

The Myanmar JOURNAL

Determinants of Consumer Buying Behavior Towards Gold Ornaments Purchase Intention
Banyar Aung

EXPLORING THE ECONOMIC IMPACTS OF TOURISM DEVELOPMENT IN BAGAN-NYAUNG OO REGION
Hlaing Hlaing Moe

A Study on Sexual Behavior, Sexual Morality and Recognition of Sexual Violence
Sunghee Kim

Industrial Sector Development of Myanmar
Khin Thida Nyein

A Study on Factors Affecting Child Care Teacher Job Stress through Review of Literature
Shin-Sook Lee

School Health Education in Myanmar - Introduction of the new course Life Skills -
Gwon Osung

Impact of Women's Empowerment on Under-Five Mortality in Myanmar
Maw Maw Khin · Sanda Thein

A Study on the Voluntary Activation of Jeollanam-do by linking with Korea's National Volunteer Basic Plan
Shin-Sook Lee

ENTREPRENEURIAL EDUCATION IN MYANMAR WITH THE REFERENCE TO KOREAN EXPERIENCE
Nu Nu Lwin

Administrators' Leadership Styles and Teachers' Organizational Commitment at Higher Education Institutions in Myanmar
Myint Myint Kyi

ENTREPRENEURSHIP IN MYANMAR: CREATION AND DEVELOPMENT OF NEW FIRMS
Nu Nu Lwin · Thant Pyie Sone Aung

A SPOTLIGHT ON WELL-BEING OF MYANMAR'S YOUTH
May Kyaw Soe · Naing Naing · Nann Sandi Moon · Ye Htet

JOB SATISFACTION OF SEAFARERS IN MYANMA FIVE STAR LINE
Mya Thandar · Hnin Darli Ma Ma Ko

Study on Implications of Vietnam's ICT Development to North Korea
Shinwon Kang

Letter from the Editor-in-Chief

The Korea Myanmar Research Institute (KOMYRA) has supported the ongoing projects on the mutual development of Myanmar and Korea in the entire field of society, economy, culture, education, science, and related industry. As a part of our efforts to provide convenient access to understand Myanmar and Korea worldwide, KOMYRA has co-published the Myanmar Journal with Yangon University of Economics (YUE) since August 2014, and now we release the Myanmar Journal Vol. 6, No. 1.

This issue features various topics that may be of international interest, such as academic and industrial researches mainly concerning economic and social changes, FDI, education, welfare, culture, renewable energy, mobile finance, etc.

We hope this journal continues to promote understanding about the present status and the potential capacities of Myanmar and Korea, and facilitate in-depth international exchange and cooperation.

I would like to express my deep gratitude to the Editorial Board and the Staff of KOMYRA who have contributed their valuable supports towards the publication of this issue of the Myanmar Journal.

February 28, 2019

Youngjun Choi *yj choi*

Editor-in-Chief of THE MYANMAR JOURNAL

Vice-President of KOMYRA

Email: yjchoi@khu.ac.kr

Office: +82-2-961-0485

Web address: komyra.com/doc/scope.php

EDITORIAL BOARD

EDITOR-IN-CHIEF (Yangon University of Economics)

Prof. Moe Moe Khaing, Ph.D. (YUE, Myanmar)

EDITOR-IN-CHIEF (Korea Myanmar Research Association)

Prof. Youngjun Choi, Ph.D. (KHU, Korea)

ASSOCIATE EDITOR-IN-CHIEF

Hyejin Park (KOMYRA, USA)

Jiyeon Chun, Ph.D. (SCNU, Korea)

Hyunwoo Cho, Ph.D. (SCNU, Korea)

Shinwon Kang, Ph.D. (SCNU, Korea)

Journal Managing EDITOR

Kyuyoung Cho (Timebee, Korea)

Sector EDITOR

Communication and Energy sector EDITOR, Shinwon Kang (SCNU, Korea)

Economic & Management sector EDITOR, John Walsh (SIU RC, Thailand)

Food Engineering sector EDITOR, Jiyeon Chun (SCNU, Korea)

International Law sector, Jeremy Sarkin (University of South Africa, South Africa)

Social Welfare sector EDITOR, Shinsook Lee & Sunghee Kim (SCNU, Korea)

Statistics & Survey statistics sector EDITOR, Jungwha Do (ReLab, Korea)

Technology Management sector EDITOR, Taeho Park (SJSU, USA)

Tourism and Leisure sector EDITOR, Ohsung Gwon (JNUE, Korea)

Trade & Education sector EDITOR, Youngjun Choi (KHU, Korea)

Language, Literature & Culture Sector EDITOR, Santosh Kumar Ranjan (JNU, India)

Business and Industry sector EDITOR, Myint Moe Chit (U of Nottingham, Malaysia)

ADVISORY BOARD

Prof. Taeho Park, Ph.D. (SJSU, USA)

Prof. Lay Kyi, Ph.D. (YUE, Myanmar)

Prof. Tun Aung, Ph.D. (YUE, Myanmar)

INFORMATION ABOUT The Myanmar Journal

The Myanmar Journal (ISSN 2383-6563) is the official international journal co-published by Yangon University of Economics (YUE) and Korea Myanmar Research Institute (KOMYRA).

This journal aims to promote the mutual cooperation and development of Myanmar and Korea through intensive researches in the entire field of society, economy, culture, and industry.

It will cover all general academic and industrial issues, and share ideas, problems and solution for development of Myanmar.

Articles for publication will be on-line released twice a year at the end of February and August every year on the Myanmar Journal webpage.

CONTENTS

Articles

1. Determinants of Consumer Buying Behavior Towards Gold Ornaments Purchase Intention
Banyar Aung
21. EXPLORING THE ECONOMIC IMPACTS OF TOURISM DEVELOPMENT IN BAGAN-NYAUNG OO REGION
Hlaing Hlaing Moe
40. A Study on Sexual Behavior, Sexual Morality and Recognition of Sexual Violence
Sunghee Kim
49. Industrial Sector Development of Myanmar
Khin Thida Nyein
65. A Study on Factors Affecting Child Care Teacher Job Stress through Review of Literature
Shin-Sook Lee
79. School Health Education in Myanmar - Introduction of the new course Life Skills -
Gwon Osung
87. Impact of Women's Empowerment on Under-Five Mortality in Myanmar
Maw Maw Khin · Sanda Thein
101. A Study on the Voluntary Activation of Jeollanam-do by linking with Korea's National Volunteer Basic Plan
Shin-Sook Lee
118. ENTREPRENEURIAL EDUCATION IN MYANMAR WITH THE REFERENCE TO KOREAN EXPERIENCE
Nu Nu Lwin
131. Administrators' Leadership Styles and Teachers' Organizational Commitment at Higher Education Institutions in Myanmar
Myint Myint Kyi
169. ENTREPRENEURSHIP IN MYANMAR: CREATION AND DEVELOPMENT OF NEW FIRMS
Nu Nu Lwin · Thant Pyie Sone Aung
185. A SPOTLIGHT ON WELL-BEING OF MYANMAR'S YOUTH
May Kyaw Soe · Naing Naing · Nann Sandi Moon · Ye Htet
209. JOB SATISFACTION OF SEAFARERS IN MYANMA FIVE STAR LINE
Mya Thandar · Hnin Darli Ma Ma Ko
227. Study on Implications of Vietnam's ICT Development to North Korea
Shinwon Kang

