. Encircle code of the answer or tick the box as applicable PSGC Code PART A: GRADUATE'S PROFILE A.1 Age as of last birthday: Province Municipality / City Barangay A.2 Present Address: No. / Street/Subdivision Barangay A.3 Sex: 1. Male 2 Female Municipality Province A.4 Marital Status: 3. Widowed 1. Single 5. Separated 7. Common-law/Live-in 6. Annulled 2. Married 4. Divorced 8. Unknown A.5 In what group do you belong when you availed of a TVET program? ☐ 4Ps Beneficiary □ Agrarian Reform Beneficiary □ Balik Probinsya □ Displaced Workers ☐ Drug Dependents Surrenderees/ Family Members of AFP and PNP Surrenderers Killed-in-Action Family Members of AFP and PNP Farmers and Fishermen Indigenous People and Cultural Wounded in-Action Communities ☐ Industry Workers Inmates and Detainees MILF Beneficiary ☐ Out-of-School Youth Overseas Filipino Workers (OFW) ☐ RCEF-RESP Dependents Returning/Repatriated Overseas ☐ Student Rebel Returnees/ **Decommissioned Combatants** Filipino Workers (OFW) TESDA Alumni TVET Trainers ☐ Uniformed Personnel Victim of Natural Disasters and Wounded-in-Action AFP & PNP ☐ Others: (please specify) Calamities Personnel (source: Registration Form MIS 03-01 (2020) A.6 Highest educational attainment before attending the TVET program/ qualification where the respondent was sampled. 1. No grade completed 8. Lower Secondary Education (Junior HS) Graduate 2. Early Childhood Education (K - 12 curriculum) Upper Secondary Education (Sr. HS) Undergraduate 3. Primary Education (Elementary) Undergraduate Primary Education (Elementary) Graduate 10. Upper Secondary Education (Sr. HS) Graduate 5. Lower Secondary Education (Junior HS) Undergraduate 11. Post-secondary Non-tertiary Education Short-cycle Tertiary Education (old curriculum) Lower Secondary Education (Junior HS) Undergraduate 13. Bachelor Level Education Undergraduate (K - 12 curriculum) 14. Bachelor Level Education Graduate 7. Lower Secondary Education (Junior HS) Graduate 15. Master Level Education (old curriculum) 16. Doctoral Level Education A.7 Please indicate main reason for taking up the program (please select one answer only) 1. For employment/to get job TVET qualification is popular (many are enrolling) Personal use/interest/hobby 2. For promotion 3. To increase income Nothing to do 4. For skills upgrading/enhancement 8. Others, please specify: A.8 What are your sources of income (multiple answers allowed) Salaries and wages from employment Commissions, tips, bonuses and honoraria Imputed rental values of owner-occupied dwelling units Interests Rentals including landowner's share of agricultural products Pensions, royalties and dividends from investments Gifts, support in any form (physical, material and financial) and the value of food and non-food items received as gifts by the family (as well as the imputed value of services rendered free of charge to the family) Others: None

PART B: Training, Competency Assessment and Certification

B.2	Date started (mm/dd/yyyy): Date completed (mm/dd/yyyy)
B.3	Program Delivery Mode (Revised based on current Guidelines) 1. Institution—based 2. Enterprise-based 3. Community-based (please proceed to B.3.1) A. Dual Training System H. Mobile training program B. Apprenticeship I. TESDA Provisional PTCs C. Learnership J. Extension programs of TTIs D. PAFSE K. LGU-oriented commbased program L. NGOs, POs, CSR trainings F. Industry-base/in-company training G. Farm schools/enterprise training
	B.3.1 Did the training have an internship or On-the-Job Training (OJT) at enterprise? 1. Yes 2. No
B.4	Name of Training Institution where training was attended:
	Type of TVET Program registration 1. With Training Regulation (WTR) 2. No Training Regulation (NTR) 3. Not registered program (proceed to B.10)
B.6	Did you avail of any of the TESDA's scholarship program? 1. Yes (please proceed to B.6.1) 2. No (please proceed to B.7)
B.7	B.6.1 What type of scholarship program? 1. Training for Work Scholarship Program (TWSP) 2. Special Training for Employment Program (STEP) 3. Private Education Special Fund Assistance (PESFA) 4. Universal Access to Quality Tertiary Education Act (UAQTEA) Did you avail other TVET scholarship program?
	1. Yes, name of scholarship program 2. No (please proceed to B.8)
3.8	Did you take the Competency Assessment? 1. Yes (please proceed to B.8.1 and B.8.2) 2. No (please proceed to B.9)
	B.8.1 Did you pass the competency assessment?
	1. Yes (please proceed to B.8.2) 2. No (please proceed to B.10)
	B.8.2 What is the level of certification? 1. Certificate of Competency (CoC) 2. National Certificate I (NC I) 3. National Certificate II (NC II) 3. National Certificate III (NC III) 5. National Certificate IV (NC IV) 6. Trainers Methodology Level 1 (TM 1) 7. Trainers Methodology Level 2 (TM 2)
	(please proceed to B.10)
3.9	Please indicate main reason for not taking competency assessment? 1. Assessment tools/test package not available 2. Assessor is not available 3. No assessment center in the area 4. Assessment is not mandatory 5. Skills and knowledge no sufficient 6. No money/financial constraints 7. No time/working/schooling/abroad 8. Schedule not known 9. Others, specify
В.10	

