

STUDY ON THE EMPLOYABILITY OF TVET GRADUATES

2017



Technical Education and Skills Development Authority

MESSAGE OF THE SECRETARY



As the central authority for technical-vocational education and training (TVET) in the Philippines, TESDA is, and always will be, one of the country's prime movers for progress. Our duties and responsibilities go hand-in-hand with the current Administration's 10-Point Agenda, which seeks to, among other things, invest in human capital development in order to meet the demands of both the business and the private sectors. In layman's terms, we help our people to have access to skills training and a job after.

But the context of "progress" goes beyond nation-building. While we uplift the Filipino workforce to be as skilled and globally-competitive as it can be, we also strive to improve our processes and programs, with the hopes of delivering better services in the future. We understand the value of human development, which is why we have helmed this Study on the Employability of TVET Graduates (SETG) that seeks to gauge our students' success in obtaining meaningful livelihoods once they finished their respective TVET courses. This is how TESDA knows the fruits of its labor.

SETG is a continuation of the previous Impact Evaluation Study (IES) of TVET Programs that started in 2005. Staying true to its namesake, SETG aims to identify the various factors and challenges that affect the employability of TVET graduates, particularly on how TESDA's programs affected their job prospects immediately after graduation and in the interim. This document provides the agency with more concrete feedback, just as how it provides employers and stakeholders alike with an informed idea on the most-current state of the Filipino workforce.

We are confident that the conclusions and discussions found herein have achieved both those objectives. May you, the reader, find meaningful insights on the quality of Philippine TVET as well as how TESDA plays a crucial role in the development of the country's human capital.

And the work does not end here. Let this paper be a stepping stone towards more fervent efforts to improve and refine TVET in our country. We at TESDA enjoin you to be our partners, a.k.a. our co-movers, for progress by using the information found here for the benefit of world-class Filipino workforce. Through your help, we all reap the benefits of progress and build a better nation.


SEC. ISIDRO S. LAPEÑA, PhD., CSEE
Director General

MESSAGE OF THE DEPUTY DIRECTOR GENERAL



Since its creation in 1994, TESDA has seen the world of work undergo dramatic changes. "Human labor" gradually incorporated machines and computers, old jobs are largely replaced by more modern ones, and new advancements made the workplace simplistic yet complicated at the same time. All these things demand new skills and competencies from the modern day worker, which we from TESDA have always striven to provide.

That being said, it is not enough to simply say that we have done our part to uplift our Philippine manpower. It is also just as important, arguably more so, to assess our success and determine whether or not our programs have achieved that goal. And not only that, we need to utilize whatever we have learned in order to improve ourselves as an agency, plan for the future, so that even more gains can be achieved for the benefit of our people.

Those are the objectives of this paper.

The Study on the Employability of TVET Graduates is a regular activity undertaken by TESDA to provide ourselves and our stakeholders with better insights on the state of technical-vocational education and training in the country. Over the course of several months, we sought out and interviewed students of TESDA programs in 2017 and determined their success of obtaining gainful employment post-graduation. We specifically collated useful information such as the students' work status prior to and after undergoing training in TESDA, their motivations to find employment, and also the challenges and issues they encountered all throughout.

This document provides businesses, both local and international, with a microcosm of what constitutes our country's highly-skilled and TESDA-trained workforce. It also provides our stakeholders and partners with detailed information as to how TVET impacts the job prospects of Filipinos, thus laying down the foundation for our future endeavors. Lastly, the study offers readers with a general, but concise, background on Philippine TVET and the world of work today, which hopefully will be enough for all to remain abreast of the future.

I hope whatever information you find within will serve you well. You can be our partner in uplifting our Philippine manpower by putting what you have learned to good use.


ROSANNA A. URDANETA, CESO II
Deputy Director General
Policies and Planning

TABLE OF CONTENTS

Executive Summary

1	Profile of TVET Graduates	1
2	Competency Assessment and Certification	8
3	Labor Force Participation (under TTIs and Non-TTIs)	12
4	Employment	18
4.1	Length of Job Search	19
4.2	Employment Rate (under TTIs and Non-TTIs)	21
4.3	Comparison of Employment Rate Across Subgroups	25
4.4	Characteristics of Employed TVET Graduates	31
4.5	Employment of Certified TVET Graduates	41
4.6	Characteristics of Certified and Non-Certified Employed TVET Graduates (Under TTIs and Non-TTIs)	45
4.7	Employment of TVET Graduates with Scholarships	51
4.8	Economic Status of TVET Graduates	55
4.9	Employment Facilitation and Skills Utilization	59
4.10	Factors Associated with Employability	63
4.11	Logistic Model for the Employability	69
	Recommendations	71

Annexes

Philippine Statistics Authority Clearance/Approval
Sampling Design
Survey Questionnaire

LIST OF TABLES

1	Weighted Distribution of TVET Graduates by Region	1
2	Weighted Distribution of TVET Graduates by Age Group, by Sex	2
3	Summary Statistics for Age by Sex	2
4	Weighted Distribution of TVET Graduates, by Sex, By Highest Grade Completed	3
5	Weighted Distribution of TVET Graduates by Region, by Delivery Mode of Training	4
6	Weighted Distribution of TVET Graduates by Scholarship Program, by Sex	5
7	Weighted Distribution of TVET Graduates by Sector, by Sex	5
8	Weighted Distribution of TVET Graduates by Their Reason for Taking Up TVET Programs	6
9	Weighted Distribution of TVET Graduates by Youth Profiling for Starring Careers (YP4SC), by Scholarship Program, by Sex	7
10	Weighted Distribution of TVET Graduates as Whether They Took Competency Assessment or Not by Sex	8
11	Weighted Distribution of TVET Graduates by Type of Program Provided, by Sex	9
12	Weighted Distribution of TVET Graduates under WTR Who Took Competency Assessment by Sex	9
13	Weighted Distribution of WTR Graduates by Their Reasons for Not Taking Competency Assessment	9
14	Certification Rates of TVET Graduates of WTR Programs, by Sector	10
15	Level of Certification of TVET Graduates, by Sex	11
16	Weighted Distribution of TVET Graduates, by Scholarship Programs, by Certification Level	11
17	Labor Force Participation Rate of TVET Graduates, by Sex	12
18	Labor Force Participation Rate of TVET Graduates, by Age Group	12
19	Labor Force Participation Rate of TVET Graduates, by Highest Grade Completed	12
20	Labor Force Participation Rate of TVET Graduates, by Region	13
21	Labor Force Participation Rate of TVET Graduates, by Training Delivery Mode	14
22	Labor Force Participation Rate of TVET Graduates, by Type of Provider	14
23	Labor Force Participation Rate of TVET Graduates under TTI, by Training Delivery Mode	15
24	Labor Force Participation Rate of TVET Graduates Under Non-TTI, by Training Delivery Mode	15
25	Labor Participation Rate of TVET Graduates by Region	16
26	Labor Participation Rate of TVET Graduates Under Non-TTI, by Region	16
27	Reasons of TVET Graduates for Not Looking for Work	17
28	Reasons of TVET Graduates Under TTI for Not Looking for Work	18
29	Reasons of TVET Graduates Under Non-TTI for Not Looking for Work	18
30	Length of Job Search After the Training	19
31	Length of Job Search After the Training Under TTI	19
32	Length of Job Search After the Training Under Non-TTI	19

33	Summary of Statistics for Length of Job Search (in months) by Type of Provider and Overall	20
34	Estimated Employment Rate of TVET Graduates, by Sex	21
35	Estimated Employment Rate of TVET Graduates, by Region	22
36	Estimated Employment Rate of TVET Graduates Under TTI, by Region	22
37	Estimated Employment Rate of TVET Graduates Under Non-TTI, by Region	23
38	Estimated Employment Rate of TVET Graduates, by Program Delivery Mode, by Sex	24
39	Estimated Employment Rate of TVET Graduates Under TTI, by Training Delivery Mode	24
40	Estimated Employment Rate of TVET Graduates Under Non-TTI, by Training Delivery Mode	25
41	Estimate of Employment Rate of TVET Graduates, by Program Delivery Mode	26
42	Estimate of the Employment Rate of TVET Graduates, by Region	26
43	Estimate of the Employment Rate of TVET Graduates, by Occupation Group	28
44	Estimate of the Employment Rate of TVET Graduates, by Sector	29
45	Estimate of the Employment Rate of TVET Graduates, by Type of Provider	30
46	Estimate of the Employment Rate, by Certification	31
47	Estimate of the Employment Rate of TVET Graduates, by Type of Scholarship Program	31
48	Weighted Distribution of Employed TVET Graduates by Occupational Group, by Sex	32
49	Weighted Distribution of Employed TVET Graduates Under TTIs, by Occupational Group, by Sex	33
50	Weighted Distribution of Employed TVET Graduates Under Non-TTIs, by Occupational Group	33
51	Weighted Distribution of Employed TVET Graduates by Occupational Group, by Training Delivery Mode	34
52	Weighted Distribution of Employed TVET Graduates Under TTIs by Occupational Group, by Training Delivery Mode	34
53	Weighted Distribution of Employed TVET Graduates Under Non-TTIs by Occupational Group, by Training Delivery Mode	35
54	Weighted Distribution of Employed TVET Graduates, by Class of Worker, by Training Delivery Mode	35
55	Weighted Distribution of Employed TVET Graduates Under TTI, by Class of Worker, by Training Delivery Mode	35
56	Weighted Distribution of Employed TVET Graduates Under Non-TTI, by Class of Worker, by Training Delivery Mode	36
57	Weighted Distribution of Employed TVET Graduates by Class of Worker, by Sex	36
58	Weighted Distribution of Employed TVET Graduates Under TTI by Class of Worker	36
59	Weighted Distribution of Employed TVET Graduates Under Non-TTI, by Class of Worker, by Sex	36
60	Weighted Distribution of Employed TVET Graduates by Sector	37
61	Weighted Distribution of Employed TVET Graduates Under TTIs by Sector	37

62	Weighted Distribution of Employed TVET Graduates Under Non-TTIs by Sector	38
63	Weighted Distribution of Employed TVET Graduates, by Nature of Work	39
64	Weighted Distribution of Employed TVET Graduates Under TTIs, by Nature of Work	39
65	Weighted Distribution of Employed TVET Graduates Under Non-TTIs, by Nature of Work	39
66	Weighted Distribution of Employed TVET Graduates, by Location of Work	40
67	Weighted Distribution of Employed TVET Graduates Under TTIs, by Location of Work	40
68	Weighted Distribution of Employed TVET Graduates Under Non-TTIs, by Location of Work	40
69	Estimated Employment Rate of Graduates by Certification	41
70	Estimated Employment Rate of Certified Graduates, by Sex	41
71	Estimated Employment Rate of Certified Graduates Under TTIs and Non-TTIs	42
72	Estimated Employment Rate of Certified WTR Graduates Under TTI, by Sex	42
73	Estimated Employment Rate of Certified WTR Graduates Under Non-TTI, by Sex	43
74	Estimated Employment Rate of Certified TVET Graduates, by Region	43
75	Estimated Employment Rate of Certified TVET Graduates, Under TTI, by Region	44
76	Estimated Employment Rate of Certified Graduates Under Non-TTI, by Region	44
77	Weighted Distribution of Employed Certified and Non-Certified TVET Graduates by Class of Worker	45
78	Weighted Distribution of Employed Certified and Non-Certified TVET Graduates under TTI, by Class of Worker	46
79	Weighted Distribution of Employed Certified and Non-Certified TVET Graduates under Non-TTI, by Class of Worker	46
80	Weighted Distribution of Employed Certified and Non-Certified TVET Graduates, by Occupational Group	47
81	Weighted Distribution of Employed Certified and Non-Certified TVET Graduates under TTI, by Occupational Group	48
82	Weighted Distribution of Employed Certified and Non-Certified TVET Graduates under Non-TTI, by Occupational Group	48
83	Comparison of Employed Certified and Non-Certified TVET Graduates, by Nature of Work	49
84	Comparison of Employed Certified and Non-Certified TVET Graduates under TTI, by Nature of Work	49
85	Comparison of Employed Certified and Non-Certified TVET Graduates Under Non-TTI, by Nature of Work	49
86	Incentives Given to Employed Certified Graduates	50
87	Incentives Given to Employed Certified Graduates under TTIs and Non-TTIs	51
88	Types of Incentives Provided by Employer	51
89	Employment Rate of TVET Graduates with and Without Scholarship	51
90	Estimated Employment Rate of TVET Graduates, by Type of Scholarship Program	51
91	Estimated Employment Rate of Male TVET Graduates, by Type of Scholarship Programs	52
92	Estimated Employment Rate of Female TVET Graduates, by Type of Scholarship Programs	52

93	Estimated Employment Rate of TVET Graduates under TTI, by Type of Scholarship Program	53
94	Estimated Employment Rate of TVET Graduates under Non-TTI, by Type of Scholarship Program	53
95	Employment Rate of Graduates Under TWSP, by Sector	54
96	Weighted Distribution of TVET Graduates by Monthly Income Before Training, by Sex	55
97	Weighted Distribution of TVET Graduates by Monthly Income After Training, by Sex	56
98	Summary Statistics for Income Before and After the Training, by Sex and Overall	56
99	Summary Statistics for Current Income, by Sex	58
100	Summary Statistics for Current Income by Type of Provider and Overall	58
101	Summary Statistics for Current Income, by Sector	59
102	Weighted Distribution of TVET Graduates Who Perceived That They Possess Skills After Completing the Program, by Sex and Program Delivery Mode	60
103	Weighted Distribution of WTR Graduates Who Perceived That They Possess Skills After Completing the Program, by Sex and Program Delivery Mode	60
104	Weighted Distribution of NTR Graduates Who Perceived That They Possess Skills After Completing the Program, by Sex and Program Delivery Mode	60
105	Satisfaction Level of TVET Graduates with the Program Attended, by Sex	61
106	Means for Getting the Present Job of TVET Graduates, by Sex	61
107	Skills Utilization of Employed TVET Graduates	61
108	Skills Utilization of Employed TVET Graduates Under TTIs	62
109	Skills Utilization of Employed TVET Graduates Under Non-TTIs	62
110	Reasons of TVET Graduates for Considering His/Her Skills Acquired Is No Use At All, by Sex	63
111	Association With TVET Graduates' Employability	63
112	Estimated Employment Rate of TVET Graduates, by Highest Educational Attainment	67
113	Estimated Employment Rate of TVET Graduates, by Competency Assessment	67
114	Estimated Employment Rate of TVET Graduates, by Level of Certification	68
115	Estimated Employment Rate of TVET Graduates, by Perception on Whether the Graduates Possess Skills After Completing the Program	68
116	Estimated Employment Rate of TVET Graduates, by Satisfaction of Training Attended	68
117	Estimated Employment Rate of TVET Graduates, by Youth Profiling for Starring Career	68
118	Estimated Employment Rate of TVET Graduates, by Age	69
119	Estimated Coefficients, Odds Ratio and p-values of the Fitted Logistic Regression Model	69
120	Model Assessment	70

LIST OF FIGURES

1	Weighted Percent Distribution of TVET Graduates by Age Group	2
2	Weighted Percent Distribution of TVET Graduates by Delivery Mode of Training	3
3	Weighted Percent Distribution of TVET Graduates by Scholarship Program by Sex	5
4	Weighted Percent Distribution of TVET Graduates by Whether or Not They Took the YP4SC	7
5	Weighted Percent Distribution of TVET Graduates by Type of Program Registration	8
6	Estimated Labor Force Participation Rate of TVET Graduates Under TTI and Non-TTI by Program Delivery Mode	15
7	Estimated Labor Force Participation Rate of TVET Graduates Under TTI and Non-TTI by Region	17
8	Weighted Percentage Distribution of TVET Graduates from TTIs and Non-TTIs by the Length of Job Search	20
9	Estimated Number of TVET Graduates Who are in the Labor Force and Employed by Sex	21
10	Estimated Employment Rate of TVET Graduates Under TTI and Non-TTI by Region	23
11	Estimated Employment Rate of TVET Graduates Under TTI and Non-TTI by Program Delivery Mode	25
12	Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Program Delivery Mode	26
13	Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Region	27
14	Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Occupation Group	28
15	Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Sector	29
16	Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Type of Provider	30
17	Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Certification	30
18	Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Type of Scholarship Program	31
19	Estimated Employment Rate of TVET Graduates Under TTI and Non-TTI by Occupational Group	32
20	Estimated Employment Rate of TVET Graduates Under TTI and Non-TTI, by Nature of Work	39
21	Estimated Employment Rate of TVET Graduates Under TTIs and Non-TTIs, by Location of Work	41
22	Estimated Employment Rate of Certified TVET Graduates Under TTI and Non-TTI, by Sex	42
23	Estimated Employment Rate of Certified TVET Graduates Under TTI and Non-TTI, by Region	45
24	Weighted Distribution of Certified TVET Graduates from Under TTI and Non-TTI, by Class of Worker	46
25	Weighted Distribution of Employed Certified TVET Graduates under TTI and Non-TTI, by Nature of Work	47
26	Weighted Distribution of Employed Certified TVET Graduates under TTI and Non-TTI by Nature of Work	50

27	Employment Rate of Scholar TVET Graduates from Different Scholarship Programs	52
28	Employment Rate of Scholar TVET Graduates from Different Scholarship Programs under TTIs and Non-TTIs	54
29	Box Plot of the Monthly Income Before Training, by Sex	57
30	Box Plot of the Monthly Income After Training, by Sex	57
31	Skill Utilization of Scholar Employed TVET Graduates Under TTIs and Non-TTIs	62
32	Biplot of Employment Status with Type of Provider	65
33	Biplot of Employment Status with Educational Attainment	65
34	Biplot of Employment Status with Availment of Scholarship Program	65
35	Biplot of Employment Status with Competency Assessment	65
36	Biplot of Employment Status with Certification	66
37	Biplot of Employment Status with the Perception Whether the Graduates Possess Skills After Completing the Program	66
38	Biplot of Employment Status with the Satisfaction of Training Attended	66
39	Biplot of Employment Status With Whether the TVET Graduate Took YP4SC or Not	66
40	Biplot of Employment Status With Region	67
41	Biplot of Employment Status With Age Group	67

EXECUTIVE SUMMARY

TESDA produced 1,606,622 TVET graduates in 2016, dominated by females. The largest portion of the TVET graduates came from Region IV-A. On the average, a TVET graduate is 28.49 years old with a standard deviation of 11.2 years. The potential TVET clientele are mainly high school graduates in which about 42% were high school graduates (old curriculum) before taking TVET programs. The largest proportion of the TVET graduates (55.92%) was produced by institution-based mode of training, followed by the community-based mode of training (39.2%). Among the 2016 TVET graduates, 508,314 were recipients of a certain scholarship. This makes up 32% of the population, in which around half were scholars of Training for Work Scholarship Program (TWSP). TVET programs in Tourism sector were the most popular among graduates in 2016, registering the highest number of graduates (22.75%), dominated by females.

Many of the graduates (57%) were produced by WTR programs, while 7% were graduates from programs with No Training Regulations (NTR). Among the WTR graduates, about 78% took the assessment. There were WTR graduates who did not take the assessment because they believed it was not mandatory (21.65%); there was lack of time due to work, school or being abroad (18.96%); the assessment tools/test package were not available (17.5%); and due to financial constraints (9.2%). WTR graduates who took the assessment attained a passing rate of 94.22% and most of them were given certificate of competency for National Certificate (NC) Level II.

The labor force participation rate (LFPR) of 2016 TVET graduates is found to be at 62.2%, in which 72% were employed during the time of the survey. More male graduates (72.23%) than females (63.59%) were reported working at the time of the survey. The highest employment rate was recorded in Region XI. Moreover, those under TTIs registered a higher employment rate than those non-TTIs. The dual training system accounted the highest employment rate at 88.93%, which is considerably higher than the other training modes. On the average, it took for a graduate 2.85 months before getting a job, with deviation of 2.96 months.

Statistical comparison revealed no significant difference in the employment rate among different training delivery modes at 5% level of significance. The employment rate of graduates from ARMM is recorded as the lowest, but not significantly different to that of in Regions VIII, IX, and XII. Whereas, employment rate recorded in Region XI was significantly higher than the other 16 regions. Employment rate across different occupational groups was also not significantly different. Moreover, employment rate was not significantly different from the rates gained by Decorative Crafts, Furniture and Fixtures, and Logistic. Employment rate of graduates from TTI was found to be significantly higher than non-TTI. Conversely, employment rate of certified graduates was not significantly different from non-certified graduates. The same result is noted in the comparison of employment rate across scholarship programs.

Characterizing the employed graduates, it can be said that a quarter of them were hired as service and sales workers. Majority of the employed graduates during the survey were from institution-based training delivery mode. A large portion (75.77%) of employed graduates is classified as wage and salary workers. Many of the employed graduates were from the Tourism sector (Hotel and Restaurant) with 20.77%, followed by electrical and electronics sector with 12.22%. About 51% of the employed graduates were already permanent in their jobs or businesses. Majority (81.82%) of the graduates, half of which were females, chose to work within their province.

It is estimated that 831,352 (91.33%) of the graduates have already been given a certification as a recognition for meeting the standard competency in the knowledge and skills required in a certain sector, of which 74% were working at the time of the survey. In both male and female certified graduates, TTIs had a higher employment rate than non-TTIs. Majority (93%) of the wage and salary workers were already given certification for meeting the competency standards. Also, majority of the own account workers (91.69%) and those involved in the unpaid family work (95.76%) were already certified graduates. Likewise, most of the graduates in different occupational groups took

and passed the competency assessment. Alternatively, the highest percentage of employed graduates who were not yet passers of the assessment were the skilled agricultural, forestry and fishery workers. Most employed graduates were competency assessment passers, in which the highest employment rate was recorded for those working for different employers on a day-to-day or week-to-week basis. It was also found that many skilled TVET clients are given incentive by their employers, in the form of salary increase, to enhance their skills and productivity.

Only about 32% of the TVET graduates availed a scholarship while enrolled in a training program, in which around 76% were employed. STEP scholars accounted for the highest employment rate at 77.62%, slightly outnumbering other scholarship programs. Majority of the graduates from many of the different sectors funded by the TWSP program were actively working during the survey.

Males, on the average, earned ₱11,323.06 monthly, while females earned ₱10,869.89. Moreover, graduates from non-TTI earned higher (₱11,129.23) than TTI (₱10,377.85), on the average. Higher monthly income was recorded for (1) Maritime with ₱20,822.78, (2) TVET with ₱19,411.28, (3) Language with ₱17,933.67, and (4) Information and Communication Technology with ₱ 14,629.03.

Majority of the graduates from all the training delivery modes thought that the trainings gave them the skills expected for them to gain. However, it is still important to note that there were graduates, though very few, who felt that attending the training did not help them level up their skills. Overall, majority of the graduates were satisfied with the trainings they attended at TESDA.

Many of the graduates got their job through referrals (34.28%) and walk-in applications (31.95). Among the employed graduates, only 40% deemed the skills that they gained from the attended programs as very useful in their current jobs.

Statistical analysis for association found that educational attainment, age group and region of a graduate were moderately associated with a graduate's employability, while the type of provider, availing of a scholarship program, took competency, took YP4SC or not, level of certification, perception, satisfaction of training attended, were weakly associated with one's employability. Furthermore, logistic regression analysis revealed that type of provider, perception whether or not the graduates possess the skills after completing the program and age group can be considered as determinant of the likelihood for a graduate to be employed. A higher employment rate was recorded for those who affirmed that they gained skills from the training than those who did not. Also, a graduate aged 25-34, 35-44, 45-54; and 55-64 is 1.5 times, 1.6 times, twice, and thrice, respectively, more likely to be employed than a graduate aged 15-24 years. Conversely, the odds of a TVET graduate to be employed is reduced to about 21.6% if one is from non-TTIs.

Based on the findings, although majority of the graduates were employed at the time of the survey, still a considerable number of graduates (of about 28%) were not yet employed, not meeting the target that all graduates will be employed after attending a program. Regions and programs with a large portion of unemployed graduates shall be taken into consideration. Enhancing the job bridging program of the government is suggested. Also, as the implication of the many graduates opting not to take the competency assessment specifically for WTR programs, it is recommended that the mandatory assessment policy be reviewed for a more effective implementation of the said policy. Moreover, there were graduates who were not satisfied with the program attended because they felt that they did not possess the skills they were expecting to gain in attending the TESDA program. Hence, it is recommended that programs be reviewed in accordance to the demand of the industry, especially the dual training system for WTR programs and the enterprise-based for NTR programs.

RESULTS AND DISCUSSION

1. Profile of TVET Graduates

In 2016, TESDA produced 1,606,622 TVET graduates all over the country, of which about 53% of the population were female graduates. The largest portion of the TVET graduates came from Region IV-A with 16.53%, which was slightly higher than NCR with 15.85% (Table 1). ARMM had the lowest number at 0.96%. It can be further noticed that great deviation in the number of female and male graduates was recorded in ARMM. Alternatively, regions with more male TVET graduates than females include CARAGA, Regions I, II, III, IV-B, VIII, and XII.

Table 1. Weighted Distribution of TVET Graduates by Region, Philippines: 2016

Region	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
ARMM	9,538	61.62	5,942	38.38	15,480	0.96
CAR	18,770	54.81	15,473	45.19	34,243	2.13
CARAGA	14,632	46.32	16,960	53.68	31,592	1.97
NCR	152,645	59.93	102,058	40.07	254,703	15.85
I	35,338	46.14	41,242	53.86	76,580	4.77
II	27,991	49.70	28,328	50.30	56,319	3.51
III	73,526	49.82	74,061	50.18	147,587	9.19
IV-A	132,936	50.05	132,672	49.95	265,608	16.53
IV-B	16,205	44.35	20,336	55.65	36,541	2.27
V	42,223	54.42	35,367	45.58	77,590	4.83
VI	62,729	57.35	46,642	42.65	109,371	6.81
VII	72,685	53.22	63,886	46.78	136,571	8.50
VIII	36,880	47.20	41,253	52.80	78,133	4.86
IX	35,950	52.16	32,971	47.84	68,921	4.29
X	36,312	51.27	34,508	48.73	70,820	4.41
XI	40,457	55.47	32,482	44.53	72,939	4.54
XII	36,040	48.95	37,584	51.05	73,624	4.58
Total	844,856	52.59	761,766	47.41	1,606,622	100.00

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

Half of the graduates in 2016 fall into 15-24 age group (Figure 1), dominated by males at 55.06% (Table 2). About a quarter belong to 25-34 years of age, with almost the same number of male and female graduates. Moreover, the youngest graduate is a 12-year old male, while the oldest is an 86-year old female. On the average, a TVET graduate is 28.49 years old with a standard deviation of 11.2 years. Fifty percent of the graduates are at most 24 years of age. Female graduates (29.84) are older than males (26.99) by almost 3 years, on the average. It can also be noted that there were very few senior citizens, as described by the coefficient of skewness of 1.38 (Table 3).

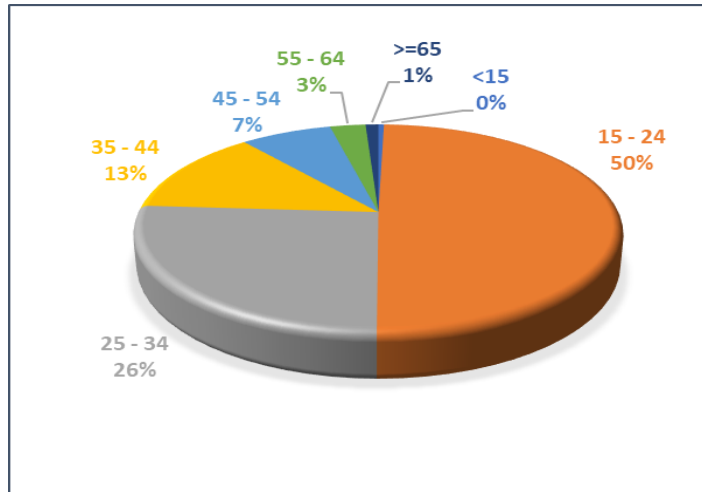


Figure 1. Weighted percent distribution of TVET graduates by Age Group, Philippines: 2016

Table 2. Weighted Distribution of TVET Graduates by Age Group, By Sex, Philippines: 2016

Age group	Sex					
	Female		Male		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Below 15	3,115	44.94	3,816	55.06	6,932	0.43
15 - 24	383,190	48.03	414,647	51.97	797,837	49.66
25 - 34	207,713	49.86	208,909	50.14	416,622	25.93
35 - 44	134,595	63.94	75,913	36.06	210,508	13.10
45 - 54	76,449	66.89	37,836	33.11	114,285	7.11
55 - 64	29,384	66.12	15,059	33.88	44,443	2.77
65 and over	10,408	65.07	5,587	34.93	15,995	1.00
Total	844,856	52.59	761,766	47.41	1,606,622	100.00

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

Table 3. Summary Statistics for Age by Sex, Philippines: 2016

Statistics	Sex		Overall
	Female	Male	
Minimum	13.00	12.00	12.00
Maximum	86.00	78.00	86.00
Mean	29.84	26.99	28.49
Standard deviation	12.00	10.04	11.20
Skewness	1.13	1.71	1.38
Percentile			
1%	15.00	16.00	15.00
5%	17.00	17.00	17.00
10%	18.00	18.00	18.00
25%	21.00	20.00	20.00
50%	26.00	24.00	24.00
75%	37.00	30.00	34.00
90%	48.00	41.00	45.00
95%	54.00	49.00	52.00
99%	66.00	62.00	64.00

As one of the education subsectors in the Philippines that provide education and training for employment, TVET has a wide range of clientele as revealed in Table 4. Its potential TVET clientele are mainly high school graduates, and this is evident in the current study, in which about 42% were high school graduates (old curriculum) before taking TVET programs. A few of them were college undergraduates or college graduates, constituting 15.14% and 15.45% of the population, respectively. It is also noticeable that TVET clients with post-degrees, the majority of which were females, considered the TVET programs significant in improving their skills and productivity.

Table 4. Weighted Distribution of TVET Graduates, by Sex, by Highest Grade Completed, Philippines: 2016

Highest Educational Attainment	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
No grade completed	1,605	61.49	1,005	38.51	2,610	0.16
Elementary undergraduate	11,414	68.14	5,338	31.86	16,752	1.04
Elementary graduate	15,333	59.10	10,609	40.90	25,942	1.61
Junior high school undergraduate	19,249	55.23	15,601	44.77	34,850	2.17
Junior high school completer	20,386	51.96	18,846	48.04	39,232	2.44
Senior high school undergraduate	27,916	53.69	24,076	46.31	51,992	3.24
Senior high school completer	3,668	54.89	3,015	45.11	6,683	0.42
High school undergraduate (old curriculum)	62,043	51.72	57,910	48.28	119,953	7.47
High school graduate (old curriculum)	322,088	48.18	346,364	51.82	668,452	41.61
TVET undergraduate	27,906	47.78	30,499	52.22	58,405	3.64
TVET graduate	42,834	54.15	36,270	45.85	79,104	4.92
College level undergraduate	128,656	52.89	114,596	47.11	243,252	15.14
College level graduate	154,213	62.14	93,946	37.86	248,159	15.45
Master's degree	5,201	80.72	1,242	19.28	6,443	0.40
Doctoral degree	1,219	52.27	1,113	47.73	2,332	0.15
Not indicated	1,126	45.75	1,335	54.25	2,461	0.15
Total	844,857	52.59	761,765	47.41	1,606,622	100.00

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

Figure 2 shows that the largest proportion of the TVET graduates (55.92%) was produced by institution-based mode of training, which can be explained by the enormous number of TVET institutions that the country has right now. This is followed by the community-based mode of training (39.2%), which intends to provide livelihood and employment opportunities for the poor and marginal groups. These two modes covered the majority of the TVET graduates. In contrast, very few graduated from enterprise-based, dual training system, and mobile delivery modes of training.

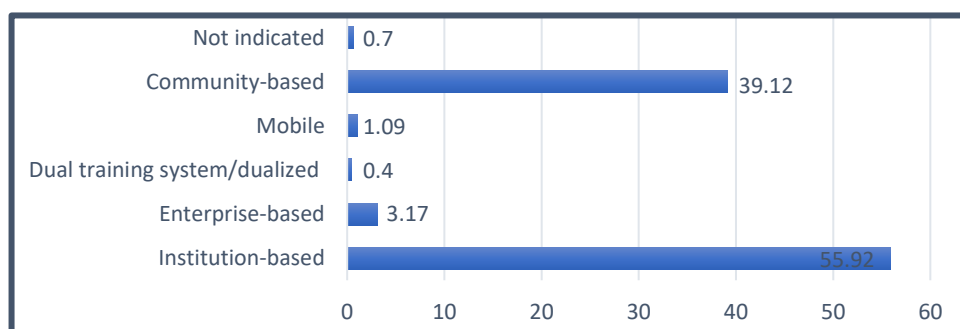


Figure 2. Weighted Percent Distribution of TVET Graduates by Delivery Mode of Training, Philippines: 2016

It is apparent across regions that the majority were graduates from institutions (Table 5). It is also evident that the only regions with TVET graduates from the dual training system were NCR, Region III, IV-A, VII, VIII, IX and XI. Meanwhile, graduates from mobile training came from different regions, except in CAR, CARAGA, and Regions I, VIII and X.