Determinants of Consumer Buying Behavior Towards Gold Ornaments Purchase Intention

Banyar Aung

Yangon University of Economics

ABSTRACT: This study focuses on determinants of consumer buying behavior towards gold ornament purchase intention in Yangon Region. The objectives of the study are to identify the determinants of the consumer buying behavior of gold ornaments in Yangon Region and to explore the most influencing factors on consumer buying behavior of gold ornaments in Yangon Region. The research strategy is survey research and quantitative methods is employed. The analysis methods used in this study are descriptive analysis and multiple regression analysis. This study contributes the factors which can determine gold ornaments purchase intention such as buyers' preference, self-image, product design, trust, expected future value and store image. This study collects the primary data, by distributing the questionnaires to 194 respondents. Data collection was done in a survey among gold ornaments consumers from Yangon Region downtown areas. The study was found that expected future value influenced purchase intention of gold ornaments. This research contribute significantly to policy makers to provide gold investment knowledge and to encourage gold investment attitude. In the financial sector, gold investment needs to be innovated as issuing gold shares and stocks so that gold investment will be one of the most important portfolio investments in Myanmar. Thus, the current gold market can be developed by innovating gold stock and share more than physical gold.

Key words : Consumer Buying Behavior, Determinant Factor, Gold Ornament, Education, Financial Sector,

I. Introduction

People in Myanmar traditionally buy gold and jewelry for the ornamental purpose and for investment. Myanmar people like to wear gold ornaments and buy it for hedging against inflation, fluctuating interest rates, political changes and other

situations.

Golden jewelry saving of the Myanmar people are increasing today because gold price mostly continue to increase in Myanmar. Gold and gold ornaments are good investment for people in golden jewelry business because it increases its value over time and does not decay. Investing gold jewelry is better than fixed assets such as land and building investment because gold can easy to resell in anytime. Investing land and building need many investments but everyone can easy to buy various kinds of golden jewelry as they can.

According to tradition, Myanmar people usually buy golden jewelry if they have extra money, hence the saying, "Golden jewelry mean food when you have not money and ornaments when you have plenty of money". So, golden jewelry is not only for ornaments but also for food.

After the years of 2010, consumer buying behavior in Myanmar gold market have been changed dramatically because it has been influenced by many factors such as changing technological improvements, openness in media and society in general. Technology has improved society as well as consumers are becoming more aware on quality and conscious.

Under the market-oriented economy, there has been enormous increase in the numbers of gold ornament retail shops in Yangon Region. Therefore, retail gold market is very competitive to acquire to get customers. Myanmar has a massive change in life styles of large section of population. In order to survive the gold business, consumer buying behavior are needed to understand for gold ornaments retail stores in Yangon Region. The problems among the gold retailers in the gold market that there was no particular evidence regarding consumer buying behavior of gold ornaments.

Understanding the buyer situations are not easy task as it is very difficult to conclude what is going in consumer mind. Thus, understanding consumer buying behavior and determinants factors on these behaviors are that to provide great business and marketing strategies and competitive advantage to gold and jewelry shops in Yangon Region for both profitability and ongoing run.

II. Working Age Population

An attempt has been made in this paper to provide a brief account of the current and the probable courses of labour force and employment opportunities in Myanmar. Development indicators are also provided wherever deemed necessary. Myanmar has vast potential for marine and fresh water fishing opportunities; a sizable surplus of agriculture produce particularly cereals like rice, beans, pulses etc. is available for export.

Crude oil reserves have been estimated at 4,706,000 U.S barrels, and natural gas at 695,591 million cubic feet, metals like tin, tungsten, lead, zinc, copper, gold, iron, industrial minerals like gypsum, clay, coal, and non-metalic minerals like jade, ruby, sapphire etc. are also found.

1. Objectives of the study

This study is conducted with the following objectives;

(1) To identify the determinants of the consumer buying behaviour on gold ornament in Yangon Region.

(2) To explore the most influencing factors on consumer buying behaviour towards purchasing intention on gold ornaments.

2. Scope and Method of the Study

This study only focuses on consumer buying behaviour of gold ornaments. Target group was the gold ornament consumers who buy from gold ornaments retail shops in Yangon downtown area. A sample of 194 consumers is collected from gold ornaments shops in Yangon downtown area. The consumers were interviewed with structured questionnaires and face to face interview.

In this study, descriptive research was conducted. For descriptive research, the primary data were collected by using structured questionnaire and face-to-face interview. Respondents are chosen by using simple random sampling method.

The structured questionnaire is composed of five parts. All the questions in the survey are designed based on the demographic characteristics, psychological factors, marketing mix factors and financial factors.

The first part asked about the background information of the respondents. The second part of the survey is based on psychological factors such as buyers' preference, self-image, trust and store image. The third part is the marketing mix factors such as product design and price discount. The fourth part is about financial factor such as expected future value.

The last question of the survey is about the factors which can determinant on purchase intention. These questions are valuable for gold retailers to know more about the consumers in order to expand the market. To analyse the collected data, the statistical Package for Social Science (SPSS) was applied. Data analysis methods are Mean Value, Correlation and Linear Regression. The conceptual framework of the study is shown in Figure 1

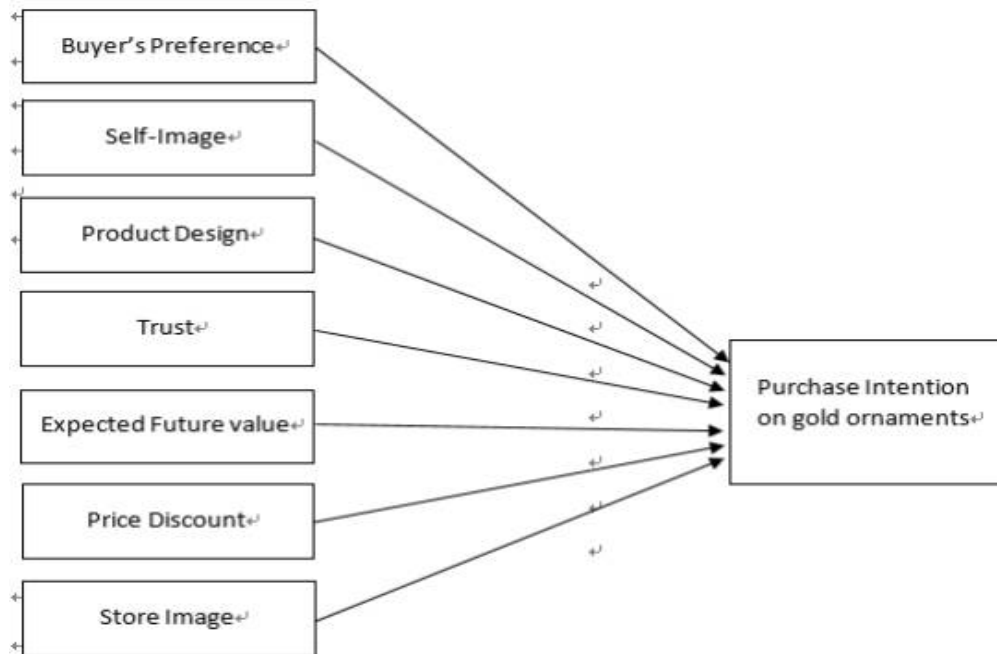


Figure 1. Conceptual Framework of the Study

Source: Own Compilation

II. Analysis of Gold Ornament Purchase Intention

1. Research Design

In this study, descriptive research was conducted. For this descriptive research, the primary data were collected by using the structured questionnaire and face to face interview. Respondents are chosen by using simple random sampling methods.

