

Gregorio S. Ochavillo, 2016

Volume 2 Issue 1, pp. 164-185

Year of Publication: 2016

DOI- <http://dx.doi.org/10.20319/pijss.2016.s21.164185>

This paper can be cited as: Ochavillo, G. S., (2016). Socio-Economic Impact of the Maritime Education Upgrading Program. *PEOPLE: International Journal of Social Sciences*, 2(1), 164-185.

This work is licensed under the Creative Commons Attribution-Non-commercial 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

## **SOCIO-ECONOMIC IMPACT OF THE MARITIME EDUCATION UPGRADING PROGRAM**

**Gregorio S. Ochavillo**

*Palompon Institute of Technology, Palompon, Leyte, Philippines*  
[gsolinganay@yahoo.com.ph](mailto:gsolinganay@yahoo.com.ph)

---

### **Abstract**

*This study endeavored to determine the impact of the Maritime Education Upgrading Program of PIT-KVNR on the socio-economic status of its graduates from school years 2002-2003 to 2007-2008. A descriptive-comparative approach design was used with two groups of respondents and total sample size of 296. It was found out that, before these graduates entered the program, the socio-economic status between parents of the two groups of marine transportation graduates-respondents were already significantly different, while there was no significant difference in the socio-economic status between parents of the two groups of marine engineering graduates-respondents. Furthermore, there were significant differences between groups of marine transportation and marine engineering graduates-respondents on their socio-economic status after they graduated from the program. Moreover, results revealed that the socio-economic status of graduates from all groups of respondents have greatly improved over a short span of time after they graduated from the program. On the other hand, the respondents from both groups also accounted the extent of performance of the Maritime*

*Education Upgrading Program as providing opportunities for the respondents to achieve performance ranging from higher to highest level.*

**Keywords**

Maritime Education, Palompon Institute of Technology, Socio-Economic Status

---

## **1. Introduction**

Major policy re-direction initiated by the International Maritime Organization (IMO) had caused great concerns among stakeholders in the local and international maritime education and training, as well as, shipping industries in the late 1990s.

In view of the global paradigm shifts, as contained in the International Conventions for the Standards of Training, Certification and Watch-keeping 1978 (STCW 78), as amended, maritime countries and multinational shipping companies went through by entering into international cooperation or bilateral understanding in order to collectively face these challenges. Thus, the cooperation between the Palompon Institute of Technology and the Royal Association of Netherlands Shipowners (KVNR) took place in a time most opportune to PIT's maritime students and graduates. The Maritime Education Upgrading Program (MEUP) of PIT-KVNR started in 2001 by virtue of the Memorandum of Agreement (MOA) signed in November 20, 2001 between PIT as the recipient maritime school and KVNR, in partnership with the Shipping Transport College (STC) in Rotterdam, also in the Netherlands as the funding agency with the end in view of improving maritime education of PIT.

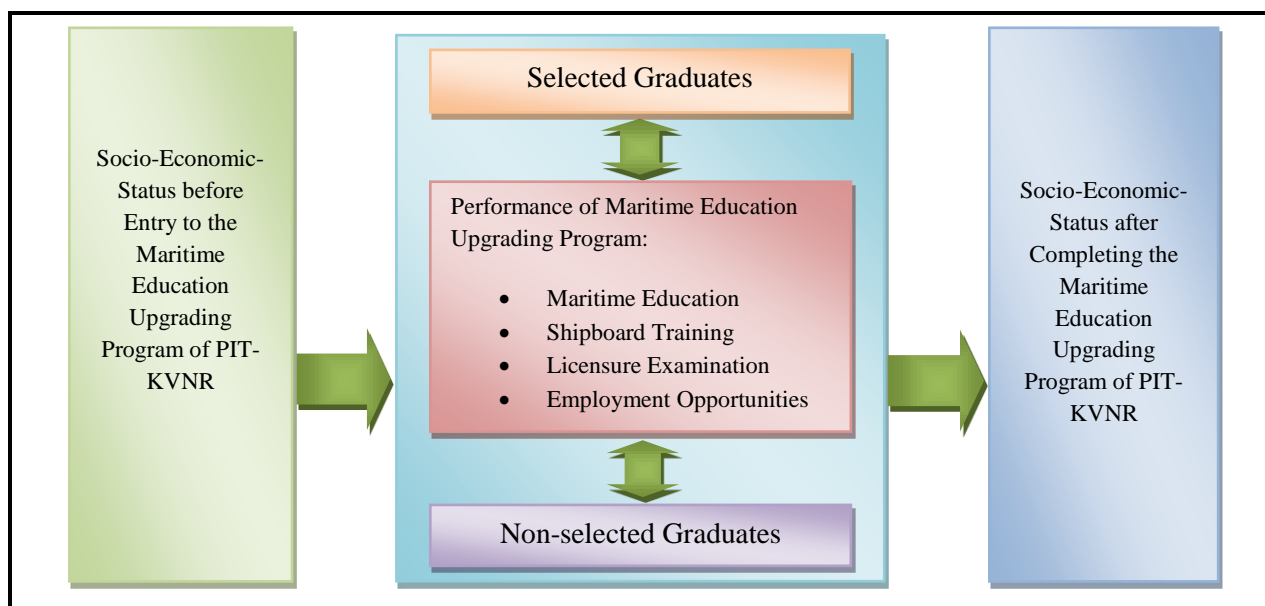
### **1.1 Theoretical/Conceptual Framework**

This study was anchored on the theories of Social Mobility and Cumulative Advantage. The theory of social mobility is the movement of individuals and groups between different class positions resulting from changes in occupation, wealth, or income (Giddens & Griffiths, 2006).