B.11 Have	e you taken a career profifing examinat	ion/career asses	sment test?				
1	1 Yes (proceed to B.11.1.1 and B.11.1.2) 2. No (proceed to B.12)						
	B.11.1.1 What career profiling/career assessment tool?						
	Youth Profiling for Starring Career (YP4SC)						
	2. National Career Assessment Examination (NCAE)						
	3. Others:	e Examination (i	. C. (L.)				
	B.11.1.2 Is the TVET program that y	ou have enrolled	d in line with t	he result of t	the profiling to	ol?	
	1. Yes 2. No						
B 12 Plea	se put a check (✓) corresponding to yo	ur level of satisf	action with th	e TVFT prog	ram vou atten	ded/completed in	
	is of the following:	our rever or sucisi	action with th	ic IVEI plog	iam you atten	aca, completed in	
-	s or the rollowing.			1	1	1/	
	Indicator	Very Satisfied	Satisfied	Neutral	Unsatisfied	Very Unsatisfied	
	maicator	(5)	(4)	(3)	(2)	(1)	
Tra	inee entry requirements		*		4	(1)	
	ining methodologies				-		
	ols and equipment		1		100		
	rning materials				-		
	ining activities						
	ining facilities/work area						
	owledge/expertise of trainer						
	ation of training						
	el of knowledge, skills, attitude						
	ained after training						
Ass	essment methods						
B.13 O	verall, are you satisfied with the TVET p	rogram vou atte	anded/comple	ated?			
	SUBSECURING COMPANY AND ADDRESS OF A STANDARD STA	,	y				
1.	Yes 2. No (please procee		itiple answer (allowed)			
	B.13.1 Reaso	117.1					
		appropriate trai					
		effective trainin					
		utdated/obsolet		6 .6			
		efective tools an					
		earning material					
		ot enough time					
	7. T	raining-work are	a – not suitab	le			
	8. T	rainer's knowled	ge not up to	date			
	9. D	uration of training	ng is too long				
	10 D	uration of traini	ng is too short	t			
	11 As	sessment was to	oo hard				
	12 As	sessment was to	oo easy				
	13 Di	d not acquire/at	tained expect	ted knowleds	ge, skills and at	titude	
		thers		•			
B.14 Do	you have any suggestion(s) that can i	mprove the prog	gram?:				
_							
DADT C. E	MADI OVAMENT STATUS OF CRADILA	TE DEFODE TO	AINING				
PART C: E	MPLOYMENT STATUS OF GRADUA	TE BEFORE IK	AINING				
C. Were y	ou employed within one week before	e enrolling in th	is course?				
C.1 Yes, p	lease specify						
					PSOC C	ode	
C.:	* 1966 1970/1971 1967 19						
C.:	1.3 Whom do you work for? (please s	elect one answer	only)				
	 Worked for private house 						
	Worked for private estab	lishment;					
	 Worked for private estab Worked for government/ 	lishment; government cor	•				
	Worked for private estab	lishment; government cor	•	ness;			
	 Worked for private estab Worked for government/ Worked with pay on own Self-employed without pay 	lishment; government cor family-operated aid employee;	d farm or busi	ness;			
	 Worked for private estab Worked for government/ Worked with pay on own Self-employed without pay Employer in own family-own 	lishment; government cor family-operatec aid employee; operated farm or	farm or busi	*			
	 Worked for private estab Worked for government/ Worked with pay on own Self-employed without pay 	lishment; government cor family-operatec aid employee; operated farm or	farm or busi	*			