Table 5. Weighted Distribution of TVET Graduates by Region, by Delivery Mode of Training, Philippines: 2016

Region	Program Delivery Mode													
	Institution-based		Enterprise-based		Dual training system/dualized training program		Mobile training program		Community-based		Not indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
ARMM	10,930	70.61	318	2.05	0	0.00	318	2.05	3,596	23.23	318	2.05	15,480	0.96
CAR	20,479	59.36	825	2.39	0	0.00	0	0.00	12,940	37.50	259	0.75	34,502	2.15
CARAGA	16,308	52.05	1,136	3.62	0	0.00	0	0.00	13,889	44.33	0	0.00	31,333	1.95
NCR	150,438	59.30	3,674	1.45	1,002	0.39	1,002	0.39	96,691	38.11	1,897	0.75	253,701	15.79
I	47,265	61.72	3,954	5.16	0	0.00	0	0.00	25,361	33.12	0	0.00	76,580	4.77
II	26,401	46.88	1,017	1.81	0	0.00	784	1.39	27,535	48.89	581	1.03	56,319	3.51
III	92,991	63.74	11,368	7.79	1,705	1.17	1,308	0.90	39,700	27.21	515	0.35	145,882	9.08
IV-A	165,773	62.52	11,372	4.29	442	0.17	2,655	1.00	82,711	31.19	2,655	1.00	265,165	16.50
IV-B	25,647	70.19	263	0.72	0	0.00	1,054	2.88	9,423	25.79	154	0.42	36,541	2.27
V	47,413	61.11	1,089	1.40	0	0.00	2,931	3.78	25,876	33.35	281	0.36	77,590	4.83
VI	56,651	51.80	4,953	4.53	0	0.00	291	0.27	47,184	43.14	291	0.27	109,371	6.81
VII	51,486	38.23	4,112	3.05	1,882	1.40	3,382	2.51	75,402	55.98	307	0.23	134,689	8.38
VIII	40,126	51.47	413	0.53	172	0.22	0	0.00	36,905	47.34	517	0.66	77,961	4.85
IX	29,415	42.83	414	0.60	250	0.36	2,829	4.12	36,013	52.44	0	0.00	68,671	4.27
X	45,945	64.88	748	1.06	0	0.00	0	0.00	21,884	30.90	2,243	3.17	70,820	4.41
XI	21,788	30.27	719	1.00	961	1.34	726	1.01	47,778	66.38	968	1.34	71,978	4.48
XII	45,722	62.10	4,332	5.88	0	0.00	217	0.29	23,137	31.43	217	0.29	73,624	4.58
Total	894,780	55.69	50,706	3.16	6,415	0.40	17,497	1.09	626,021	38.97	11,202	0.70	1,606,622	100.00

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

Among the 2016 TVET graduates, 508,314 were recipients of a certain scholarship. This makes up 32% of the population, in which around half were scholars of Training for Work Scholarship Program (TWSP), a program that provides immediate interventions to meet the need for highly critical skills. Moreover, the remaining half of the population were granted a scholarship by the Private Education Students Fund Assistance (PESFA), Skills Training for Employment Program (STEP) and other programs such as those funded by the local government units (LGUs), civil society organizations (CSOs), among others. A slight difference in the number of male and female scholars of TWSP can also be noted from Table 6 and Figure 3. Conversely, a considerably higher number of PESFA scholars were males, while more female were scholars of STEP and other programs.

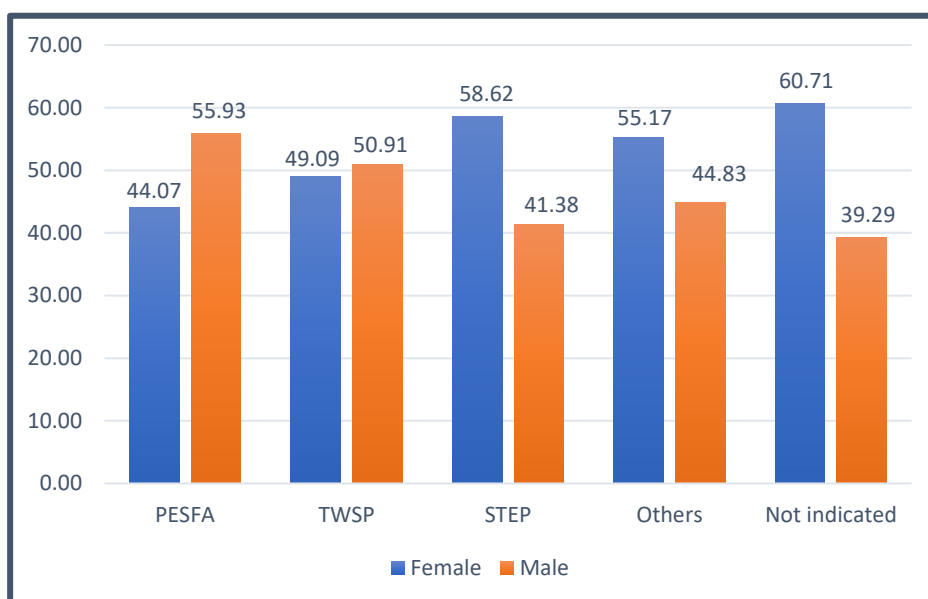


Figure 3. Weighted Percent Distribution of TVET Graduates by Scholarship Program, by Sex, Philippines: 2016

Table 6. Weighted Distribution of TVET Graduates by Scholarship Program, by Sex, Philippines: 2016

Scholarship Program	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
PESFA	11,212	44.07	14,230	55.93	25,442	5.01
TWSP	124,821	49.09	129,432	50.91	254,253	50.02
STEP	27,136	58.62	19,153	41.38	46,289	9.11
Others	95,229	55.17	77,375	44.83	172,604	33.96
Not indicated	5,905	60.71	3,821	39.29	9,726	1.91
Total	264,303	52.00	244,011	48.00	508,314	100.00

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

TVET programs in Tourism sector were the most popular among graduates in 2016, registering the highest number of graduates (22.75%), dominated by females. Electrical and electronic sectors followed at 12.84%, in which majority were males (63.66%). Likewise, sectors dominated by male graduates include Automotive and Land Transportation, Construction, Maritime, Metals and Engineering, and Utilities (Table 7).

Table 7. Weighted Distribution of TVET Graduates by Sector, by Sex, Philippines: 2016

Sector	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Agriculture Forestry and Fisheries	47,933	57.65	35,213	42.35	83,145	5.18
Automotive and Land Transportation	12,598	10.31	109,594	89.69	122,192	7.61
Construction	8,114	12.88	54,885	87.12	62,999	3.92
Decorative Crafts	374	52.80	334	47.20	708	0.04
Electrical and Electronics	74,986	36.34	131,350	63.66	206,336	12.84
Entrepreneurship	21,121	65.29	11,230	34.71	32,351	2.01
Footwear	541	100.00	0	0.00	541	0.03

Sector	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Furniture and Fixtures	1,096	60.28	722	39.72	1,818	0.11
Garments	30,177	81.90	6,668	18.10	36,846	2.29
Heating, Ventilation, Airconditioning	0	0.00	10,009	100.00	10,009	0.62
Human Health/Health Care	69,728	76.83	21,032	23.17	90,761	5.65
Information and Communication	65,154	57.24	48,682	42.76	113,836	7.09
Language	12,919	52.29	11,788	47.71	24,707	1.54
Logistics	291	57.36	217	42.64	508	0.03
Maritime	257	6.01	4,029	93.99	4,286	0.27
Metals and Engineering	15,205	13.82	94,818	86.18	110,023	6.85
Processed Food and Beverages	44,560	71.56	17,713	28.44	62,274	3.88
Social, Community Development	89,919	74.51	30,767	25.49	120,686	7.51
TVET	6,264	60.85	4,029	39.15	10,293	0.64
Tourism (Hotel and Restaurant)	249,005	68.13	116,493	31.87	365,498	22.75
Utilities	0	0.00	145	100.00	145	0.01
Visual Arts	684	100.00	0	0.00	684	0.04
Wholesale and Retail Trading	4,116	55.92	3,245	44.08	7,361	0.46
Others	89,812	64.79	48,803	35.21	138,616	8.63
Total	844,856	52.59	761,766	47.41	1,606,622	100.00

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

Since TVET provides education and training to clients primarily for employment purposes, the largest portion (44.19%) of the 2016 graduates certainly took the programs to secure a job. Nonetheless, a considerable large number wanted to upgrade their skills, many of whom are females seeking to increase their income, satisfy a hobby, or for personal reasons (Table 8).

Table 8. Weighted Distribution of TVET Graduates by their Reasons for Taking Up TVET Programs. Philippines, 2016

Reasons for taking up the program	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Employment/to get job	344,787	48.56	369,278	52.01	710,000	44.19
Promotion	9,785	51.50	9,581	50.43	19,000	1.18
To increase in income	42,199	71.52	16,578	28.10	59,000	3.67
Skills upgrading/enhancement	274,635	53.85	235,584	46.19	510,000	31.74
TVET qualification is popular	20,270	45.05	24,373	54.16	45,000	2.80
Personal use/interest/hobby	112,239	62.35	64,744	35.97	180,000	11.20
Others	39,302	49.75	39,970	50.59	79,000	4.92
Not indicated	1,638	49.71	1,657	50.28	3,296	0.21
Total	844,856	52.59	761,766	47.41	1,606,622	100.00

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

The Youth Profiling for Starring Careers (YP4SC) is a TESDA program meant as a career guide for clients to help them make informed decisions on which career to pursue. Despite this, the majority of the graduates, mostly females, revealed that they did not consider taking such a program (Figure 4). Consequently, the management of TESDA needs to review the program to maximize its use. Table 9 presents the detailed distribution of TVET graduates based on whether they took the YP4SC or not according to scholarships. Regardless of the scholarship received, it appears that many did not take YP4SC.

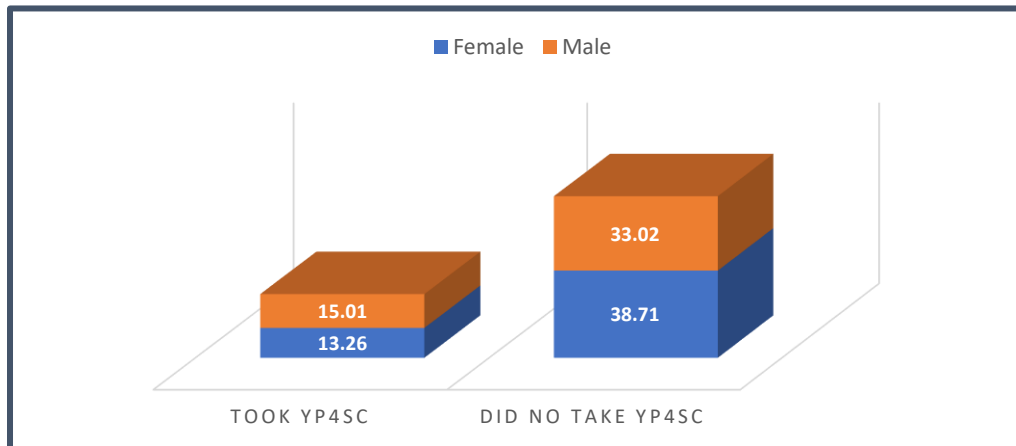


Figure 4. Weighted Percent Distribution of TVET Graduates by Whether or Not They took the YP4SC, Philippines: 2016

Table 9. Weighted Distribution of TVET Graduates By Youth Profiling for Starring Careers (YP4SC), by Scholarship Program, by Sex, Philippines: 2016

Scholarship Program	Took YP4SC				Did not Take YP4SC				Total	
	Female		Male		Female		Male		Freq	% ^b
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a		
PESFA	3,292	12.94	4,300	16.90	7,920	31.13	9,930	39.03	25,442	5.07
TWSP	38,294	15.22	46,794	18.60	85,261	33.88	81,299	32.31	251,649	50.18
STEP	7,408	16.36	4,986	11.01	19,180	42.35	13,715	30.28	45,289	9.03
Others	14,948	8.79	18,868	11.09	78,414	46.10	57,862	34.02	170,093	33.92
Not indicated	2,548	28.16	335	3.70	3,357	37.10	2,808	31.04	9,047	1.80
Total	66,490	13.26	75,283	15.01	194,132	38.71	165,615	33.02	501,519	100.00

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

2. Competency Assessment and Certification

TESDA follows the assessment and certification of competencies of the middle-level skilled workers to ensure acquisition of competencies required by a certain qualification. The said assessment is mandatory to those programs with training regulations. Despite the policy, however, only about 52% took the assessment during the survey (Table 10).

Table 10. Weighted Distribution of TVET Graduates as Whether They Took Competency Assessment or Not by Sex, Philippines: 2016

Took Competency	Sex					
	Female		Male		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	433,556	49.09	449,547	50.91	883,103	51.85
No	401,780	56.78	305,869	43.22	707,649	44.05
Not indicated	9,520	59.99	6,350	40.01	15,870	0.99
Total	844,856	52.59	761,766	47.41	1,606,622	100.00

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

WTR programs of TESDA are those registered under the Unified TVET Program Registration and Accreditation System (UTPRAS) with promulgated training regulations. As seen in Figure 5, many of the graduates (57%) were produced by WTR programs, while 7% were graduates from programs with No Training Regulations (NTR). Likewise, about 34% of the graduates were under those programs classified as monitored – programs with TVET content conducted by partners such as LGUs, NGOs, and other government agencies monitored by TESDA field offices (Table 11).

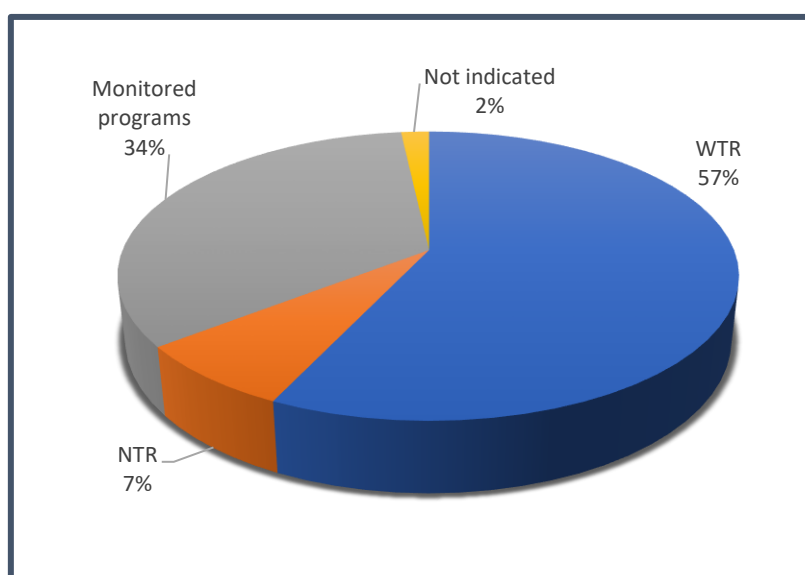


Figure 5. Weighted Percent Distribution of TVET Graduates by Type of Program Registration, Philippines: 2016

Table 11. Weighted Distribution of TVET Graduates by Type of Program Provided, by Sex, Philippines: 2016

Type of Program	Sex					
	Female		Male		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
WTR	449,736	49.11	466,075	50.89	915,811	57.00
NTR	63,790	53.57	55,289	46.43	119,079	7.41
Monitored	316,090	58.11	227,896	41.89	543,985	33.86
Not indicated	15,240	54.93	12,506	45.07	27,746	1.73
Total	844,856	52.59	761,766	47.41	1,606,622	100.00

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

Among the WTR graduates, about 78% took the assessment (Table 12), while around 21% did not take it for different reasons.

There were WTR graduates who did not take the assessment because they believed it was not mandatory (21.65%); there was lack of time due to work, school or being abroad (18.96%); the assessment tools/test package were not available (17.5%); and due to financial constraints (9.2%). Nonetheless, many of them did not cite their reasons (Table 13).

The implication of the many graduates opting not to take the competency assessment specifically for WTR programs entails that mandatory assessment policy be reviewed for it to be properly implemented and actively promoted.

Table 12. Weighted Distribution of TVET Graduates under WTR Who Took Competency Assessment by Sex, Philippines: 2016

Took Competency	Sex					
	Female		Male		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Yes	340,867	47.79	372,444	52.21	713,310	77.89
No	104,789	53.66	90,502	46.34	195,291	21.32
Not indicated	4,080	56.60	3,129	43.40	7,210	0.79
Total	449,736	49.11	466,075	50.89	915,811	100.00

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

Table 13. Weighted Distribution of WTR Graduates by their Reasons for Not Taking Competency Assessment, Philippines: 2016

Reasons for not taking competency assessment	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Assessment tools/test package not available	19,908	58.24	14,275	41.76	34,183	17.50
Assessment Officer/Assessor not available	1,123	51.06	1,076	48.94	2,199	1.13
No assessment officer/assessor in the area	0	0.00	734	100.00	734	0.38
Assessment center not available/not accessible	428	38.72	678	61.28	1,107	0.57
No assessment center in the area	334	22.61	1,143	77.39	1,477	0.76
Assessment not mandatory	22,666	53.62	19,606	46.38	42,272	21.65

Reasons for not taking competency assessment	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Assessment tools/test package not available	19,908	58.24	14,275	41.76	34,183	17.50
Assessment Officer/Assessor not available	1,123	51.06	1,076	48.94	2,199	1.13
No assessment officer/assessor in the area	0	0.00	734	100.00	734	0.38
Skills and knowledge learned not sufficient	5,475	73.92	1,932	26.08	7,407	3.79
No money/financial constraints	8,443	46.98	9,528	53.02	17,971	9.20
No time/working/schooling/abroad	20,401	55.19	16,564	44.81	36,966	18.93
Schedule not known	9,174	58.42	6,531	41.58	15,705	8.04
Others	7,005	45.85	8,272	54.15	15,277	7.82
Not indicated	9,830	49.17	10,163	50.83	19,993	10.24
Total	104,789	53.66	90,502	46.34	195,291	100.00

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

It is remarkable that WTR graduates who took the assessment attained a passing rate of 94.22% (Table 14). Impressive certification rates were seen in all sectors. Moreover, outstanding performance were achieved for graduates of Entrepreneurship, Furniture and Fixtures, Language, Visual Arts, and Whole Sale Trading. Hence, it can be said that the majority of TVET graduates have satisfied the competency standards.

Table 14. Certification Rates of TVET Graduates of WTR Programs, by Sector, Philippines: 2016

Sector	Took Assessment		Assessment Result					
			Passed		Failed		Not indicated	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Agriculture Forestry and Fisheries	17,510	2.46	16,397	93.64	1,113	6.36	0	0.00
Automotive and Land Transportation	70,998	9.98	67,988	95.76	2,301	3.24	709	1.00
Construction	39,816	5.60	39,154	98.34	405	1.02	257	0.65
Electrical and Electronics	102,833	14.46	94,600	91.99	7,338	7.14	896	0.87
Entrepreneurship	467	0.07	467	100.00	0	0.00	0	0.00
Furniture and Fixtures	73	0.01	73	100.00	0	0.00	0	0.00
Garments	15,076	2.12	14,110	93.60	966	6.40	0	0.00
Heating, Ventilation, Airconditioning	7,682	1.08	7,447	96.93	0	0.00	235	3.07
Human Health/Health Care	43,203	6.07	41,767	96.68	1,436	3.32	0	0.00
Information and Communication	25,357	3.57	21,770	85.85	2,811	11.09	776	3.06
Language	355	0.05	355	100.00	0	0.00	0	0.00
Maritime	2,521	0.35	2,310	91.62	211	8.38	0	0.00
Metals and Engineering	79,222	11.14	75,281	95.02	3,942	4.98	0	0.00
Processed Food and Beverages	17,884	2.51	16,931	94.67	954	5.33	0	0.00
Social, Community Development	53,871	7.57	45,664	84.77	7,950	14.76	257	0.48
TVET	8,801	1.24	8,432	95.81	368	4.19	0	0.00
Tourism (Hotel and Restaurant)	222,257	31.25	214,044	96.30	7,454	3.35	759	0.34
Visual Arts	242	0.03	242	100.00	0	0.00	0	0.00
Wholesale and Retail Trading	515	0.07	515	100.00	0	0.00	0	0.00
Others	2,588	0.36	2,588	100.00	0	0.00	0	0.00
TOTAL	711,273	100	670,134	94.22	37,249	5.24	3,890	0.55

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

Most graduates (70.62%) already given certificate of competency achieved National Certificate (NC) Level II. Most of male (80.14%) certified graduates were given NC I, while most females (65.44%) were given NC III (Table 15).

Table 15. Level of Certification of TVET Graduates by Sex, Philippines: 2016

Certification Level	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
COC	57,560	58.80	40,327	41.20	97,887	11.02
NC I	10,240	19.86	41,328	80.14	51,568	5.80
NC II	308,605	49.19	318,830	50.81	627,434	70.62
NC III	28,089	65.44	14,835	34.56	42,924	4.83
NC IV	1,670	52.78	1,494	47.22	3,164	0.36
N TTC Level I	2,511	49.89	2,522	50.11	5,032	0.57
N TTC Level II	602	64.72	328	35.28	931	0.10
Not indicated	32,722	54.98	26,791	45.02	59,513	6.70
Total	441,999	49.75	446,454	50.25	888,453	93.30

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

Moreover, for the monitoring purposes of the different scholarship programs, Table 16 reveals the percentage of graduates who were already awarded the certification. As seen, the majority of the graduates with scholarships were already passers of the competency assessment and were given certification. It can also be noted that STEP scholars exhibited the highest rate, albeit with only slight difference from other scholarship programs.

Table 16. Weighted Distribution of TVET Graduates, by Scholarship Programs, by Certification, Philippines: 2016

Scholarship Program	Certification							
	Certified		Not Certified		Not indicated		Total	
	Frequency	% ^a	Frequency	% ^a	Frequency	% ^a	Frequency	% ^b
PESFA	20,124	91.22	1,938	8.78	0	0.00	22,061	5.57
TWSP	201,798	93.34	13,320	6.16	1,072	0.50	216,189	54.54
STEP	35,137	96.83	1,150	3.17	0	0.00	36,287	9.15
Others	109,707	96.67	3,502	3.09	281	0.25	113,490	28.63
Not indicated	7,644	91.17	529	6.31	211	2.52	8,385	2.12
Total	374,409	94.45	20,439	5.16	1,564	0.39	396,412	100.00

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

3. Labor Force Participation (under TTIs and Non-TTIs)

Among 2016 TVET graduates, those in the labor force was reported at 999,346. This places the labor force participation rate (LFPR) at 62.2% (Table 17), implying that 6 in 10 of the population of TVET graduates are either employed or unemployed. It can also be seen that the LFPR in both female and male graduates were at par with the overall LFPR.

Table 17. Labor Force Participation Rate of TVET Graduates by Sex, Philippines: 2016

Sex	Not in the Labor Force		In the Labor Force		Total Graduates	
	Frequency	Percentage ^a	Frequency	LFPR	Frequency	Percentage ^b
Female	329,949	39.05	514,907	60.95	514,907	52.59
Male	277,327	36.41	484,439	63.59	484,439	47.41
Total	607,276	37.80	999,346	62.20	999,346	100.00

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

Graduates with ages of 25 to 64 years were active in the labor force with participation rate of 70-78%, while those at 35 to 44 were the most active (78.07%).

Those who earned a college degree and post-graduate studies shared a large labor force participation rate. Likewise, it can be seen in Table 19 that most who had no grade completed before taking a TVET program were also active in the labor force (90.14%). Meanwhile, low participation rate was recorded for junior high schools and senior high school undergraduates. This could be explained by the possibility that these graduates continued their study in college.

Table 18. Labor Force Participation Rate of TVET Graduates, by Age Group, Philippines: 2016

Age group	Not in the Labor Force		In the Labor Force		Total Graduates	
	Frequency	Percentage ^a	Frequency	LFPR ^b	Frequency	Percentage ^c
Below 15	6,932	100.00	0	0.00	6,932	0.43
15 – 24	405,120	50.78	392,717	49.22	797,837	49.66
25 – 34	98,602	23.67	318,020	76.33	416,622	25.93
35 – 44	46,166	21.93	164,343	78.07	210,508	13.10
45 – 54	30,041	26.29	84,244	73.71	114,285	7.11
55 – 64	12,963	29.17	31,480	70.83	44,443	2.77
65 and over	7,453	46.60	8,542	53.40	15,995	1.00
Total	607,276	37.80	999,346	62.20	1,606,622	100.00

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

Table 19. Labor Force Participation Rate of TVET Graduates, by Highest Grade Completed, Philippines: 2016

Highest Educational Attainment	Not in the Labor Force		In the Labor Force		Total Graduates	
	Frequency	% ^a	Frequency	LFPR	Frequency	% ^b
No grade completed	257	9.86	2,353	90.14	2,611	0.16
Elementary undergraduate	6,169	36.83	10,583	63.17	16,752	1.04
Elementary graduate	11,333	43.69	14,609	56.31	25,942	1.61
Junior high school undergraduate	29,842	85.63	5,007	14.37	34,850	2.17
Junior high school completer	28,952	73.80	10,281	26.20	39,233	2.44

Highest Educational Attainment	Not in the Labor Force		In the Labor Force		Total Graduates	
	Frequency	% ^a	Frequency	LFPR	Frequency	% ^b
Senior high school undergraduate	44,851	86.27	7,141	13.73	51,992	3.24
Senior high school completer	2,561	38.31	4,123	61.69	6,684	0.42
High school undergraduate (old curriculum)	58,668	48.91	61,286	51.09	119,954	7.47
High school graduate (old curriculum)	230,731	34.52	437,722	65.48	668,452	41.61
Techvoc undergraduate	24,582	42.09	33,823	57.91	58,405	3.64
Techvoc graduate	19,778	25.00	59,325	75.00	79,104	4.92
College level undergraduate	98,448	40.47	144,803	59.53	243,251	15.14
College level graduate	49,547	19.97	198,611	80.03	248,158	15.45
Master's degree	631	9.79	5,812	90.21	6,443	0.40
Doctoral degree	0	0.00	2,331	100.00	2,331	0.15
Not indicated	926	37.62	1,535	62.38	2,461	0.15
Total	607,276	37.80	999,346	62.20	1,606,622	100.00

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

Majority of the graduates from the different regions of the country were involved in the labor force, except those from Region VII with only 48.08%. Region IV-B posted the highest labor participation rate at 77.63%, indicating that about 8 in 10 TVET graduates are in the labor force (Table 20).

Table 20. Labor Force Participation Rate of TVET Graduates, by Region, Philippines: 2016

Region	Not in the Labor Force		In the Labor Force		Total Graduates	
	Frequency	Percentage ^a	Frequency	LFPR ^b	Frequency	Percentage ^c
ARMM	5,069	32.75	10,411	67.25	15,480	0.96
CAR	10,302	30.08	23,941	69.92	34,243	2.13
CARAGA	10,385	32.87	21,207	67.13	31,592	1.97
NCR	75,172	29.51	179,531	70.49	254,703	15.85
I	32,745	42.76	43,835	57.24	76,580	4.77
II	21,354	37.92	34,965	62.08	56,319	3.51
III	60,773	41.18	86,814	58.82	147,587	9.19
IV-A	89,125	33.56	176,483	66.44	265,608	16.53
IV-B	8,173	22.37	28,368	77.63	36,541	2.27
V	27,545	35.50	50,045	64.50	77,590	4.83
VI	44,083	40.31	65,288	59.69	109,371	6.81
VII	76,846	56.27	59,725	43.73	136,571	8.50
VIII	31,985	40.94	46,148	59.06	78,133	4.86
IX	35,785	51.92	33,136	48.08	68,921	4.29
X	24,173	34.13	46,647	65.87	70,820	4.41
XI	26,989	37.00	45,950	63.00	72,939	4.54
XII	26,770	36.36	46,854	63.64	73,624	4.58
Total	607,276	37.80	999,346	62.20	1,606,622	100.00

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

Table 21 shows that graduates of the enterprise-based mode of training were the most active in the labor force with reported participation rate of 74.27%. This is followed by those in mobile training program (70.37%) and institution-based program (65.04%). Despite small number of graduates from enterprise-based program, a large portion of them were active in the labor force because of their exposure in the workplace.

Table 21. Labor Force Participation Rate of TVET Graduates, by Training Delivery Mode, Philippines: 2016

Program Delivery Mode	Not in the Labor Force		In the Labor Force		Total Graduates	
	Frequency	Percentage ^a	Frequency	LFPR ^b	Frequency	Percentage ^c
Institution-based	312,810	34.96	581,970	65.04	894,780	55.69
Enterprise-based	13,048	25.73	37,659	74.27	50,706	3.16
Dual training system/ dualized training program	2,967	46.26	3,447	53.74	6,415	0.40
Mobile training program	5,185	29.63	12,312	70.37	17,497	1.09
Community-based	269,091	42.98	356,931	57.02	626,022	38.97
Not indicated	4,175	37.27	7,027	62.73	11,202	0.70
Total	607,276	37.80	999,346	62.20	1,606,622	100.00

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

TESDA continues to undertake direct training provisions to its growing enrollees through their schools and training centers, which collectively called as TESDA Technology Institutions (TTIs). TTIs are training providers directly manage by TESDA, while non-TTIs are private and public institutions (such as SUCs, LUCs, LGUs) with TESDA registered programs. Considering this, the labor force participation of the TVET graduates was analyzed separately for TTIs and non-TTIs.

Among the 2016 TVET graduates, about 256,068 or 16% were from TTIs. As seen in Table 22, labor force participation rate of those from TTIs (72.31%) was a bit higher than those from non-TTIs (60.28%). This illustrates that about 7 in 10 TTI graduates and 6 in 10 non-TTI graduates actively participated in the labor force during the time of the survey.

Table 22. Labor Force Participation Rate of TVET Graduates, by Type of Provider, Philippines: 2016

Type of Provider	Not in the Labor Force		In the Labor Force		Total Graduates	
	Frequency	Percentage ^a	Frequency	LFPR ^b	Frequency	Percentage ^c
TTI	70,894	27.69	185,174	72.31	256,068	15.94
Non-TTI	536,382	39.72	814,173	60.28	1,350,554	84.06
Total	607,276	37.80	999,346	62.20	1,606,622	100.00

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

In Tables 23 and 24, graduates' participation in the labor force is further described by their type of provider and program delivery mode. Those under the institution-based program had the highest share in the TTI's labor participation rate at 72.74%. This is slightly higher than those shared by the graduates from community-based and enterprise-based programs. Conversely, the highest share of labor participation rate of the non-TTI's graduates came from the enterprise-based program (74.39%) and mobile training program (71.66%).

Table 23. Labor Force Participation Rate of TVET Graduates under TTI, by Training Delivery Mode, Philippines: 2016

Program Delivery Mode	Not in the Labor Force		In the Labor Force		Total Graduates	
	Frequency	Percentage ^a	Frequency	LFPR ^b	Frequency	Percentage ^c
Institution-based	52,943	27.26	141,288	72.74	194,231	12.09
Enterprise-based	499	29.26	1,207	70.74	1,706	0.11
Dual training system/dualized training program	408	40.13	608	59.87	1,016	0.06
Mobile training program	655	43.23	860	56.77	1,514	0.09
Community-based	15,941	28.30	40,504	71.70	56,491	3.52
Not indicated	403	36.32	707	63.68	1,110	0.07
Total	70,894	27.69	185,174	72.31	256,068	15.94

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

Table 24. Labor Force Participation Rate of TVET Graduates Under Non-TTI, by Training Delivery Mode, Philippines: 2016

Program Delivery Mode	Not in the Labor Force		In the Labor Force		Total Graduates	
	Frequency	Percentage ^a	Frequency	LFPR ^b	Frequency	Percentage ^c
Institution-based	259,868	37.09	440,682	62.91	700,550	43.60
Enterprise-based	12,549	25.61	36,452	74.39	49,001	3.05
Dual training system/dualized training program	2,560	47.41	2,839	52.59	5,398	0.34
Mobile training program	4,530	28.34	11,453	71.66	15,983	0.99
Community-based	253,104	44.44	316,426	55.56	569,530	35.45
Not indicated	3,772	37.37	6,320	62.63	10,092	0.63
Total	536,381	39.72	814,173	60.28	1,350,554	84.06

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

Comparison between TTI and non-TTI graduates is further shown in Figure 6 across different program delivery modes. TTI graduates from the institution-based program was observed to be more active in the labor force than non-TTI graduates during the time of the survey. Whereas, non-TTI graduates from enterprise-based program were more engaged in the labor force than the TTI graduates.