Another theory that is adhered to in the present study is the Cumulative Advantage Theory. Merton (1973), as cited by Caro (2009), first invoked this term to explain increasing

success in scientific careers. The cumulative advantage process explains growing inequality when current levels of accumulation directly affect future levels of accumulation. And, an individual who is behind at a point in time has difficulty in catching up with the rest.

Moreover, as shown next page, a significant difference between the selected and non-selected Bachelor of Science in Marine Transportation (BSMT) and Bachelor of Science in Marine Engineering (BSMarE) graduates for the KVNR shipboard training has accounted the performance of the maritime education upgrading program. Moreover, a significant difference on the socio-economic status of the respondents before joining and after completing the upgrading program was also looked into.



**Figure 1:** *Schematic Diagram of the Study*

## **1.2 Statement of the Problem**

This study endeavored to look into the impact of the Maritime Education Upgrading Program (MEUP) of PIT-KVNR on the socio-economic status of its graduates from school years 2002-2003 up to 2007-2008. Specifically, the study answered the following questions: 1. How do the respondents account the performance of MEUP, in terms of: 1.1. Maritime education; 1.2. Shipboard training; 1.3. Licensure examination; and 1.4. employment opportunities? 2. What is the socio-economic status of the respondents of the study: 2.1. upon entering the program; 2.1.1. family income; 2.1.2. investment; 2.1.3. household size; 2.1.4. house ownership; and 2.1.5. lifestyle? 2.2. after finishing the program: 2.2.1. family income;

2.2.2. investment; 2.2.3. household size; 2.2.4. house ownership; 2.2.5. lifestyle; and 2.2.6. employment? 3. Is there a significant difference between the selected and non-selected PIT-KVNR graduates on their account of the performance of the MEUP? 4. Is there a significant difference between groups of respondents on their socio-economic status before entry to the MEUP? 5. Is there a significant difference between groups of respondents on their socio-economic status after completing the MEUP?

The hypotheses of the study were as follows: 1) there is a significant difference between the two groups of respondents on their performance account of MEUP; 2) there is significant difference between groups of respondents on their socio-economic status before entry to the MEUP; and 3) there is a significant difference between groups of respondents on their socio-economic status after completing the MEUP.

## **2. Related Literature**

The socio-economic development of an area is the best reflection of the quality of life of its people. The distribution of social and economic services is crucial not only for promoting economic growth but also for assuring the social justice and improving the quality of life (Chattopadhyay, 2012). Social indicators are statistical time series "... used to monitor the social system, helping to identify changes and to guide intervention to alter the course of social change" (Sharpe, 1999).

Socio-economic status is typically used as a shorthand expression for variables that characterize the placement of persons, families, households, census tracts, or other aggregates with respect to the capacity to create or consume goods that are valued in our society. Thus, socio-economic status may be indicated by educational attainment, occupational standing, social class, income, wealth, tangible possessions—such as home appliances or libraries, houses, cars, boats, or degrees from elite colleges and universities. At times, it has also been taken to include measures of participation in social, cultural or political life. It is an empirical, rather than a conceptual or theoretical question whether one should take socio-economic status as no more than a convenient shorthand expression for variables like these, or whether such variables, taken collectively, behave as if they formed a unitary construct (Hauser & Warren, 1996).

### **3. Methodology**

This study used a descriptive-comparative approach research design. It is a comparative survey where the researcher considered at least two entities (not manipulative) and establishes a formal procedure for obtaining criterion data on the basis of which he can compare and conclude which of the two is better (Calmorin & Calmorin, 1998). The research venue was the College of Maritime Education (COMEd), PIT including its service areas. The school is a chartered state college located in the municipality of Palompon, Leyte, Philippines.

The respondents of the study were the Marine Transportation and Marine Engineering graduates of PIT from school years 2002-2003 to 2007-2008. They were grouped into two groups such as: 1) selected graduates; and 2) non-selected graduates, for the KVNR shipboard training. Using the Sloven formula, the study had a total respondents of 296 distributed proportionately.

The researcher used the researcher-made survey questionnaire to look into the impact of the MEUP on the socio-economic status of its graduates. Both groups of respondents used the same set of survey questionnaire observing minor variations in the concluding part of the questionnaire. Results of the “test-retest” testing for reliability of the questionnaire was computed with the use of Spearman rank different correlation coefficient at  $r_s = 0.882$  (high relationship). This indicated that the responses gathered during the dry run were reliable (Zulueta & Costales, 2003).