The quantitative methodology is used to discover Yangon consumers' purchase intention for gold ornaments in order to understand the impact of factors influencing customers' behaviour and purchase intention.

The questionnaire was developed from previous literature in Section 2 to include the concepts to measure. The study involves three main independent variables including marketing mix, psychological factors and economic factors. The dependent variable was people's intention to purchase gold ornaments.

The questionnaire survey consists of three sections which contains 39 questions. Part 1 demographic information. Part 2 consist of questions to measure independent variables those is consumer's behaviour. Part 3 consist of question to measure the

dependent variable that is gold ornament consumers on purchase intention to purchase gold ornament as dependent variable. In this study, a 5-point Likert scale: ranging from 5(strongly agree), 4(agree), 3(neutral), 2(disagree), 1(agree) is used to find out this study. After conducting the survey, the obtained data are processed and analyzed using Statistical Package for Social Science to conduct descriptive statistics such as Frequency distribution, mean, standard deviation and inferential analysis such as correlation analysis and regression analysis.

2. Demographic Factors of the Respondents

Demographic characteristics of the respondents are analyzed by gender, age group, income level. Table (1) describes the demographic profile of the 194 respondents by gender, age and income.

1) Gender

In this study, gender can be classified into two groups, male and female.

Table 1. Gender of Respondents

Gender	Number of respondents	Percent
Male	63	32.5
Female	131	67.5
Total	194	100.0

Source: Survey Data

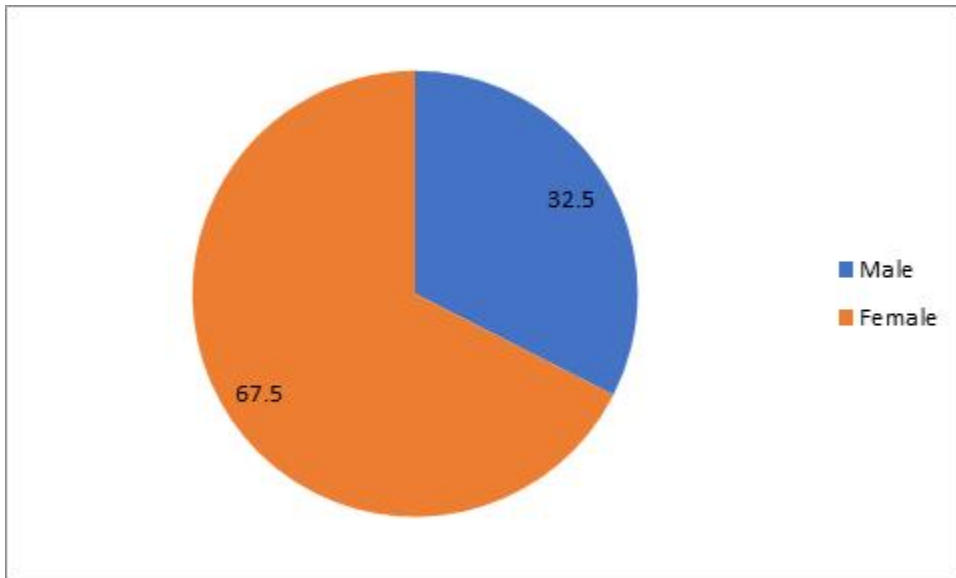


Figure 2. Gender of Respondents

Source: Table 1

From data analysis, table (1) and figure (2), found that among 194 respondents, male 32.5% and female 67.5%. According to table (1) and figure (2) female respondents took larger domain than male.

2) Age of Respondents

In this study, age are divided into four groups, consist of 20-30 years, 31-40 years, 41-50 years and 51-60 years.

Table 2. Age of the Respondents

Age	Number of respondents	Percent
20-30 years	99	51.0
31-40 years	59	30.4
41-50 years	29	14.9
51-60 years	7	3.6
Total	194	100.0

Source: Survey Data

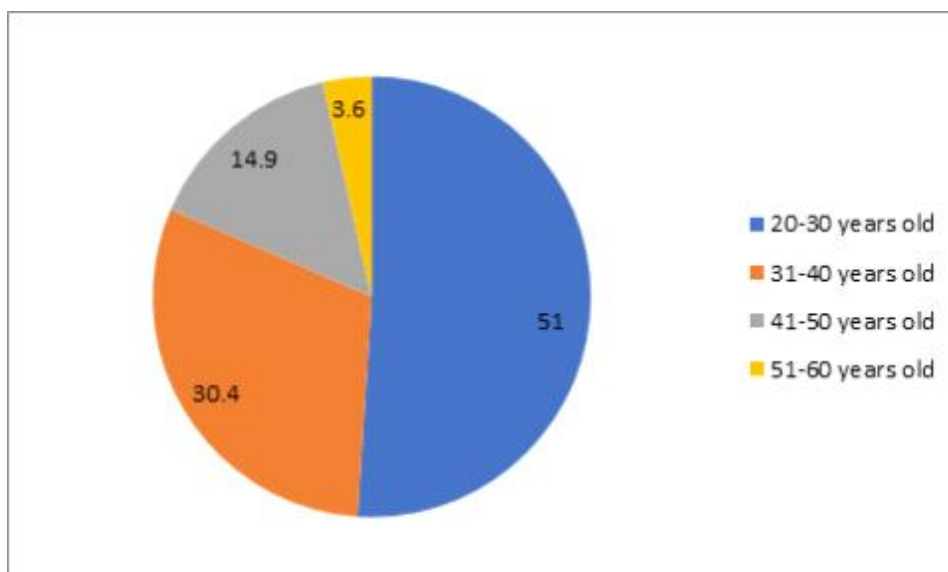


Figure 3. Age of the respondents

Source: Table 2.

According to the following Table (2) and Figure (3), age of respondents are largely involved between 20-30 years and 41-50 years old but the respondents 51-60 years old are less involved.

From this study found that range of age between 20-30 is largely domain in survey as number of 99, (51%) of respondents and second largest range of age 31-40 years of age groups was 59 number, (30.4%) of respondents, the range of age between 41-50 years of age group was 29 number (14.9%) and (51-60) years was 7 number, (3.6%).

3) Income

In this study, income is divided into four groups which consist of under Kyats 200,000, Kyats 200,001-400,000, Kyats 400,001-600,000 and above Kyats 600,000.