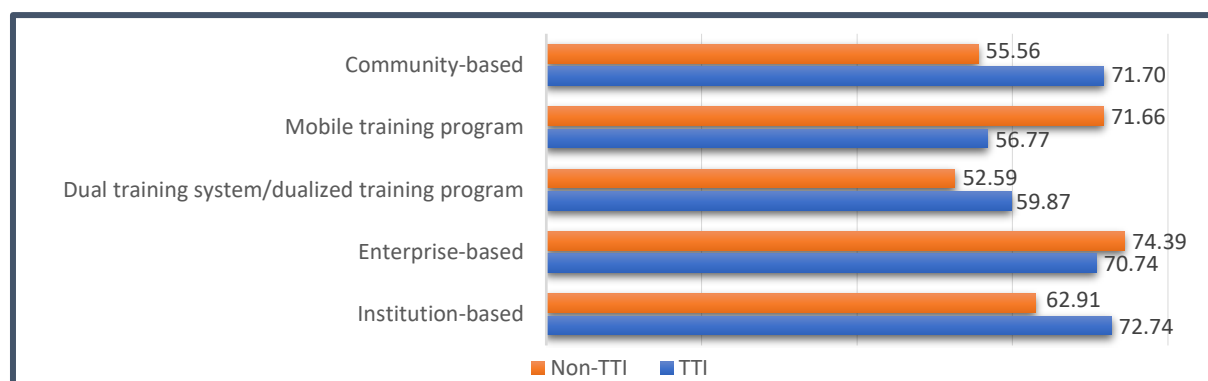


Figure 6. Estimated Labor Force Participation Rate of TVET Graduates Under TTI and Non-TTI by Program Delivery Mode, Philippines: 2016

Moreover, based on the graduates' labor force participation across regions, NCR and Region IV-B typically had the highest share both under the TTI and non-TTI as observed in Tables 25 and 26. Generally, as revealed in Figure 7, TTI graduates garnered a higher share in the labor force than non-TTI graduates across regions, except in Region X.

Table 25. Labor Force Participation Rate of TVET Graduates, by Region, Philippines: 2016

Region	Not in the Labor Force		In the Labor Force		Total Graduates	
	Frequency	Percentage ^a	Frequency	LFPR ^b	Frequency	Percentage ^c
ARMM	303	16.67	1,513	83.33	1,816	0.11
CAR	2,054	26.17	5,797	73.83	7,851	0.49
CARAGA	1,867	22.86	6,300	77.14	8,167	0.51
NCR	1,359	11.76	10,196	88.24	11,555	0.72
I	5,753	31.05	12,773	68.95	18,525	1.15
II	3,334	22.82	11,277	77.18	14,611	0.91
III	5,431	27.27	14,482	72.73	19,913	1.24
IV-A	9,922	30.19	22,946	69.81	32,868	2.05
IV-B	1,851	19.67	7,556	80.33	9,407	0.59
V	4,799	23.64	15,504	76.36	20,303	1.26
VI	5,042	28.19	12,845	71.81	17,887	1.11
VII	4,339	32.04	9,201	67.96	13,540	0.84
VIII	8,446	30.43	19,306	69.57	27,752	1.73
IX	3,774	32.39	7,877	67.61	11,651	0.73
X	5,478	37.18	9,255	62.82	14,733	0.92
XI	3,768	29.09	9,184	70.91	12,952	0.81
XII	3,375	26.92	9,162	73.08	12,537	0.78
Total	70,894	27.69	185,174	72.31	256,068	15.94

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

Table 26. Labor Force Participation Rate of TVET Graduates Under Non-TTI, by Region, Philippines: 2016

Region	Not in the Labor Force		In the Labor Force		Total Graduates	
	Frequency	Percentage ^a	Frequency	LFPR ^b	Frequency	Percentage ^c
ARMM	4,767	34.88	8,897	65.12	13,664	0.85
CAR	8,248	31.25	18,145	68.75	26,392	1.64
CARAGA	8,518	36.36	14,907	63.64	23,425	1.46
NCR	73,813	30.36	169,335	69.64	243,148	15.13
I	26,992	46.49	31,063	53.51	58,055	3.61
II	18,020	43.21	23,688	56.79	41,708	2.60
III	55,343	43.35	72,331	56.65	127,674	7.95
IV-A	79,202	34.03	153,538	65.97	232,740	14.49
IV-B	6,322	23.30	20,812	76.70	27,134	1.69
V	22,746	39.71	34,541	60.29	57,287	3.57
VI	39,041	42.68	52,443	57.32	91,484	5.69
VII	72,508	58.93	50,523	41.07	123,031	7.66
VIII	23,539	46.72	26,842	53.28	50,381	3.14
IX	32,011	55.90	25,259	44.10	57,270	3.56
X	18,696	33.33	37,391	66.67	56,087	3.49
XI	23,221	38.71	36,766	61.29	59,987	3.73
XII	23,395	38.30	37,692	61.70	61,087	3.80
Total	536,381	39.72	814,173	60.28	1,350,554	84.06

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

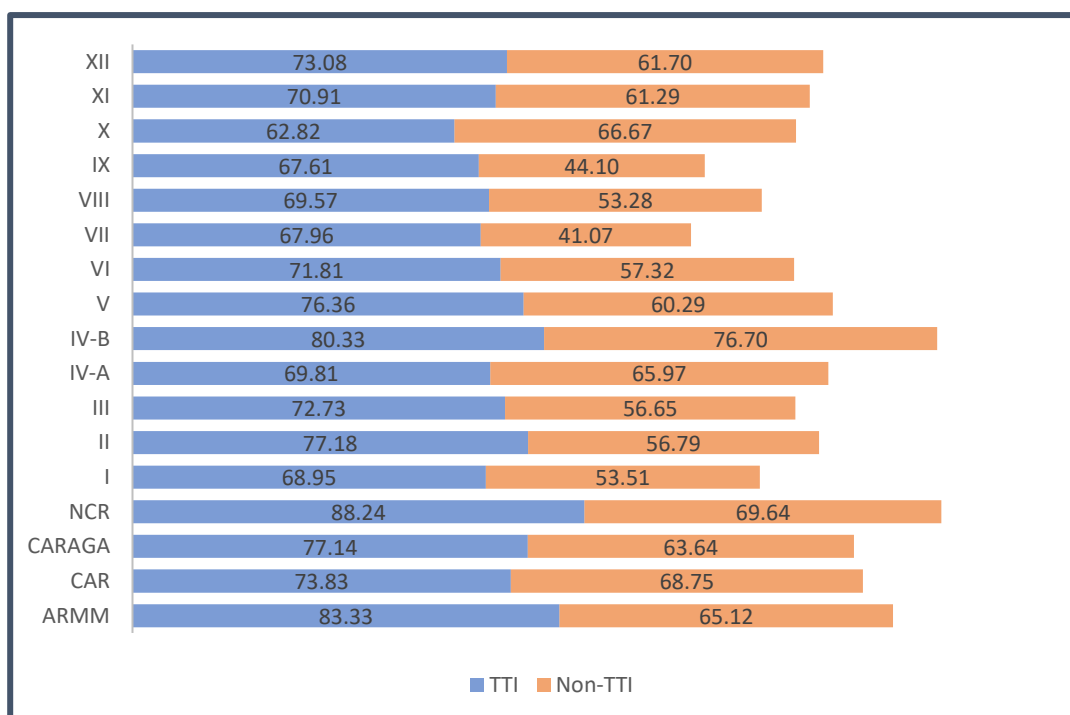


Figure 7. Estimated Labor Force Participation Rate of TVET Graduates Under TTI and Non-TTI by Region, Philippines: 2016.

To intensify the graduates' participation in the labor force, determining the reasons for not looking for work is essential. Table 27 shows that the three main reasons of the graduates for not looking for work include (1) schooling; (2) household or family duties; and (3) pending results of previous application. These reasons apply to graduates either from TTIs or non-TTIs (Tables 28 and 29). This supports the earlier results which stated that their reasons for taking a TVET program was just for personal use or for a hobby. In fact, some of those who graduated were still students or at home, taking care of their families, which is the case for many female graduates. Even so, some of them were awaiting job results during the survey.

Table 27. Reasons of TVET Graduates for Not Looking for Work, Philippines: 2016

Reasons	Sex					
	Female		Male		Total	
	Frequency	% ^a	Frequency	% ^a	Frequency	% ^c
Financial problem/reason	30,089	51.16	28,728	48.84	58,817	6.62
Poor communication skills	3,477	58.72	2,444	41.28	5,921	0.67
Inadequate skills required for the job	3,721	34.64	7,020	65.36	10,741	1.21
Inadequate experience required for the job	7,197	54.00	6,132	46.00	13,328	1.50
Tired	3,274	41.28	4,657	58.72	7,931	0.89
No work available	32,026	49.59	32,557	50.41	64,582	7.27
Awaiting results of previous application	41,080	41.67	57,499	58.33	98,579	11.10
Bad weather	291	53.09	257	46.91	549	0.06
Waiting for rehire/job recall	23,411	40.51	34,379	59.49	57,790	6.50
Too young/old or retired	18,940	57.93	13,753	42.07	32,693	3.68
Permanent disability	1,547	32.25	3,251	67.75	4,798	0.54
Household/family duties	133,412	74.94	44,617	25.06	178,028	20.04
Schooling	171,162	50.40	168,418	49.60	339,580	38.22
Others	7,011	46.29	8,136	53.71	15,147	1.70
Total	476,637	53.65	411,847	46.35	888,484	100.00

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

Table 28. Reasons of TVET Graduates Under TTI for Not Looking for Work, Philippines: 2016

Reasons	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^c
Financial problem/reason	2,293	28.16	5,849	71.84	8,142	7.20
Poor communication skills	172	31.44	376	68.56	548	0.49
Inadequate skills required for the job	1,203	33.59	2,378	66.41	3,581	3.17
Inadequate experience required for the job	791	31.42	1,727	68.58	2,519	2.23
Tired	340	24.52	1,047	75.48	1,387	1.23
No work available	2,936	35.74	5,278	64.26	8,215	7.27
Awaiting results of previous application	4,125	24.65	12,608	75.35	16,734	14.81
Waiting for rehire/job recall	857	16.10	4,468	83.90	5,325	4.71
Too young/old or retired	2,428	46.35	2,811	53.65	5,239	4.64
Permanent disability	413	73.30	150	26.70	564	0.50
Household/family duties	19,096	62.76	11,330	37.24	30,426	26.92
Schooling	9,972	36.21	17,566	63.79	27,537	24.37
Others	713	25.54	2,078	74.46	2,791	2.47
Total	45,340	40.12	67,666	59.88	113,006	100.00

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

Table 29. Reasons of TVET Graduates Under Non-TTI for Not Looking for Work, Philippines: 2016

Reasons	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^c
Financial problem/reason	27,796	54.85	22,879	45.15	50,675	6.53
Poor communication skills	3,305	61.51	2,068	38.49	5,373	0.69
Inadequate skills required for the job	2,518	35.17	4,642	64.83	7,161	0.92
Inadequate experience required for the job	6,405	59.26	4,404	40.74	10,810	1.39
Tired	2,934	44.83	3,610	55.17	6,544	0.84
No work available	29,090	51.61	27,278	48.39	56,368	7.27
Awaiting results of previous application	36,954	45.15	44,891	54.85	81,845	10.55
Bad weather	291	53.09	257	46.91	549	0.07
Waiting for rehire/job recall	22,554	42.99	29,911	57.01	52,465	6.77
Too young/old or retired	16,512	60.14	10,943	39.86	27,454	3.54
Permanent disability	1,134	26.78	3,100	73.22	4,234	0.55
Household/family duties	114,316	77.45	33,287	22.55	147,602	19.03
Schooling	161,190	51.66	150,852	48.34	312,042	40.24
Others	6,299	50.97	6,058	49.03	12,356	1.59
Total	431,297	55.62	344,181	44.38	775,478	100.00

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

4. Employment

TESDA aims to ensure the employability of their clients by providing them the trainings that would develop the skills necessary for their chosen program. Characterizing the TVET graduates and determining their economic status after graduating from the program is vital for the management towards improving their training programs and policies.

4.1. Length of Job Search

Determining how long a TVET graduate searched for a job is essential for the management, since the length of unemployment may have long-term employment consequences. As seen in Table 30, most of the graduates secured a job in less than six months. Whereas, very few took more than six months but less than a year to be employed. This is true both for TTI and non-TTI graduates (Figure 8).

Table 30. Length of Job Search After the Training, Philippines: 2016

Length of Job Search	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Less than 6 months	151,984	49.44	155,442	50.56	307,426	83.40
6 months to 1 year	34,815	56.88	26,392	43.12	61,206	16.60
Total	186,799	50.67	181,833	49.33	368,632	100.00

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

Table 31. Length of Job Search After the Training Under TTI, Philippines: 2016

Length of Job Search	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Less than 6 months	24,056	36.46	41,914	63.54	65,969	82.99
6 months to 1 year	6,073	44.92	7,447	55.08	13,520	17.01
Total	30,128	37.90	49,361	62.10	79,489	100.00

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

Table 32. Length of Job Search after the Training Under Non-TTI, Philippines: 2016

Length of Job Search	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Less than 6 months	127,929	52.98	113,528	47.02	241,457	83.51
6 months to 1 year	28,742	60.27	18,944	39.73	47,687	16.49
Total	156,671	54.18	132,472	45.82	289,143	100.00

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

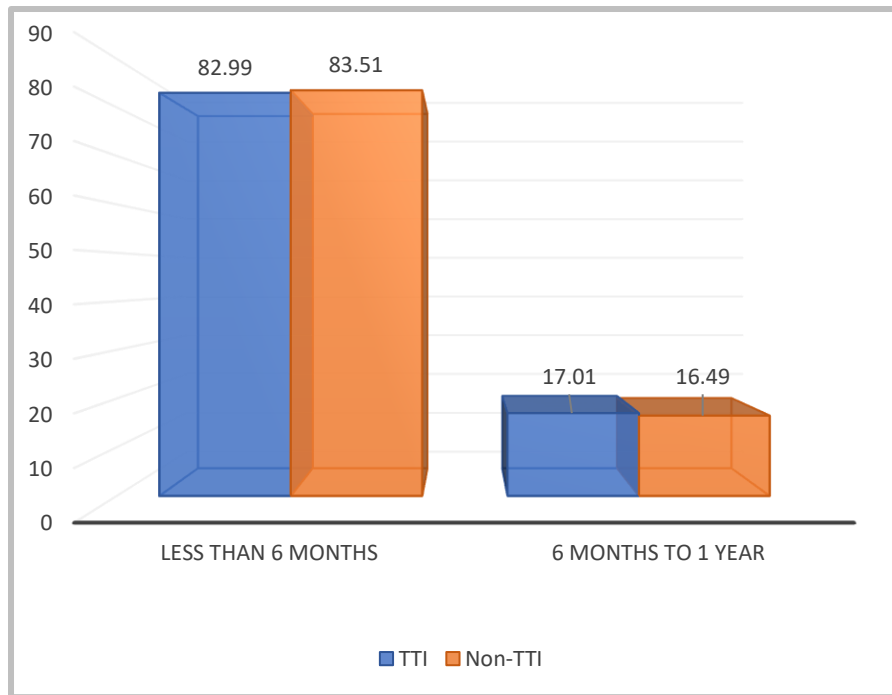


Figure 8. Weighted Percentage Distribution of TVET Graduates from TTIs and Non-TTIs by the Length of Job Search, Philippines: 2016

On the average, it took for a graduate 2.85 months before getting a job, with standard deviation of 2.96 months. Whereas, 50% waited for at most 2 months. As indicated by the coefficient of skewness (1.56), there were very few graduates who waited for a long time to get a job, with 12 months (1 year) as the longest time recorded both for TTI and non-TTI graduates (Table 33).

Table 33. Summary Statistics for Length of Job Search (in months) by Type of Provider and Overall, Philippines: 2016

Statistics	Type of Provider		Overall
	TTI	Non-TTI	
Minimum	0.25	0.25	0.25
Maximum	12.00	12.00	12.00
Mean	2.79	2.86	2.85
Standard deviation	3.07	2.93	2.96
Skewness	1.61	1.55	1.56
Percentile			
1%	0.25	0.25	0.25
5%	0.25	0.25	0.25
10%	0.25	0.25	0.25
25%	1.00	1.00	1.00
50%	1.00	2.00	2.00
75%	3.00	4.00	4.00
90%	8.00	7.00	7.00
95%	10.00	10.00	10.00
99%	12.00	12.00	12.00

4.2. Employment Rate (under TTIs and Non-TTIs)

As reported earlier, it is estimated that 62.2% or 999,346 of the 2016 TVET graduates participated in the labor force, and about 72% of them were working during the survey (Table 34). Figure 9 shows that more male graduates (63.59%) were active in the labor force than females (60.95). Moreover, Figure 9 shows a very small percentage-point difference in the employment rate between male (72.23%) and female (71.54%) graduates.

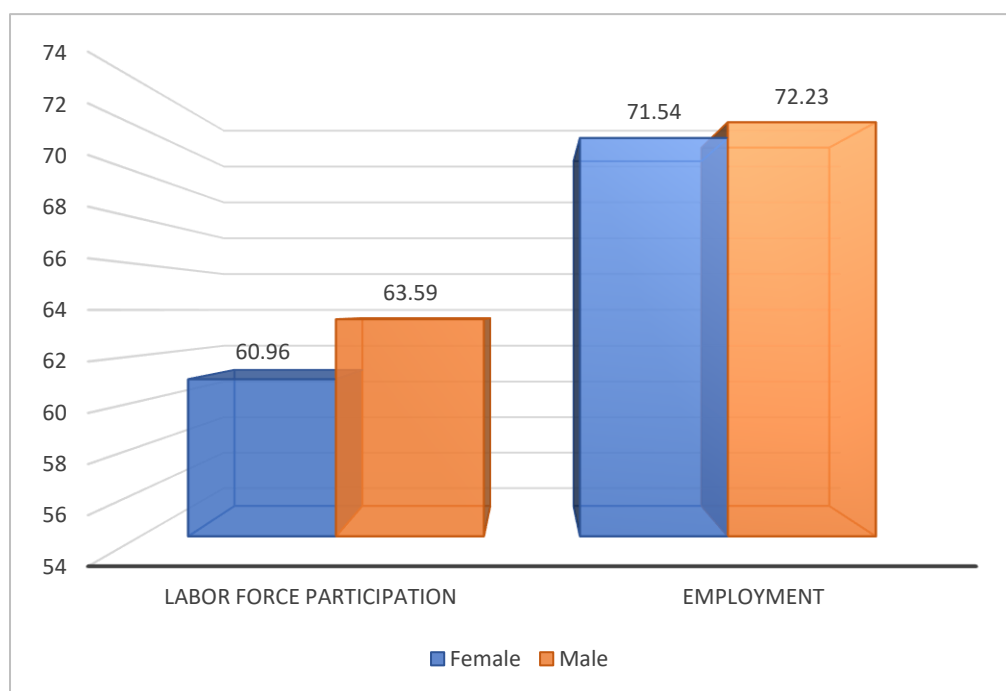


Figure 9. Estimated Number of TVET Graduates Who are in the Labor Force and Employed by Sex, Philippines: 2016

Table 34. Estimated Employment Rate of TVET Graduates, by Sex, Philippines: 2016

Sex	Not in the Labor Force		In the Labor Force						TVET Graduates	
			Not employed		Employed		Total			
	Frequency	%	Frequency	%	Frequency	ER ^a	Frequency	%	Frequency	%
Female	329,949	39.05	146,549	28.46	368,358	71.54	514,907	60.95	844,856	52.59
Male	277,327	36.41	134,520	27.77	349,919	72.23	484,439	63.59	761,766	47.41
Total	607,276	37.80	281,069	28.13	718,277	71.87	999,346	62.20	1,606,622	100.00

^aER – employment rate

About 96% of Region XI graduates who were in the labor force were employed during the time of the survey (Table 35), placing the region as having the highest employment rate. This is followed by Region I (83.07%) then CAR (82.77%). In contrast, ARMM had the lowest employment rate at 52.76%, suggesting that still, more than half of those in the labor force were employed.

Table 35. Estimated Employment Rate of TVET Graduates, by Region, Philippines: 2016

Region	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq	% ^a	Freq	% ^a	Freq	ER ^a	Freq	% ^a	Freq	% ^b
ARMM	5,069	32.75	4,918	47.24	5,493	52.76	10,411	67.25	15,480	0.96
CAR	10,302	30.08	4,125	17.23	19,816	82.77	23,941	69.92	34,243	2.13
CARAGA	10,385	32.87	5,332	25.14	15,875	74.86	21,207	67.13	31,592	1.97
NCR	75,172	29.51	42,214	23.51	137,317	76.49	179,531	70.49	254,703	15.85
I	32,745	42.76	7,422	16.93	36,413	83.07	43,835	57.24	76,580	4.77
II	21,354	37.92	8,653	24.75	26,312	75.25	34,965	62.08	56,319	3.51
III	60,773	41.18	28,707	33.07	58,106	66.93	86,814	58.82	147,587	9.19
IV-A	89,125	33.56	59,253	33.57	117,230	66.43	176,483	66.44	265,608	16.53
IV-B	8,173	22.37	5,262	18.55	23,106	81.45	28,368	77.63	36,541	2.27
V	27,545	35.50	10,658	21.30	39,386	78.70	50,045	64.50	77,590	4.83
VI	44,083	40.31	18,580	28.46	46,708	71.54	65,288	59.69	109,371	6.81
VII	76,846	56.27	20,352	34.08	39,372	65.92	59,725	43.73	136,571	8.50
VIII	31,985	40.94	17,492	37.90	28,656	62.10	46,148	59.06	78,133	4.86
IX	35,785	51.92	12,457	37.59	20,678	62.41	33,136	48.08	68,921	4.29
X	24,173	34.13	13,665	29.30	32,981	70.70	46,647	65.87	70,820	4.41
XI	26,989	37.00	1,922	4.18	44,028	95.82	45,950	63.00	72,939	4.54
XII	26,770	36.36	20,055	42.80	26,799	57.20	46,854	63.64	73,624	4.58
Total	607,276	37.80	281,069	28.13	718,277	71.87	999,346	62.20	1,606,622	100.00

^aER – employment rate

When employment status based on the type of provider was analyzed, it can be seen that those under TTIs registered a higher employment rate than those non-TTIs, with a slight difference of about 7% (Tables 36 and 37). It can also be noted that Region XI consistently bagged the highest employment rate both for TTI and non-TTI graduates. Also, it is apparent from Figure 10 that many regions had higher employment rate in TTIs than in non-TTIs, and a substantial gap between the two can be seen in ARMM, with ITT graduates gaining higher employment rate.

Table 36. Estimated Employment Rate of TVET Graduates Under TTI, by Region, Philippines: 2016

	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq	%	Freq	%	Freq	ER ^a	Freq	%	Freq	%
ARMM	303	16.67	151	10.00	1,362	90.00	1,513	83.33	1,816	0.11
CAR	2,054	26.17	1,101	18.99	4,696	81.01	5,797	73.83	7,851	0.49
CARAGA	1,867	22.86	1,925	30.56	4,375	69.44	6,300	77.14	8,167	0.51
NCR	1,359	11.76	1,133	11.11	9,063	88.89	10,196	88.24	11,555	0.72
I	5,753	31.05	1,853	14.50	10,920	85.50	12,773	68.95	18,525	1.15
II	3,334	22.82	2,550	22.61	8,727	77.39	11,277	77.18	14,611	0.91
III	5,431	27.27	3,481	24.04	11,001	75.96	14,482	72.73	19,913	1.24
IV-A	9,922	30.19	5,271	22.97	17,674	77.03	22,946	69.81	32,868	2.05
IV-B	1,851	19.67	1,311	17.35	6,246	82.65	7,556	80.33	9,407	0.59
V	4,799	23.64	3,076	19.84	12,428	80.16	15,504	76.36	20,303	1.26
VI	5,042	28.19	3,721	28.97	9,124	71.03	12,845	71.81	17,887	1.11
VII	4,339	32.04	2,384	25.91	6,818	74.09	9,201	67.96	13,540	0.84
VIII	8,446	30.43	5,516	28.57	13,790	71.43	19,306	69.57	27,752	1.73
IX	3,774	32.39	2,954	37.50	4,923	62.50	7,877	67.61	11,651	0.73
X	5,478	37.18	1,700	18.37	7,555	81.63	9,255	62.82	14,733	0.92

	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq	%	Freq	%	Freq	ER ^a	Freq	%	Freq	%
XI	3,768	29.09	471	5.13	8,713	94.87	9,184	70.91	12,952	0.81
XII	3,375	26.92	3,375	36.84	5,786	63.16	9,162	73.08	12,537	0.78
Total	70,894	27.69	41,973	22.67	143,201	77.33	185,174	72.31	256,068	15.94

^aER – employment rate

Table 37. Estimated Employment Rate of TVET Graduates Under Non-TTI, by Region, Philippines: 2016

Region	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq	%	Freq	%	Freq	ER ^a	Freq	%	Freq	%
ARMM	4,767	34.88	4,767	53.57	4,131	46.43	8,897	65.12	13,664	0.85
CAR	8,248	31.25	3,024	16.67	15,120	83.33	18,145	68.75	26,392	1.64
CARAGA	8,518	36.36	3,407	22.86	11,500	77.14	14,907	63.64	23,425	1.46
NCR	73,813	30.36	41,081	24.26	128,254	75.74	169,335	69.64	243,148	15.13
I	26,992	46.49	5,570	17.93	25,493	82.07	31,063	53.51	58,055	3.61
II	18,020	43.21	6,104	25.77	17,584	74.23	23,688	56.79	41,708	2.60
III	55,343	43.35	25,226	34.88	47,106	65.12	72,331	56.65	127,674	7.95
IV-A	79,202	34.03	53,982	35.16	99,556	64.84	153,538	65.97	232,740	14.49
IV-B	6,322	23.30	3,952	18.99	16,860	81.01	20,812	76.70	27,134	1.69
V	22,746	39.71	7,582	21.95	26,959	78.05	34,541	60.29	57,287	3.57
VI	39,041	42.68	14,859	28.33	37,584	71.67	52,443	57.32	91,484	5.69
VII	72,508	58.93	17,968	35.56	32,555	64.44	50,523	41.07	123,031	7.66
VIII	23,539	46.72	11,976	44.62	14,867	55.38	26,842	53.28	50,381	3.14
IX	32,011	55.90	9,503	37.62	15,756	62.38	25,259	44.10	57,270	3.56
X	18,696	33.33	11,965	32.00	25,426	68.00	37,391	66.67	56,087	3.49
XI	23,221	38.71	1,451	3.95	35,315	96.05	36,766	61.29	59,987	3.73
XII	23,395	38.30	16,680	44.25	21,012	55.75	37,692	61.70	61,087	3.80
Total	536,381	39.72	239,096	29.37	575,076	70.63	814,173	60.28	1,350,554	84.06

^aER – employment rate

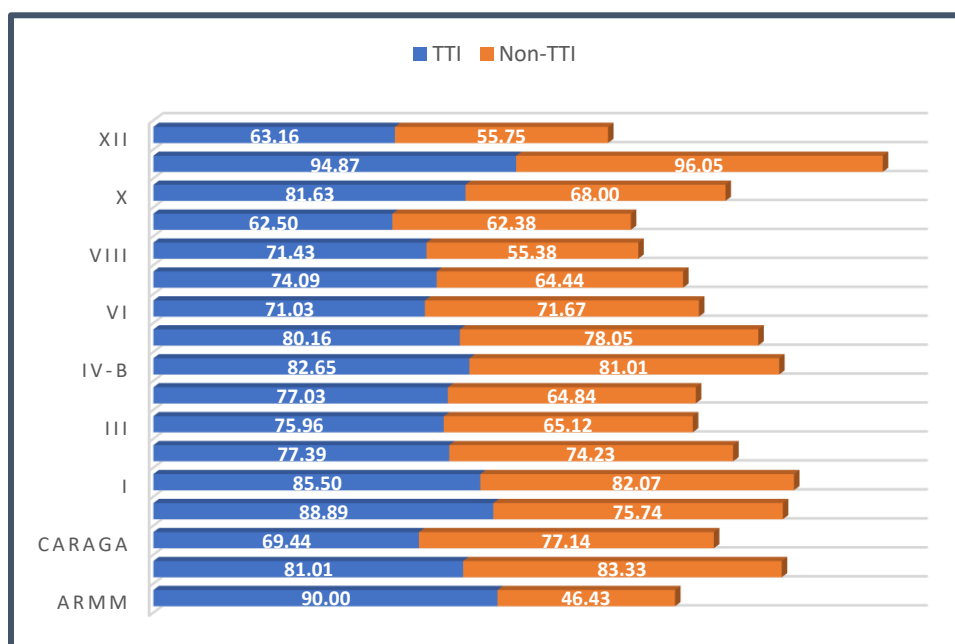


Figure 10. Estimated Employment Rate of TVET Graduates under TTI and Non-TTI by Region, Philippines: 2016

When it comes to program delivery modes, the dual training system accounted the highest employment rate at 88.93%, which is considerably higher than the other training modes. This can be attributed to its exposure in the workplace Dual training system is followed by mobile training program (73.51%), which is not very far from institution-based (73.11%).

Majority of the graduates from all programs under TTIs and non-TTIs were employed during the time of the survey. Under TTIs, the dual training system consistently gained the highest employment rate at 92.16% (Table 31), while it gained 88.23% under non-TTI (Table 32). Figure 11 further show that the program delivery modes under TTIs registered a higher employment rate than those in non-TTIs, except for enterprise-based program.

High recorded employment rate of TTIs in almost all training modalities, except for enterprise-based training can be attributed to the effective partnership with industries. Meanwhile, some private companies with TVET registered companies conduct training for possible hiring. Also, there were companies that allowed their employees to attend training to TESDA for skills upgrading. And this might explain the high employment rate for non-TTI graduates from enterprise-based training.

Table 38. Estimated Employment Rate of TVET Graduates, by Program Delivery Mode, By Sex, Philippines: 2016

Program Delivery Mode	Not in the Labor Force		In the Labor Force						TVET Graduates	
	Freq	%	Not employed		Employed		Total		Freq	%
			Freq	%	Freq	ER ^a	Freq	%		
Institution-based	312,810	34.96	156,486	26.89	425,484	73.11	581,970	65.04	894,780	55.69
Enterprise-based	13,048	25.73	10,721	28.47	26,938	71.53	37,659	74.27	50,706	3.16
Dual training system/dualized training program	2,967	46.26	382	11.07	3,066	88.93	3,447	53.74	6,415	0.40
Mobile training program	5,185	29.63	3,262	26.49	9,051	73.51	12,312	70.37	17,497	1.09
Community-based	269,091	42.98	107,193	30.03	249,737	69.97	356,930	57.02	626,021	38.97
Not indicated	4,175	37.27	3,025	43.04	4,002	56.96	7,027	62.73	11,202	0.70
Total	607,276	37.80	281,069	28.13	718,277	71.87	999,346	62.20	1,606,622	100.00

^aER – employment rate

Table 39. Estimated Employment Rate of TVET Graduates under TTI, by Training Delivery Mode, Philippines: 2016

Program Delivery Mode	Not in the Labor Force		In the Labor Force						Total Graduates	
	Freq	%	Not employed		Employed		Total		Freq	%
			Freq	%	Freq	ER ^a	Freq	%		
Institution-based	52,943	27.26	30,256	21.41	111,032	78.59	141,288	72.74	194,231	75.85
Enterprise-based	499	29.26	449	37.24	757	62.76	1,207	70.74	1,706	0.67
Dual training system/dualized training program	408	40.13	48	7.84	561	92.16	608	59.87	1,016	0.40
Mobile training program	655	43.23	0	0.00	860	100.00	860	56.77	1,514	0.59
Community-based	15,987	28.30	11,219	27.70	29,285	72.30	40,504	71.70	56,491	22.06
Not indicated	403	36.32	0	0.00	707	100.00	707	63.68	1,110	0.43
Total	70,894	27.69	41,973	22.67	143,201	77.33	185,174	72.31	256,068	100.00

^aER – employment rate

Table 40. Estimated Employment Rate of TVET Graduates Under Non-TTI, by Training Delivery Mode, Philippines: 2016

Program Delivery Mode	Not in the Labor Force		In the Labor Force						Total Graduates	
	Freq	%	Not employed		Employed		Total		Frequency	%
			Freq	%	Freq	ER ^a	Freq	%		
Institution-based	259,868	37.09	126,230	28.64	314,452	71.36	440,682	62.91	700,550	51.87
Enterprise-based	12,549	25.61	10,272	28.18	26,180	71.82	36,452	74.39	49,001	3.63
Dual training system/dualized training program	2,560	47.41	334	11.77	2,505	88.23	2,839	52.59	5,398	0.40
Mobile training program	4,530	28.34	3,262	28.48	8,191	71.52	11,453	71.66	15,983	1.18
Community-based	253,104	44.44	95,974	30.33	220,452	69.67	316,426	55.56	569,530	42.17
Not indicated	3,772	37.37	3,025	47.86	3,295	52.14	6,320	62.63	10,092	0.75
Total	536,381	39.72	239,097	29.37	575,076	70.63	814,173	60.28	1,350,554	100.00

^aER – employment rate

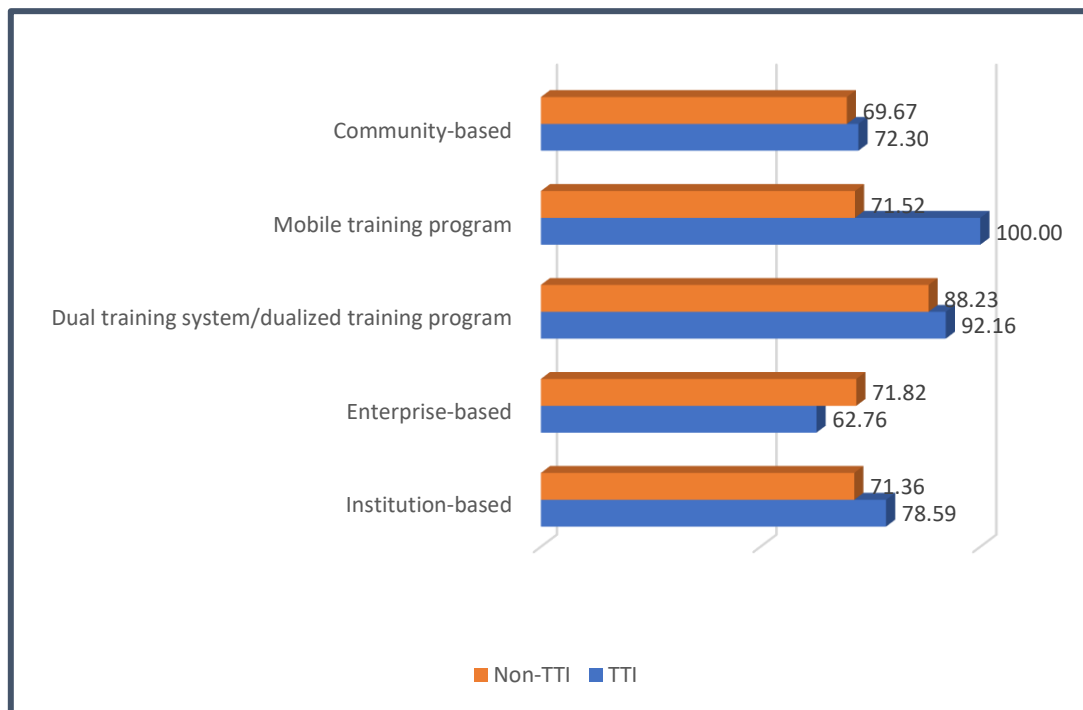


Figure 11. Estimated Employment Rate of TVET Graduates Under TTI and Non-TTI by Program Delivery Mode, Philippines: 2016

4.3. Comparison of Employment Rate across Subgroups

The employment rate of 2016 TVET graduates is estimated across several groups, such as regions of the country, training delivery modes, sectors, among others. A 95% confidence interval estimates of the employment rate per subgroup considered in the survey were likewise generated. Point and interval estimates of the employment rate under the different training delivery modes are given in Table 41. Interval estimates given in Figure 12 suggested no significant difference in the employment rate among different training delivery modes at 5% level of significance.