The statistical measures used were frequency count, percentage rank, and weighted mean while the chi – square and z – test were used for the inferential aspect.

### **4. Results and Discussion**

#### **4.1 Performance of the Maritime Education Upgrading Program (MEUP)**

Results attributed for the selected BSMT and BSMarE group have indicated that performances of the four components of the upgrading program have all contributed in providing the respondents opportunities to achieve highest level of performance. However, the

non-selected BSMT and BSMarE groups have indicated that these four components also contributed among the respondents’ opportunities to achieve higher level of performance only.

**Table 1: Summary of the Extent of Performance of Maritime Education Upgrading Program**

Performance Attributes	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	WM	I	WM	I	WM	I	WM	I
Maritime Education	4.12	VE	4.07	VE	4.18	VE	3.98	VE
Shipboard Training	3.96	VE	3.52	VE	4.03	VE	3.65	VE
Licensure Examination	4.31	VME	3.90	VE	4.35	VME	3.50	VE
Employment Opportunities	4.46	VME	3.99	VE	4.38	VME	3.88	VE
<b>Overall Weighted Mean</b>	<b>4.21</b>	<b>VME</b>	<b>3.87</b>	<b>VE</b>	<b>4.24</b>	<b>VME</b>	<b>3.75</b>	<b>VE</b>

Legend: WM – Weighted Mean; I – Interpretation; VME – Very Much Effective; VE – Very Effective

#### **4.2 Socio-economic Status of the Family/Parents of the Respondents before Entry to the Maritime Education Upgrading Program of PIT-KVNR**

Table 2 shows the distribution of family income before entering the program.

**Table 2: Distribution of Family Income before Entering the Program**

Income Class (in Php)	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
5,000 and below	11	11.96	24	22.43	17	25.00	10	34.48
5,001 – 10,000	32	34.78	47	43.92	25	36.76	13	44.83
10,001 – 20,000	20	21.74	23	21.50	13	19.12	2	6.90
20,001 – 30,000	15	16.30	8	7.48	8	11.76	3	10.34
30,001 – 40,000	9	9.78	1	0.93	2	2.94	-	-
40,001 – 50,000	3	3.26	3	2.80	3	4.41	1	3.45
50,001 and above	2	2.17	1	0.93	-	-	-	-

Table 3 shows the lump total investment made by the respondents’ parents with regards to acquisition of any type of residence/s by the family or parents of the respondents of the study.

**Table 3: Acquisition of Any Type of Residences**

Type of Residence	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Residential House & Lot	73	79.35	89	83.18	60	88.23	21	72.41
Apartment Units	1	1.09	1	0.93			1	3.45
Condominium Units	1	1.09	-	-	-	-	-	-
Townhouse Units	2	2.17	1	0.93	1	1.47	1	3.45
NONE at ALL	28	30.43	24	22.43	17	25.00	6	20.69
Total Responses	105		115		78		29	

Table 4 shows the distribution in lump total investments in real and personal properties made by the family or parents of the respondents during their studies in PIT.

**Table 4: Investment in Real and Personal Properties**

Type of Properties	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Rice land (in hectares)	28	30.43	36	33.64	21	30.88	8	27.58
Coconut land (in ha.)	23	25.0	27	25.23	18	26.47	4	13.79
Residential lot (in sq.m.)	1	1.09	-	-	-	-	-	-
Jewelry (in pieces)	4	4.34	3	2.80	-	-	-	-
Car	7	7.62	4	3.72	4	5.88	2	6.90
Motorcycle	46	50.0	39	36.45	33	48.53	9	31.04
Others	2	2.17	3	2.80	3	4.41	1	3.45
NONE at ALL	32	34.78	37	34.58	18	26.47	10	34.48
Total Responses	143	155.43	149	139.25	97	142.65	34	117.24

Table 5 shows the distribution of investments/business owned by the families or parents.

**Table 5: Investments in Different Types of Business**

Type of Business	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Agri-business	7	7.61	5	4.67	4	5.88	2	6.90
Buy and Sell	1	1.09	4	3.74	1	1.47	3	10.34
Copra Trading	6	6.52	6	5.61	5	7.35	1	3.45
Lending Business	1	1.09	-	-	-	-	-	-

Money Market	2	2.17	1	0.93	1	1.47	1	3.45
Real Estate	1	1.09	1	0.93	-	-	-	-
Rice Trading	4	4.35	6	5.61	1	1.47	-	-
Variety Store	26	28.26	38	35.51	29	42.65	9	31.03
Time-deposit Account	37	40.22	15	14.02	7	10.29	2	6.90
Transport Business	2	2.17	3	2.80	-	-	1	3.45
Others	7	7.61	6	5.61	7	10.29	3	10.34
None	44	47.83	50	46.73	24	35.29	13	44.83

Table 6 shows the distribution of household sizes among the families of the respondents.