Table 3. Monthly Income Level of Respondents

Income	Number of Respondents	Percent
Less than 200,000 kyat	46	23.7
200001-400,000 kyat	91	46.9
400,001-600,000 kyat	40	20.6
More than Kyats 600,001	17	8.8
Total	94	100.0

Source: Survey Data (2018)

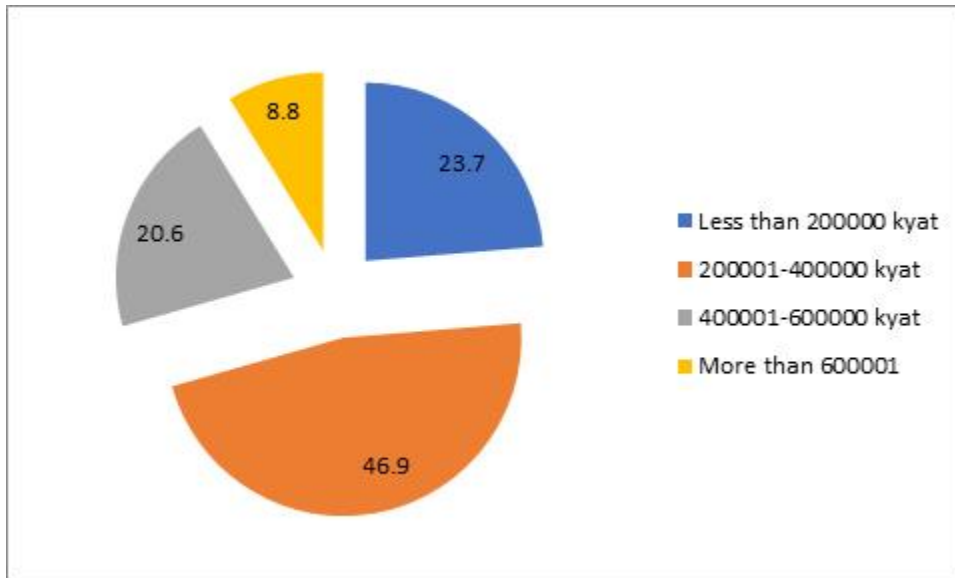


Figure 4. Monthly Income Level of Respondents

Source: Table 3.

This study found that the highest in income, above more than Kyats 200,001-400,000 with 46.9%, Less than Kyats 200,000 with 23.7%, Kyats 400,001-600,000 with 20.6% and more than Kyats 600,000 with 8.8% are shown in table (3) and Figure (3). It is found that most of the respondents who are the income level Kyats200,001-400,000.

3. Gold Ornament Purchase Intention on Psychological, Marketing Mix and Financial Factors

Psychological factors include buyer's preference, self-image, trust and store image. Marketing mix factors include product design and price discount. Financial factor is expected future value.

Therefore, each factor has been described in term of the mean value and the standard deviation of each statement. It can be assumed that consumer will agree if mean values indicate above 3 while consumer s won't agree if the mean value indicate less than 3.

1) Psychological Factors (Buyer's Preference)

According to the prepared questionnaire in this paper, gold ornament purchase intention on Buyer's Preference are classified into the following factors, "I buy similar

gold ornament design with my friend", "My friends' opinion affect my gold ornament", "My family opinion affects my gold ornament purchase behaviour", "I buy gold ornament for special occasion and I often buy gold ornament as gift for myself".

Table 4. Gold Ornament purchase Intention of Buyer's Preference

Particulars	Mean	Standard Deviation
I buy similar gold ornament design with my friend	2.16	.999
My friend's opinion affect my gold ornament	2.46	1.063
My family opinion affect my gold ornament	2.74	1.122
I buy gold ornament for special occasions	3.28	1.100
I often buy gold ornament as gift for myself	2.84	1.045
Overall mean	2.696	.685

Source: Survey Data (2018)

According to the table (4) by comparing the score of buyer preference factors, the study found that the highest mean score is 3.28 in which My family opinion affect my gold ornament while the lowest mean score is 2.16 in which I buy similar gold ornament design with my friend. The average mean score is 2.696. For all statement of Buyer preference, it is not key factor to cause gold ornament purchase intention.

2) Psychological Factor (Self-Image)

According to the prepared questionnaire in this paper, gold ornament purchase intention on self-image are classified into the following factors, "I wear gold ornament for adornment myself to look better", "Gold ornament is for body adornment", "I buy gold ornament for my status appearance", "I feel happy when I wear gold ornament and Gold ornaments can help me my special appearance".

Table 5. Gold Ornament purchase intention of Self- Image

Particulars	Mean	Standard Deviation
I wear gold ornament for adornment myself to look better	3.08	1.033
Gold ornament is for body adornment	3.60	.853
I buy gold ornament for my status appearance	2.72	.995
I feel happy when I wear gold ornament	2.97	.981
Gold ornament can help me my special appearance	2.90	.974
Overall mean	3.055	.685

Source: Survey Data (2018)

By comparing the mean score of self- image factors, this study found that the highest mean score is 3.60 in which gold ornament is for body adornment while the lowest mean value is 2.72 in which I buy gold ornament for my status appearance. The average mean score is 3.055. For all statement of Self- image, it is a key factor to cause gold ornament purchase intention.

3) Psychological Factor (Trust)

According to the prepared questionnaire in these paper, gold ornament purchase intention on Trust are classified into the following factors, "It is important that I trust the sale person", "Sale person influence me to buy gold ornament", "I cannot change my buying behaviour on gold ornament when sale person attract me", "I always buy gold ornament in trusted shops in mind" and "I buy the gold ornament retail shops when other people say trusty shops".

Table 6. Gold Ornament purchase intention of Trust

Particulars	Mean	Standard Deviation
It is important that I trust the sale person	3.18	1.020
Sale person can influence me to buy gold ornament	2.53	.796
I cannot change my buying behaviour on gold ornament when sale person attract me.	3.44	.754

I always buy gold ornament in trusted shops in mind	3.76	.792
I buy the gold ornament retail shops when other people say trusty shops.	3.34	.996
Overall mean	3.251	.519

Source: Survey Data (2018)

By comparing the mean score of Trust factors, this study found that the highest mean score is 3.76 in which I buy the gold ornament retail shops when other people say trusty shops while the lowest mean score is 2.53 in which Sale person can influence me to buy gold ornament. The average mean score is 3.251. For all statement of Trust, it is a key factor to cause purchase intention.

4) Psychological Factor (Store Image)

According to the prepared questionnaire in these paper, gold ornament purchase intention on Store Image are classified into the following factors, "I afraid to go gold ornaments shops with special decoration", "The decoration of the gold ornament shops can attract me", "I always buy the gold ornament retail shops with special features and decoration", "I always buy the gold ornament retail store with have pleasant atmosphere and good operation", Gold ornament retail shops decoration change my buying decision.