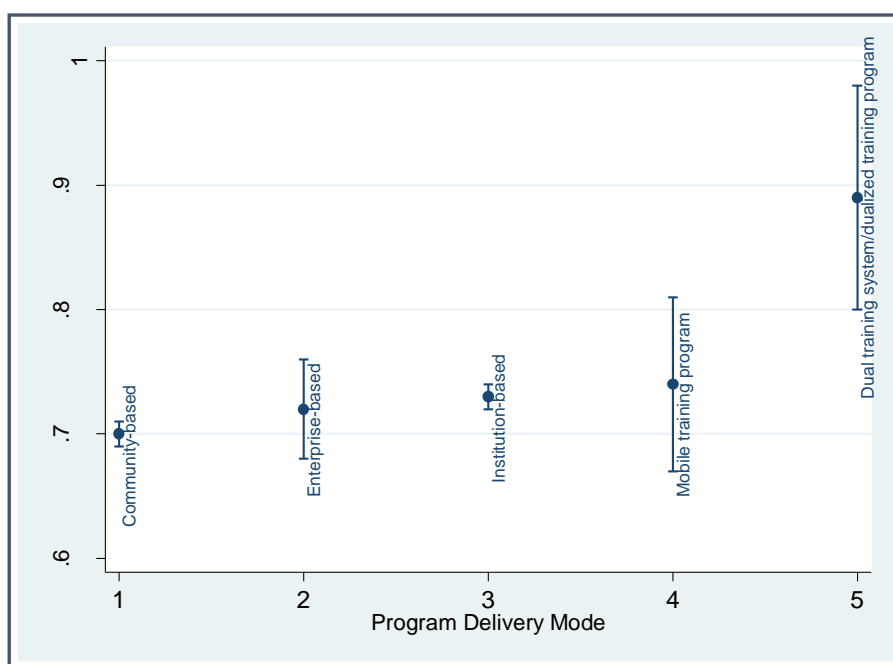


Figure 12. Confidence Interval Estimate of the Employment Rate of TVET Graduates, By Program Delivery Mode, Philippines: 2016

Table 41. Estimate of the Employment Rate of TVET Graduates, by Program Delivery Mode, Philippines: 2016

Program Delivery Mode	Proportion	Standard Error	95% Confidence Interval	
			Lower Limit	Upper Limit
Institution-based	0.73	0.01	0.71	0.75
Enterprise-based	0.72	0.04	0.64	0.79
Dual training system/dualized training program	0.89	0.09	0.71	1.00
Mobile training program	0.74	0.07	0.60	0.87
Community-based	0.70	0.01	0.67	0.73
Not indicated	0.57	0.11	0.35	0.79

Table 42 gives the interval estimates of the employment rate of graduates across the regions, and are displayed in Figure 13. The employment rate of graduates from ARMM is recorded as the lowest, but this is not significantly different to that of in Regions VIII, IX, and XII. Alternatively, employment rate generated in ARMM is significantly different from the rest of the region. Moreover, Region XI, which yielded the highest employment rate is indeed significantly higher than the other 16 regions.

Table 42. Estimate of the Employment Rate of TVET Graduates, by Region, Philippines: 2016

Region	Proportion	Standard Error	95% Confidence Interval	
			Lower Limit	Upper Limit
ARMM	0.53	0.08	0.37	0.69
CAR	0.83	0.04	0.76	0.90
CARAGA	0.75	0.03	0.69	0.81
NCR	0.76	0.02	0.73	0.80
I	0.83	0.02	0.78	0.88
II	0.75	0.03	0.70	0.80

Region	Proportion	Standard Error	95% Confidence Interval	
			Lower Limit	Upper Limit
III	0.67	0.02	0.62	0.72
IV-A	0.66	0.02	0.62	0.71
IV-B	0.81	0.03	0.77	0.86
V	0.79	0.03	0.73	0.84
VI	0.72	0.03	0.66	0.77
VII	0.66	0.03	0.61	0.71
VIII	0.62	0.04	0.54	0.70
IX	0.62	0.04	0.55	0.70
X	0.71	0.05	0.60	0.81
XI	0.96	0.01	0.93	0.99
XII	0.57	0.03	0.51	0.64

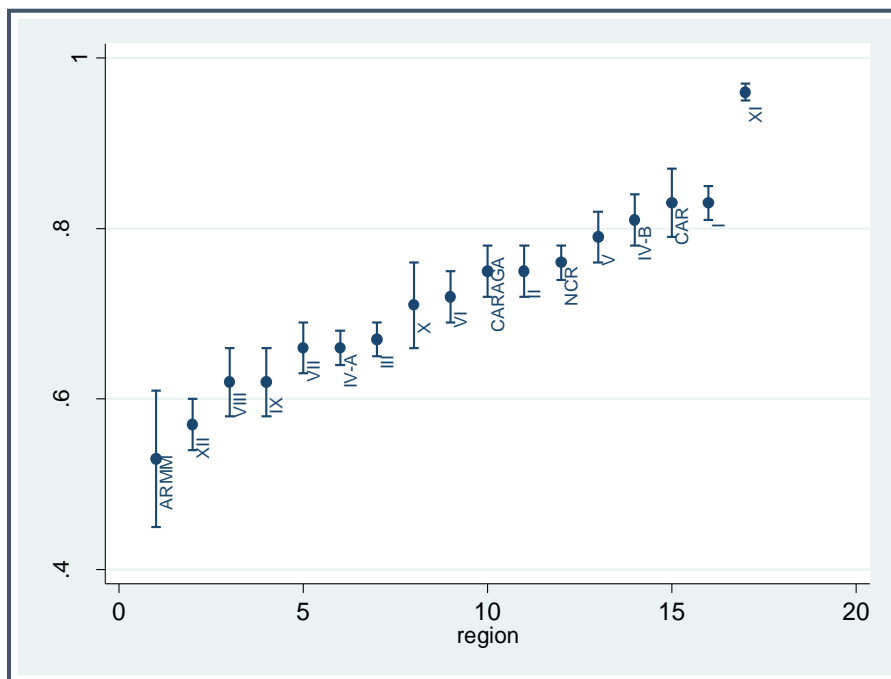


Figure 13. Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Region, Philippines: 2016

Employment rate across different occupational groups was not significantly different as revealed in Figure 14 and Table 43. This indicates that although the group of the Managers posted the highest employment rate of graduates, this was not significantly different from the rates for the other occupational groups.

Table 43. Estimate of the Employment Rate of TVET Graduates, by Occupation Group, Philippines: 2016

Occupational Group	Proportion	Standard Error	95% Confidence Interval	
			Lower Limit	Upper Limit
Armed forces occupations	0.64	0.14	0.36	0.93
Managers	0.78	0.05	0.69	0.88
Professionals	0.70	0.03	0.65	0.76
Technicians and associate professionals	0.64	0.06	0.53	0.74
Clerical support workers	0.70	0.04	0.62	0.77
Service and sales workers	0.68	0.02	0.64	0.73
Skilled agricultural, forestry and fishery workers	0.67	0.06	0.56	0.79
Craft and related trades workers	0.75	0.03	0.69	0.80
Plant and machine operators and assemblers	0.74	0.04	0.65	0.82
Elementary occupations	0.71	0.03	0.64	0.78

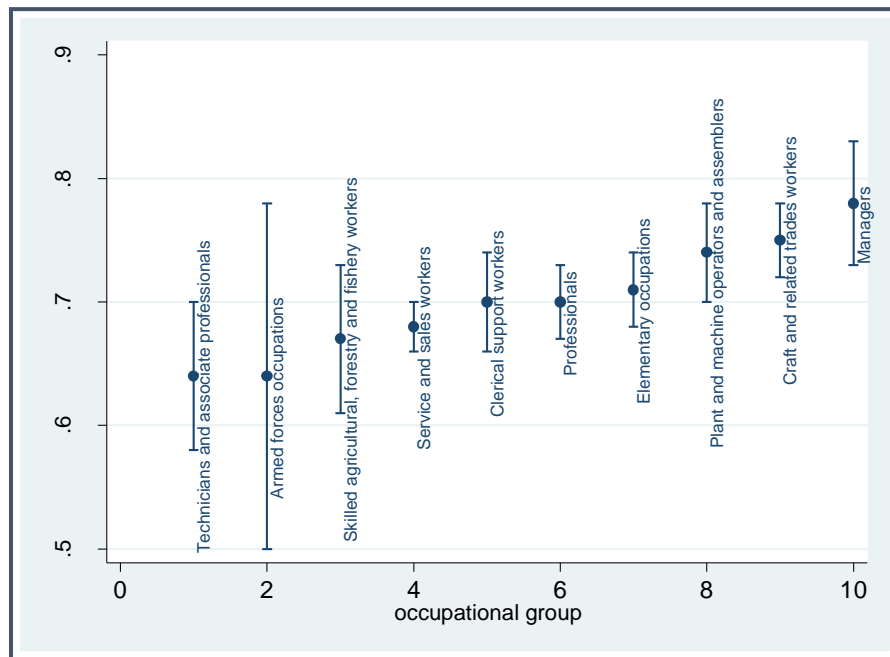


Figure 14. Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Occupation Group, Philippines: 2016

Table 44 gives the estimates of employment rate of graduates from different sectors. Interval estimates are graphed in Figure 15 for easy comparison. It appears that while high employment rate was not significantly different from the rates gained by Decorative Crafts, Furniture and Fixtures, and Logistic, it was significantly different from the rest of the other sectors at 5% level of significance.

Table 44. Estimate of the Employment Rate of TVET Graduates, by Sector, Philippines: 2016

Sector	Proportion	Standard Error	95% Confidence Interval	
			Lower Limit	Upper Limit
Agriculture Forestry and Fisheries	0.80	0.03	0.75	0.86
Automotive and Land Transportation	0.74	0.03	0.69	0.79
Construction	0.73	0.04	0.66	0.81
Decorative Crafts	1.00	-	-	-
Electrical and Electronics	0.71	0.02	0.67	0.76
Entrepreneurship	0.82	0.04	0.74	0.89
Footwear	0.00	-	-	-
Furniture and Fixtures	1.00	-	-	-
Garments	0.77	0.04	0.68	0.86
Heating, Ventilation, Aircondining	0.72	0.08	0.57	0.88
Human Health/Health Care	0.68	0.03	0.62	0.75
Information and Communication	0.69	0.03	0.63	0.75
Language	0.79	0.05	0.69	0.88
Logistics	1.00	-	-	-
Maritime	0.73	0.14	0.46	1.00
Metals and Engineering	0.73	0.03	0.68	0.78
Processed Food and Beverages	0.70	0.04	0.63	0.78
Social, Community Development	0.72	0.03	0.66	0.77
TVET	0.96	0.03	0.90	1.02
Tourism (Hotel and Restaurant)	0.70	0.02	0.66	0.73
Utilities	0.00	-	-	-
Visual Arts	0.00	-	-	-
Wholesale and Retail Trading	0.54	0.13	0.29	0.79
Others	0.67	0.04	0.58	0.76

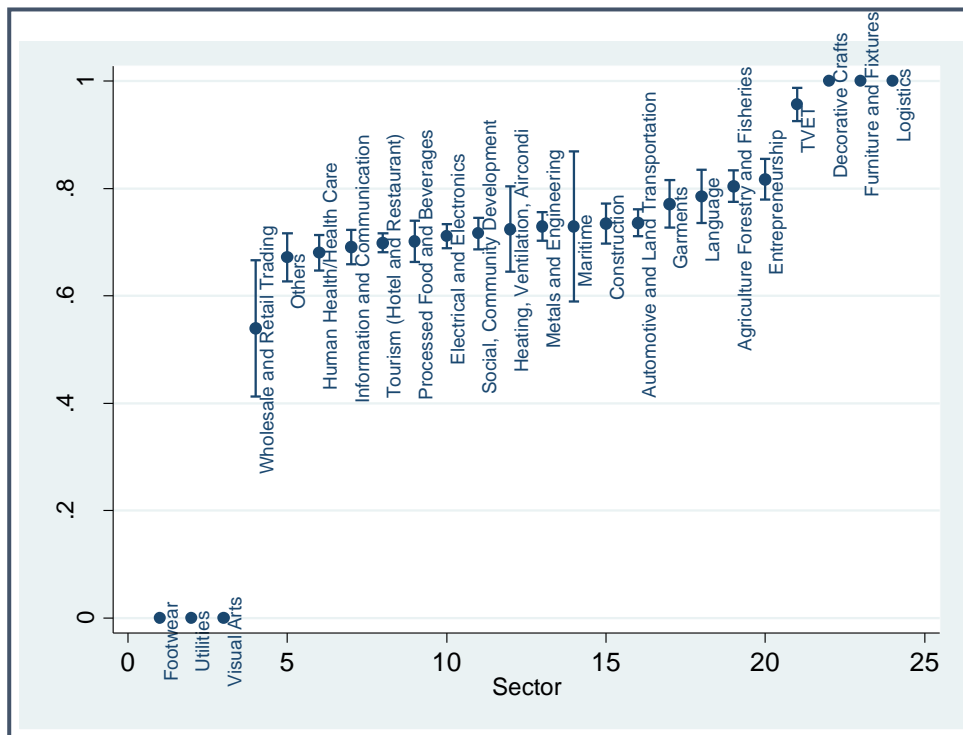


Figure 15. Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Sector, Philippines: 2016.

Employment rate of graduates from TTI was significantly higher than non-TTI as revealed by the constructed 95% confidence interval estimates shown in Table 45 and visualized in Figure 16.

Table 45. Estimate of the Employment Rate of TVET Graduates, by Type of Provider, Philippines: 2016

Type of Provider	Proportion	Standard Error	95% Confidence Interval	
			Lower Limit	Upper Limit
TTI	0.77	0.01	0.75	0.80
Non-TTI	0.71	0.01	0.69	0.72

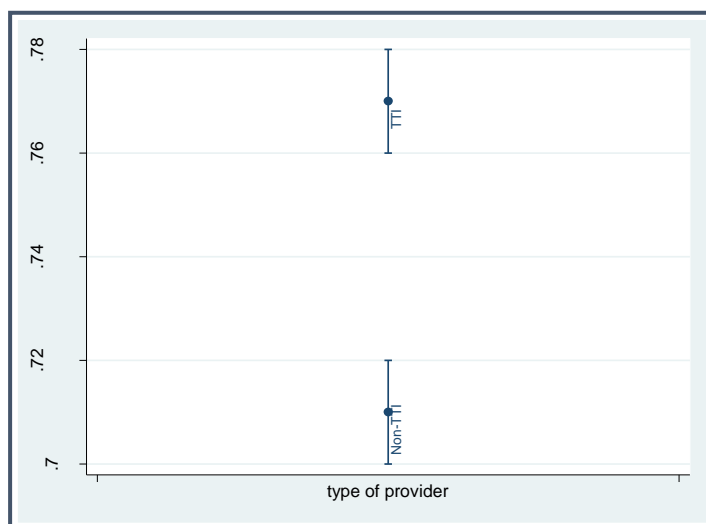


Figure 16. Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Type of Provider, Philippines: 2016

On the other hand, Table 46 and Figure 17 show that employment rate of certified graduates was not significantly different from non-certified graduates. The same result is noted in the comparison of employment rate across scholarship programs in Table 47 and Figure 18. At the 5% level of significance, difference in employment rates among scholarship programs was not significant.

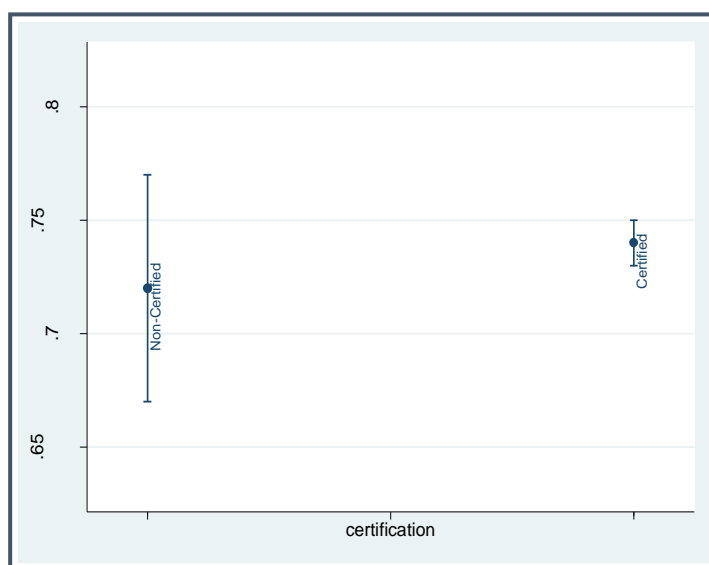


Figure 17. Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Certification, Philippines: 2016

Table 46. Estimate of the Employment Rate of TVET Graduates, by Certification, Philippines: 2016

Certification	Proportion	Standard Error	95% Confidence Interval	
			Lower Limit	Upper Limit
Certified	0.74	0.01	0.72	0.76
Non-Certified	0.72	0.05	0.63	0.82
Not indicated	0.74	0.06	0.63	0.85

Table 47. Estimate of the Employment Rate of TVET Graduates, by Type of Scholarship Program, Philippines: 2016

Type of Scholarship Program	Proportion	Standard Error	95% Confidence Interval	
			Lower Limit	Upper Limit
PESFA	0.66	0.06	0.54	0.78
TWSP	0.77	0.02	0.74	0.80
STEP	0.77	0.04	0.70	0.85
OTHERS	0.74	0.02	0.70	0.78
Not indicated	0.77	0.08	0.61	0.92

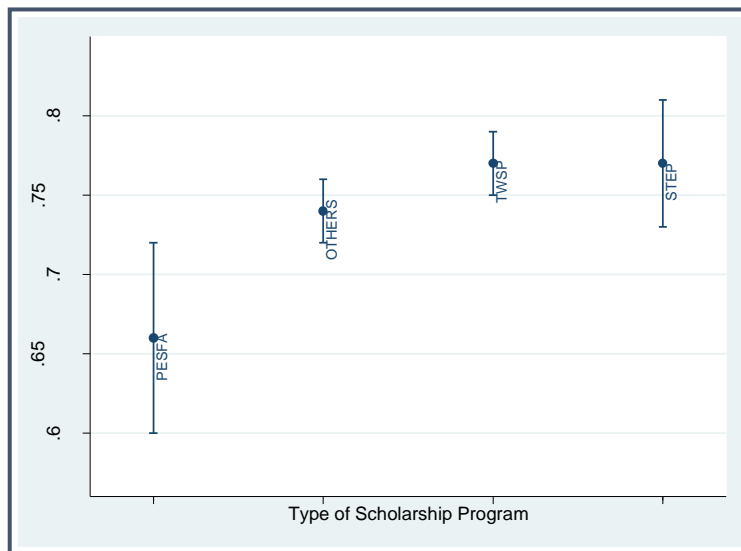


Figure 18. Confidence Interval Estimate of the Employment Rate of TVET Graduates, by Type of Scholarship Program, Philippines: 2016

4.4. Characteristics of Employed TVET Graduates

A quarter of the 2016 TVET graduates were hired as service and sales workers (Table 48), in which more than half of were females. Craft and related trades workers also garnered a higher number of employed graduates at 17.23% relative to other occupational groups, for instance, to professionals at 15.34%. In all the identified occupational groups, except for clerical support workers, more female graduates were employed than males. Almost the same pattern of distribution of employed graduates can be seen in Figure 19 for those under TTIs and non-TTIs, in which the highest percent of employed graduates were realized in the group of service and sales workers.

Table 48. Weighted Distribution of Employed TVET Graduates by Occupational Group, by Sex, Philippines: 2016

Occupational Group	Sex					
	Female		Male		Total	
	Frequency	% ^a	Frequency	% ^a	Frequency	% ^b
Armed forces occupations	142	4.33	3,136	95.67	3,278	0.46
Managers	22,448	61.10	14,291	38.90	36,739	5.14
Professionals	74,283	67.80	35,287	32.20	109,570	15.34
Technicians and associate professionals	24,721	57.35	18,384	42.65	43,105	6.03
Clerical support workers	39,493	65.70	20,617	34.30	60,110	8.42
Service and sales workers	122,827	64.99	66,161	35.01	188,987	26.46
Skilled agricultural, forestry and fishery workers	7,590	31.90	16,200	68.10	23,790	3.33
Craft and related trades workers	30,898	25.10	92,183	74.90	123,080	17.23
Plant and machine operators and assemblers	7,304	15.66	39,350	84.34	46,654	6.53
Elementary occupations	36,594	46.33	42,386	53.67	78,980	11.06
Total	366,300	51.28	347,993	48.72	714,293	100.00

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

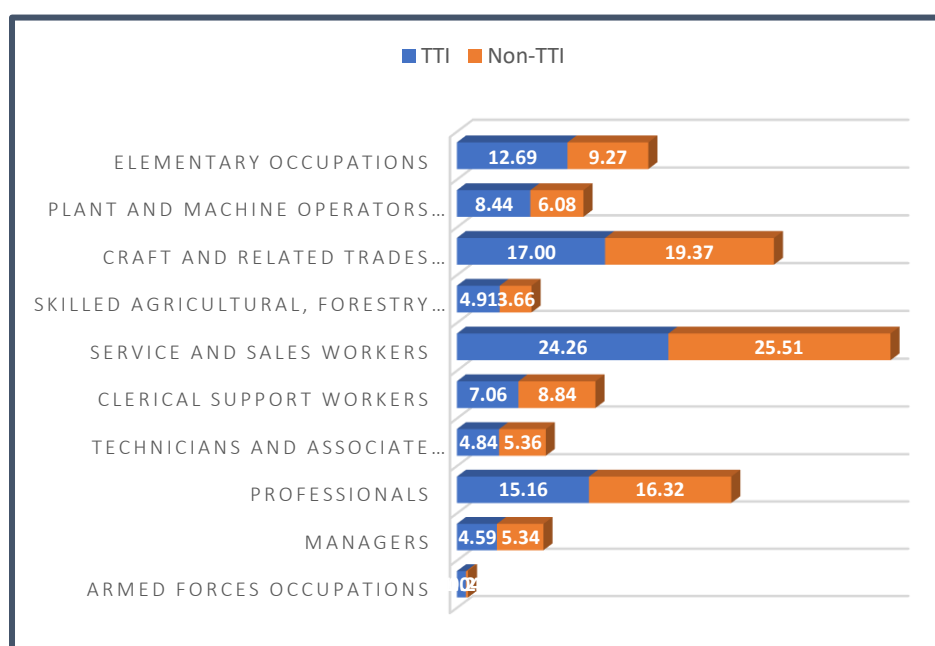


Figure 19. Estimated employment Rate of TVET Graduates under TTI and Non-TTI by Occupational Group, Philippines: 2016

Under TTIs, there were more male employed graduates than females in these identified occupational groups: (1) Plant and machine operators and assemblers, (2) Craft and related trades workers, (3) Skilled agricultural, forestry and fishery workers, and (4) Technicians and associate professionals (Table 49). Same result was observed for graduates under non-TTIs (Table 50). Occupational groups that demonstrate higher percentage of male employed graduates under TTIs include (1) Armed Forces occupations, (2) Plant and Machine operators and assemblers, (3) Craft and related trades workers, and (4) Skilled agricultural, Forestry and Fishery workers. Conversely,

those that exhibited high percentage of female employed graduates under non-TTIs are: (1) Service and sales workers, (2) Professionals, (3) Clerical support workers, (4) Managers, and (5) Technicians and associate professionals.

Table 49. Weighted distribution of employed TVET graduates under TTIs by occupational group, by Sex, Philippines: 2016

Occupational Group	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Armed forces occupations	0	0.00	1,461	100.00	1,461	1.03
Managers	4,676	57.23	3,495	42.77	8,172	5.75
Professionals	18,520	73.04	6,835	26.96	25,356	17.83
Technicians and associate professionals	1,110	27.85	2,875	72.15	3,985	2.80
Clerical support workers	6,287	66.63	3,148	33.37	9,435	6.63
Service and sales workers	16,449	56.19	12,823	43.81	29,272	20.58
Skilled agricultural, forestry and fishery workers	1,355	27.06	3,653	72.94	5,008	3.52
Craft and related trades workers	4,983	13.69	31,404	86.31	36,387	25.59
Plant and machine operators and assemblers	548	7.12	7,143	92.88	7,691	5.41
Elementary occupations	6,481	41.97	8,962	58.03	15,443	10.86
Total	60,409	42.48	81,801	57.52	142,210	100.00

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

Table 50. Weighted Distribution of Employed TVET Graduates under Non-TTIs by Occupational Group, by Sex, Philippines: 2016

Occupational Group	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Armed forces occupations	142	7.82	1,674	92.18	1,816	0.32
Managers	17,772	62.21	10,796	37.79	28,567	4.99
Professionals	55,763	66.22	28,451	33.78	84,214	14.72
Technicians and associate professionals	23,611	60.36	15,509	39.64	39,120	6.84
Clerical support workers	33,206	65.53	17,468	34.47	50,675	8.86
Service and sales workers	106,378	66.60	53,338	33.40	159,716	27.92
Skilled agricultural, forestry and fishery workers	6,234	33.19	12,547	66.81	18,782	3.28
Craft and related trades workers	25,915	29.89	60,778	70.11	86,694	15.15
Plant and machine operators and assemblers	6,756	17.34	32,207	82.66	38,963	6.81
Elementary occupations	30,113	47.39	33,424	52.61	63,537	11.11
Total	305,891	53.47	266,193	46.53	572,083	100.00

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

The distribution of employed graduates was further examined by occupational group across different training delivery modes. It is evident in Table 51 that the majority of the employed graduates during the survey were from institution-based training delivery mode. This was also observed for graduates under TTIs (Table 52). Alternatively, under non-TTIs, armed forces occupations and technicians and associate professionals registered higher percentage of employed graduates, relative to other training delivery modes (Table 53).

Table 51. Weighted Distribution of Employed TVET Graduates by Occupational Group, by Training Delivery Mode, Philippines: 2016

Occupational Group	Training Delivery Mode													
	Institution-based		Enterprise-based		Dual training system/dualized training program		Mobile training program		Community-based		Not indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Armed forces occupations	1828	55.77	0	0.00	0	0.00	0	0.00	1450	44.23	0	0.00	3278	0.46
Managers	15270	41.56	334	0.91	0	0.00	640	1.74	20495	55.79	0	0.00	36739	5.14
Professionals	75650	69.04	1182	1.08	881	0.80	723	0.66	29786	27.18	1347	1.23	109570	15.34
Technicians and associate professionals	27709	64.28	721	1.67	259	0.60	0	0.00	14417	33.45	0	0.00	43105	6.03
Clerical support workers	42452	70.62	404	0.67	0	0.00	734	1.22	16375	27.24	145	0.24	60110	8.42
Service and sales workers	102926	54.46	6786	3.59	501	0.27	4064	2.15	73066	38.66	1644	0.87	188987	26.46
Skilled agricultural, forestry and fishery workers	9075	38.14	217	0.91	250	1.05	639	2.68	13610	57.21	0	0.00	23790	3.33
Craft and related trades workers	81910	66.55	6777	5.51	896	0.73	1316	1.07	31697	25.75	484	0.39	123080	17.23
Plant and machine operators and assemblers	23959	51.35	8093	17.35	139	0.30	0	0.00	14462	31.00	0	0.00	46654	6.53
Elementary occupations	43047	54.50	2423	3.07	139	0.18	935	1.18	32053	40.58	382	0.48	78980	11.06
Total	423826	59.34	26938	3.77	3066	0.43	9051	1.27	247411	34.64	4002	0.56	714293	100.00

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

Table 52. Weighted Distribution of Employed TVET Graduates Under TTIs by Occupational Group, by Training Delivery Mode, Philippines: 2016

Occupational Group	Training Delivery Mode													
	Institution-based		Enterprise-based		Dual training system/dualized training program		Mobile training program		Community-based		Not indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Armed forces occupations	1266	86.66	0	0.00	0	0.00	0	0.00	195	13.34	0	0.00	1461	1.03
Managers	5394	66.01	0	0.00	0	0.00	0	0.00	2778	33.99	0	0.00	8172	5.75
Professionals	21747	85.77	0	0.00	48	0.19	0	0.00	3437	13.55	125	0.49	25356	17.83
Technicians and associate professionals	3582	89.88	48	1.20	48	1.20	0	0.00	308	7.73	0	0.00	3985	2.80
Clerical support workers	6612	70.08	48	0.51	0	0.00	0	0.00	2776	29.42	0	0.00	9435	6.63
Service and sales workers	19886	67.94	303	1.04	48	0.16	664	2.27	8063	27.55	308	1.05	29272	20.58
Skilled agricultural, forestry and fishery workers	3711	74.10	0	0.00	0	0.00	196	3.92	1101	21.99	0	0.00	5008	3.52
Craft and related trades workers	30678	84.31	359	0.99	139	0.38	0	0.00	4985	13.70	227	0.62	36387	25.59
Plant and machine operators and assemblers	6761	87.90	0	0.00	139	1.81	0	0.00	791	10.29	0	0.00	7691	5.41
Elementary occupations	10650	68.97	0	0.00	139	0.90	0	0.00	4605	29.82	48	0.31	15443	10.86
Total	110287	77.55	757	0.53	561	0.39	860	0.60	29039	20.42	707	0.50	142210	100.00

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

Table 53. Weighted Distribution of Employed TVET Graduates Under Non-TTIs by Occupational Group, by Training Delivery Mode, Philippines: 2016

Occupational Group	Training Delivery Mode													
	Institution-based		Enterprise-based		Dual training system/dualized training program		Mobile training program		Community-based		Not indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Armed forces occupations	562	30.92	0	0.00	0	0.00	0	0.00	1255	69.08	0	0.00	1816	0.32
Managers	9876	34.57	334	1.17	0	0.00	640	2.24	17717	62.02	0	0.00	28567	4.99
Professionals	53903	64.01	1182	1.40	833	0.99	723	0.86	26350	31.29	1223	1.45	84214	14.72
Technicians and associate professionals	24127	61.67	673	1.72	211	1.93	0	0.00	14109	36.07	0	0.00	39120	6.84
Clerical support workers	35840	70.72	357	0.70	0	0.00	734	1.45	13599	26.84	145	0.29	50675	8.86
Service and sales workers	83040	51.99	6483	4.06	453	0.00	3400	2.13	65003	40.70	1336	0.84	159716	27.92
Skilled agricultural, forestry and fishery workers	5364	28.56	217	1.15	250	1.33	442	2.36	12509	66.60	0	1.37	18782	3.28
Craft and related trades workers	51232	59.10	6419	7.40	757	0.87	1316	1.52	26712	30.81	257	0.00	86694	15.15
Plant and machine operators and assemblers	17198	44.14	8093	20.77	0	0.00	0	0.00	13671	35.09	0	0.86	38963	6.81
Elementary occupations	32397	50.99	2423	3.81	0	0.00	935	1.47	27448	43.20	334	5.19	63537	11.11
Total	313540	54.81	26180	4.58	2505	0.44	8191	1.43	218372	38.17	3295	0.58	572083	100.00

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

Table 54 reveals that a large portion (75.77%) of employed graduates is classified as wage and salary workers, of which majority came from institution-based training delivery mode. The case is the same if graduates were to be classified as either from TTIs or non-TTIs, in which majority of the employed graduates are earning as wage and salary workers, constituting 75.43% and 74.84% of the populations of TTI and non-TTI graduates, respectively (Tables 55 and 56).