**Table 6: Household Size of Family/Parents**

Household Size	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
1	3	3.26	6	5.61	6	8.82	1	3.45
2	11	11.96	9	8.41	12	17.65	3	10.34
3	22	23.91	22	20.56	16	23.53	4	13.79
4	26	28.26	29	27.10	15	22.06	8	27.59
5	17	18.48	16	14.95	11	16.18	9	31.03
6	10	10.87	14	13.08	6	8.82	3	10.34
7	-	-	7	6.54	2	2.94	-	-
8	-	-	3	2.80	-	-	1	3.45
9	2	2.17	1	0.93	-	-	-	-
10	1	1.09	-	-	-	-	-	-

Table 7 shows the distribution on house ownership by their families or parents.

**Table 7: House Ownership by Family/Parents**

House Ownership	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
YES	73	79.35	89	83.18	60	88.24	25	86.21
NO	19	20.65	18	16.82	8	11.76	4	13.79
Total	92	100.0	107	100.0	68	100.0	29	100.0

Table 8 shows the responses of the family/parents lifestyle on children education.



**Table 8: Family/Parents Lifestyle on Children Education**

Type of School	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
International School	-		-	-	-	-	-	-
Private-Catholic School	16	17.39	25	23.36	16	23.53	5	17.24
Private-Exclusive School	1	1.09	2	1.87	-	-	-	-
Private Non-Sectarian Sch.	4	4.35	3	2.80	6	8.82	1	3.45
Public School	84	91.30	100	93.46	57	83.82	29	100.0

Table 9 shows the distribution on parents' socio-economic involvement.

**Table 9: Family/Parents Socio-economic-Civic Involvement**

Socio-economic-civic Organization	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Chamber of Commerce	1	1.09	-	-	1	1.47	-	-
Jaycees Club	1	1.09	-	-	2	2.94	-	-
Rotary Club	-	-	-	-	-	-	1	3.45
Others	-	-	3	2.80	3	4.41	-	-
None	90	97.83	104	97.20	62	91.18	28	96.55

Table 10 shows the distribution of socio-cultural involvement of parents.

**Table 10: Socio-cultural Involvement of Parents**

Socio-Cultural Organizations/Council	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Barangay Socio-Cultural	33	35.87	51	47.66	24	35.29	10	34.48
Municipal Socio-Cultural	3	3.26	2	1.87	4	5.88	1	3.45
Parents-Teachers Association	28	30.43	29	27.10	17	25.00	7	24.14
Parish Council	15	16.30	26	24.30	9	13.24	5	17.24
Others	-	-	-	-	1	1.47	-	-
None	33	35.87	30	28.04	26	38.24	13	44.83

Table 11 shows the distribution on the account of personal gadgets.

**Table 11: Personal Gadgets Owned by Family/Parents**

Kind of Gadgets	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
High-end (prof'l) camera	1	1.09	3	2.80	1	1.47	3	10.34
iPad	1	1.09	-	-	-	-	-	-
Laptop	9	9.78	6	5.61	-	-	3	10.34
Low-cost Cellphone	81	88.04	75	70.09	50	73.53	20	68.97
Others	1	1.09	-	-	-	-	-	-
None	4	4.35	29	27.10	18	26.47	9	31.03

Table 12 presents the distribution of ownership of appliances and fixtures.

**Table 12: Appliances and Fixtures Owned by the Family/Parents**

Kind of Appliances and Fixtures	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Cable/Satellite Receiver	6	6.52	6	5.61	5	7.35	4	13.79
Desktop Computers	15	16.30	3	2.80	6	8.82	1	3.45
DVD Player/Recorder	54	58.70	46	42.99	30	44.12	12	41.38
Freezer	5	5.43	1	0.93	4	5.88	-	-
Karaoke	41	44.57	46	42.99	26	38.24	16	55.17
Radio Cassette	28	30.43	35	32.71	15	22.06	10	34.48
Refrigerator	75	81.52	46	42.99	50	73.53	16	55.17
Room Air Conditioner	8	8.70	2	1.87	1	1.47	1	3.45
Small (CRT) TV	83	90.22	68	63.55	57	83.82	21	72.41
Stereo	34	36.96	10	9.34	-	-	6	20.69
Wide Screen Flat TV	6	6.52	-	-	3	4.41	1	3.45
WIFI/Internet	3	3.26	-	-	-	-	-	-
Others	51	55.44	36	33.64	30	44.12	16	55.17

### 4.3 Socio-economic Status of the Respondents after Finishing the PIT-KVNR MEUP

Table 13 shows the distribution of the respondents' monthly income.

**Table 13: Personal Monthly Income**

Income Class (in Php)	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
20,000 and below	-	-	18	16.82	-	-	3	10.34
20,001 – 40,000	1	1.09	9	8.41	-	-	3	10.34

40,001 – 60,000	15	16.30	49	45.79	13	19.12	14	48.28
60,001 – 80,000	7	7.61	6	5.61	1	1.47	2	6.90
80,001 – 100,000	4	4.35	1	0.93	1	1.47	1	3.45
100,001 – 120,000	18	19.56	12	11.21	23	33.82	3	10.34
120,001 – 160,000	33	35.87	9	8.41	23	33.82	-	-
160,001 – 200,000	14	15.22	2	1.87	5	7.35	2	6.90
200,001 – 300,000	-	-	1	0.93	2	2.94	1	3.45
<b>Total</b>	<b>92</b>	<b>100.0</b>	<b>107</b>	<b>99.98</b>	<b>68</b>	<b>99.99</b>	<b>29</b>	<b>100.0</b>

Table 14 shows distribution of monthly apprenticeship allowances.