Table 7. Gold Ornament purchase intention of Store Image

Particulars	Mean	Standard Deviation
I afraid to go gold ornament shops with special decoration.	2.28	.952
The decoration of the gold ornament shops can attract me.	3.03	1.075
I always buy the gold ornament retail shops with special features and decoration.	2.72	.931
I always buy the gold ornament retail store with have pleasant atmosphere and good conditions.	3.79	.707
Gold ornament retail shops decoration change my buying decision.	2.77	1.013
Overall mean	2.917	.622

Source: Survey Data (2018)

By comparing the mean score of Store-Image factors, this study found that the highest mean score is 3.79 in which I always buy the gold ornament retail store with have pleasant atmosphere and good condition while the lowest mean score is 2.28 in which I afraid to go gold ornament shops with special decoration. The average mean score is 2.917. For all statement of Store Image, it is not a key factor to cause purchase intention.

5) Marketing Mix Factors (Product Design)

According to the prepared questionnaire in these paper, gold ornament purchase intention on Product Design are classified into the following factors, "I am willing to pay for the of gold ornament I like", "I choose gold ornament because I like the design", "Gold ornament should represent the current fashion", Gold ornament should be durable, Gold ornament design display in the gold retail shop can attract me to buy it.

Table 8. Gold ornament purchase intention of Product Design

Particular	Mean	Standard Deviation
I am willing to pay for thereof gold ornament I like.	3.85	.759
I choose gold ornament because I like the design.	3.87	.845
Gold ornament should represent the current fashion.	3.53	.956
Gold ornament should be durable,	3.99	.741
Gold ornament design display in the gold retail shop can attract me to buy it.	3.72	.966
Average	3.786	.600

Source: Survey Data (2018)

By comparing the mean score of Product-design factors, this study found that the highest mean score is 3.99 in which Gold ornament should be durable while the lowest mean score is 3.53 in which Gold ornament should represent the current fashion. The average means score is3.786. For all statement Product Design, it is a key factor to cause purchase intention.

6) Marketing Factor (Price Discount)

According to the prepared questionnaire in these paper, gold ornament purchase

intention on Price Discount are classified into the following factors," I like to bargain for gold smith charge discount", "I am satisfied with price discount for gold smith charge", "Discounting gold smith charge cannot influence my buying behaviour", "I always buy gold ornament when I only get little gold smith charge discount", "I buy gold ornaments if the shops will give at least gold smith charge discount".

Table 9. Gold Ornament Purchase Intention of Price Discount

Particulars	Mean	Standard Deviation
I like to bargain for gold smith charge discount	3.30	.885
I am satisfied with price discount for gold smith charge.	3.25	.864
Discounting gold smith charge cannot influence my buying behaviour.	3.07	.936
I always buy gold ornament when I only get little gold smith charge discount.	3.19	.920
I buy gold ornaments if the shops will give at least gold smith charge discount.	3.10	.960
Overall mean	3.183	.512

Source: Survey Data (2018)

By comparing the mean score of Price-discount factors, this study found that the highest mean score is 3.30 in which I like to bargain for gold smith charge discount while the lowest mean score is 3.07 in which Discounting gold smith charge cannot influence my buying behavior. The average mean score is 3.183. For all statement Price discount, it is a key factor to cause purchase intention.

7) Financial Factor (Expected Future Value)

According to the prepared questionnaire, gold ornament purchase intention on Expected Future Value are classified into the following factors, I buy gold ornament because "I believe their value will increase in their future and buying", "Gold ornament is a way of investment for me", "I buy gold ornament because it can easily convert to money", "I buy gold ornament because it can easily sell than other assets, I buy gold ornament because it can prevent inflation".

Table 10. Gold Ornament purchase intention of Expected Future Value

Particulars	Mean	Standard Deviation
I buy gold ornament because I believe their value will increase in their future and buying.	4.01	.876
Gold ornament is a way of investment for me.	4.10	.831
I buy gold ornament because it can easily convert to money.	4.34	.641
I buy gold ornament because it can easily sell than other assets.	4.21	.770
I buy gold ornament because it can prevent inflation.	3.89	.962
Overall mean	4.109	.652

Source: Survey Data (2018)

By comparing the mean score of Expected Future Value factors, this study found that the highest mean score is 4.34 in which I buy gold ornament because it can easily convert to money while the lowest mean score is 3.89 in which I buy gold ornament because it can prevent inflation. The average mean score is 4.109. For all statement Expected Future Value, it is a key factor to cause purchase intention.

4. Factors Influencing on Purchase Intention

There are seven independent variables; buyers' preference, self-image, product design, trust, expected future value, price discount and store image and a dependent variable i.e. purchase intention of gold which are involved in this study. Measurement scales for all variables except demographics were adapted from previous study.

A correlation analysis was run to investigate the relationship between variables. Finally, a multiple regression analysis was run to test the relationships between the independent variables and the dependent variable.

Pearson correlation coefficient indicates the significance, direction, strength and significance of the bivariate relationship among all the variables that were measured at an interval or ratio level (Sekaran, 2003). It was a statistical measure of association between two variables.

The correlation coefficient (r) range from -1.0 to + 1.0. When the value of r is -1.0 indicates a perfect negative linear relationship while r value of + 1.0 indicates a perfect positive linear relationship. When the r value equal to 0 means that there is no

correlation indicated among the variables.

Table 11. Correlation of the Independent Variables and Purchase Intention

	Purchase Intention	Buyers' Preference	Self-Image	Product Design	Trust	Expected Future value	Price Discount	Store Image
Purchase Intention	1							
Buyers' preference	.003	1						
Self-Image	-.004	.488**	1					
Product Design	.052	.259**	.303**	1				
Trust	-.102	.160*	.305**	.146*	1			
Expected Future Value	.331**	.067	.006	.269**	-.057	1		
Price Discount	-.036	0.047	0.268**	0.182*	0.349**	-0.082	1	
Store Image	-.030	.121	.225**	.221**	.509**	.015	.359**	1

Source: SPSS Outputs

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

*Correlation is significant at the 0.05 level (2-tailed)

Table (11) demonstrates the correlation coefficient for dependent variable-purchase intention and independent variables i.e the seven dimensions: buyers' preference, self-image, product design, trust, expected future value, price discount and store image. The correlation coefficient between expected future value and purchase intention is 0.331 at 1% level of significance. Moreover, Table (4.11) also describe that the value of their correlations were less than 0.90. The estimated correlations between the factors were not excessively high (e.g; < .90 in absolute value). This result indicated the acceptable discriminated validity (Kline, 2011).

Multiple regression analysis is an analysis of association in which the effects of two or more independent variables on a single, interval-scaled dependent variable are investigated simultaneously (G.Zikmund, J.Babin, C.Carr & Griffin, 2010). Multiple regression is use when there is more than one independent variable to explain the variation in a dependent variable.

Multiple regression analysis was applied to investigate the factors of purchase intention. To develop the multiple regression model, purchase intention was used as dependent variable and buyers' preference, self-image, product design, trust, expected future value and store image were used as independent variable

Table 12. Factors Influencing on Purchase Intention

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.620	.160		28.944	.000
Buyers' Preference	-.004	.025	-.012	-.152	.879
Self-Image	.011	.026	.037	.431	.667
Product Design	-.014	.027	-.039	-.502	.616
Trust	-.039	.034	-.097	-1.157	.249
Expected Future Value	.110	.024	.340	4.682	.000
Price Discount	.009	.032	.021	.266	.791
Store Image	.003	.028	.010	.120	.905

Source: SPSS output

Based on the results of multiple regression analysis, it can be concluded that expected future value has a significant positive influence on purchase intention of gold. Buyers' preference, self-image, product design, trust, expected future value, price discount and store image did not impose any significant impact on purchase intention of gold.