Table 54. Weighted Distribution of Employed TVET Graduates, by Class of Worker, by Training Delivery Mode, Philippines: 2016

Class of Worker	Training Delivery Mode													
	Institution-based		Enterprise-based		Dual training system/dualized training program		Mobile training program		Community-based		Not indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Wage and Salary Worker	354,174	65.66	24,106	4.47	3,066	0.57	6,730	1.25	148,392	27.51	2,926	0.54	539,393	75.77
Own account workers	69,666	39.98	2,832	1.63	0	0.00	2,125	1.22	98,542	56.56	1,077	0.62	174,241	24.48
Unpaid family work	1,644	33.31	0	0.00	0	0.00	196	3.97	3,095	62.72	0	0.00	4,935	0.69
Total	425,484	59.77	26,938	3.78	3,066	0.43	2,321	0.33	250,028	35.12	4,002	0.56	711,838	100.00

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

Table 55. Weighted Distribution of Employed TVET Graduates Under TTI, by Class of Worker, by Training Delivery Mode, Philippines: 2016

Class of Worker	Training Delivery Mode													
	Institution-based		Enterprise-based		Dual training system/dualized training program		Mobile training program		Community-based		Not indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Wage and Salary Worker	88,903	82.44	331	0.31	561	0.52	237	0.22	17,155	15.91	649	0.60	107,835	75.43
Own account workers	21,627	62.49	426	1.23	0	0.00	426	1.23	12,071	34.88	58	0.17	34,609	24.21
Unpaid family work	502	66.35	0	0.00	0	0.00	196	25.94	58	7.72	0	0.00	756	0.53
Total	111,031	77.66	757	0.53	561	0.39	622	0.44	29,285	20.48	707	0.49	142,963	100.00

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

Table 56. Weighted Distribution of Employed TVET Graduates Under Non-TTI, by Class of Worker, by Training Delivery Mode, Philippines: 2016

Class of Worker	Training Delivery Mode												Total	
	Institution-based		Enterprise-based		Dual training system/ dualized training program		Mobile training program		Community-based		Not indicated			
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Wage and Salary Worker	265,271	61.47	23,775	5.51	2,505	0.58	6,493	1.50	131,237	30.41	2,277	0.53	431,557	74.85
Own account workers	48,039	34.40	2,405	1.72	0	0.00	1,698	1.22	86,470	61.93	1,018	0.73	140,890	24.43
Unpaid family work	1,142	27.33	0	0.00	0	0.00	0	0.00	3,037	72.67	0	0.00	4,179	0.72
Total	314,452	55.28	26,180	4.60	2,505	0.44	1,698	0.30	220,744	38.80	3,295	0.58	568,875	100.0

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

Likewise, almost the same number of wage and salary workers was observed for male and female graduates (Table 57). However, about 55% of the own account workers were female. Alternatively, graduates under TTIs who are wage and salary workers and own account workers were mostly male with 57.77% and 56.13%, respectively (Table 58). In contrast, many of the wage and salary workers and own account workers in non-TTIs were female, comprising 52.03% and 57.95% of their group, respectively (Table 59).

Table 57. Weighted Distribution of Employed TVET Graduates by Class of Worker, by Sex, Philippines: 2016

Class of worker	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Wage and Salary Worker	270,055	50.07	269,338	49.93	539,393	75.06
Own account workers	96,097	55.15	78,144	44.85	174,241	24.25
Unpaid family work	2,497	50.60	2,438	49.40	4,935	0.69
Total	368,649	51.30	349,919	48.70	718,568	100.00

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

Table 58. Weighted Distribution of Employed TVET Graduates Under TTI by Class of Worker, by Sex, Philippines: 2016

Class of worker	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Wage and Salary Worker	45,535	42.23	62,301	57.77	107,835	75.30
Own account workers	15,184	43.87	19,425	56.13	34,609	24.17
Unpaid family work	371	49.08	385	50.92	756	0.53
Total	61,090	42.66	82,111	57.34	143,201	100.00

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

Table 59. Weighted Distribution of Employed TVET Graduates under Non-TTI by Class of Worker, by Sex, Philippines: 2016

Class of worker	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Wage and Salary Worker	224,521	52.03	207,037	47.97	431,557	75.01
Own account workers	80,912	57.95	58,719	42.05	139,632	24.27
Unpaid family work	2,126	50.88	2,053	49.12	4,179	0.73
Total	307,559	53.45	267,808	46.55	575,367	100.00

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

Tables 60 to 62 present the distribution of employed TVET graduates by the major industry sectors. Many of the employed graduates were from the Tourism sector (Hotel and Restaurant) with 20.77%, followed by electrical and electronics sector with 12.22%. These two sectors dominate both TTI and non-TTI graduates. Majority of the female graduates were working at the (1) Garments, (2) Human Health Care, (3) Information and Communication, (4) Language, (5) Logistics, (6) Processed Food and Beverages, (7) Social and Community Development, (8) TVET, and (9) Tourism. Meanwhile, majority of male graduates work in (1) Automotive and Land Transportation; (2) Construction; (3) Decorative Crafts; (4) Electrical and Electronics; (5) Furniture and Fixtures; (6) Heating, Ventilation and Air Condition; (7) Metals and Engineering; and (8) Whole Sale and Retail Trading.

Table 60. Weighted Distribution of Employed TVET Graduates by Sector, Philippines: 2016

Sector	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Agriculture Forestry and Fisheries	20,385	53.35	17,822	46.65	38,207	5.32
Automotive and Land Transportation	5,100	8.52	54,743	91.48	59,843	8.33
Construction	1,919	5.90	30,606	94.10	32,524	4.53
Decorative Crafts	0	0.00	334	100.00	334	0.05
Electrical and Electronics	32,604	37.13	55,203	62.87	87,807	12.22
Entrepreneurship	12,785	69.51	5,608	30.49	18,393	2.56
Furniture and Fixtures	250	40.10	374	59.90	624	0.09
Garments	14,537	76.18	4,546	23.82	19,083	2.66
Heating, Ventilation, Airconditioning	0	0.00	4,511	100.00	4,511	0.63
Human Health/Health Care	30,111	72.95	11,166	27.05	41,277	5.75
Information and Communication	27,875	61.56	17,408	38.44	45,283	6.30
Language	8,149	54.95	6,680	45.05	14,830	2.06
Logistics	291	57.36	217	42.64	508	0.07
Maritime	0	0.00	2,149	100.00	2,149	0.30
Metals and Engineering	8,208	14.60	47,999	85.40	56,207	7.83
Processed Food and Beverages	19,794	71.06	8,062	28.94	27,856	3.88
Social, Community Development	42,694	77.26	12,569	22.74	55,263	7.69
TVET	5,914	63.58	3,389	36.42	9,303	1.30
Tourism (Hotel and Restaurant)	102,487	68.71	46,666	31.29	149,153	20.77
Wholesale and Retail Trading	720	31.98	1,531	68.02	2,251	0.31
Others	34,534	65.32	18,338	34.68	52,872	7.36
TOTAL	368,358	51.28	349,919	48.72	718,277	100.00

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

Table 61. Weighted Distribution of Employed TVET Graduates Under TTIs by Sector, Philippines: 2016

Sector	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Agriculture Forestry and Fisheries	4,773	76.18	1,493	23.82	6,265	4.38
Automotive and Land Transportation	1,224	6.76	16,867	93.24	18,091	12.63
Construction	718	9.23	7,060	90.77	7,778	5.43
Electrical and Electronics	4,436	20.48	17,221	79.52	21,657	15.12
Entrepreneurship	2,614	67.70	1,247	32.30	3,862	2.70
Garments	4,048	75.04	1,347	24.96	5,395	3.77
Heating, Ventilation, Airconditioning	0	0.00	3,581	100.00	3,581	2.50
Human Health/Health Care	3,989	84.07	756	15.93	4,745	3.31
Information and Communication	400	36.83	687	63.17	1,087	0.76
Language	2,773	53.36	2,424	46.64	5,197	3.63
Metals and Engineering	2,803	13.38	18,150	86.62	20,953	14.63

Sector	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Processed Food and Beverages	6,815	82.09	1,487	17.91	8,302	5.80
Social, Community Development	3,766	92.73	295	7.27	4,061	2.84
TVET	3,707	74.51	1,268	25.49	4,975	3.47
Tourism (Hotel and Restaurant)	16,510	70.73	6,832	29.27	23,342	16.30
Others	2,514	64.30	1,396	35.70	3,909	2.73
TOTAL	61,090	42.66	82,111	57.34	143,201	100.00

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

Table 62. Weighted Distribution of Employed TVET Graduates Under Non-TTIs by Sector, Philippines: 2016

Sector	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Agriculture Forestry and Fisheries	15,612	48.88	16,329	51.12	31,941	5.55
Automotive and Land Transportation	3,876	9.28	37,876	90.72	41,752	7.26
Construction	1,200	4.85	23,546	95.15	24,746	4.30
Decorative Crafts	0	0.00	334	100.00	334	0.06
Electrical and Electronics	28,168	42.58	37,982	57.42	66,150	11.50
Entrepreneurship	10,171	69.99	4,360	30.01	14,531	2.53
Furniture and Fixtures	250	40.10	374	59.90	624	0.11
Garments	10,489	76.63	3,199	23.37	13,689	2.38
Heating, Ventilation, Airconditioning	0	0.00	929	100.00	929	0.16
Human Health/Health Care	26,122	71.51	10,409	28.49	36,531	6.35
Information and Communication	27,475	62.17	16,722	37.83	44,196	7.69
Language	5,377	55.81	4,257	44.19	9,633	1.68
Logistics	291	57.36	217	42.64	508	0.09
Maritime	0	0.00	2,149	100.00	2,149	0.37
Metals and Engineering	5,405	15.33	29,849	84.67	35,254	6.13
Processed Food and Beverages	12,979	66.37	6,575	33.63	19,554	3.40
Social, Community Development	38,928	76.03	12,274	23.97	51,202	8.90
TVET	2,207	51.01	2,120	48.99	4,328	0.75
Tourism (Hotel and Restaurant)	85,976	68.34	39,835	31.66	125,811	21.88
Utilities	720	0.00	1,531	0.00	2,251	0.39
Others	32,020	65.40	16,942	34.60	48,962	8.51
TOTAL	307,268	53.43	267,808	46.57	575,076	100.00

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

During the time of the survey, about 51% of the employed graduates were already permanent in their jobs or businesses (Table 63). Almost the same share is noted for those who came from non-TTIs (Table 65). Under TTIs, many of the employed graduates (45.89%) gained permanent status as well. However, it is also important to note that many of them (42.7%) were only working in short-term jobs or businesses (Table 64). Moreover, it can be noted in Figure 20 that a larger portion of those in non-TTIs were working permanently than those in TTIs.

Table 63. Weighted Distribution of Employed TVET Graduates, by Nature of Work, Philippines: 2016

Nature of Work	Employed TVET Graduates	% Share
Permanent job/business/unpaid family work	362,436	50.73
Short-term or seasonal job/business/unpaid family work	281,693	39.43
Worked different employers on a day-to-day or week-to-week basis	61,581	8.62
Not indicated	8,729	1.22
Total	714,438	100.00

Table 64. Weighted Distribution of Employed TVET Graduates Under TTIs, by Nature of work, Philippines: 2016

Nature of Work	Employed TVET Graduates	% Share
Permanent job/business/unpaid family work	65,267	45.89
Short-term or seasonal job/business/unpaid family work	60,732	42.70
Worked different employers on a day-to-day or week-to-week basis	14,603	10.27
Not indicated	1,612	1.13
Total	142,215	100.00

Table 65. Weighted Distribution of Employed TVET graduates Under Non-TTIs, by Nature of Work, Philippines: 2016

Nature of Work	Employed TVET Graduates	% Share
Permanent job/business/unpaid family work	297,169	51.93
Short-term or seasonal job/business/unpaid family work	220,960	38.61
Worked different employers on a day-to-day or week-to-week basis	46,978	8.21
Not indicated	7,117	1.24
Total	572,224	100.00

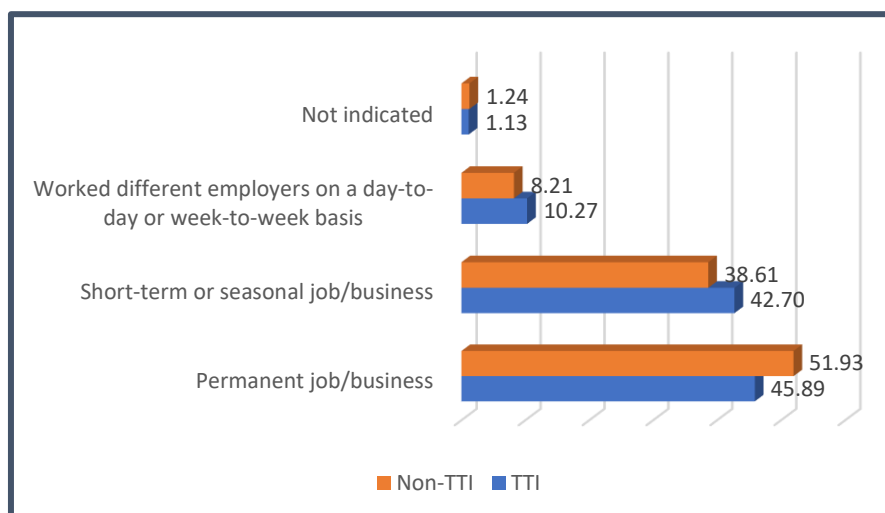


Figure 20. Estimated Employment Rate of TVET Graduates Under TTI and Non-TTI by Nature of Work. Philippines, 2016

Majority (81.82%) of the graduates, half of which were females, chose to work within their province (Table 66). Likewise, most of the graduates, either from TTIs or non-TTIs, were working within their province. It is remarkable, however, that females working outside the country outnumbered the male workers. Figure 21 also shows that a higher percentage of graduates working within the province and working abroad was seen in non-TTIs (Table 68), while a larger portion was working outside their province and outside region in TTIs (Table 67). Moreover, under TTIs, unlike in general TVET graduates, many of them were male graduates.

Table 66. Weighted Distribution of Employed TVET Graduates, by Location of Work, Philippines: 2016

Location of Work	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Within the province	307,753	52.66	276,656	47.34	584,409	81.82
Outside the province but within the region	23,091	45.21	27,988	54.79	51,079	7.15
Outside the region	23,085	37.99	37,685	62.01	60,771	8.51
Outside the country	12,164	67.49	5,860	32.51	18,024	2.52
Total	366,092	51.25	348,189	48.75	714,282	100.00

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

Table 67. Weighted Distribution of Employed TVET Graduates Under TTIs, by Location of Work, Philippines: 2016

Location of Work	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Within the province	50,360	44.15	63,708	55.85	114,069	79.99
Outside the province but within the region	5,060	41.26	7,203	58.74	12,263	8.60
Outside the region	4,848	32.05	10,278	67.95	15,125	10.61
Outside the country	316	27.69	824	72.31	1,140	0.80
Total	60,583	42.49	82,013	57.51	142,597	100.00

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

Table 68. Weighted Distribution of Employed TVET Graduates Under Non-TTIs, by Location of Work, Philippines: 2016

Location of Work	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Within the province	257,393	54.72	212,948	45.28	470,341	82.27
Outside the province but within the region	18,031	46.45	20,785	53.55	38,816	6.79
Outside the region	18,238	39.96	27,407	60.04	45,645	7.98
Outside the country	11,848	70.17	5,036	29.83	16,884	2.95
Total	305,509	53.44	266,176	46.56	571,685	100.00

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

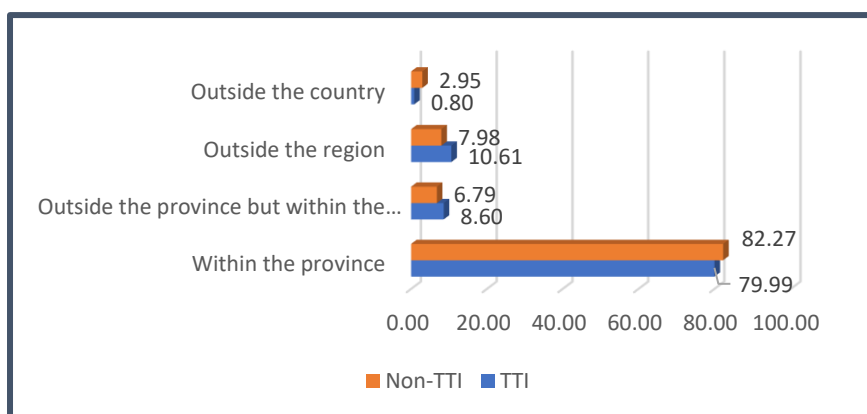


Figure 21. Estimated Employment Rate of TVET Graduates Under TTI and Non-TTI by Location of Work, Philippines: 2016

4.5. Employment of Certified TVET Graduates

As stated earlier, it is necessary for TVET graduates to undertake the competency assessment to assess whether they meet the standards that would enable them to secure better opportunities. To see the significance of the said policy, it was deemed useful to characterize employment status of certified graduates after taking a program, as this would strengthen the implementation of the policy.

It is estimated that 831,352 (91.33%) of the graduates have already been given a certification as a recognition for meeting the standard competency in the knowledge and skills required in a certain sector, of which 74% were working at the time of the survey (Table 69). This is 2% higher than the estimated employment rate for the population of TVET graduates.

Table 70 further describes the employment status of the certified graduates per sex. Similar to the population of certified graduates, 7 in 10 males and 7 in 10 females were employed at the time of the survey.

Table 69. Estimated Employment Rate of Graduates by Certification, Philippines: 2016

Provide	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Frequency	%	Frequency	%	Frequency	ER ^a	Frequency	LFR ^b	Frequency	%
Certified	271,403	32.65	144,282	25.77	415,667	74.23	559,949	67.35	831,352	91.33
Non-Certified	20,650	46.72	6,498	27.59	17,051	72.41	23,549	53.28	44,199	4.86
Not indicated	13,548	38.99	5,564	26.24	15,639	73.76	21,203	61.01	34,751	3.82
Total	305,601	33.57	156,344	25.85	448,357	74.15	604,701	66.43	910,302	100.00

^aER – employment rate; ^bLFR – labor force rate

Table 70. Estimated Employment Rate of Certified Graduates, by Sex, Philippines: 2016

Sex	Not in the Labor Force		In the Labor Force						Certified TVET Graduates	
			Not employed		Employed		Total			
	Freq	%	Freq	%	Freq.	ER ^a	Freq.	LFR ^b	Freq	%
Female	135,864	33.11	70,486	25.68	204,035	74.32	274,521	66.89	410,385	49.36
Male	135,539	32.20	73,795	25.85	211,633	74.15	285,428	67.80	420,967	50.64
Total	271,403	32.65	144,282	25.77	415,667	74.23	559,949	67.35	831,352	100.00

^aER – employment rate; ^bLFR – labor force rate

To know the employment status of the certified graduates considering their provider institution, Table 71 reveals that an estimated 4.99 percentage-point difference between employment rate of TTI graduates (78%) and non-TTI graduates (73.01%).

Female certified graduates under TTIs gained higher employment rate than males, while the opposite was observed for non-TTIs. Likewise, Figure 22 shows that in both male and female certified graduates, TTIs had a higher employment rate than non-TTIs (Tables 72 and 73).

Table 71. Estimated Employment Rate of Certified Graduates under TTIs and Non-TTIs, Philippines: 2016

Provide	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq.	%	Freq.	%	Freq.	ER ^a	Freq.	LFR ^b	Freq	%
TTI	56,489	29.08	30,306	22.00	107,432	78.00	137,738	70.92	194,227	23.36
Non-TTI	214,914	33.73	113,976	26.99	308,236	73.01	422,211	66.27	637,125	76.64
Total	271,403	32.65	1,442,812	25.77	415,667	74.23	559,949	67.35	831,352	100.00

^aER – employment rate; ^bLFR – labor force rate

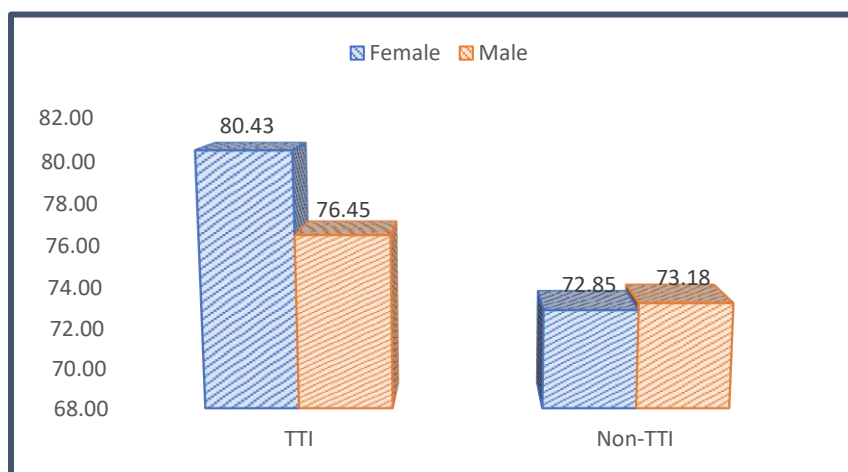


Figure 22. Estimated Employment Rate of Certified TVET Graduates Under TTI and Non-TTI, by Sex, Philippines: 2016

Table 72. Estimated Employment Rate of Certified WTR Graduates under TTI, by Sex, Philippines: 2016

Sex	Not in the Labor Force		In the Labor Force						Certified TVET Graduates	
			Not employed		Employed		Total			
	Freq.	%	Freq.	%	Freq.	ER ^a	Freq.	LFR ^b	Freq	%
Female	22,700	29.80	10,465	19.57	43,015	80.43	53,480	70.20	76,180	39.22
Male	33,789	28.62	19,841	23.55	64,417	76.45	84,258	71.38	118,047	60.78
Total	56,489	29.08	30,306	22.00	107,432	78.00	137,738	70.92	194,227	100.00

^aER – employment rate; ^bLFR – labor force rate

Table 73. Estimated Employment Rate of Certified WTR Graduates under Non-TTI, by Sex, Philippines: 2016

Sex	Not in the Labor Force		In the Labor Force						Certified TVET Graduates	
			Not employed		Employed		Total			
	Freq.	%	Freq.	%	Freq.	ER ^a	Freq.	LFR ^b	Freq.	%
Female	113,164	33.86	60,021	27.15	161,020	72.85	221,041	66.14	334,205	52.46
Male	101,750	33.59	53,954	26.82	147,216	73.18	201,170	66.41	302,920	47.54
Total	214,914	33.73	113,976	26.99	308,236	73.01	422,211	66.27	637,125	100.00

^aER – employment rate; ^bLFR – labor force rate

Table 74 reveals high employment rate of certified graduates across different regions of the country. Region XI consistently garnered the highest employment rate at 92.55%, while ARMM had the lowest employment rate at 47.26%, which is considerably lower than the region's employment rate of the TVET graduates.

Table 74. Estimated Employment Rate of Certified TVET Graduates, By Region, Philippines: 2016

Region	Not in the Labor Force		In the Labor Force						Certified TVET Graduates	
			Not employed		Employed		Total			
	Freq.	%	Freq.	%	Freq.	ER ^a	Freq.	LFR ^b	Freq.	%
ARMM	2,159	27.44	3,011	52.74	2,699	47.26	5,710	1.02	7,869	0.95
CAR	3,887	20.27	2,328	15.23	12,961	84.77	15,290	2.73	19,176	2.31
CARAGA	4,632	27.07	3,063	24.55	9,414	75.45	12,477	2.23	17,110	2.06
NCR	40,532	29.11	20,040	20.30	78,655	79.70	98,694	17.63	139,227	16.75
I	15,099	37.64	4,540	18.15	20,479	81.85	25,019	4.47	40,118	4.83
II	4,875	23.31	3,749	23.38	12,288	76.62	16,037	2.86	20,912	2.52
III	30,454	34.78	18,348	32.12	38,771	67.88	57,119	10.20	87,573	10.53
IV-A	47,442	33.14	23,144	24.18	72,583	75.82	95,727	17.10	143,169	17.22
IV-B	5,076	20.61	4,318	22.09	15,231	77.91	19,549	3.49	24,625	2.96
V	12,116	27.03	7,393	22.60	25,324	77.40	32,716	5.84	44,832	5.39
VI	13,850	29.65	10,114	30.78	22,747	69.22	32,861	5.87	46,710	5.62
VII	18,203	37.14	8,978	29.14	21,835	70.86	30,813	5.50	49,016	5.90
VIII	14,777	34.54	9,541	34.07	18,465	65.93	28,006	5.00	42,784	5.15
IX	11,621	44.79	6,213	43.37	8,112	56.63	14,325	2.56	25,945	3.12
X	13,696	32.31	7,494	26.12	21,197	73.88	28,691	5.12	42,387	5.10
XI	15,385	40.55	1,680	7.45	20,871	92.55	22,552	4.03	37,936	4.56
XII	17,599	41.94	10,328	42.39	14,035	57.61	24,363	4.35	41,962	5.05
Total	271,403	32.65	144,282	25.77	415,667	74.23	559,949	100.00	831,352	100.00

^aER – employment rate; ^bLFR – labor force rate

High employment rates were also recorded for certified graduates under TTIs and non-TTIs across regions (Tables 75 and 76). In TTIs, NCR (100%), Region XI (93.10%), and ARMM (88.0%) had the highest employment rates. ARMM being in the top three indicates that the low employment rate of ARMM in the population of TVET graduates is independent from that of TTI graduates. The lowest employment rate for the graduates was documented in Region XII.

Meanwhile, for non-TTIs, Region XI (92.31%), CAR (86.84%), and Region I (81.16%) garnered the top employment rates, while ARMM had the lowest employment rate at 35.71%, appreciably lower than the TTIs. Moreover, it can be observed that certified graduates under TTIs had a bit higher employment rate than those in non-TTIs across regions, except in CAR, CARAGA, Region VI and Region XII (Figure 23).

Table 75. Estimated Employment Rate of Certified TVET Graduates under TTI, by Region, Philippines: 2016

Region	Not in the Labor Force		In the Labor Force						Certified TVET Graduates	
			Not employed		Employed		Total			
	Freq	%	Freq	%	Freq	ER ^a	Freq	LFR ^b	Freq	%
ARMM	252	16.67	151	12.00	1,110	88.00	1,261	0.23	1,513	0.78
CAR	1,688	25.84	954	19.70	3,889	80.30	4,843	0.86	6,530	3.36
CARAGA	1,225	25.00	933	25.40	2,742	74.60	3,675	0.66	4,900	2.52
NCR	453	12.50	0	0.00	3,172	100.00	3,172	0.57	3,625	1.87
I	4,388	30.00	1,755	17.14	8,483	82.86	10,238	1.83	14,625	7.53
II	2,550	23.42	1,569	18.82	6,766	81.18	8,335	1.49	10,885	5.60
III	4,456	27.83	2,646	22.89	8,912	77.11	11,558	2.06	16,014	8.24
IV-A	8,062	30.59	2,791	15.25	15,504	84.75	18,294	3.27	26,356	13.57
IV-B	1,388	18.18	1,157	18.52	5,089	81.48	6,246	1.12	7,634	3.93
V	3,691	23.62	2,338	19.59	9,598	80.41	11,936	2.13	15,627	8.05
VI	3,361	25.45	3,121	31.71	6,723	68.29	9,844	1.76	13,205	6.80
VII	3,194	29.13	2,002	25.77	5,769	74.23	7,771	1.39	10,965	5.65
VIII	7,757	32.61	4,999	31.18	11,032	68.82	16,031	2.86	23,787	12.25
IX	3,118	33.93	2,461	40.54	3,610	59.46	6,072	1.08	9,190	4.73
X	4,722	35.71	1,511	17.78	6,989	82.22	8,500	1.52	13,222	6.81
XI	3,532	34.09	471	6.90	6,358	93.10	6,829	1.22	10,362	5.33
XII	2,652	45.83	1,447	46.15	1,688	53.85	3,134	0.56	5,786	2.98
Total	56,489	29.08	30,306	22.00	107,432	78.00	137,738	24.60	194,227	100.00

^aER – employment rate; ^bLFR – labor force rate

Table 76. Estimated Employment Rate of Certified TVET Graduates under Non-TTI, by Region, Philippines: 2016

Region	Not in the Labor Force		In the Labor Force						Certified TVET Graduates	
			Not employed		Employed		Total			
	Freq	%	Freq	%	Freq	ER ^a	Freq	LFR ^b	Freq	%
ARMM	1,907	30.00	2,860	64.29	1,589	35.71	4,449	0.79	6,355	1.00
CAR	2,199	17.39	1,375	13.16	9,072	86.84	10,447	1.87	12,646	1.98
CARAGA	3,407	27.91	2,130	24.19	6,673	75.81	8,802	1.57	12,209	1.92
NCR	40,079	29.56	20,040	20.98	75,483	79.02	95,522	17.06	135,602	21.28
I	10,711	42.02	2,785	18.84	11,997	81.16	14,782	2.64	25,493	4.00
II	2,325	23.19	2,180	28.30	5,522	71.70	7,702	1.38	10,027	1.57
III	25,998	36.33	15,702	34.46	29,859	65.54	45,561	8.14	71,559	11.23
IV-A	39,380	33.71	20,354	26.29	57,079	73.71	77,433	13.83	116,812	18.33
IV-B	3,688	21.71	3,161	23.76	10,142	76.24	13,304	2.38	16,992	2.67
V	8,425	28.85	5,055	24.32	15,726	75.68	20,781	3.71	29,205	4.58
VI	10,489	31.30	6,992	30.38	16,024	69.62	23,017	4.11	33,505	5.26
VII	15,009	39.44	6,976	30.28	16,066	69.72	23,042	4.11	38,051	5.97
VIII	7,020	36.96	4,543	37.93	7,433	62.07	11,976	2.14	18,996	2.98
IX	8,503	50.75	3,751	45.45	4,502	54.55	8,253	1.47	16,756	2.63
X	8,974	30.77	5,983	29.63	14,209	70.37	20,191	3.61	29,165	4.58
XI	11,852	42.98	1,209	7.69	14,513	92.31	15,722	2.81	27,575	4.33
XII	14,947	41.32	8,881	41.84	12,347	58.16	21,229	3.79	36,176	5.68
Total	214,914	33.73	113,976	26.99	308,236	73.01	422,211	75.40	637,125	100.00

^aER – employment rate; ^bLFR – labor force rate

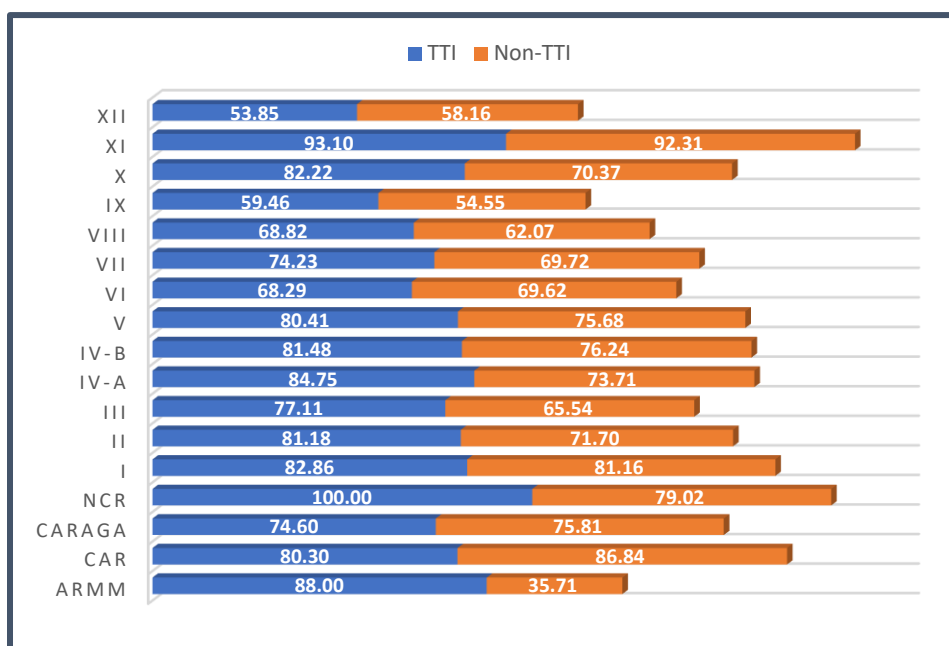


Figure 23. Estimated Employment Rate of Certified TVET Graduates Under TTI and Non-TTI by Region, Philippines: 2016.