**Table 14: Monthly Apprenticeship Allowance**

Monthly Allowance (in Php)	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
2,000 and below	1	1.09	87	81.31	2	2.94	19	65.52
2,001 - 5,000	1	1.09	-	-	-	-	-	-
5,001 -10,000	56	60.87	1	0.93	39	57.35	2	6.90
10,001 – 15,000	14	15.22	5	4.67	13	19.12	2	6.90
15,001 – 20,000	13	14.13	-	-	11	16.18	2	6.90
20,001 - 25,000	7	7.60	8	7.48	3	4.41	2	6.90
25,001 and above	-	-	6	5.61	-	-	2	6.90

Table 15 shows the distribution of approximate value of real and personal properties.

**Table 15: Approximate Total Value of Real and Personal Properties of the Respondents**

Approximate Total Value (in Php)	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
250,000 and below	23	25.00	53	49.53	12	17.65	8	27.59
250,001 - 500,000	31	33.70	44	41.12	29	42.65	14	48.28
500,001 - 1,000,000	23	25.00	7	6.54	21	30.88	5	17.24
1,000,001 – 2,000,000	13	14.13	2	1.87	3	4.41	2	6.89
2,000,001 – 3,000,000	2	2.17	1	0.93	3	4.41	-	-
3,000,001 and above	-	-	-	-	-	-	-	-
Total	92	100.0	107	99.99	68	100.0	29	100.0

Table 16 shows the distribution personal acquisition of any type of residence/s.

**Table 16: Personal Acquisition of any Type of Residence/s**

Type of Residence	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Residential House & Lot	41	44.56	56	52.33	43	63.24	13	44.83
Apartment Units	-	-			1	1.47	1	3.45
Condominium Units	1	1.09	1	0.93	-	-	-	-
Townhouse Units	4	4.35	4	3.74	4	5.88	1	3.45
NONE at ALL	26	28.26	49	45.79	24	35.29	14	48.28

Table 17 shows the distribution in lump or total of responses of respondents who acquired real and personal properties after finishing the MEUP in PIT.

**Table 17: Acquisition of Real and Personal Properties**

Kind of Properties	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Rice land (in hectares)	10	10.87	22	20.56	20	29.41	8	27.59
Coconut land	17	18.47	11	10.27	11	16.17	1	3.35
Residential lot (in sqm)	41	44.56	28	26.16	28	41.18	11	37.94
Jewelries	13	14.13	6	5.60	5	7.35	3	10.35
Car	9	9.78	6	5.59	8	11.76	4	13.80
Motorcycle	64	69.56	57	53.26	49	72.06	18	62.06
Others	1	1.09	1	0.93	1	1.47	-	-
NONE at ALL	16	17.39	38	35.51	8	11.76	-	-

Table 18 shows the distribution on the account of personal investment/business.

**Table 18: Investments/Business of the Respondents**

Type of Business	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Agri-business	12	13.04	12	11.21	6	8.82	3	10.34
Buy and Sell	4	4.35	9	8.41	1	1.47	3	10.34
Copra Trading	5	5.43	7	6.54	4	5.88	1	3.45
Lending Business	1	1.09	5	4.67	2	2.94		

Money Market	9	9.78	3	2.80	3	4.41	1	3.45
Real Estate	10	10.87	3	2.80	9	13.24		
Rice Trading	8	8.70	7	6.54	6	8.82		
Sari-sari Store	21	22.83	35	32.71	18	26.47	10	34.48
Time-deposit Accounts	43	46.74	35	32.71	30	44.12	12	41.38
Transport Business	3	3.26	5	4.67	4	5.88	2	6.90
Others	2	2.17	1	0.93	6	8.82		
None	30	32.61	36	33.64	13	19.12	8	27.59

Table 19 shows the distribution of personal household sizes of the respondents.

**Table 19: Household Size of the Respondents**

Household Size	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
1	5	5.43	14	13.08	5	7.35	4	13.79
2	29	31.52	40	37.38	19	27.94	7	24.14
3	23	25.00	26	24.30	25	36.76	8	27.59
4	11	11.96	6	5.61	6	8.82	3	10.34
5	11	11.96	3	2.80	5	7.35	4	13.79
6	1	1.09	2	1.87	2	2.94	-	-
7	1	1.09	-	-	1	1.47	1	3.45
8	-	-	2	1.87	-	-	-	-
10	1	1.09	-	-	-	-	-	-
None	10	10.87	14	13.08	5	7.35	2	6.90
Total	92	100.0	107	99.99	68	99.98	29	100.0
Average	2.76		2.2		2.74		2.79	

Table 20 shows the distribution of house ownership by the respondents.