C.2 N	lo , did you lo	ook for work or try to establish a business within one week before enrolling in	this course?
	1 Yes (please proceed to C.3) 2 No (proceed to C.2.1)	
	C.2.1 i	f No, what is the primary reason for not looking for work? (please select one ar	nswer only)
		1. Tired	
		2. No work available	
		3. Awaiting results of previous application If response is any from	m 1 to 6, proceed to C.3
		Temporary illness/disability Bad weather	
		6. Waiting for rehire/job recall	
		7. Too young/old or retired	
		8. Permanent disability	m 7 to 10, proceed to D.2
		9. Household/family duties	
		10. Schooling	
		11. others, pls. specify	
		ailable and willing to take up work in paid or self-employment within the past v	week and/or would be available
а	nd willing to	take up work within two weeks before enrolling in this course?	
	Inle	1. Yes 2. No ease proceed to D.2)	
	(pie	use proceed to b.2)	
		YMENT STATUS OF GRADUATE AFTER TRAINING	
-		before training	
D		ou retain your job after the training? Yes	PSOC Code
	D.1.1	D.1.1.1 Promoted?	
		1. Yes 2. No	
		D.1.1.2 Occupation :	
		D.1.1.3 Monthly Gross Oncome : ₱	
		(please proceed to D.4)	
	D.1.2	34003003	PSOC Code
		D.1.2.1 Transferred to another company/workplace? 1. Yes 2. No	
		D.1.2.2 Occupation :	
		D.1.2.3 Monthly Gross Income : ₱	
		(please proceed to D.4)	
		yed before training	
D		ou get a job after the training?	
	1 Y e	accompanies of water accompanies of the second	PSOC Code
		D.2.1.1 Occupation : L D.2.1.2 Monthly Gross Income : ₱	
		(please proceed to D.2.2)	
	2 N o	O (please proceed to D.4)	
_	22 11		2
D		long did it take you to get your job/employment after completing the	course?
		Less than a month 1 to 5 months	
		more than 5 months to 12 months	
D 2 .		over a year	
D.3 I		erience a requirement of the employer before being employed? 2. No 3. I don't know	
	1. Yes		
D.4		ion a requirement of the employer before being employed?	
	1. Yes	2. No 3. I don't know	

PART E. EMPLOYMENT STATUS OF GRADUATE AT THE TIME OF THE SURVEY

E.1 W	ere yo	ou employed	d within a week	of this interview	?					
	1	Yes, (procee	ed to E.1.2)	No, (pleas	se proceed to E	. 2)				
E.1.2 '	1. 2.	Works for p Works for p Works for g Works with Self-emplo Employer in	private househol private establish government/gov n pay on own fan yed without paic n own family-ope	ment/corporation; ernment corporation nily-operated farm	on; or business;/Biz ness;		ect one answe	r only)		
E.1.3	Comp	lete Name c	of Establishmen	t/Business:						
E.	1.3.1		usiness name of th	e enterprise. If there se and the business ac		me, enter th	ne name of th	ne owner wi	ith surna	me
E.	1.3.2	Registered		None of the state						
		•		egistered with SEC, CL						
				me registered with th ame of owner, the sa	(A) 1187		PSGC Code			
			e "SAME" in the sp				Province	Municipality	// City	Barangay
E.1.4	Comp	lete Addres:	s:							
			2000	(Number ./ Street)		(Barangay)				
- 4 -	_			(Municipality/City)		(Province)				
		oation :			-	<u> </u>		PSOC C	ode	
				mployment: mm/yy):	: ·					
E.1.7	Curre	nt Monthly		₱						
E 1 Q	Numb	or of hours		nclude estimated value of g past week:						
L.1.0	Num			.8, if the respondent				inocc)		
		(uisreg	gara ims ricin, L.1	o, ij the respondent	nus yet to report	joi work o	r start a bas	111033 /		
E.1.9	Is you	ur current jo	ob,							
		st	ill the same of	your previous job	prior to pande	emic				
		sh	nifted to new jo	b as:						
E.1.10	Hov	v is your inc	ome affected v	vith the COVID -1	9 Crisis? (pleas			nding to t	:he ansv	wer)
			_ Reduced inco		-	No chan	ge			
		-	_ Increased inc	come	1	Do not k	now			
	E.	10.1 Curre		the causes of the			e?			
		2		to close shop/bu		10010113				
		3	Had to close s							
		4		embers working a	re sick or in qu	arantine				
		5	Employer's de	cision to downsiz	e or reduce nu	ımber of	employees	6		
		6	Daily labor op	portunities reduc	ed					
		7		nber of clients/cເ	ustomers					
		8	Have a new jo							
		9	Other (specify							
E.1.11	How	did you get	t your present j	ob? <i>(please select</i>	t one answer o	nly)				
	1.	Job fair			5. Newspar					
			Platform (BDP)		6. Referral			es		
	3.		oloyment Servic	e Office (PESO)	7. Walk-in	2.0				
	4.	Internet jo	b posting		8. Others,	please spe	ecity			_