4.6. Characteristics of Certified and Non-Certified Employed TVET Graduates (under TTIs and Non-TTIs)

Among the employed TVET graduates, majority (79.53%) were wage and salary workers, of which about 93% were already given certification for meeting the competency standards. Also, majority of the own account workers (91.69%) and those involved in the unpaid family work (95.76%) were already certified graduates (Table 77).

Table 77. Weighted Distribution of Employed Certified and Non-Certified TVET Graduates, by Class of Worker, Philippines: 2016

Class of Worker	Certification							
	Certified TVET Graduates		Non-Certified TVET Graduates		Not Indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Wage and Salary workers	331,433	92.94	15,135	4.24	10,024	2.81	356,592	79.53
Own account workers	82,019	91.69	1,818	2.03	5,614	6.28	89,451	19.95
Unpaid family work	2,216	95.76	98	4.24	0	0.00	2,314	0.52
Total	415,667	92.71	17,051	3.80	15,639	3.49	448,357	100.00

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

Characterization of the graduates based on their institution provider is presented in Tables 78 and 79. Most TTI (93.68%) and non-TTI (92.70%) graduates were wage and salary workers who passed the competency assessment and were given certification. In addition, Figure 24 shows that the portion of certified salary workers in TTIs was slightly higher than in non-TTIs. But a different scenario was noted for own account workers and unpaid family workers: non-TTIs had appreciably higher portion of certified graduates than TTIs.

Table 78. Weighted Distribution of Employed Certified and Non-Certified TVET Graduates under TTI, by Class of Worker, Philippines: 2016

Class of Worker	Certification							
	Certified TVET Graduates		Non-Certified TVET Graduates		Not Indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Wage and Salary Worker	82,569	93.68	3,450	3.91	2,125	2.41	88,144	75.97
Own account workers	24,263	89.26	943	3.47	1,976	7.27	27,182	23.43
Unpaid family work	600	85.95	98	14.05	0	0.00	698	0.60
Total	107,432	92.59	4,491	3.87	4,101	3.53	116,024	100.0

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

Table 79. Weighted Distribution of Employed Certified and Non-Certified TVET Graduates under Non-TTI, by Class of Worker, Philippines: 2016

Class of Worker	Certification							
	Certified TVET Graduates		Non-Certified TVET Graduates		Not Indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Wage and Salary Worker	248,864	92.70	11,685	4.35	7,900	2.94	268,448	80.78
Own account workers	57,756	92.75	875	1.41	3,638	5.84	62,269	18.74
Unpaid family work	1,616	100.00	0	0.00	0	0.00	1,616	0.48
Total	308,236	92.75	12,560	3.78	11,537	3.47	332,333	100.0

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

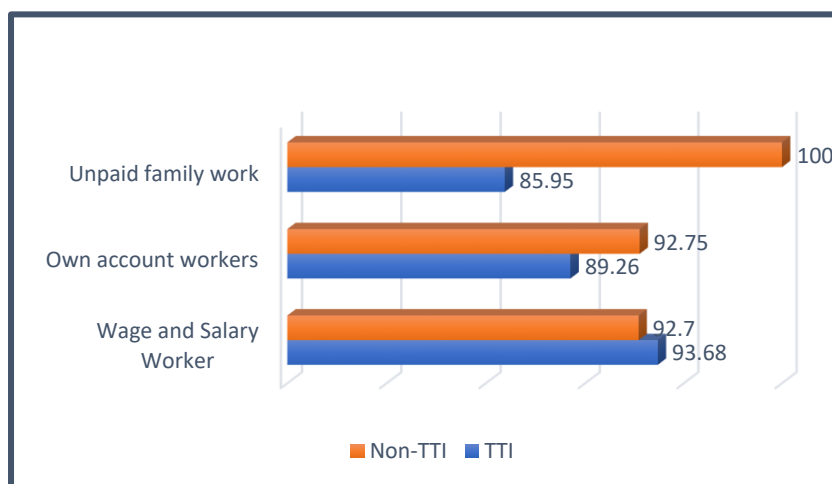


Figure 24. Weighted Distribution of Certified TVET Graduates from under TTI and Non-TTI by Class of Worker, Philippines: 2016.

Most of the graduates in different occupational groups took and passed the competency assessment (Table 80). It can also be noted that no non-certified TVET graduates were working in the armed forces. In addition, the highest percentage of employed graduates who were not yet passers of the assessment were the technicians and associate professionals (7.72%).

Table 80. Weighted Distribution of Employed Certified and Non-Certified TVET Graduates, by Occupational Group, Philippines: 2016

Occupational Group	Certification							
	Certified TVET Graduates		Non-Certified TVET Graduates		Not Indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Armed forces occupations	1,788	100.00	0	0.00	0	0.00	1,788	0.40
Managers	17,297	90.17	822	4.29	1,063	5.54	19,182	4.29
Professionals	73,498	95.20	2,909	3.77	799	1.03	77,206	17.28
Technicians and associate professionals	19,609	91.06	1,662	7.72	264	1.23	21,535	4.82
Clerical support workers	35,303	92.71	2,047	5.38	730	1.92	38,079	8.52
Service and sales workers	104,667	92.63	4,416	3.91	3,914	3.46	112,997	25.30
Skilled agricultural, forestry and fishery workers	8,690	90.35	451	4.69	477	4.96	9,618	2.15
Craft and related trades workers	86,158	95.40	2,540	2.81	1,615	1.79	90,313	20.22
Plant and machine operators and assemblers	23,707	87.88	902	3.34	2,368	8.78	26,976	6.04
Elementary occupations	43,652	89.08	945	1.93	4,408	8.99	49,004	10.97
Total	414,368	92.76	16,693	3.74	15,639	3.50	446,699	100.00

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

Almost the same condition for certified employed graduates were noted under TTIs and non-TTIs (Tables 81 and 82). Furthermore, Figure 25 shows a higher portion of certified employed graduates in TTIs than non-TTIs for those working as managers, craft and related trades workers, plant and machine operators and assemblers, and those related in elementary occupations.

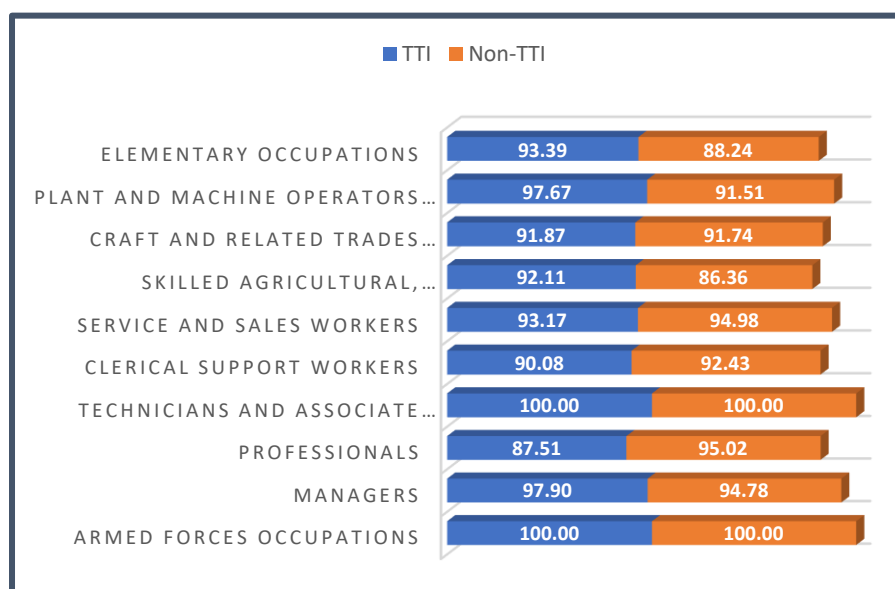


Figure 25. Weighted Distribution of Employed CTET Graduates under TTI and Non-TTI by Nature of Work, Philippines: 2016

Table 81. Weighted Distribution of Employed Certified and Non-Certified TVET Graduates under TTI, by Occupational Group, Philippines: 2016

Occupational Group	Certification							
	Certified TVET Graduates		Non-Certified TVET Graduates		Not Indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Armed forces occupations	784	100.00	0	0.00	0	0.00	784	0.68
Managers	5,473	100.00	0	0.00	0	0.00	5,473	4.75
Professionals	19,262	95.00	793	3.91	220	1.09	20,275	17.59
Technicians and associate professionals	3,020	89.41	310	9.18	48	1.41	3,378	2.93
Clerical support workers	6,839	89.16	313	4.08	519	6.76	7,670	6.65
Service and sales workers	20,459	95.87	787	3.69	95	0.45	21,342	18.51
Skilled agricultural, forestry and fishery workers	3,247	82.55	451	11.46	235	5.99	3,933	3.41
Craft and related trades workers	30,954	95.77	1,128	3.49	238	0.74	32,320	28.04
Plant and machine operators and assemblers	5,908	88.12	387	5.78	409	6.10	6,704	5.82
Elementary occupations	10,817	80.73	245	1.83	2,337	17.44	13,399	11.62
Total	106,764	92.61	4,414	3.83	4,101	3.56	115,279	100.00

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

Table 82. Weighted Distribution of Employed Certified and Non-Certified TVET Graduates under Non-TTI, by Occupational Group, Philippines: 2016

Occupational Group	Certification							
	Certified TVET Graduates		Non-Certified TVET Graduates		Not Indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
Armed forces occupations	1,004	100.00	0	0.00	0	0.00	1,004	0.30
Managers	11,823	86.25	822	6.00	1,063	7.75	13,709	4.14
Professionals	54,236	95.27	2116	3.72	579	1.02	56,930	17.18
Technicians and associate professionals	16,589	91.36	1352	7.45	217	1.19	18,158	5.48
Clerical support workers	28,464	93.60	1734	5.70	211	0.70	30,410	9.18
Service and sales workers	84,208	91.87	3629	3.96	3,819	4.17	91,655	27.66
Skilled agricultural, forestry and fishery workers	5,443	95.75	0	0.00	242	4.25	5,685	1.72
Craft and related trades workers	55,204	95.19	1412	2.43	1,377	2.37	57,993	17.50
Plant and machine operators and assemblers	17,799	87.80	515	2.54	1,959	9.66	20,272	6.12
Elementary occupations	32,834	92.22	700	1.97	2,071	5.82	35,605	10.74
Total	307,604	92.81	12,280	3.71	11,537	3.48	331,421	100.00

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

Table 83. Comparison of Employed Certified and Non-Certified TVET Graduates, by Nature of Work, Philippines: 2016

Nature of Work	Certification							
	Certified TVET Graduates		Non-Certified TVET Graduates		Not indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
permanent job/business/unpaid family work	201,199	91.65	9,504	4.33	8,822	4.02	219,525	49.27
short-term or seasonal job/business/unpaid family work	166,460	93.09	6,071	3.40	6,288	3.52	178,820	40.14
worked different employers on a day-to-day or week-to-week basis	39,401	97.33	1,033	2.55	48	0.12	40,482	9.09
Not indicated	6,247	93.39	442	6.61	0	0.00	6,689	1.50
Total	413,307	92.77	17,051	3.83	15,158	3.40	445,516	100.00

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

When certified employed graduates is compared to non-certified ones, it can be said that most employed graduates were competency assessment passers, in which the highest employment rate was recorded for those working for different employers on a day-to-day or week-to-week basis. This is the same for both TTI and non-TTI graduates (Tables 84 and 85), in which almost the same employment rate can be observed for their certified graduates. Also, in Figure 26, more of the certified graduates in TTI were appointed to permanent positions compared to non-TTIs. Also, more of TTI certified graduates worked for different employers on a day-to-day or week-to-week basis than the non-TTIs, with a slight difference of 1.22%.

Table 84. Comparison of Employed Certified and Non-Certified TVET Graduates under TTI, by Nature of Work, Philippines: 2016

Nature of Work	Certification							
	Certified TVET Graduates		Non-Certified TVET Graduates		Not indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
permanent job/business/unpaid family work	46,933	90.77	1,694	3.28	3,076	5.95	51,703	44.87
short-term or seasonal job/business/unpaid family work	46,227	93.70	2,176	4.41	929	1.88	49,333	42.81
worked different employers on a day-to-day or week-to-week basis	12,055	94.75	620	4.87	48	0.37	12,723	11.04
Not indicated	1,473	100.00	0	0.00	0	0.00	1,473	1.28
Total	106,688	92.59	4,491	3.90	4,054	3.52	115,232	25.86

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

Table 85. Comparison of Employed Certified and Non-Certified TVET Graduates under Non-TTI, by Nature of Work, Philippines: 2016

Nature of Work	Certification							
	Certified TVET Graduates		Non-Certified TVET Graduates		Not indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
permanent job/business/unpaid family work	154,266	91.92	7,810	4.65	5,745	3.42	167,822	50.81
short-term or seasonal job/business/unpaid family work	120,233	92.85	3,895	3.01	5,359	4.14	129,487	39.20

Nature of Work	Certification							
	Certified TVET Graduates		Non-Certified TVET Graduates		Not indicated		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^a	Freq	% ^b
worked different employers on a day-to-day or week-to-week basis	27,346	98.51	413	1.49	0	0.00	27,758	8.41
Not indicated	4,774	91.52	442	8.48	0	0.00	5,216	1.58
Total	306,619	92.84	12,560	3.80	11,104	3.36	330,284	74.14

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

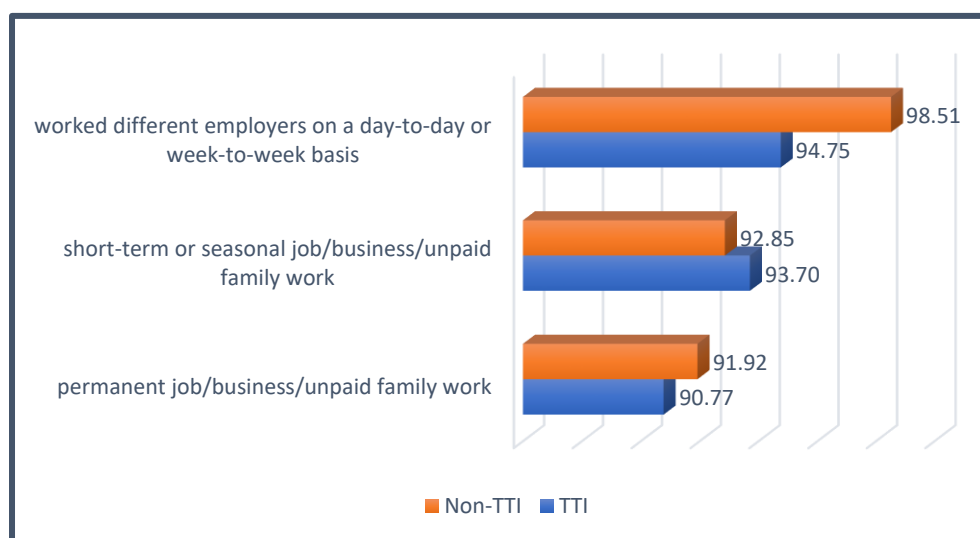


Figure 26. Weighted Distribution of Employed Certified TVET Graduates under TTI and Non-TTI, by Nature of Work, Philippines: 2016

High quality skills learning and certification are fundamental in the country's competitive advantage in the global marketplace. For this reason, many skilled TVET clients are given incentive by their employers to enhance their skills and productivity. Table 86, however, reveals that the majority of the employed certified graduates did not receive any incentive from their employers, and the same scenario was observed for certified graduates in TTIs and non-TTIs. It can be further noted in Table 87 that more graduates from non-TTIs did not receive incentives (5.41% higher than TTIs). Nonetheless, most of those who were given incentives received it in the form of salary increase (Table 88).

Table 86. Incentives Given to Employed Certified Graduates, Philippines: 2016

Employer provide incentives	Frequency	Percentage
Yes	183,889	35.21
No	338,446	64.79
Not indicated	12,034	2.30
Total	522,334	100.00

Table 87. Incentives Given to Employed Certified Graduates under TTIs and Non-TTIs, Philippines: 2016

Employer provide incentives	TTI		Non-TTI	
	Frequency	Percentage	Frequency	Percentage
Yes	41,465	39.53	142,424	34.12
No	63,426	60.47	275,020	65.88
Not indicated	1,628	1.55	10,406	2.49
Total	104,891	100.00	417,444	100.00

Table 88. Types of Incentives Provided by Employer, Philippines: 2016

Types of Incentives	Frequency
Salary Increase	78,132
Promotion	55,095
Job Security	53,542

4.7. Employment of TVET Graduates with Scholarships

As indicated in Table 89, only about 32% of the TVET graduates availed a scholarship while enrolled in a training program. About 7 in 10 scholars were active in the labor force at the time of the survey. Among those in the labor force, around 76% were employed.

Taking into consideration the employment status of the scholars, their participation in the labor force was further characterized. Table 90 shows that the majority of the scholars from different programs were employed, wherein STEP scholars accounted for the highest (77.39%) employment rate.

Table 89. Employment Rate of TVET Graduates With and Without Scholarship, Philippines: 2016

Availed Any Scholarship	Not in the Labor Force		In the Labor Force						TVET Graduates	
			Not employed		Employed		Total			
	Freq.	%	Freq.	%	Freq.	ER ^a	Freq.	LFR ^b	Freq.	%
Yes	144,887	28.50	88,865	24.45	274,561	75.55	363,426	71.50	508,313	31.64
No	456,192	42.13	189,527	30.25	437,059	69.75	626,586	57.87	1,082,778	67.39
Not indicated	6,197	39.90	2,677	28.68	6,657	71.32	9,334	60.10	15,531	0.97
Total	607,276	37.80	281,069	28.13	718,277	71.87	999,346	62.20	1,606,622	100.00

^aER – employment rate; ^bLFR – labor force rate

Table 90. Estimated Employment Rate of TVET Graduates, by Type of Scholarship Program, Philippines: 2016

Type of Program	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq.	%	Freq.	%	Freq.	ER ^a	Freq.	LFR ^b	Freq.	%
PESFA	7,249	28.49	6,153	33.82	12,040	66.18	18,193	71.51	25,442	5.01
TWSP	68,137	26.80	42,929	23.07	143,187	76.93	186,116	73.20	254,253	50.02
STEP	17,468	37.74	6,517	22.61	22,304	77.39	28,821	62.26	46,289	9.11
OTHERS	49,178	28.49	31,675	25.66	91,751	74.34	123,426	71.51	172,604	33.96
Not indicated	2,855	29.35	1,591	23.15	5,280	76.85	6,870	70.65	9,725	1.91
Total	144,887	28.50	88,865	24.45	274,561	75.55	363,426	71.50	508,313	100.00

^aER – employment rate; ^bLFR – labor force rate

Male and female scholars exhibited almost the same employment rate at 75.56% and 75.54%, respectively (Tables 91 and 92). As displayed in Figure 27, female scholars yielded a higher employment than males only under PESFA. Whereas, male scholars generated a higher employment than females for the rest of the scholarship program.

Table 91. Estimated Employment Rate of Male TVET Graduates, By Type of Scholarship Programs, Philippines: 2016

Type of Program	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq.	%	Freq.	%	Freq.	ER ^a	Freq.	LFR ^b	Freq.	%
PESFA	2,695	18.94	4,213	36.53	7,322	63.47	11,535	81.06	14,230	5.83
TWSP	36,376	28.10	20,769	22.32	72,286	77.68	93,055	71.90	129,432	53.04
STEP	7,145	37.31	2,537	21.12	9,471	78.88	12,008	62.69	19,153	7.85
OTHERS	20,302	26.24	14,509	25.42	42,564	74.58	57,073	73.76	77,375	31.71
Not indicated	1,695	44.36	942	44.30	1,184	55.70	2,126	55.64	3,821	1.57
Total	68,213	27.95	42,970	24.44	132,827	75.56	175,797	72.05	244,010	100.00

^aER – employment rate; ^bLFR – labor force rate

Table 92. Estimated Employment Rate of Female TVET Graduates, By Type of Scholarship Programs, Philippines: 2016

Type of Program	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq.	%	Freq.	%	Freq.	ER ^a	Freq.	LFR ^b	Freq.	%
PESFA	4,554	40.62	1,940	29.14	4,718	70.86	6,658	59.38	11,212	4.24
TWSP	31,760	25.44	22,160	23.81	70,901	76.19	93,061	74.56	124,821	47.23
STEP	10,323	38.04	3,980	23.67	12,832	76.33	16,813	61.96	27,136	10.27
OTHERS	28,876	30.32	17,166	25.87	49,187	74.13	66,353	69.68	95,229	36.03
Not indicated	1,160	19.65	649	13.67	4,096	86.33	4,745	80.35	5,905	2.23
Total	76,674	29.01	45,895	24.46	141,734	75.54	187,629	70.99	264,302	100.00

^aER – employment rate; ^bLFR – labor force rate

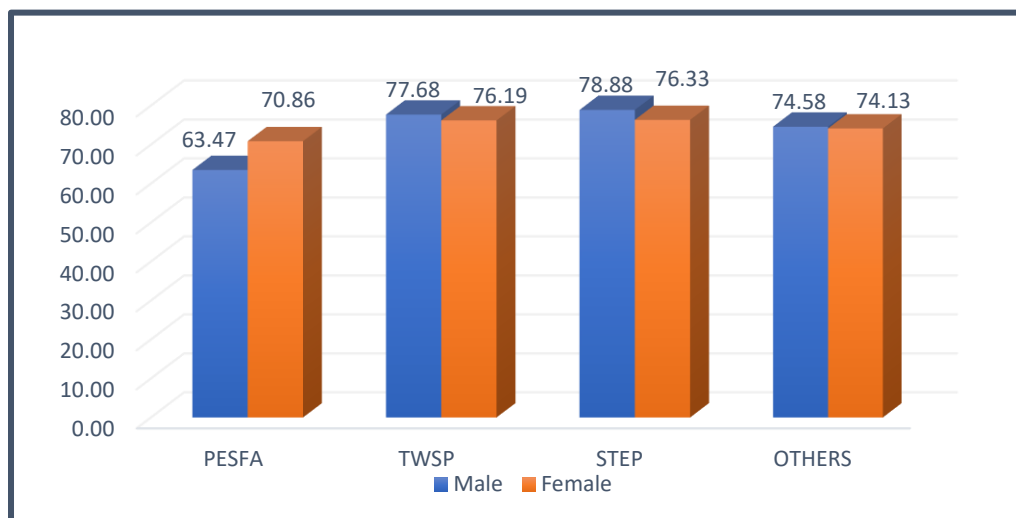


Figure 27. Employment Rate of Scholar TVET Graduates from Different Scholarship Programs, Philippines: 2016

Examining the performance of the scholars from TTIs and non-TTIs, Tables 93 and 94 provide the employment rate of graduates from different scholarship programs. About 8 in every 10 scholars from TTIs (76.31%) and non-TTIs (75.36%) were employed at the time of the survey. It is also clearly shown in Figure 21 that TWSP scholars from TTIs had a higher employment rate at 82.25%. Overall, STEP scholars accounted for the highest employment rate at 77.62%, slightly outnumbering other scholarship programs.

Table 93. Estimated Employment Rate of TVET Graduates under TTI, by Type of Scholarship Program, Philippines: 2016

Type of Program	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq.	%	Freq.	%	Freq.	ER ^a	Freq.	LFR ^b	Freq.	%
PESFA	629	14.13	2,274	59.48	1,550	40.52	3,824	85.87	4,453	4.58
TWSP	8,064	21.00	5,385	17.75	24,957	82.25	30,341	79.00	38,406	39.46
STEP	4,841	32.27	2,342	23.05	7,821	76.95	10,164	67.73	15,005	15.42
OTHERS	9,872	26.45	7,094	25.84	20,359	74.16	27,453	73.55	37,326	38.35
Not indicated	409	19.19	318	18.48	1,403	81.52	1,722	80.81	2,130	2.19
Total	23,816	24.47	17,414	23.69	56,090	76.31	73,504	75.53	97,320	100.00

^aER – employment rate; ^bLFR – labor force rate

Table 94. Estimated Employment Rate of TVET Graduates under Non-TTI, by Type of Scholarship Program, Philippines: 2016

Type of Program	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq.	%	Freq.	%	Freq.	ER ^a	Frequency	LFR ^b	Freq.	%
PESFA	6,620	31.54	3,879	26.99	10,490	73.01	14,369	68.46	20,989	5.11
TWSP	60,073	27.83	37,544	24.10	118,230	75.90	155,775	72.17	215,847	52.52
STEP	12,627	40.36	4,175	22.38	14,483	77.62	18,657	59.64	31,284	7.61
OTHERS	39,305	29.06	24,581	25.61	71,391	74.39	95,972	70.94	135,278	32.91
Not indicated	2,446	32.20	1,272	24.71	3,877	75.29	5,149	67.80	7,595	1.85
Total	121,071	29.46	71,451	24.64	218,471	75.36	289,922	70.54	410,993	100.00

^aER – employment rate; ^bLFR – labor force rate

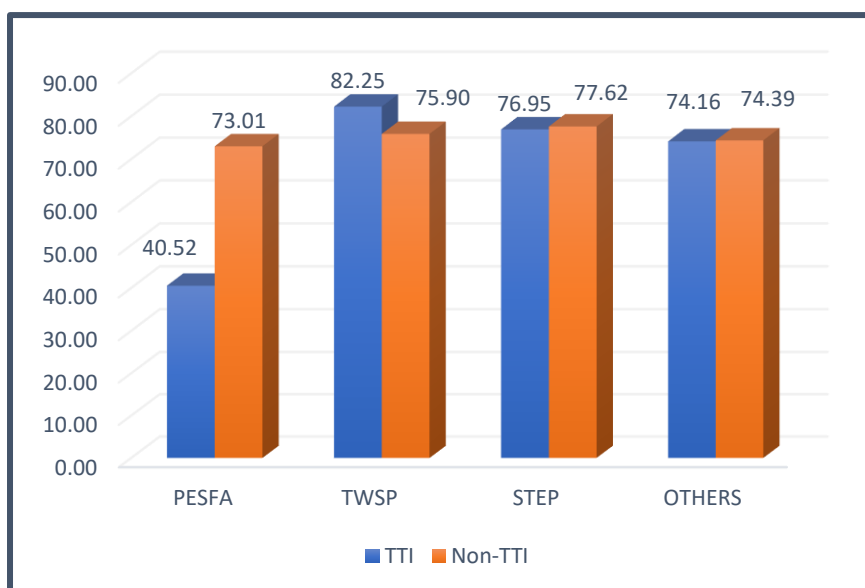


Figure 28. Employment Rate of Scholar TVET Graduates From Different Scholarship under TTIs and Non-TTIs, Philippines: 2016

Training for Work Scholarship Program (TWSP) of TESDA gives assistance to deserving TVET enrollees from all the regions in the country. All training programs under TWSP ensure the quality of their produced graduates. Knowing their scholars' productivity after having finished their programs enables them to assess the national and global competitiveness of their students. This may also serve as their basis in continuously improving their training programs.

Table 95 reveals that majority of the graduates from many of the different sectors funded by the TWSP program were actively working during the survey. Among the different sectors, graduates from Heating, Ventilation, and Air conditioning placed the highest in employment rate at 100%. TVET follows next with 95.01%, then Construction with 85.95%. Alternatively, no graduates from the sectors of Entrepreneurship, Visual Arts, Wholesale and Retail Trading were found to be working at the time of the survey.

Table 95. Employment Rate of Graduates Under TWSP By Sector, Philippines: 2016

Sector	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq	%	Freq	%	Freq	ER ^a	Freq	LFR ^b	Freq	%
Agriculture Forestry and Fisheries	1,718	20.79	1,979	30.23	4,567	69.77	6,545	79.21	8,263	3.25
Automotive and Land Transportation	4,757	25.91	2,678	19.69	10,922	80.31	13,599	74.09	18,356	7.22
Construction	2,848	21.99	1,419	14.05	8,684	85.95	10,103	78.01	12,950	5.09
Electrical and Electronics	11,626	28.13	6,482	21.82	23,224	78.18	29,706	71.87	41,332	16.26
Entrepreneurship	250	51.02	240	100.0	0	0.00	240	48.98	490	0.19
Garments	1,158	33.49	98	4.24	2,202	95.76	2,300	66.51	3,458	1.36
Heating, Ventilation, Air condition	334	87.51	0	0.00	48	100.00	48	12.49	382	0.15
Human Health/Health Care	1,156	18.86	1,364	27.43	3,611	72.57	4,975	81.14	6,131	2.41
Information and Communication	6,306	31.94	2,682	19.96	10,756	80.04	13,438	68.06	19,744	7.77
Language	1,293	17.17	1,274	20.43	4,965	79.57	6,239	82.83	7,532	2.96

Sector	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq	%	Freq	%	Freq	ER ^a	Freq	LFR ^b	Freq	%
Metals and Engineering	5,392	19.82	5,737	26.31	16,073	73.69	21,810	80.18	27,202	10.7
Processed Food and Beverages	98	3.39	1,712	61.56	1,069	38.44	2,781	96.61	2,878	1.13
Social, Community Development	1,087	19.71	1,080	24.39	3,347	75.61	4,427	80.29	5,514	2.17
TVET	257	4.22	291	4.99	5,545	95.01	5,836	95.78	6,094	2.40
Tourism (Hotel and Restaurant)	27,805	31.20	14,241	23.23	47,064	76.77	61,306	68.80	89,111	35.0
Visual Arts	242	100.0	0	0.00	0	0.00	0	0.00	242	0.10
Wholesale and Retail Trading	772	75.00	257	100.0	0	0.00	257	25.00	1,030	0.40
Others	1,036	29.25	1,394	55.63	1,112	44.37	2,507	70.75	3,543	1.39
Total	68,137	26.80	42,929	23.07	143,187	76.93	186,116	73.20	254,253	100

^aER – employment rate; ^bLFR – labor force rate

4.8. Economic Status of TVET Graduates

TVET system plays a role in the economic development of the country. It aims to provide the students the skills that match the needs of the society and economy. In this way, graduates can improve their employment opportunities which enable them to have better quality of living.

The monthly income of the graduates before and after the training were asked to determine their economic condition. Before training, majority (63.74%), mostly females, were earning ₱10,000 monthly. Very few, mostly males, were earning at least ₱30,000 monthly (Table 96).

After attending a training, most (63.39%) had a monthly income of below ₱10,000, but this time males dominated. A small number, mostly male graduates, were high earners (Table 97).

Table 96. Weighted Distribution of TVET Graduates by Monthly Income Before Training, By Sex, Philippines: 2016

Income	Sex					
	Female		Male		Total	
	Frequency	Percentage ^a	Frequency	Percentage ^a	Frequency	Percentage ^b
Below 10,000	146,932	52.13	134,900	47.87	281,832	63.74
10,000 - 19,999	57,175	47.89	62,205	52.11	119,380	27.00
20,000 - 29,999	15,418	55.53	12,350	44.47	27,768	6.28
30,000 - 39,999	3,701	42.85	4,936	57.15	8,637	1.95
40,000 - 49,999	466	18.61	2,037	81.39	2,503	0.57
50,000 and over	624	30.23	1,440	69.77	2,064	0.47
Total	224,317	50.73	217,869	49.27	442,185	100.00

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

Table 97. Weighted Distribution of TVET Graduates by Monthly Income After Training, by Sex, Philippines: 2016

Income	Sex					
	Female		Male		Total	
	Frequenc y	Percentage ^a	Frequenc y	Percentage ^a	Frequenc y	Percentage ^b
Below 10,000	133,903	48.57	141,766	51.43	275,669	63.39
10,000 - 19,999	70,395	53.73	60,627	46.27	131,022	30.13
20,000 - 29,999	14,524	65.59	7,621	34.41	22,145	5.09
30,000 - 39,999	1,710	65.42	904	34.58	2,613	0.60
40,000 - 49,999	0	0.00	1,757	100.00	1,757	0.40
50,000 and over	318	18.91	1,364	81.09	1,682	0.39
Total	220,850	50.78	214,038	49.22	434,888	100.00

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

Table 98 gives the summary statistics of the graduates' income before and after attending a training. On the average, the graduates' income after training was estimated at ₱10,151.64, significantly higher than their income before ₱8,248.19 (p -value=<0.0001). Remarkably, there was a male graduate who was earning a tremendous monthly income of ₱ 200,000 and 250,000 before and after attending a training, respectively (Figures 29 and 30). Based on the standard deviation and coefficient of skewness, a greater variability in the monthly income of the graduates was noted after attending a training, which implies that some graduates earned better after attending a training but some did not.