**Table 20: House Ownership by the Respondents**

House Ownership	BS Marine Transportation				BS Marine Engineering				Average
	Selected		Non-Selected		Selected		Non-Selected		
	f	%	f	%	f	%	f	%	
YES	41	44.56	53	49.53	39	57.35	13	44.83	49.07
NO	51	55.43	54	50.47	29	42.65	16	55.17	50.93
Total	92	99.99	107	100.00	68	100.00	29	100.0	100.0

Table 21 shows the distribution of responses made by the respondents on the preferences where to enroll their school-going children.

**Table 21:** Children Education – If the Respondents Already Have School-going Children

Type of School	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
International School	1	1.09	-	-	-	-	-	-
Private-Catholic School	37	40.22	30	28.04	20	29.41	10	34.48
Private-Exclusive School	15	16.30	16	14.95	18	26.47	2	6.90
Private Non-Sectarian Sch	8	8.70	10	9.34	8	11.76	2	6.90
Public School	35	38.04	51	47.66	22	32.35	15	51.72

Table 22 shows the distribution on socio-economic civic involvement of the respondents.

**Table 22:** Percentage on Socio-economic-Civic Involvement of the Respondents

Socio-economic-civic Organization	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Kiwanis Club	-	-	-	-	1	1.47	-	-
Others	86	93.48	35	32.71	55	80.88	7	24.14
None	6	6.52	72	67.29	12	17.65	22	75.86

Table 23 shows the distribution socio-cultural involvement of the respondents.

**Table 23:** Socio-cultural Involvement

Socio-Cultural Organization/Council	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Barangay Socio-Cultural	6	6.52	22	20.56	7	10.29	7	24.14
Municipal Socio-Cultural	1	1.09	-	-	1	1.47	-	-
Parents-Teachers Association	5	5.43	26	24.30	5	7.35	7	24.14
Parish Council	7	7.61	12	11.21	2	2.94	4	13.79
None	77	83.70	55	51.40	54	79.41	15	51.72

Table 24 shows the distribution of the respondents personal gadget ownership.

**Table 24: Personal Lifestyle – Personal Gadgets**

Kind of Gadgets	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
High-end Camera	54	58.70	37	34.58	36	52.94	14	48.28
iPad	31	33.70	20	18.69	20	29.41	5	17.24
iPhone	40	43.48	21	19.63	21	30.88	1	3.45
Laptop	89	96.74	76	71.03	60	88.24	25	86.21
Low-cost Cellphone	75	81.52	93	86.92	68	100.0	29	100.0
Others	3	3.26	1	0.93	5	7.35	-	-

Table 25 next page shows the distribution of ownership of appliances and fixtures.

**Table 25: Appliances and Fixtures Owned by the Respondents**

Kind of Appliances and Fixtures	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Cable/Satellite Receiver	54	58.70	45	42.06	45	66.18	12	41.38
Desktop Computers	40	43.48	28	26.17	34	50.00	7	24.14
DVD Player/Recorder	63	68.48	79	73.83	51	75.00	20	68.97
Freezer	1	1.09	2	1.87	-	-	-	-
Karaoke	20	21.74	34	31.78	13	19.12	12	41.38
Radio Cassette	4	4.35	3	2.80	3	4.41	3	10.34
Refrigerator	64	69.56	79	73.83	53	77.94	25	86.21
Room Air Conditioner	51	55.43	31	28.97	40	58.82	8	27.59
Small (CRT) TV	25	27.17	48	44.86	33	48.53	20	68.97
Stereo	27	29.35	17	15.89	9	13.24	9	31.03
Wide Screen Flat TV	58	63.04	49	45.79	3	4.41	11	37.93
WIFI/Internet Connection	51	55.43	-	-	28	41.18	-	-
Others	97	105.4	80	74.77	30	44.12	34	117.2

Table 26 shows the distribution of employment of the respondents.

**Table 26: Employment of the Respondents**

Type of Employment	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	f	%	f	%	f	%	f	%
Sea-based-Overseas	91	98.1	86	80.37	68	100.0	26	89.66
Sea-based-Domestic	-	-	9	8.41	-	-	1	3.45
Land-based	1	1.09	12	11.21	-	-	2	6.90
Total	92	100.0	107	99.99	68	100.0	29	100.0

#### 4.4 Differences between Selected and Non-selected Groups of Respondents on their Account of the Performance of the Maritime Education Upgrading Program

Table 27 shows the results on the performance of the MEUP.