III Findings and Discussions

The main purpose of this study was to investigate the determinants of consumer buying behaviour towards gold ornaments purchase intention. Finally, to provide the meaningful implications to decision makers of gold retail markets, the study tries to achieve the understanding on determinants of consumer buying behaviour towards gold purchase intention.

Data for the study was collected through questionnaires which include both open and close-ended. The surveys questionnaires are distributed to (194) consumers in Yangon downtown areas and fully receive a total of 194 survey questionnaires. The target population for the study consists of consumers buying in Yangon downtown areas.

Frequencies, mean, percentages, and standard deviation were employed to present

the responses obtained from the respondents. According to the demographic factors, female respondents' tool larger domain than male respondents. Age of the respondents are classified between 20 years old and above 60 years old. Among them, the range of age between 20-30 years is largely dominated as 51% of respondents are largely domain among them. According to the income level of respondent in the survey, the patterns of buying gold ornaments were varied because of different monthly income distribution, the highest in income, above more than Kyats 200001-4000000 with 46.9% of respondents are largely domain that for income level. In this study assumed that middle level income buys gold ornaments in the market.

Planned Behavioral Theory is applied in this study. Thus, Psychological factors consist of Buyers' Preference, Self-Image, Trust and Store Image. Marketing Mix factors consist of Product Design and Price Discount. And then, Financial Factor includes Expected Future Value.

In psychological factors, there are five relevant statements for Buyers' Preference, five relevant statements for Self-Image, five relevant statements for Trust and five relevant statements for Store Image. In marketing Mix factors, there are five relevant statements for product design, five relevant statements for price discount. In financial factor, there have five relevant statements for Expected future value. In Buyers' Preference, consumers are more agreed to buy gold ornaments for special occasion while they are less agreed in which similar gold ornament design with their friends. For Self-Image, consumers are more agreed to buy gold ornaments for body adornment while they are less agreed in which gold ornament for their status appearance. For Trust, consumers are more agreed to buy gold ornaments for trusted shops in their mind while they are less agreed in which sale person can influence them to buy gold ornaments.

In Store Image, consumers are more agreed to buy gold ornaments gold ornaments retail stores with have pleasant atmosphere and good operations while they are less agreed in which they afraid to go to gold ornament retail stores with special decoration. In Product design, consumers are more agreed to buy gold ornament that gold ornament should be durable while they are less agreed in which Gold ornament should represent the current fashion. In Price discount, consumers are more agreed to buy gold ornament that they like to bargain for gold smith charge discount while they are less agreed in which Discounting gold smith charges cannot influence their buying behavior. In Expected Future Value, consumers are more agreed to buy gold ornaments that they buy gold ornament because it can easily convert into money.

The correlation coefficient for dependent variables- purchase intention and independent variables i.e. the seven dimensions: buyers' preference, self-image, store image, trust, product design, price discount and expected future value are significant so that buyers' preference, self-image, store image, trust, product design, price discount

and expected future value are correlated with purchase intention.

Based on the results of multiple regression analysis, it can be concluded that expected future value has a significant positive influence on purchase intention of gold ornaments. Buyers' preference, self-image, store image, trust, product design and price discount did not impose any significant impact on purchase intention of gold ornaments.

1. Suggestions and Recommendations

Regarding Buyers' Preference and Store Image are less agreed to cause purchase intention, Gold ornament retail stores should prepare many promotional strategies carefully. Furthermore, they should prepare good and pleasant atmosphere in their shops. Moreover, it is also recommended that the gold ornaments retail stores shopkeeper should focus on both quality and services, especially the design of products that can make future benefits from the investment in gold. This study suggests that the importance of Buyers' Preference and Store Image factors cannot be ignored since they do have an effect on Purchase Intention.

The study has manifested that consumers believe that Expected Future Value factors are highly influence the degree to which purchase intention on gold ornaments by the results of regression. Research showed that gold ornaments is already known and valued by the people for its stable nature and long tradition. This is the great advantage during the current uncertain economic times where trust-based investment instruments lose ground. Trust-based investment instruments (like stocks and bonds) are used more for earning profit whereas gold ornaments is regarded as long-term stable backbone of the portfolio. All the respondents said that they plan to hold gold and buy more if it is possible.

This study can provide a valuable contribution as an idea of investment in gold for the people in Myanmar. Gold ornaments are preferred by the customer; not only to buy as jewellery but also as a portfolio of an investment for future benefits intention. It is part of culture of buying gold and wearing gold ornaments in Myanmar. Findings of this study indicates that female consumers are more likely to consume gold ornaments than males. As female consumers are major group of gold ornaments buyers, the policy makers should provide gold investment knowledge and to encourage their gold investment attitude. In the financial sector, gold investment needs to be innovated as issuing gold shares and stocks so that gold investment will be one of the most important portfolio investments in Myanmar. The current gold market can be developed by innovating gold stocks and shares. Additionally, it can contribute to grow Myanmar financial market.

2. Need for Further Study

This study covers the area of gold ornaments retail market in Yangon downtown areas, according to time limit and financial constraints. In this study, purchase intention on gold ornaments is analysed on Planned Behavioral Theory. In the event of the further study, some interesting research areas can find out purchasing factors influence the buying decisions of consumers for gold ornaments. Next, a replication of this study using different methodologies for data collection and analysis methods. The similar studies can be conducted in Mandalay region because Mandalay is the second biggest city and a great number of investors are there.

References

- A, F. (2005). *Discovering Statistics Using SPSS*(2 ed.).
- Ajzen, I. (1991). The Theory of planned behavior. *Organizational Behavior and Human Decision Process*, Vol.50 NO.2, 179-211.
- Annual Report. (n.d.). Myanmar Gold Entrepreneur Association.
- Aung Thamadi Gold Smith. (2010). *Knowledge about Gold*. Mandalay: Aung Thamadi .
- Aye, T. N. (2011). *A Study of Marketing Mix of Golden Jewellery Shops in Yangon*. Yangon University of Economics: Master of Business Administration.
- Aye, T. N. (2012). *Analysis of Relationship between Exchange Rate and Gold Price in Yangon*. Yangon University of Economics: Master of Development Studies Programme.
- Blackwell. (2006). *Consumer Behavior*. The Dry Press International Edition.
- Cornell. (2002). *Cult of Luxury: The new opiate masses*. *Australian Financial Review*, 47.
- Engel, & J.F. (1995). *Consumer Behavior*. 8: Prince Hall.
- Erasmus, & A.C. (2001). *Consumer decision- making models within of family Ecology and Consumer Sciences*.
- Ertimur. (2003). *Gold and Gold Jewelry: Exploration of Consumer Practice*.
- Guiltian, & Joshep. (1991). *Marketing Management*. Mc Graw Hill.
- Gupta, & S. (Nov 25, 1998). *Impact of Sale Promotion When, What, and How much to buy* . *Journal of Marketing Research*.
- Hamid Akbariyeh. (2015). *A Study of Factors Affecting on Customers Purchase Intentions*. *Journal of Multidisciplinary Engineering Science and Technology*, 267-273.
- Henri, J. (2011). *Consumer Perception and behavior in Respect to Ethical, Social and Environmental Matters in Jewelry Business*.
- Kotler. (2002). *Principles of Marketing*. Retrieved 2002
- Kotler, Philip, & Kelvin lane Keller. (n.d.). *Marketing Management*. US: Prentice Hall.
- L.G, S., & Lazar, K. L. (n.d.). *Consumer Behavior*(6 ed.).
- Latt, T. C. (2013). *A Study on Consumer Buying Behavior Towards Bath Soap*. Yangon University of Economics : Commerce Department.
- Malhotra, Naresh K, Birks, & David F. (2007). *Marketing Research and Applied*