Table 98. Summary Statistics for Income Before and After the Training by Sex and Overall, Philippines: 2016

Statistics	Income	
	Before Training	After Training
Minimum	1,000.00	1,000.00
Maximum	200,000.00	250,000.00
Mean	8,248.19	10,151.64
Standard deviation	6,798.47	12,218.44
Skewness	4.11	14.17
Percentile		
1%	1,100.00	1,500.00
5%	2,000.00	2,500.00
10%	3,000.00	3,000.00
25%	4,750.00	5,000.00
50%	7,000.00	8,000.00
75%	11,780.00	12,000.00
90%	19,000.00	18,000.00
95%	23,000.00	20,000.00
99%	40,000.00	35,000.00

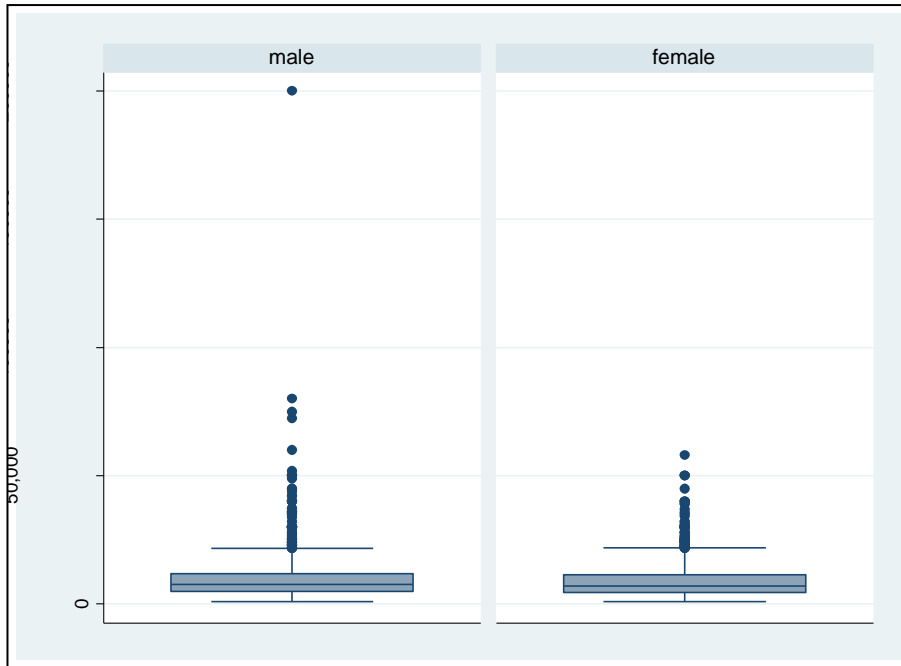


Figure 29. Box Plot of the Monthly Income Before Training, By Sex, Philippines 2016

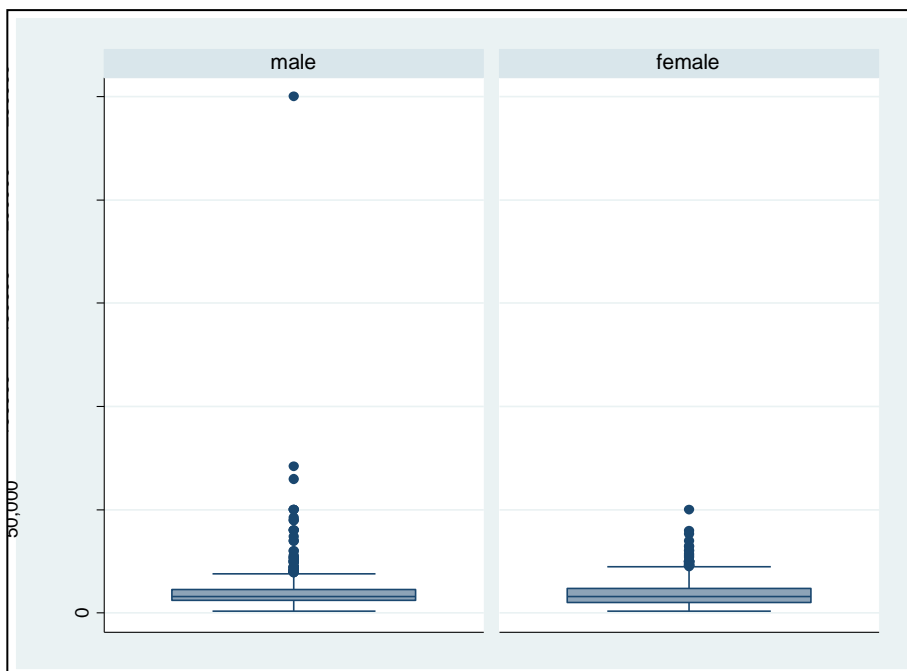


Figure 30. Box Plot of the Monthly Income After Training, By Sex, Philippines: 2016

The current income of the graduates was obtained and summarized in Table 99. During the survey, graduates who were earning received an average of ₱11,091.02 monthly. Males, on the average, earned ₱11,323.06 monthly, while females earned ₱10,869.89. However, *t*-test shows that the difference in their mean monthly income was not significant (*p*-value=0.771). Extremely high monthly earnings were recorded from male graduates as indicated by the coefficient of skewness of 11.42. Maximum monthly income of 70,000 and 390,000 were tagged for female and male graduates, respectively.

The highest income recorded for TTI and non-TTI graduates were ₱250,000 and ₱390,000 monthly, respectively. Moreover, graduates from non-TTI earned higher (₱11129.23) than TTI (₱10,377.85), on the average; but *t*-test shows that the difference in the mean income was not significant (*p*-value= 0.079). As indicated by the coefficient of skewness, extreme high monthly income has been recorded for the graduates (Table 100).

Furthermore, current income of the graduates at the time of the survey was summarized by sector attended. On the average, higher monthly income was recorded for (1) Maritime with ₱ 20,822.78, (2) TVET with ₱19,411.28, (3) Language with ₱17,933.67, and (4) Information and Communication Technology with ₱14,629.03. The largest monthly earning was reported by a graduate from the Automotive and Land Transportation sector, amounting to ₱390,000, while the lowest was noted for graduates of Processed Food and Beverages having an earning of ₱600 (Table 101).

Table 99. Summary Statistics for Current Income, by Sex. Philippines: 2016

Statistics	Sex		Overall
	Female	Male	
Minimum	600	700	600
Maximum	70,000	390,000	390,000
Mean	10,869	11,323	11,091
Standard deviation	7,615	12,570	10,340
Skewness	2	13	11
Percentile			
1%	1,200	1,600	1,500
5%	2,000	3,000	2,500
10%	3,000	4,000	3,500
25%	5,000	6,000	6,000
50%	9,000	9,000	9,000
75%	15,000	12,500	14,000
90%	20,000	20,000	20,000
95%	24,000	25,000	24,000
99%	38,111	50,000	45,000

Table 100. Summary Statistics for Current Income by Type of Provider and Overall, Philippines: 2016

Statistics	Type of Provider		Overall
	TTI	Non-TTI	
Minimum	800	600	200
Maximum	390,000	250,000	390,000
Mean	10,378	11,129	11,270
Standard deviation	10,732	12,065	10,233
Skewness	19	13	9
Percentile			
1%	1,500	1,500	1,200
5%	2,500	2,500	2,500
10%	3,500	3,500	3,500
25%	5,200	6,000	6,000
50%	8,000	9,360	8,500
75%	12,864	14,000	13,500
90%	20,000	20,000	20,000
95%	24,000	24,000	25,000
99%	39,150	50,000	50,000

Table 101. Summary Statistics for Current Income by Sector, Philippines: 2016

Sector	Mean	Std Dev	Minimum	Maximum
Agriculture Forestry and Fishery	9,324.32	7,965.77	900.00	7,0000.00
Automotive and Land Transportation	10,943.38	15,008.48	1,500.00	39,0000.00
Construction	10,844.33	8,197.79	1,000.00	53,000.00
Decorative Crafts	8,000.00	0.00	8,000.00	8,000.00
Entrepreneurship	11,644.68	7,411.41	1,000.00	53,000.00
Footwear and Leather goods	9,016.95	6,214.95	1,000.00	24,000.00
Furniture and Fixtures	6,771.48	417.73	6,500.00	7,200.00
Garments	8,486.76	6,294.89	1,333.00	40,000.00
Heating, Ventilation, Air conditioning and Refrigeration	8,170.14	5,475.44	2,000.00	20,000.00
Human Health/Health Care	8,549.83	7,032.91	800.00	45,000.00
Information and Communication Technology	14,629.03	21,620.07	1,100.00	250,000.00
Language	17,933.67	13,173.88	1,700.00	62,080.00
Logistics	10,985.11	4,895.89	8,000.00	15,000.00
Maritime	20,822.78	25,066.83	6,000.00	71,000.00
Metals and Engineering	10,023.74	7,135.71	2,000.00	65,000.00
Processed Food and Beverages	8,368.66	5,448.36	600.00	30,020.00
Social, Community Development and Other Services	11,297.86	8,730.94	1,000.00	60,000.00
Tourism (Hotel and Restaurant)	11,343.03	8,173.85	1,150.00	80,000.00
TVET	19,411.28	7,772.64	5,000.00	40,000.00
Wholesale and Retail Trading	7,582.04	7,025.98	700.00	20,000.00

4.9. Employment Facilitation and Skills Utilization

TVET clients underwent a training to enhance their skills on a certain interest and ultimately secure better jobs with better salaries. One factor that is related to job satisfaction that can affect the productivity of a worker is skill utilization. Thus, determining how the graduates are using the skills they earned is critical, since it is the objective of every program to improve the productivity and the quality of life of students.

As seen in Table 102, majority of the graduates from all the training delivery modes thought that the trainings gave them the skills expected for them to gain. However, it is still important to note that there were graduates, though very few, who felt that attending the training did not help them level up their skills, with the largest portion coming from dual training system. For the WTR graduates, in particular, considerably large portion (21.8%) of graduates from dual training system indicated that they did not possess the skills that they are expecting to gain, while all WTR graduates from community-bases program completely believed that they acquired their skills from the program attended (Table 103). Meanwhile, all NTR graduates from enterprise-based and community-based said that they were able to develop the skills that they are expecting in attending the program. Alternatively, many (32.33%) NTR graduates, more compared to WTR graduates, perceived that they did not possess the skills that they are anticipating after completing the program attended (Table 104).

Furthermore, majority of the graduates were satisfied with the trainings they attended at TESDA, but then it is also important to consider that approximately 3.33% of the graduates were slightly satisfied or not satisfied at all with the program attended (Table 105).

Table 102. Weighted Distribution of TVET Graduates Who Perceived that they Possess Skills After Completing the Program, by Sex and Program Delivery Mode, Philippines: 2016

Program Delivery Mode	Sex					
	Female		Male		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^b
Institution-based	294,941	47.52	325,752	52.48	620,693	95.37
Enterprise-based	6,317	45.57	7,545	54.43	13,862	98.50
Dual training system/dualized training program	2,596	79.79	657	20.21	3,254	81.13
Mobile training program	7,033	69.67	3,062	30.33	10,095	90.64
Community-based	83,484	54.80	68,858	45.20	152,342	94.89

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

Table 103. Weighted Distribution of WTR Graduates Who Perceived that they Possess Skills After Completing the Program, by Sex and Program Delivery Mode, Philippines: 2016

Program Delivery Mode	Sex					
	Female		Male		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^b
Institution-based	271,614	46.73	309,663	53.27	581,277	95.66
Enterprise-based	2,366	30.67	5,347	69.33	7,712	97.33
Dual training system/dualized training program	1,439	73.52	518	26.48	1,957	78.20
Mobile training program	6,533	68.09	3,062	31.91	9,595	90.20
Community-based	26,559	56.14	20,750	43.86	47,309	96.01

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

Table 104. Weighted Distribution of NTR Graduates Who Perceived that they Possess Skills After Completing the Program, by Sex and Program Delivery Mode, Philippines: 2016

Program Delivery Mode	Sex					
	Female		Male		Total	
	Freq	% ^a	Freq	% ^a	Freq	% ^b
Institution-based	8,791	57.41	6,521	42.59	15,312	91.97
Enterprise-based	1,327	75.00	442	25.00	1,770	100.00
Dual training system/dualized training program	442	100.00	0	0.00	442	67.67
Community-based	2,856	48.57	3,024	51.43	5,880	100.00

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

Table 105. Satisfaction Level of TVET Graduates with the Program Attended, by Sex, Philippines: 2016

Satisfaction level	Sex					
	Female		Male		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Not satisfied	4,978	45.96	5,853	54.04	10,831	0.67
Slightly satisfied	17,900	41.91	24,809	58.09	42,709	2.66
Moderately satisfied	131,506	50.56	128,578	49.44	260,084	16.19
Very satisfied	476,990	53.61	412,763	46.39	889,753	55.38
Extremely satisfied	210,204	52.78	188,066	47.22	398,270	24.79
Not indicated	3,278	65.89	1,697	34.11	4,975	0.31
Total	844,856	52.59	761,766	47.41	1,606,622	100.00

As indicated in Table 106, many of the graduates got their job through referrals (34.28%) and walk-in applications (31.95). There were very few who got employed through blue desk and Public Employment Service Office (PESO).

Table 106. Means for Getting the Present Job of TVET Graduates by Sex, Philippines: 2016

Satisfaction level	Sex					
	Female		Male		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Blue Desk	2,894	48.80	3,036	51.20	5,930	0.84
Public Employment Service Office	9,547	54.75	7,890	45.25	17,436	2.47
Internet Job Posting	14,941	48.48	15,876	51.52	30,817	4.36
Newspaper Advertisements	3,852	45.97	4,527	54.03	8,379	1.19
Referral from friends/relatives	111,727	46.12	130,506	53.88	242,234	34.28
Walk-in application	118,870	52.65	106,908	47.35	225,778	31.95
Others	99,553	56.56	76,455	43.44	176,008	24.91

Among the employed graduates, only 40% deemed the skills that they gained from the attended programs as very useful in their current jobs. Whereas, about 16% stated that they were not useful at all (Table 107).

Table 107. Skills Utilization of Employed TVET Graduates, Philippines: 2016

Skills Utilization	Sex				Total	
	Female		Male		Frequency	Percentage ^b
	Frequency	Percentage ^a	Frequency	Percentage ^a		
Very useful	188,079	50.08	187,477	49.92	375,556	39.97
Some use	95,517	53.38	83,427	46.62	178,945	19.05
No use at all	78,037	51.44	73,656	48.56	151,693	16.15
Not indicated	134,008	57.44	99,278	42.56	233,286	24.83
Total	495,641	52.76	443,839	47.24	939,480	100.00

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

Likewise, many TTI and non-TTI graduates shared similar views. Only about 41% of TTI graduates expressed the value of the skills they learned from the trainings. More TTI graduates (19.18%) than non-TTIs (15.45%) indicated that they were not able to apply in their current jobs the skills they learned (Figure 31). In addition, many male employed TTI graduates mentioned the uselessness of their skills in their jobs, while more females from non-TTIs shared the same views (Tables 108 and 109).

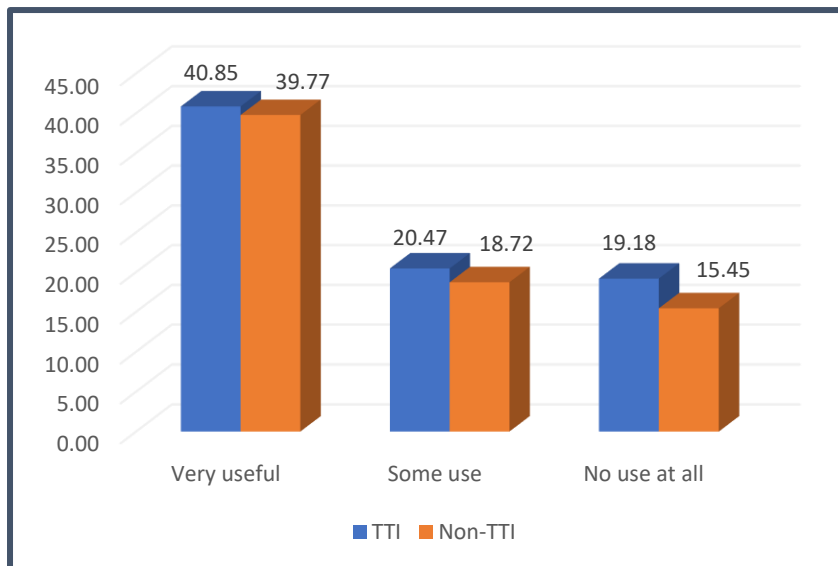


Figure 31. Skill Utilization of Scholar Employed TVET Graduates Under TTIs and Non-TTIs, Philippines: 2016

Table 108. Skills Utilization of Employed TVET Graduates under TTIs, Philippines: 2016

Skills Utilization	Sex				Total	
	Female		Male		Frequenc y	Percentage b
	Frequenc y	Percentage a	Frequenc y	Percentage a		
Very useful	29,484	41.19	42,097	58.81	71,580	40.85
Some use	15,693	43.76	20,166	56.24	35,859	20.47
No use at all	14,696	43.73	18,910	56.27	33,606	19.18
Not indicated	15,430	45.16	18,738	54.84	34,167	19.50
Total	75,302	42.98	99,911	57.02	175,213	100.00

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

Table 109. Skills Utilization of Employed TVET Graduates under Non-TTI, Philippines: 2016

Skills Utilization	Sex				Total	
	Female		Male		Frequenc y	Percentage b
	Frequenc y	Percentage a	Frequenc y	Percentage a		
Very useful	158,596	52.17	145,380	47.83	303,976	39.77
Some use	79,825	55.79	63,261	44.21	143,086	18.72
No use at all	63,341	53.64	54,746	46.36	118,087	15.45
Not indicated	118,578	59.55	80,541	40.45	199,119	26.05
Total	420,339	55.00	343,928	45.00	764,267	100.00

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

Table 110 shows that some of the graduates indicated that the skills they learned from the program were not useful in their current jobs, since the work they landed on were entirely unrelated from the trainings they have completed (50.54%). Also, some of them stated that the skills they acquired from the training were unnecessary in the actual work they were doing at the time of the survey (43.43%).

Table 110. Reasons of TVET Graduates for Considering His/Her Skills Acquired Is No Use at All, by Sex, Philippines: 2016

Reason	Sex					
	Female		Male		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Skills acquired from training/course not needed in actual work	33,050	51.79	30,761	48.21	63,812	43.43
Occupation is entirely different with training/course completed	39,186	52.77	35,077	47.23	74,263	50.54
Others	3,352	41.21	4,782	58.79	8,134	5.54
Not indicated	211	29.63	502	70.37	714	0.49
Total	75,800	51.59	71,123	48.41	146,923	15.64

4.10. Factors Associated with Employability

Characteristics of TVET graduates found significantly associated with their employability are presented in Table 111. Among these factors, **educational attainment, age group and region of a graduate** were found to be moderately associated with a graduate's employability. On the other hand, the type of provider, availing of a scholarship program, took competency, took YP4SC or not, level of certification, perception, satisfaction of training attended, were weakly associated with one's employability.

Table 111. Association with TVET Graduates' Employability

Factor	Rao-Scott Test statistic	p-value	Cramer's V
Type of Provider	17.82	<0.0001*	0.06
Educational Attainment	6.85	<0.0001*	0.17
Program Delivery Mode	1.53	0.1779	0.05
Type of Program Registration	2.47	0.0603	0.05
Availment of Scholarship Program	6.75	0.0012*	0.06
Competency Assessment	6.11	0.0022*	0.06
Results of Competency Assessment	0.07	0.9313	0.01
Level of Certification	2.10	0.0432*	0.08
Perception whether the graduates possess skills after completing the program	9.02	<0.0001*	0.07
Satisfaction of Training Attended	3.84	0.0019*	0.08
Took the Youth Profiling for Starring Career	3.15	0.0433*	0.04
Enrolled in line with the YP4SC results	0.48	0.6202	0.04
Region	9.03	<0.0001*	0.19
Age group	17.10	<0.0001*	0.16
Sex	0.20	0.6578	0.01

All factors found significantly associated with TVET graduates' employability (at the 5% level of significance) were subjected to correspondence analysis to visually present existing associations. Based on the biplot of correspondence analysis, the closer to the origin, the less distinct the factors probably are; otherwise, the more discriminating they probably are. Being a graduates from TTI and being employed are on the opposite sides of the origin (axis label), as seen in Figure 32. This gives an impression of negative associations, suggesting that graduates from TTI are less likely to be unemployed. Conversely, it seems that those from non-TTIs are less likely to be employed. However, TTI is far from the origin, and thus more discerning for graduates' employment status.

Likewise, in Figure 33, it appears that techvoc and college graduates are most likely to be employed, while high school graduates are more likely to be unemployed. Nonetheless, an elementary graduate is considered more of a discriminating attribute against other categories of educational attainment. As seen in Table 112, a large portion of the elementary graduates who took a training program were employed.

Availing of scholarship and being employed in Figure 34 are in the opposite directions (axis label), indicating that those who availed scholarships are less likely to be unemployed. Table 89 shows the estimated employment rates for this factor for better understanding of the associations.

Similarly, graduates who took the competency assessment (Figure 35) shows higher chances of employment. Referring to Table 113 would help in analyzing the association that exists between two factors.

As seen in Figure 36, employment status of graduates is weakly described by their level of certification, except for those at NC IV, which exhibits more discriminating attribute to the employment of graduates against other levels of certification. For better understanding, Table 114 presents the employment rates of different levels of certification, which describes a high employment rate for NC IV.

It can be noted in Figure 37 that many of those who were employed were also those who said that they gained useful skills after attending a training. However, it does not imply that unemployment is likely for those who said that they did gain useful skills, since it can be seen in Table 115 that a larger portion of graduates in this group were in fact employed during the survey.

Figure 38 expresses that although many of those who were very satisfied were employed, employment status is weakly explained by the level of satisfaction from the training. It can be noticed that a slight satisfaction gives a more discriminating attribute, relative to other levels of satisfaction. Likewise, based on Figure 39, those who took the YP4SC are likely to be employed. However, this biplot shows a weak association between the two factors. Tables 116 and 117 give the estimated employment rates for these factors for better understanding of the associations.

It is shown in Figure 40 that those from Region XI, I, IV-B, V, CAR and NCR are most likely to be employed. To add, since it is presented in Table 35 that CARAGA had a high employment rate (74.86%), it can be said that graduates are likely to be employed. This is supported by its higher discriminating attribute than other regions. Moreover, many of those who were employed fall within 25-54 age group, while those 15-24 years old are more likely to be unemployed (Figure 41). A more discriminating age group was seen in 65 years and over, in which majority are employed at the time of the survey (see Table 118).

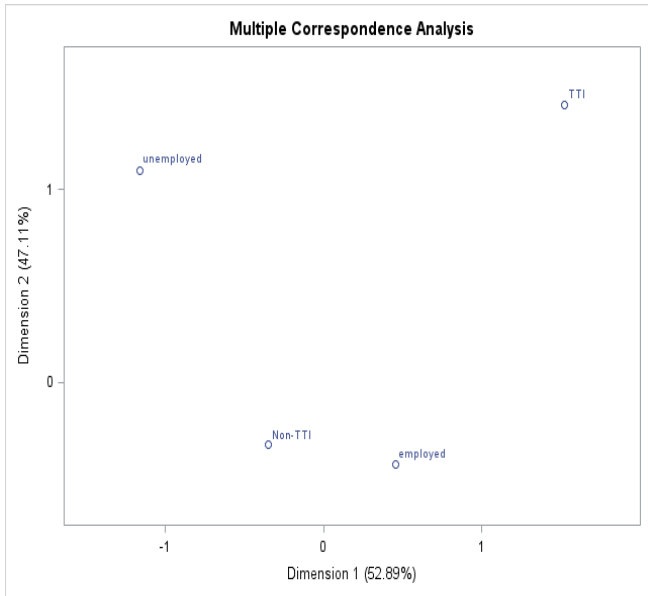


Figure 32. Biplot of Employment status With Type of Provider

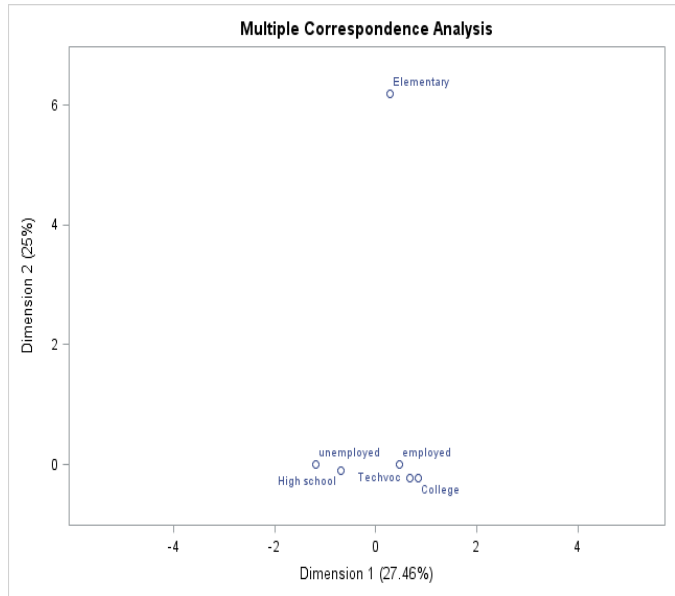


Figure 33. Biplot of Employment Status With Educational Attainment

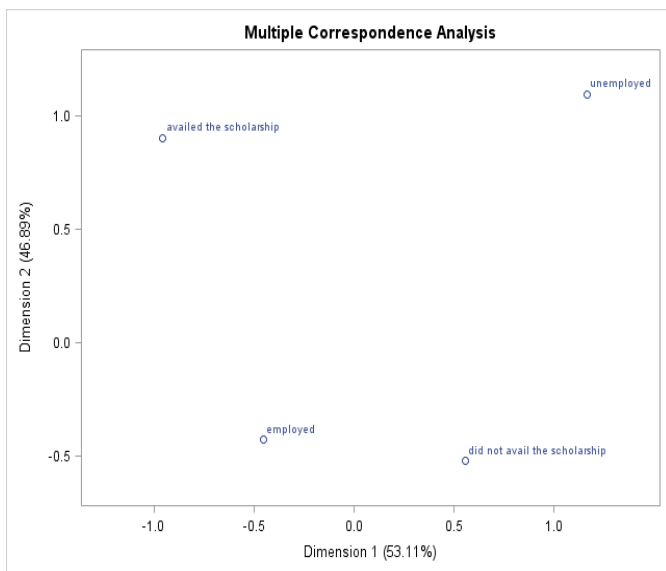


Figure 34. Biplot of Employment Status With Availment of Scholarship Program

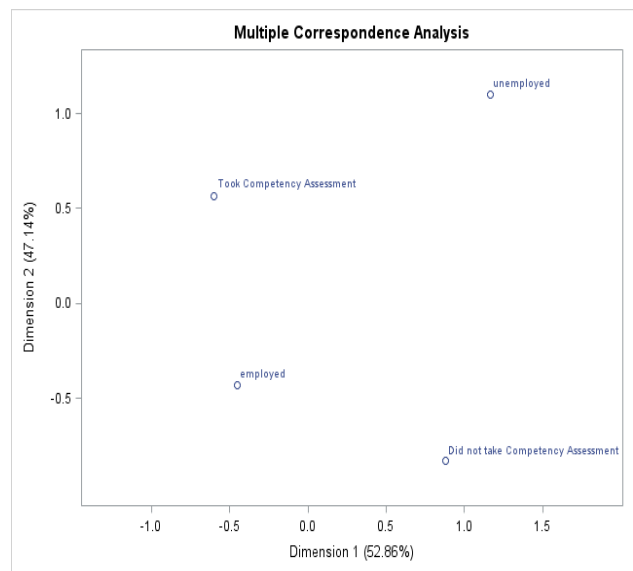


Figure 35. Biplot of Employment Status With Competency Assessment

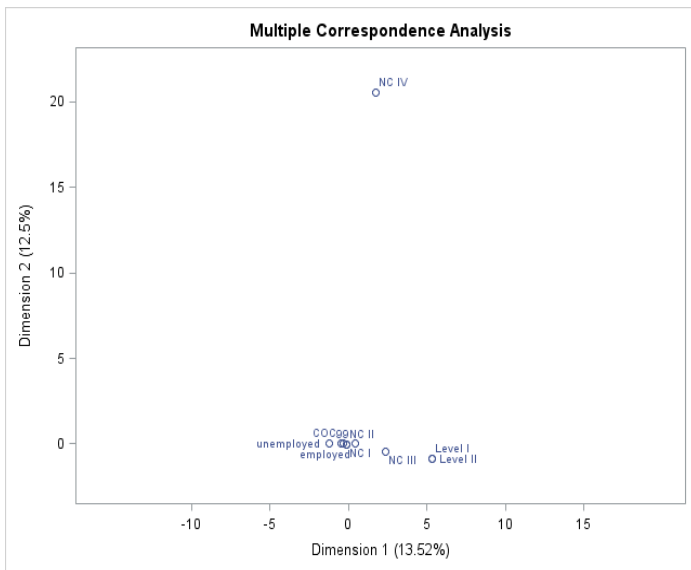


Figure 36. Biplot of Employment Status With Certification

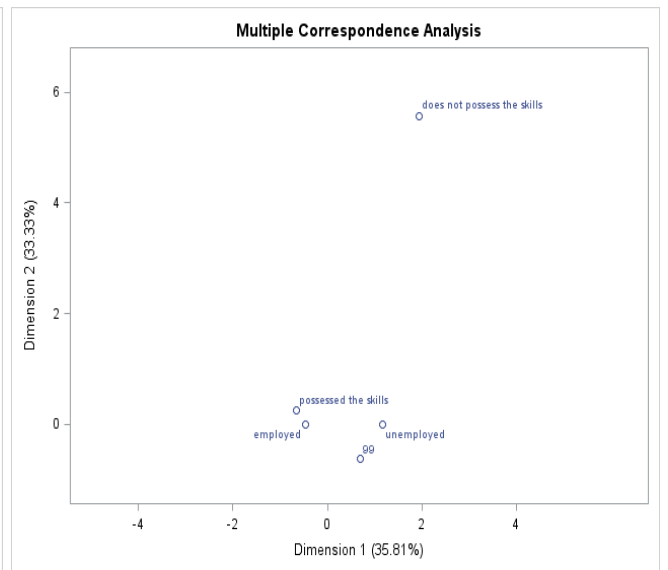


Figure 37. Biplot of Employment Status With the Perception Whether the Graduates Possess Skills After Completing the Program

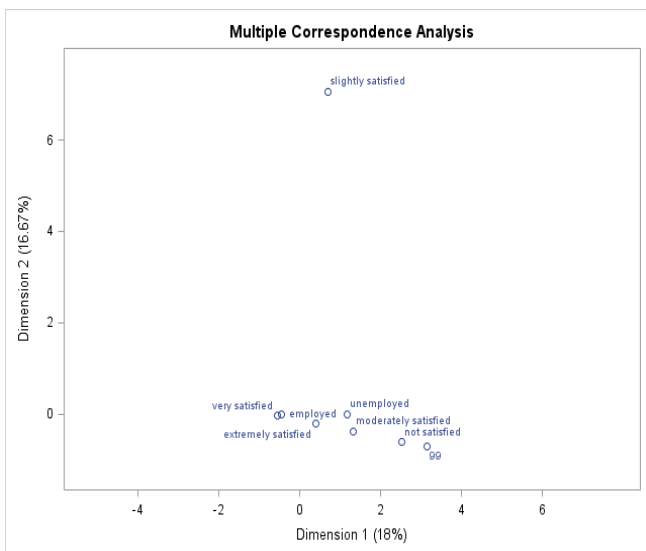


Figure 38. Biplot of Employment Status with the Satisfaction of Training Attended

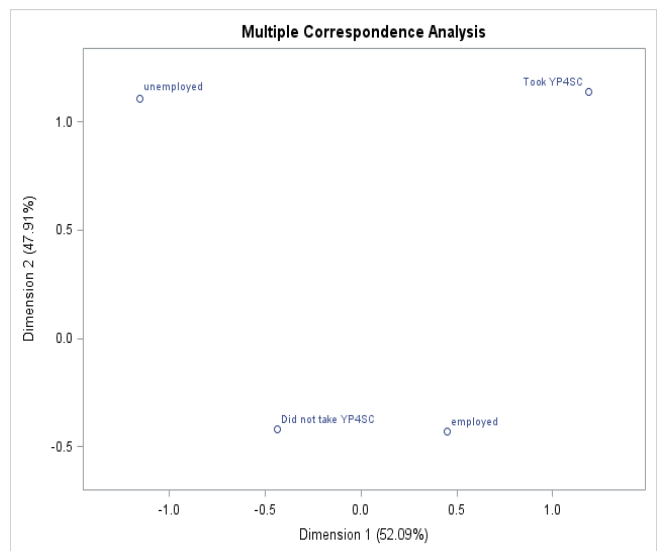


Figure 39. Biplot of Employment status with whether the TVET Graduate Took YP4SC or not