E.1.12	What type of industry/business are you enga	PSIC Code	
	(please specify, e.g. iron works, garments, semiconductor,		
	E.1.12.1 What is the major product or type of	service of your company/business?	
	(please specify, example: rice, corn, ste	eel pipes or tubes, plastic pipes, etc.)	
E.1.13	What is the nature of your employment? (ple	ease select one answer only)	
	 permanent job/permanent business/per short-term or seasonal job/business/unp worked for different employers/clients or 	paid family work	
E.1.14	Are the terms of your employment covered I	by a contract?	
	1 Yes (proceed to E.14.1) 2 No (proceed	ed to E.15)	
	E.1.14.1 if Yes, is the contract, 1. written 2. verbal		
E.1.15	Do you or does your employer pay for your o	contribution to the following (pleas	se encircle the appropriate answer
	1. GSIS/SSS	Yes No	
	2. Pag-IBIG	Yes No	
	3. PhilHealth	Yes No	
E.1.16	Does your employer provide incentives to Na	ational Certificate / Certificate of C	Competency holder?
	1 Yes (proceed to E.16.1) 2 No (proceed	ed to E.17)	
	E.1.16.1 if Yes, what are the incentives? (plea	ase encircle as many as may be approprio	ate)
	 Salary increase Promotion 		
	3. Job Security		
	4. Others, please specify		
E.1.17	Is the training/course you completed (in B.1)	related or relevant to your curren	t job/business?
	very much related or relevant relevant relevant	related or 3. not related or relevant	
E 1 10			
E.1.18	How useful are your skills acquired from the to Very useful (when often or directly used		
	2 Some use (when seldom or sometimes u	75 The state of th	
	3 No use at all because	servicini sori accinico di consulta	
	SUPPLIES AND STORY WATER AND THE STORY WATER A	training/course not needed in actual v	
		y different with training/course comp	leted
F.1.19	E.1.18.3.3 other reason, (please Where is the company/business located? <i>(pla)</i>	SERVICE SUPERIOR	
	1. within the province	and the second of the second o	
	2. outside the province but within the reg		
	3. outside the region, please specify prov		
	4. outside the country, please specify cou	intry	
E.1.20	Other than your current occupation in E.1.5 , additional job or to have new job with longer		in your present job or
	1. Yes, please state the reason		
	2. No		
E.1.21	Do you intend to be trained in other skills or	upskills your current skills to find	a job?
	1. Yes (proceed to E.1.21.1) 2. No (p	proceed to Part F: Covid 19 pande	mic-related questions)
	E.1.21.1 If Yes, are you currently enrol		
	 Yes No (proceed) 	to Part F: Covid 19 pandemic-rela	ated questions)

- E.1.22 Which of the flexible learning mode do you prefer?
 - 1. Face-to-face learning
 - 2. Online learning
 - 3. Blended learning
 - 4. Distance learning
 - 5. Combination of Face-to-face and distance learning

(please proceed to Part F: Covid 19 pandemic-related questions)

(E.2 – to be answered by the respondent whose response in E.1 is NO)