- Approach.uk: Pearson Education Limited.
- Min, M. A. (2013). Fluctuation Gold, Dollar and World currency market. *Business Journal* Vol.13,2.
- Navarwan Chaisuriyathavikun. (2016). A study of factors influencing customers' purchasing behaviors of gold ornaments. *Journal of Business and Retail Management Research*, 147-159.
- Olson, J.C, Peter, & J.P. (2008). *Consumer Behavior and Marketing Strategy*.
- Peter, j, Donnelly, H, & J.Jr. (1992). *Marketing Management*(3 ed.). Retrieved 1992
- Schenk, T.Carolyn, Holman, & H.Rebecca. (1980). A Sociological Approach to Brand Choice: The Concept of Situational Self-Image. *Advance in Consumer Research*, 7, 610-614.
- Shahiar Shafiee, & Erkan Topal. (2010). *An Overview of Global gold market and gold price forecasting, Resource policy*.US: Oxford University.
- Sindh, Dr. (2013). A Study on Impact of Selected Factors on The Price of Gold. *IOSR Journal of Business and Management*, 84-93.
- Solmon, M. (2006). *European Perspective*.Harlow: Prentice Hall.
- Solomon. (2006,2009). *Consumer Behavior*.
- Thaw, Z. M. (2018). *Consumer Buying Behavior Towards Organic Food Products*.Yangon University of Economics: Commerce Department.

EXPLORING THE ECONOMIC IMPACTS OF TOURISM DEVELOPMENT IN BAGAN-NYAUNG OO REGION

*Hlaing Hlaing Moe**

Yangon University of Economics

ABSTRACT : Tourism is an essential sector of economic growth for many countries. This paper aims to analyze the causal relationship among attitude of community attachment, personal benefits from tourism, economic impacts of tourism and resident's support for tourism development in Bagan-Nyaung Oo Region. Structural Equation Modelling (SEM) is used to analyze the data. The model contains 19 measured variables and 4 latent variables. This study reveals that local residents view community attachment and personal benefits from tourism as the important factors in their support for tourism development. The local residents perceive the economic impacts tourism as a main and mediation factor in their support for sustainable tourism development. The results of the study able to provide the government and local community to set up tourism plans, policies, rules and regulations for the implementation of sustainable tourism development in tourist destinations in the country.

Key words : Tourism Development, Bagan-Nyaung OO Region, Economic Impact, internal CSR, Sustainable development,

I. Introduction

Tourism development is an important agenda of policy planning in international, national and regional level. Many countries have proceeded to attract international tourist arrivals and to reap international tourism receipts. Tourism can make a valuable contribution to the achievement of millennium development goals among nations. Tourism is a vital source of income for many developing countries including

* Lecturer, Department of Statistics, Yangon University of Economics

Myanmar. Nowadays, tourism represents one of the economic sectors and is known to be a smokeless industry.

Myanmar tourism statistics clearly stated that international tourist arrivals increased from 0.79 million in 2010 to 4.68 million in 2015, and 3.55 million in 2018. The foreign exchange earnings increased from US\$254 million in 2010, to US\$2122 million in 2015 and US\$1969 million in 2017. The tourism industry accounted for 4.8 percent of GDP and created about 6.5 percent of the job opportunities in 2015.

Myanmar has become an emerging tourist destination for international travellers keen to experience Myanmar's abundant wealth of cultural and natural heritage, genuine hospitality and spiritual values. In Myanmar, most tourist sites are Yangon, Mandalay, Bagan, Inlay, Ngapali, and Mrauk Oo. These sites are already gained economic benefits but it has initiated to experience environmental, social and cultural pressures from tourism (MOHT, 2013). Bagan is one of the Asia's most archaeological sites. Bagan has over 2000 well-preserved pagodas and temples. This study explores the economic impacts of tourism development in Bagan-Nyaung Oo Region. This study is aimed to develop residents' support for tourism development model by means of Structural Equation Modelling (SEM).

II. LITERATURE REVIEW

Many countries have tried to attract international tourists and to reap international tourism. World tourism is experienced by a very rapid increase in international tourism flows with regard to both tourist arrivals and tourism receipts. In addition to, many new destinations have emerged in the world. Tourism has played an essential role in contributing foreign exchange revenues for developing countries and least developed countries. An ever-increasing number of destinations worldwide has opened up to and invested in tourism, turning it into a key driver of socio-economic progress through the creation of jobs and enterprises, export revenues, and infrastructure development. Christaller (1963) pointed out that tourism can be used to achieve economic development in peripheral regions because tourists travel from core metropolitan areas to the periphery.

Sustainable tourism allows the development of tourism and recreation activities in a tourist destination by taking into account the basic principles of sustainable development. Sustainable tourism is delivering economic benefits to destinations and communities through competitive tourism businesses that create employment and it is minimizing adverse impacts on the environment. Bramwell and Lane (1993) believed that a sustainable approach will reduce tension and friction created by tourism through

its interaction among tourists, the tourism industry and host communities. The authors believe that a sustainability approach will maintain capacity and quality of natural and man-made resources.

Community attachment is a complex construct for assessing the attitudes of the host residents toward their communities. McCool and Martin (1994) suggested that the concept of community attachment is an important issue in the assessment of the social impacts. The authors argued that strongly attached residents rated more positive dimensions of tourism than the unattached residents, but attached residents were more concerned about sharing the costs of tourism development. On the other hand, some authors indicated that attached residents appear to evaluate the economic and social impacts positively, but the environmental impacts negatively. Thus the community attachment is more affected on perceived economic impacts of tourism.

Perdue, Long and Allen (1990) examined the influence of personal benefits from tourism on perception of economic impacts of tourism. The authors found that a positive relationship between personal benefits from tourism and perceptions of tourism impacts. Compared with the benefits from tourism bring to the whole community, resident's benefits from tourism have a closer correlation with residents' support for tourism development. According to the social exchange theory, the residents would share the more personal benefits from tourism, if they perceived maximum of the positive economic impacts and minimum the negative economic impacts of tourism.