**Table 27: Differences between Selected and Non-selected Groups of Respondents on the Performance of the Maritime Education Upgrading Program**

	BS Marine Transportation				BS Marine Engineering			
	Selected		Non-Selected		Selected		Non-Selected	
	n = 92		n = 107		n = 68		n = 29	
	WM	I	WM	I	WM	I	WM	I
Overall Weighted Mean	4.21	VME	3.87	VE	4.24	VME	3.75	VE
Standard Deviation	0.24				0.35			
z - test <sub>CV</sub>	<b>2.00 (Significant)</b>				<b>1.98 (Significant)</b>			
z - test <sub>TV</sub> @ $\alpha = 0.025$	+/- 1.96				+/- 1.96			
Decision	Reject Ho if: $z - test_{CV} > z - test_{TV}$				Reject Ho if: $z - test_{CV} > z - test_{TV}$			

On the hypothesis whether there was a significant difference on the performance profile of the upgrading program between KVNR selected and non-selected groups of respondents, Table 27 showed the computed z - test value at 2.00, between BSMT selected and non-selected groups and 1.98 between BSMarE selected and non-selected groups of respondents, respectively were higher than the z - test critical value = +/- 1.96 at 0.025 level of significance, thus both were interpreted as significant. On this basis, the first null hypothesis was rejected, thus the research hypothesis was accepted. This meant that there were significant differences between the two groups of respondents on the performance account of the PIT-KVNR Maritime Education Upgrading Program.



#### 4.5 Differences between Selected and Non-selected Groups of Respondents in their Socio-Economic-Status before Entering the Program

Table 28 presents the significant differences on the socio-economic status of the families/parents of the respondents of this study before entry to the PIT-KVNR MEUP.

**Table 28:** Differences between Selected and Non-selected Groups of Respondents in their Families/Parents Socio-economic-Status before Entering the Program

Socio-Economic Status Indicators	df	Critical Values	BSMT	BSMarE
			X <sup>2</sup>	X <sup>2</sup>
Monthly Income	6	12.592	15.72*	3.88**
Acquisition of any type of residence	4	9.488	2.765**	3.296**
Acquisition of Real and personal properties	7	14.067	4.27**	3.679**
Investments/business	11	19.675	16.1916**	10.1287**
Household size	6	12.592	10.197**	3.6**
House Ownership	1	3.8414	0.88**	0.08**
Children Education	4	9.488	1.88**	1.72**
Socio-economic-civic Involvement	5	11.070	4.9319**	4.96**
Community-based Socio-cultural Involvements	5	11.070	16.88*	1.058**
Personal Gadgets	6	12.592	21.44*	10.86**
Appliances and Fixtures	11	21.026	32.83*	21.36*

$\alpha = 0.05$  \* Significant \*\* Not Significant

On the basis of the results revealed in the study and for the X<sup>2</sup> computed values shown in Table 28, the differences between the selected and non-selected BSMT groups with regards to the different items presented in the study were found to be significant. On this note, the second null hypotheses was rejected, thus the second research hypothesis was accepted. This meant that there were significant differences between the selected and non-selected groups of respondents in their socio-economic-status before they joined the upgrading program.

By considering the results between the BSMarE selected and non-selected groups showing majority of the X<sup>2</sup> computed values of the indicators interpreted “not significant” the second null hypothesis was accepted, thus the second research hypothesis was rejected. This meant that there were no significant differences between the selected and non-selected groups of BSMarE respondents in their socio-economic status before they joined the upgrading

program. It can be inferred from these findings that the socio-economic status of both the selected and non-selected BSMarE groups of respondents had the same or almost the same level.

#### **4.6 Differences between Selected and Non-selected Groups of Respondents in their Socio-Economic Status after Completing the Program**

Table 29 presents the results on the socio-economic status of the BSMT and BSMarE selected and non-selected groups of respondents tested using the chi-square at 0.05 level of significance.

**Table 29:** *Differences between Selected and Non-selected Groups of Respondents in their Socio-economic-Status after Completing the Program*

Socio-Economic Status Indicators	df	Critical Values	BSMT	BSMarE
			X <sup>2</sup>	X <sup>2</sup>
Monthly Income	9	16.919	68.48*	36.54*
Apprenticeship Allowance	6	12.592	167.29*	57.17*
Approximate Value of Real and Personal Properties	5	11.070	30.08*	4.04**
Acquisition of any type of residence	4	9.488	0.816**	2.68**
Acquisition of Real and personal properties	7	14.067	20.76*	6.22**
Investments/business	11	19.675	16.61**	16.24**
Household size	6	12.592	8.41**	0.916**
House Ownership	1	3.8414	0.4908**	1.29**
Children Education	4	9.488	4.395**	6.41**
Socio-economic-civic Involvement	5	11.070	76.645*	30.35*
Community-based Socio-cultural Involvements	5	11.070	27.86*	11.82*
Personal Gadgets	6	12.592	11.91**	8.84**
Appliances and Fixtures	12	21.026	51.23*	56.35*
Employment	2	5.991	17.413*	7.2238*

$\alpha = 0.05$  \* Significant \*\* Not Significant

On the basis of the various X<sup>2</sup> results attributed to the BSMT selected and non-selected groups of respondents in Table 29 showing the significant differences in eight out of 14 indicators, interpreted to be “significant,” these findings were supported by the respective X<sup>2</sup> computed values, all of which were greater than the critical value. Thus, the third null hypothesis was rejected. This meant that there were significant differences between the

selected and non-selected groups of BSMT respondents in their socio-economic status after they graduated from the upgrading program. This implied that the two groups of BSMT respondents manifested significant improvements in their socio-economic status after they graduated from the program. Moreover, the results attributed between the selected and non-selected groups of BSMarE respondents were noted that six out of 14 indicators were found and interpreted as significant as their chi-square computed values were higher than the critical value, thus the differences were significant. On this basis, the third null hypothesis was rejected, thus the third research hypothesis was accepted. This meant that there were significant differences between the selected and non-selected groups of BSMarE respondents in their socio-economic status after they graduated from the upgrading program of PIT.