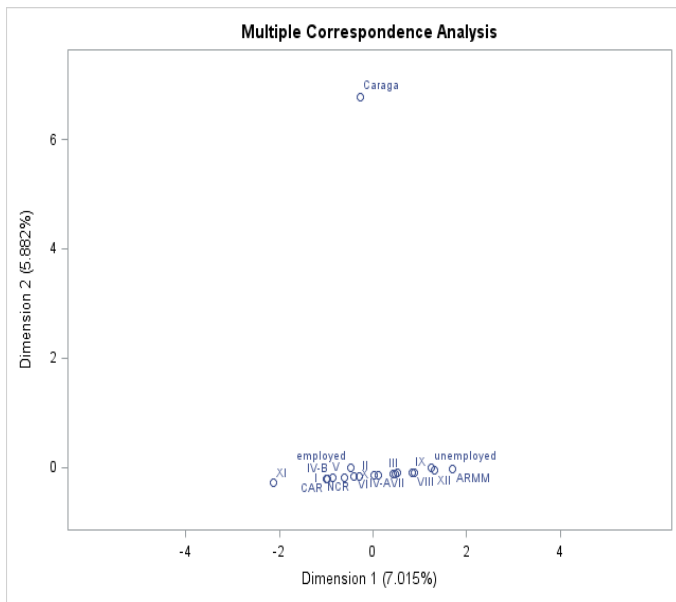


Figure 40. Biplot of Employment Status With Region

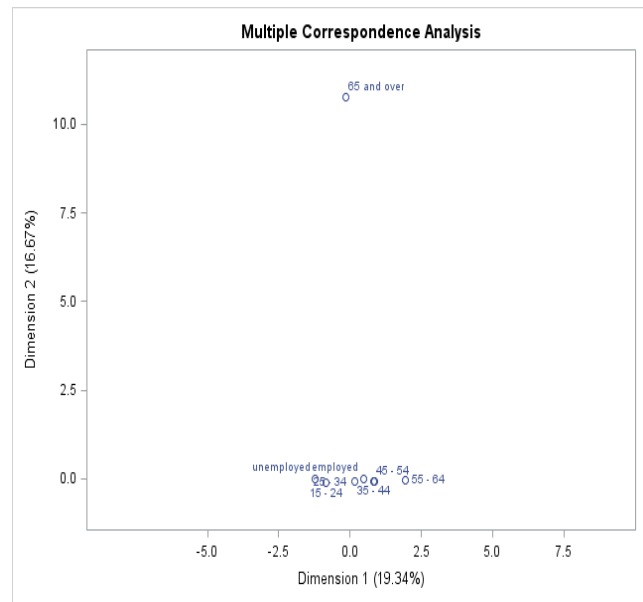


Figure 41. Biplot of Employment Status With Age group

Table 112. Estimated Employment Rate of TVET Graduates, by Highest Educational Attainment, Philippines: 2016

Highest Educational Attainment	Not in the Labor Force		In the Labor Force						Total Graduates	
	Freq	%	Not employed		Employed		Total		Freq	%
			Freq	%	Freq	ER	Freq	LFR		
No grade completed	257	9.86	0	0.00	2,353	100.00	2,353	90.14	2,611	0.16
Elementary undergraduate, Elementary graduate	17,503	40.99	6,677	26.50	18,515	73.50	25,192	59.01	42,694	2.66
Junior high school undergraduate, Junior high school completer, Senior high school undergraduate, Senior high school completer, High school undergraduate (old curriculum), High school graduate (old curriculum)	395,604	42.95	169,991	32.35	355,492	67.65	525,482	57.05	921,086	57.33
Techvoc undergraduate, Techvoc graduate	44,360	32.24	22,447	24.08	70,779	75.92	93,226	67.76	137,586	8.56
College level undergraduate, College level graduate, Master's degree, Doctoral degree	148,626	29.71	81,513	23.19	270,044	76.81	351,558	70.29	500,184	31.13
Not indicated	926	37.62	442	28.78	1,093	71.22	1,535	62.38	2,461	0.15
Total	607,276	37.80	281,609	28.13	718,277	71.87	999,346	62.20	1,606,622	100.0

Table 113. Estimated Employment Rate of TVET Graduates, by Competency Assessment, Philippines: 2016

Competency Assessment	Not in the Labor Force		In the Labor Force						Total Graduates	
	Freq	%	Not employed		Employed		Total		Freq	%
			Freq	%	Freq	ER	Freq	LFR		
Took the Assessment	294,857	33.39	152,290	25.89	435,956	74.11	588,246	66.61	883,103	54.97
Did not take the Assessment	305,756	43.21	125,101	31.13	276,792	68.87	401,893	56.79	707,649	44.05
Not indicated	6,663	41.98	3,678	39.95	5,529	60.05	9,207	58.02	15,870	0.99
Total	607,276	37.80	281,069	28.13	718,277	71.87	999,346	62.20	1,606,622	100.0

Table 114. Estimated Employment Rate of TVET Graduates, by Level of Certification, Philippines: 2016

Level of Certification	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq	%	Freq	%	Freq	ER	Freq	LFR	Freq	%
COC	34,238	34.98	17,913	28.14	45,736	71.86	63,649	65.02	97,887	11.02
NC I	16,343	31.69	9,265	26.30	25,960	73.70	35,225	68.31	51,568	5.80
NC II	203,463	32.43	111,902	26.39	312,069	73.61	423,971	67.57	627,434	70.62
NC III	13,469	31.38	4,238	14.39	25,217	85.61	29,455	68.62	42,924	4.83
NC IV	1,778	56.20	242	17.45	1,144	82.55	1,386	43.80	3,164	0.36
Level I	848	16.86	0	0.00	4,184	100.00	4,184	83.14	5,032	0.57
Level II	591	63.47	0	0.00	340	100.00	340	36.53	931	0.10
Not indicated	23,819	40.02	9,805	27.47	25,888	72.53	35,693	59.98	59,513	6.70
Total	294,549	33.15	153,365	25.82	440,538	74.18	593,904	66.85	888,453	100.00

Table 115. Estimated Employment Rate of TVET Graduates, by Perception on Whether the Graduates Possess Skills After Completing the Program, Philippines: 2016

Possess Skills for Employment	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq	%	Freq	%	Freq	ER	Freq	LFR	Freq	%
Yes	264,615	32.87	135,953	25.15	404,548	74.85	540,501	67.13	805,116	50.11
No	14,706	36.44	9,475	36.93	16,180	63.07	25,656	63.56	40,362	2.51
Not indicated	327,955	43.09	135,641	31.31	297,548	68.69	433,189	56.91	761,144	47.38
Total	607,276	37.80	281,069	28.13	718,277	71.87	999,346	62.20	1,606,622	100.00

Table 116. Estimated Employment Rate of TVET Graduates, by Satisfaction of Training Attended, Philippines: 2016

Satisfaction of Training Attended	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq	%	Freq	%	Freq	ER	Freq	LFR	Freq	%
Not satisfied	5,227	48.26	2,270	40.50	3,334	59.50	5,604	51.74	10,831	0.67
Slightly Satisfied	23,363	54.70	6,092	31.49	13,254	68.51	19,346	45.30	42,709	2.66
Moderately Satisfied	125,559	48.28	46,467	34.54	88,057	65.46	134,525	51.72	260,084	16.19
Very Satisfied	320,062	35.97	144,395	25.35	425,296	74.65	569,691	64.03	889,753	55.38
Extremely Satisfied	131,842	33.10	80,210	30.11	186,218	69.89	266,427	66.90	398,270	24.79
Not indicated	1,223	24.57	1,635	43.57	2,118	56.43	3,753	75.43	4,975	0.31
Total	607,276	37.80	281,069	28.13	718,277	71.87	999,346	62.20	1,606,622	100.00

Table 117. Estimated Employment Rate of TVET Graduates, by Youth Profiling for Starring Career, Philippines: 2016

Youth Profiling for Starring Career (YP4SC)	Not in the Labor Force		In the Labor Force						Total Graduates	
			Not employed		Employed		Total			
	Freq	%	Freq	%	Freq	ER	Freq	LFR	Freq	%
Took YP4SC	169,930	38.96	66,455	24.96	199,815	75.04	266,270	61.04	436,201	27.15
Did not take YP4SC	430,006	37.36	210,453	29.19	510,446	70.81	720,899	62.64	1,150,905	71.64
Not indicated	7,339	37.61	4,161	34.17	8,015	65.83	12,177	62.39	19,516	1.21
Total	607,276	37.80	281,069	28.13	718,277	71.87	999,346	62.20	1,606,622	100.00

Table 118. Estimated Employment Rate of TVET Graduates, by Age, Philippines: 2016

Age group	Not in the Labor Force		In the Labor Force						Total Graduates	
	Freq	%	Not employed		Employed		Total		Freq	%
			Freq	%	Freq	ER	Freq	LFR		
Below 15	6,932	100.00	0	0.00	0	0.00	0	0.00	6,932	0.43
15 – 24	405,120	50.78	141,422	36.01	251,295	63.99	392,717	49.22	797,837	49.66
25 – 34	98,602	23.67	84,014	26.42	234,006	73.58	318,020	76.33	416,622	25.93
35 – 44	46,166	21.93	32,882	20.01	131,461	79.99	164,343	78.07	210,508	13.10
45 – 54	30,041	26.29	17,131	20.34	67,113	79.66	84,244	73.71	114,285	7.11
55 – 64	12,963	29.17	3,089	9.81	28,391	90.19	31,480	70.83	44,443	2.77
65 and over	7,453	46.60	2,530	29.62	6,012	70.38	8,542	53.40	15,995	1.00
Total	607,276	37.80	281,069	28.13	718,277	71.87	999,346	62.20	1,606,622	100.00

4.11. Logistic Model for the Employability

Factors with evidence of association with employment status were then subjected in logistic regression analysis to identify the determinants of employability of TVET graduates. Among the factors found significantly associated with employability, only three were considered significant determinants (at 5% level of significance): type of provider, perception whether or not the graduates possess the skills after completing the program and age group.

As indicated in Table 119, a TVET graduate is about 1.7 times more likely to be employed if one believes that he/she has the skills expected of him/her after the training, holding other factors constant. Based on presented earlier, a higher employment rate was recorded for those who affirmed that they gained skills from the training than those who did not.

Also, a graduate aged 25-34, 35-44, 45-54; and 55-64 is 1.5 times, 1.6 times, twice, and thrice, respectively, more likely to be employed than a graduate aged 15-24 years. Whereas, the employability of a 65 years old or over was not significantly different to those at 15-24 years of age. This can be attributed to these age groups' less active participation in the labor force.

On the other hand, the odds of a TVET graduate to be employed is reduced to about 21.6% if one is from non-TTIs. This could be explained by the previous results, in which TTI graduates posted significantly higher employment rate than non-TTIs.

Table 119. Estimated Coefficients, Odds Ratio, and p-values of the Fitted Logistic Regression model

Factor	Coefficient	Odds Ratio	p-value
Type of provider (Non-TTI)^a	-0.2437	0.7837	0.0170
Perception whether the graduates possess skills after completing the program^b	0.5254	1.6911	0.0270
Age Group^c			
25 – 34	0.4151	1.5146	0.0010
35 – 44	0.7016	2.0169	<0.0001
45 – 54	0.4966	1.6431	0.0200
55 – 64	1.2292	3.4184	0.0020
65 and over	-0.1626	0.8500	0.7990

^aTTI as the reference group; ^bdid not possess as the reference group; ^c15-24 as the reference group

The log likelihood chi-square test was done to assess the significance of the model. Table 120 reveals that the estimated model with the three regressors found was significant at 5% level with a *p-value* of <0.0001. Moreover, Hosmer and Lemeshow's goodness-of-fit test indicates that the estimated model fits the data well, indicated by its *p-value* of 0.8890.

Table 120. Model Assessment

Measures of Fit	Test Statistic	p-value
Log likelihood test	42.16	<0.0001
Hosmer-Lemeshow	1.70	0.8890

Recommendations:

In order to further improve the implementation of TVET programs and increase the employability of TVET graduates, the following are recommended/suggested:

1. Among the training modality, high employment rate was observed to graduates of Dual Training System (DTS). The workplace experiences gained by the TVET graduates during the training can be attributed to the employability of graduates of DTS. TESDA should intensify conduct of training at the enterprise. Companies/enterprises should be encouraged to participate in the conduct of TVET training programs. This can be done through:
 - Assessment of the current policies governing the implementation of training program that involves enterprises, such as Dual Training System, Dual Training Program, Apprenticeship Program and Learnership; and
 - Established mechanisms that will incentivized the enterprises that will participate in conduct of training;
 - Study and adapt the good practices of other countries that are applicable to the TVET system in the Philippines, towards strengthening the training programs in partnership with the industries; and
 - Conduct massive advocacy and promotion of training programs with enterprises.
2. The employment rate of certified graduates is not significantly different from non-certified graduates. This is also evident in the results of the previous studies on the employability. It is therefore recommended that the agency should develop a mechanism that will encourage the industries to recognize the certification of TVET graduates, and will give value to the National Certificate.
3. Despite the existing policy on the conduct of mandatory assessment for programs With Training Regulations (WTR), it is still apparent that 22% of graduates of WTR did not take the assessment; and the major reason for not taking the assessment is because they are not aware that it is mandatory. It is suggested that trainers should ensure that the trainees are aware of the process and requirements of the training programs. Also, further stud can be undertaken to validate the results and to determine the details.
4. Graduates under STEP accounted with higher employment compared to TWSP which major objectives is provide funding on sectors that have available employment. This can be considered to the review the existing qualifications identified as priority programs under the TWSP, another criterion/basis in the identification of specific qualifications can be considered to ensure the employability of the graduates after completing the programs under the TWSP.
5. Low utilization of supporting mechanism like the YP4SC and jobs bridging should be reviewed to determine the applicability of these initiatives with the current trends and changes. Conduct of separate study that will assess the implementations of the programs is therefore recommended. This is to provide specific recommendations to the management that will support the formulation new policies if necessary.
6. The percentage of graduate that responded that they did not gain the required skills implies the need to conduct of review of the standards. Further analysis to identify the sectors and program took by the graduates should be undertaken to determine the qualifications that needs to be reviewed.

7. The high employability of TTIs graduates is also worth to note. The results of the study can be considered a basis for the allocation of funds for the development of the infrastructure, trainers of the TTIs, among others.
8. Educational attainment and age were disclosed as factors that contribute to the employability of the graduates. Elementary graduates and individuals who are 65 and above have less chances to be employed. It denotes that these indicators can be considered in the entry requirements of the trainees.

ANNEXES

Title of statistical survey 2017 Study on the Employability of Technical and Vocational Education and Training (TVET) Graduates			
Proponent agency Technical Education and Skills Development Authority	Conducting agency Technical Education and Skills Development Authority		
<p>1 <input checked="" type="checkbox"/> CLEARANCE GRANTED, subject to the following final action:</p> <p>i) <input checked="" type="checkbox"/> All information enclosed in the box/es below must be printed or stamped on the upper right corner of the first page of the statistical survey form.</p> <p>(a) Questionnaire Title: <i>2017 Study on the Employability of TVET Graduates</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">PSA Approval No. TESDA-1737</td> <td style="text-align: center;">Expires on 31 October 2018</td> </tr> </table> <p>ii) <input checked="" type="checkbox"/> Submit a copy of the Manual of Operations and the printed forms/questionnaires with the clearance number to the Censuses and Technical Coordination Office – Standards Service (CTCO-SS), 30 days upon receipt of this form.</p> <p>iii) <input checked="" type="checkbox"/> Others. (Specify)</p> <ul style="list-style-type: none"> • Please furnish the CTCO-SS copies of the survey results. • The survey design and instrument shall be subject to review should there be any changes made prior to the expiration of the clearance granted. 		PSA Approval No. TESDA-1737	Expires on 31 October 2018
PSA Approval No. TESDA-1737	Expires on 31 October 2018		
2 <input type="checkbox"/> DISAPPROVED , for the following reasons:			
<p>3 <input checked="" type="checkbox"/> REMARKS</p> <p>A. Sampling Design</p> <ol style="list-style-type: none"> 1. We would like to reiterate our previous comment that the response rate in the 2017 Study be aimed at a minimum of 90%, instead of 70%. The TESDA database on the 2016 TVET graduates, disaggregated by region/province may be provided to the enumerators or respective provincial offices. A sample which will not be able to respond to the survey may be replaced by a different graduate/respondent that will be lifted from the database. Doing so will obtain a higher response rate for the survey, thus increasing the reliability of the results. 2. On the SSRCS Form 1, the following are our comments: <ol style="list-style-type: none"> a. Kindly note that since the statistics to be produced would be disaggregated at the provincial level, it is expected that the domain should be the province. By definition, “domain” refers to the lowest level for which survey results could be produced. To compute for the sample size per province, we recommend that the estimated sample size by region should be proportionally allocated by province. b. It is suggested to indicate the actual size of universe i.e., 1,613,318 instead of CY2017. 3. On page 1 of Sampling Design and on Table 1, the total number of 2017 TVET graduates is 1,613,318 which is used in the computation of initial sample size. However, in adjusting the sample size, the N used is 1,617,349. We would like to clarify which is the correct total population or big N to be accounted in this survey. <p>B. Questionnaire Design/Forms Content</p> <ol style="list-style-type: none"> 1. The reference period in SSRCS Form 1 is September 2015, while the training program covered is CY 2016. We would like to clarify which reference period will be covered in this survey. 			

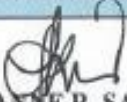

past week) be stated as: "Please ask Question D.15"

C. TABLES TO BE GENERATED

1. On the SSRCS Form 1, the geographic disaggregation of data to be produced is provincial level. Thus, it is suggested to provide statistics by province.
2. In the questionnaire, we noted that item B.3 (Program Delivery Mode) under Part B (Training, Competency Assessment and Certification) included dual training program/dualized training program and mobile training program as categories in addition to institution-enterprise and community based training programs. Thus, please include these two additional categories in Table 2 to be generated.
3. Please explore the possibility of generating tables on TVET graduates by 1-digit PSIC, 2-digit PSIC or by 3-Digit PSIC to aid TESDA in targeting TVET enrolment in specific types of industries/sectors.

D. OTHER COMMENTS

1. It is suggested to spell out abbreviations that are not of common knowledge (such as TVET, TTI, WTR, NTR, PESFA) to all data users, enumerators, etc.
2. On the Guidelines on the Conduct of the 2017 Study on the Employability of TVET Graduates, please revise the note on page 23 as follows: "To be answered by respondents whose answer in D.12 is Yes and D.14 is any from 1 to 6."

REVIEWING OFFICIAL	RECOMMENDING OFFICIAL
 PATRICIA ANNE R. SAN BUENAVENTURA <i>(Supervising Statistical Specialist)</i> <i>Officer-in-Charge</i> <i>Statistical Standards Division</i> <i>23 October 2017</i>	 CANDIDO J. ASTROLOGO, JR. <i>Assistant National Statistician</i> <i>Standards Services</i> <i>23 October 2017</i>

2017 Study on the Employability of TVET Graduates

Sampling Design:

The list of 2016 TVET graduates of regular programs and scholarship programs from MIS 03-02 submitted to the Central Office by the regional/provincial offices served as the sampling frame/population from where the sample respondents were selected. However, the province of Lanao del Sur was excluded from the coverage of the study due to possible inconvenience or difficulty in locating the graduate-respondents displaced by the crisis in Marawi City.

Stratified random sampling will be adopted in 2017 Employability Study, with the regions as the identified strata. A confidence level of 95% and 0.05 margin of error were adopted in determining the sample size. Systematic random sampling was applied in the selection of sample respondents per stratum. The formula for the computation of the sample size is:

$$n = \frac{z_{\alpha/2}^2 CV^2}{e^2 + \frac{z_{\alpha/2}^2 CV^2}{N}}$$

where:

n = sample size

N = 2017 TVET graduates

$$n = \frac{1.96^2(2.5)^2}{0.5^2 + \frac{1.96^2(2.5)^2}{1,606,622}}$$

= **9,547** sample TVET graduates

To adjust the sample size:

- a) The finite population correction (fpc) shall be taken into account

For CY 2016 TVET graduates

$$n = \frac{Nn_0}{N+n_0} = \frac{(1,606,622)(9,547)}{1,606,622+9,547}$$

= 9,491

- b) Considering that the average response rate in the previous 2015 survey conducted is 70%, we will adopt

$$n = \frac{n}{0.70} = \frac{9,491}{0.70}$$

= 13,559

- c) The sample is divided into two groups, graduates of TESDA Technology Institutions (TTIs) and graduates of other TVET institutions. We purposively selected 30 samples from the 119 TTIs further increasing the number of samples

$$n_{(\text{non-TTI})} = 11,402$$

$$n_{(\text{TTI})} = 3,570$$

$$n = 14,972$$

The survey will be done through face-to-face or phone interview using a structured questionnaire. The individual TVET graduate is the unit of enumeration for the survey. The key informant will be interviewed in cases where the sampled graduate will not be available during the survey period. The key informants include relatives, i.e., parents, children, spouse, siblings of the graduate who can provide the needed information.

The generation of data and information will be carried out through a nationwide survey of selected TVET graduates using a structured survey instrument with clearance issued by the Philippine Statistics Authority (PSA).

The total universe and the sample size by region are indicated in Table 1.

Table 1. Total Number of 2016 TVET Graduates and Sample Size by Region

Region	Total Graduates	Number of Samples
NCR	254,703	2,172
CAR	34,243	402
I	76,580	700
II	56,319	532
III	147,587	1,378
IV-A	265,608	2,204
IV-B	36,541	380
V	77,590	815
VI	109,371	1,072
VII	136,571	1,398
VIII	78,133	696
IX	68,921	634
X	70,820	773
XI	72,939	687
XII	73,624	606
CARAGA	31,592	348
ARMM	15,480	175
Total	1,606,622	14,972

Training Program Particulars in CY 2016: (All Items should be filled up by the Provincial M&E Focal Staff before the conduct of the survey, except items B.3.1, B.8 and B.9. But it should be verified by the enumerators during the survey. Please encircle the appropriate code and request additional answer as applicable)

B.1 TVET Program Attended/ Qualification Title/s in 2016 where the graduate was sampled	B.2 Date Started and Date Completed (mm/dd/yyyy)		B.3 Program Delivery Mode	B.3.1 If institution-based, did the training have an internship or OJT at enterprise?	B.4 Name of Training Institution/s Attended	B.5 Type of TVET Program Registration
	Started	Completed	1. Institution-based 2. Enterprise-based 3. Dual Training Program/Dualized Training Program 4. Mobile Training Program 5. Community-based	1. Yes 2. No		1. WTR 2. NTR 2. Not registered

Write the other programs the respondent took in 2016 in the spaces provided below. Write N/A if not applicable

B.1.1 Other programs the respondent took in 2016	Started	Completed	1. Institution-based 2. Enterprise-based 3. Dual Training Program/Dualized Training Program 4. Mobile Training Program 5. Community-based	1. Yes 2. No		1. WTR 2. NTR 3. Not registered
	Started	Completed	1. Institution-based 2. Enterprise-based 3. Dual Training Program/Dualized Training Program 4. Mobile Training Program 5. Community-based	1. Yes 2. No		1. WTR 2. NTR 3. Not registered
	Started	Completed	1. Institution-based 2. Enterprise-based 3. Dual Training Program/Dualized Training Program 4. Mobile Training Program 5. Community-based	1. Yes 2. No		1. WTR 2. NTR 3. Not registered

All succeeding questions refer to the qualification where the respondent was sampled.

<p>B.10 Are you satisfied with the TVET program you attended/completed? [5] extremely satisfied [4] very satisfied [3] moderately satisfied [2] slightly satisfied [1] not satisfied</p> <p>B.10.1 If not satisfied, please indicate reason why: _____</p> <p>B.11 Did you take the Youth Profiling for Starring Career (YP4SC)?</p> <p>1. Yes</p> <p>B.11.1 Is the TVET Program that you have enrolled in line with the result of YP4SC?</p> <p>1. Yes 2. No</p> <p>2. No</p>

(Continuation of B)

B.6 Did You avail of any scholarship program?	B.6.1 What type of scholarship program?	B.7 Did you take the competency Assessment?	B.7.1 Did you pass the Competency Assessment?	B.7.2 What is the level of certification	B.8 Reason for not taking assessment (see choices below)	B.9 After completing the training program, do you think you already possess the necessary skills for getting employed?
1. Yes 2. No (If YES, answer question B.6.1, if NO, proceed to question B.7)	1. PESFA 2. TWSP 3. STEP 4. Others, pls. specify _____ _____	1. Yes 2. No (If YES, answer question B.7.1, if NO, proceed to question B.8)	1. Yes 2. No (If YES, answer question B.7.2, if NO, proceed to question B.9)	1. COC 2. NC I 3. NC II 4. NC III 5. NC IV		1. Yes 2. No, state the reason _____ _____

B.8 Choices of reasons for not taking the assessment

1. Assessment tools/test package not available
2. Assessment officer/assessor not available
3. No Assessment officer/assessor in the area
4. Assessment center not available/not accessible
5. No Assessment center in the area
6. Assessment not mandatory
7. Skills and knowledge learned not sufficient
8. No money/financial constraints
9. No time/working/schooling/abroad
10. Schedule not known
11. Others, please specify _____

PART C: EMPLOYMENT STATUS OF GRADUATE BEFORE AND AFTER TRAINING

Employment Status before Enrolment

C.1 Were you employed upon or within one week before enrolling in this course?

[Note: "employed" include all persons 15 years old and over as of their last birthday who either:

a. do any work even for one hour during the reference period for pay or profit, or work without pay on the farm or business enterprise operated by a member of the same household related by blood, marriage, or adoption;

OR b. With a job but not at work (those who have a job or business but are not at work because of temporary illness/injury, vacation, or other reasons.)

Likewise, persons who expect to report for work or to start operation of a farm or business enterprise within two weeks from the date of the enumerator's visit

Also included as employed are those who opt to resign from their job for enrolment reason.

1. Yes

C.1.1 occupational title : _____

C.1.2 monthly gross income : ₱ _____

C.1.3 Whom do you work for? **(please select one answer only)**

1. Worked for private household;
2. Worked for private establishment;
3. Worked for government/government corporation;
4. Worked with pay on own family-operated farm or business;
5. Self-employed without paid employee;
6. Employer in own family-operated farm or business;
7. Worked without pay on own family-operated farm or business
(please proceed to C.3)

PSOC Code _____

Income Code _____

2. No **(please ask C.2)**

C.2 Did you look 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 **(please ask C.2.1)**

C.2.1 What is the major reason for not looking for work? **(please select one answer only)**

- | | |
|---|-----------------------------------|
| 1. Financial problem <i>(no money for job application/search)</i> | 10. Too young/old or retired |
| 2. Poor communication skills | 11. Permanent disability |
| 3. Inadequate skills required for the job | 12. Household/family duties |
| 4. Inadequate experience required for the job | 13. Schooling |
| 5. Tired | 14. Others, please specify: _____ |
| 6. No work available | |
| 7. Awaiting results of previous application | |
| 8. Bad weather | |
| 9. Waiting for rehire/job recall | |

C.3 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 before enrolling in this course?

1. Yes 2. No

Employment Status After Training

C.4 Did you get your **first job/employment after completing the course/training program**?

(Note: include as employed if the graduate was able to work even for one hour in any period after completing the course/training program until one week before this interview)

1. Yes, specify

C.3.1 occupational title : _____

C.3.2 monthly gross income : ₱ _____

2. No **(please proceed to C.5)**

3. Continued with the previous job **(please proceed to C.5)**

PSOC Code _____

Income Code _____

C.5 How long did it take you to get your **first job/employment** after completing the course?

C.5.1 please indicate number of months _____

C.5.2 if less than one month, indicate number of weeks _____

C.6 Is work experience a requirement of the employer before being employed?

1. Yes 2. No 3. I don't know

C.7 Is certification a requirement of the employer before being employed?

1. Yes 2. No 3. I don't know

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

D.1 Are you currently employed or employed within a week before this interview?

1. Yes

D.1.1 Complete Name of Company: _____

D.1.2 Complete Address: _____

(No./ Street
(Municipality/City)

(Barangay)

(Province)

D.1.3 Occupational title: _____

PSOC Code _____

D.1.4 Since when? (*Date of start of this employment*): _____

(mm/yyyy)

D.1.5 Current monthly gross income: ₱ _____

(include estimated value of goods or non-cash received)

Income Code _____

D.1.6 Number of hours worked in the past week: _____

(disregard item D.1.6 if the respondent has yet to report for work or start a business)

2. No (*Please proceed to D.13*)

D.2 How did you get your present job? (*please select one answer only*)

1. Blue Desk
2. Public Employment Service Office (PESO)
3. Internet Job Posting
4. Newspaper Advertisements
5. Referral from friends/relatives
6. Walk-in application
7. Others, pls. specify _____

D.3 What type of industry/business are you engaged in?

(please specify, example: agriculture, forestry and fishing; mining and quarrying, etc.)

D.3.1 What is the major product or type of service of your company/business?

(please specify, example: rice, corn, steep pipes or tubes, plastic pipes, etc.)

PSIC Code _____

D.4 Whom do you work for? (*please select one answer only*)

1. Works for private household;
2. Works for private establishment;
3. Works for government/government corporation;
4. Works with pay on own family-operated farm or business;
5. Self-employed without paid employee; (*please proceed to D.8*)
6. Employer in own family-operated farm or business; (*please proceed to D.8*)
7. Works without pay on own family-operated farm or business (*please proceed to D.8*)

D.5 Does your employer provide incentives to National Certificate/Certificate of Competency holder?

1. Yes

D.5.1 What are the incentives, (*select as many as possible*).

1. Salary increase
2. Promotion
3. Job Security
4. Others, please specify _____

2. No

D.6 Are the terms of your employment covered by a contract?

1. Yes

D.6.1. written contract

D.6.2. verbal contract

2. No

D.7 Does your employer pay for your contribution to the following (*please encircle the appropriate box*):

1. GSIS/SSS	Yes	No
2. Pag-IBIG	Yes	No
3. PhilHealth	Yes	No

D.8 What is the nature of your employment? (*please encircle one answer only*)

1. permanent job/permanent business/permanent unpaid family work
2. short-term or seasonal job/business/unpaid family work
3. worked for different employers/clients on day to day or week to week basis

D.9 Is the training/course you completed (in B.1) related or relevant to your current job/business?

- [3] very much related or relevant (*please proceed to D.10*) [2] somewhat related or relevant (*please proceed to D.10*) [1] not related or relevant (*please ask D.9.1*)

D.9.1 If **not related or relevant** , please indicate reason why: _____
(*please ask D.10.3*)

D.10 How useful are your skills acquired from the training to your job/business?

- D.10.1. Very useful (when often or directly used in the job)
D.10.2. Some use (when seldom or sometimes used in the job)
D.10.3. No use at all because
3.1 skills acquired from training/course not needed in actual work
3.2 occupation is entirely different with training/course completed
3.3 others, pls. specify _____

D.11 Where is the company/business located? (*please select one answer only*)

1. within the province
2. outside the province but within the region
3. outside the region, pls. specify province _____
4. outside the country, pls. specify country _____

D.12 Other than your current occupation in D.1, do you still want additional hours in your present job or additional job or to have new job with longer hours?

1. Yes, please state the reason _____
2. No

***End of interview for the employed TVET graduate-respondents,
please request respondent to sign in the last page of the questionnaire***

(D.13 to be answered by the respondent whose response in D.1 is NO)

D.13 What is the major reason why you are currently unemployed? (*pls. select 1 answer only*)

1. Financial problem (*no money for job application/search*)
2. Poor communication skills
3. Inadequate skills required for the job
4. Inadequate experience required for the job
5. Tired
6. No work available
7. Awaiting results of previous application
8. Bad weather
9. Waiting for rehire/job recall
10. Too young/old or retired
11. Permanent disability
12. Household/family duties
13. Schooling
14. Others, please specify: _____

D.14 Did you look for work or try to establish a business during the past week (*within 1 week before this interview*)?

1. Yes (*please ask D.15*)
2. No

D.15 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

(End of interview. Please request the TVET graduate respondent to sign below)

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

Time interview ended: _____

Name and Signature of Respondent _____

Name and Signature of Enumerator


Date Accomplished

Edited/Verified Correct: Provincial M&E focal staff

Date Edited/Verified

I affirmed that the survey was done in accordance to the 2017 Study on the Employment of TVET Graduates Guidelines and all responses are correct, accurate and complete as reviewed/verified by the M&E focal staff.

Name and Signature of Provincial Director



Planning Office
Office of the Deputy Director General for Policies and Planning
Technical Education and Skills Development Authority
TESDA Complex, East Service Road, South Superhighway,
Taguig City, Metro Manila
Tel. No. (+632) 888 5652 / 817 2675 / 893 1966
www.tesda.gov.ph