- E.2 Is your unemployment due to the impact of the Covid 19 pandemic?
 - 1. Yes (proceed to **E.2.1**)
- 2. No (proceed to **E.2.2**)
- E.2.1 If yes,
 - 1 Could not work due to travel/movement restrictions
 - 2 Employer had to close shop/business
 - 3 Had to close shop/business
 - 4 Household members working are sick or in quarantine
 - 5 Employer's decision to downsize or reduce number of employees
 - 6 Daily labor opportunities reduced
 - 7 Other (specify)
- E.2.2 Did you look for work or try to establish a business within a week of this interview?
 - 1. Yes (proceed to E.2.4)
- 2. No (proceed to **E.2.3**)
- E.2.3 No, what is the primary reason for not looking for work? (please select one answer only)
 - Tired
 - 2. No work available
 - 3. Awaiting results of previous application
 - 4. Temporary illness/disability
 - 5. Bad weather
 - 6. Waiting for rehire/job recall
- 7. Too young/old or retired
- 8. Permanent disability
- 9. Household/family duties
- 10. Schooling
- 11. Fear of getting Covid-19
- 12. Others, pls specify: _

Note: If response is any from 1 to 6, proceed to E.2.4, else proceed to E.2.5

- E.2.4 Were you available and willing to take up work in paid or self-employment within the past week and/or would be available and willing to take up work within two weeks after this interview?
 - 1. Yes 2. No
- E.2.5 Do you think the pandemic affects your possible employment?
 - 1. Yes 2. No (proceed to Part F: Covid 19 pandemic-related questions)
- E.2.6 Do you intend to be trained in other skills or upskills your current skills to find a job?
 - 1. Yes 2. No (proceed to Part F: Covid 19 pandemic-related questions)
 - E.2.6.1 If YES, are you currently enrolled in any TVET program?
 - 1. Yes 2. No (proceed to Part F: Covid 19 pandemic-related questions)
 - E.2.6.2 Which of the flexible learning mode do you prefer?
 - 1. Face-to-face learning
 - 2. Online learning
 - 3. Blended learning
 - 4. Distance learning
 - 5. Combination of Face-to-face and distance learning

(please proceed to Part F: Covid 19 pandemic-related questions)

Part F: Additional Questions (related to COVID 19 pandemic)

F.1 What are your worries in the current pandemic situation? Please put a check (✓) for your response (multiple response/answers allowed)

No worries	
Shortage of food	
Increase in food prices	
Shortage of medicine	
Disruption of medical service	
Disruption of educational institutes	
Getting sick	
Lack of work	
Disruption of livelihood source	
Travel restrictions	
Paying the rent	
Paying utility bills	
Others, specify	

F.2 The questions in this scale ask you about your feelings and thoughts during **THE PREVIOUS MONTH**. In each case, please indicate your response by placing an (✓) representing HOW OFTEN you felt or thought a certain way.

	Indicator	Never	Almost Never	Sometimes	Fairly Often	Very Often
1.	In the last month, how often have you been upset because of something that happened unexpectedly?					
2.	In the last month, how often have you felt that you were unable to control the important things in your life?					
3.	In the last month, how often have you felt nervous and "stressed"?					
4.	In the last month, how often have you felt confident about your ability to handle your personal problems?					
5.	In the last month, how often have you felt that things were going your way?					
6.	In the last month, how often have you found that you could not cope with all the things that you had to do?					
7.	In the last month, how often have you been able to control irritations in your life?					
8.	In the last month, how often have you felt that you were on top of things?					
9.	In the last month, how often have you been angered because of things that were outside your control?					
10.	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?					

0	44 W27 A2 1907 A2				į.	
F.3	Based on your experience with COVID-19, what TVET skills do pandemic?	you thin	k would l	oe very usefu	ıl in the	time of
F.4	What TVET skills are you able to use during the time of pander	nic?				d

Thank you for your support and full cooperation to our undertaking.



Technical Education and Skills Development Authority



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STUDY ON THE EMPLOYMENT OF TVET GRADUATES

SERIES OF 2020

Policy Research and Evaluation Division - Planning Office

Office of the Deputy Director General for Policies and Planning

Technical Education and Skills Development Authority

TESDA Complex, East Service Road, South Luzon Expressway (SLEX),

Fort Bonifacio, Taguig City 1630, Metro Manila

Tel. No. (+632) 8888 5652 / 8817 2675 / 8893 1966

www.tesda.gov.ph | po.pred@tesda.gov.ph