It can be inferred from the results that those in the selected groups of both programs were likewise in advantage in their socio-economic status compared to those in the non-selected groups also from the BSMT and BSMarE programs.

## **5. Findings**

1. All the groups of respondents have accounted the extent of performance of the Maritime Education Upgrading Program from higher to highest level.
2. There were significant differences on how the performance of the upgrading program has been accounted by the selected and non-selected BSMT and BSMarE groups of respondents,
3. Before the respondents joined the upgrading program, the socio-economic status Between BSMT groups was significantly different while there was no significant Difference between BSMarE respondents.
4. Moreover, the socio-economic status of the respondents in both BSMT and BSMarE Groups have greatly improved after they graduated from the program.

## **6. Conclusions**

The Maritime Education Upgrading Program of the Palompon Institute of Technology (PIT), in partnership with the Royal Association of Netherlands Shipowners (KVNR), has been successful in transforming the old maritime education programs of PIT to what it is now

known at present both in the national and international levels. In fact, the school itself has become an Institution known for its high quality maritime education by establishing its own niche in the field of maritime education at present. Professional board examinations results brought honors and fame for the Institute with countless passers and board top-notchers. It is now common to its graduates making names in the international shipping industry by leading and commanding ocean going vessels into the high seas.

In general, the program has also successfully created positive socio-economic improvements in the lives of the maritime graduates since 2001. Because of the implementation of the upgrading program, enormous numbers of graduates have manifested becoming millionaires in a very short span of time. Many others just simply indicated that their socio-economic status has improved thus far. Most of PIT's graduates came from poor families in the countryside who dreamt of new perspectives waiting for them after graduating from the program. True enough, their dreams were fulfilled by changing lives tremendously different now from what has it been like before.

Had there been no program like the Maritime Education Upgrading Program in PIT, all these positive gains or achievements or outlooks attributed to the College of Maritime Education and to its graduates would not be what it is now at present. To this, the upgrading program truly brought the difference by providing better socio-economic perspectives and better opportunities to the lives of its graduates.

All these served as testimonial evidences of the effectiveness of the Maritime Education Upgrading Program in transforming graduates into globally competitive seafarers endowed with tremendously improved socio-economic status.

## **7. Recommendations**

1. Establish another unit within the Shipboard Training Office that will attend to the shipboard training needs of the cadets who failed to qualify the KVNR shipboard training program.
2. Put an income ceiling for the incoming freshmen students within range of the prevailing national poverty threshold in order for the Institute to remain a school for the poor.

3. PIT should establish a unit that will assist maritime graduates to gain sound inclusive financial management system and to minimize “financial shock” effect to the graduates’ parents and for the graduates themselves.
4. Include in the maritime curriculum subject on financial management for the students to have theoretical immersion on how to manage their high salary earning when already working onboard ships.
5. PIT should consider gradually increasing the in-take of maritime students in each year level to maximize the advantages of the upgrading program and the employment opportunities.

### **References**

- Calmorin, L. P. & Calmorin M. A. (1998). *Methods of Research and Thesis Writing*. Mandaluyong City: Rex Book Store, Inc.
- Caro, D. H (2009). Socio-economic status and academic achievement trajectories from childhood to adolescence. *Canadian Journal of Education*. Retrieved December 20, 2012 from [files.eric.ed.gov/fulltext/EJ859263.p](http://files.eric.ed.gov/fulltext/EJ859263.p)
- Chattopadhyay, A. (2012). Socio-economic development: a case study of bhagwangola-i and bhagwangola-ii blocks of murshidabad blocks district, wb. Retrieved May 27, 2013, [www.ror.isrj.net/UploadedData/162.pdf](http://www.ror.isrj.net/UploadedData/162.pdf)
- Giddens, A. & Griffiths, S. (2006). *Introduction to Sociology Fifth Edition*. New York: W.W. Norton & Company, Inc.
- Hauser, R. M. & Warren, J. R. (1996). Socioeconomic indexes for occupations: a review, update, and critique. Center for Demography and Ecology. Retrieved December 21, 2012, From [www.ssc.wisc.edu/cde/cdewp/96-01.pdf](http://www.ssc.wisc.edu/cde/cdewp/96-01.pdf)
- Sharpe, A. (1999). A survey of indicators of economic and social well-being. for the Study of Living Standards. Retrieved December 27, 2012, from [ideas.repec.org/p/sls/resrep/99wb.html](http://ideas.repec.org/p/sls/resrep/99wb.html)

Zulueta, F. M., & Costales, NE B. Jr. (2003). *Methods of Research Thesis Writing and Applied Statistics*. Mandaluyong City: National Book Store.