Tourism can create jobs, provides foreign exchange and produces return to investment of emerging local businesses. Tourism brings technology and improves living standards. The most prominent benefits are the economic benefits which use to promote tourism development. The residents feel that tourism improves the standard of living and it helps the host community to earn more foreign exchange (Var and Kim, 1989). Tourism enhances to generate employment and revenue for local business and shopping facilities. This study analyses vast majority of the economic impacts of tourism such as generation of employment and income, contributions to government's revenue, standard of living and cost of living.

Researchers try to investigate factors influencing local residents support for tourism development. Untong et al. (2010) found that residents see private cooperation as an important factor in their support for local tourism development. Economic impacts are the main factor influencing local residents' support for tourism development especially in traditional tourist destinations such as Phuket and Pattaya. In more tourist destination like Chiang Mai and Pai, local residents pay attention more on local employment opportunities. Past studies also agree in general that residents' support for future tourism development is influenced by their perceived economic impacts of tourism in terms of the social exchange model. Residents with a positive perceived economic tourism impact are more likely to support additional tourism development

and hence, they will have a higher willingness to participate in an exchange with visitors. The understanding of residents' support is great importance for local government, policymakers and businesses. If the perceived positive economic impacts (benefits) outweigh the potential negative economic consequences (costs), residents are likely to support tourism development (Lee, 2013). As such, the support of residents in tourism is an important consideration for successful development of tourism in this study.

III. OBJECTIVES

The following objectives are set in this study:

- (i) To explore economic impacts of tourism on the local residents in Bagan-Nyaung Oo Region.
- (ii) To analyze the residents' support for tourism development in Bagan-Nyaung Oo Region.

IV. RESEARCH METHODS

1. Survey Design

Household sample survey is conducted in Bagan-Nyaung Oo Region to obtain the required information. The questionnaires are used to collect the required information. The questionnaire has basically consisted of three main sections. These sections are the demographic and socio-economic characteristics of a household, the statements of economic impacts of tourism and support of residents for tourism development. The questionnaire is prepared for household head and related family members. Only one person in each household is invited to participate in the study.

In this study, two-stage sampling design has been used to carry out a household sample survey. In the first stage, wards are treated as first-stage sampling units (FSUs) and households in the FSUs are treated as second-stage sampling units (SSUs). At first-stage, the SRSWOR method has been used to select 50% of enumeration area units from Bagan-Nyaung Oo Region. Therefore, six wards are selected from sampling frame of Bagan-Nyaung Oo Region. In the second-stage sampling, households (SSUs) are selected randomly in each selected FSUs by SRSWOR technique. The target population consisted of permanent residents of Bagan-Nyaung Oo Region who are 18 years old or older. Data are collected during December, 2017 to February, 2018 using a

structured self-administered questionnaire and personal interview with 392 households. Regarding with the 98% of response rate and incomplete questionnaires, only 350 complete questionnaires are retained and used for subsequent data analysis.

2. Measurement

The measurement variables represent the scale for each construct to measure. Each construct in the proposed model is designated as either an endogenous construct or an exogenous construct. The proposed model comprises four major constructs such as attitude of community attachment and personal benefits from tourism, economic impacts of tourism and residents' support for tourism development. The attitude of community attachment and personal benefits from tourism are exogenous constructs. The economic impacts of tourism and residents' support for tourism development are endogenous constructs.

1) Exogenous Variables

The two exogenous constructs (residents' attitude of community attachment and personal benefits from tourism) are presented in the proposed model. The measurement scales of each construct are selected to measure residents' attitude level of community attachment and personal benefits from tourism.

(1) Attitude of Community Attachment

The study analyzes that the attitude of community attachment depend on perception of economic impacts and residents' support for tourism development. Five items are used to measure the community attachment based on the studies of Gursoy and Rutherford (2006).

- (i) The community is a good place to live for you.
- (ii) The community is a good place for your job.
- (iii) The community has increased your living standard.
- (iv) The community is safe place to live.
- (v) You enjoy living in this community more than other community.

(2) Personal Benefits from Tourism

The study analyzes the influence of personal benefits from tourism on perception of tourism impacts and support of residents for tourism development. Five items are used to measure the personal benefits from tourism based on the studies of McCool & Martin (1994).

- (i) You get main income earned from tourism.

- (ii) Your job is related to tourism.
- (iii) Improving your living standard is related to tourism.
- (iv) Your conservation of local culture is related to tourism.
- (v) Your conservation of environment is related to tourism.

2) Endogenous Variables

The two endogenous constructs (economic impacts of tourism and residents' support for tourism development) are presented in the proposed model. The measurement scales of each construct are selected to measure residents' perception of economic impacts of tourism and support for tourism development.

3. Economic Impacts of Tourism

The economic impacts of tourism can be categorized into four different sub-dimensions such as generation of employment and income, contribution to government revenue, standard of living and cost of living. Four items for generation of employment and income, three items for contribution to government revenue, standard of living and cost of living are used to measure residents' perception of economic impacts based on the studies of Untong et al. (2010), Lee (2013) and Var and Kim (1989).

(i) Tourism development has more increased currently income and employment opportunities for residents than before.

(iii) Tourism brings more investment to economy of the community.

(iii) Hotels, guest houses, restaurants, Lacquerware firms and cane firms have got more income from tourists because of tourism development.

(iv) The local economy has become over dependency on tourism.

(v) Tourism has generated tax revenues for local government.

(vi) Tourism has created for local government to work together with foreign countries.

(vii) Tourism is important because of getting foreign earnings.

(viii) Tourism development has more increased your living standard than before.

(ix) Tourism development has caused to improve roads and highways in the community.

(x) Local residents can get social benefits, higher education and improved health facilities from tourism development.

(xi) The prices of many goods and services have significantly increased because of tourism.

(xii) The prices of real estate and dwelling houses have increased because of tourism.

(xiii) Tourism has led to more spending in your community.

4. Support of Residents for Tourism Development

This study investigates factors influencing local residents support for tourism development. Items for the construct are selected to measure residents' support for tourism development. Five items are applied to measure the residents' support for tourism development based on the studies of Untong et al. (2010) and Lee (2013).

(i) The residents should be financially invested to tourism development.

(ii) The residents should participate to increase the volume of tourists.

(iii) The local government should make plans for tourism development in the community.

(iv) The residents should be actively participated to develop local tourism industry.

(v) The residents should support tourism development because it has reduced the poverty of the community.

5. DATA ANALYSIS AND RESULTS

The descriptive statistics of demographic and socio-economic characteristics of local residents in Bagan-Nyaung Oo Region are described in the study. According to gender, 204 respondents (58.3%) are males while 146 respondents (41.7%) are females. Most of respondents are in the middle age group of 31-40, which is 33.1 percent and followed by the 41-50 age group (25.7%), the 21-30 age group (20.3%), the 51-60 age group (18.6%), the 20 and under age group (0.9%) and above 60 years old (1.4%). The average age of residents is 39 years. This means that most residents have working age population in the area.

In terms of the marital status, the majority of the respondents is married (70%) and followed by single (24.3%), widow (4.3%), divorced (0.9%) and separated (0.6%). According to the birth place, (57.1%) of respondents are born in the community and (42.9%) of respondents are not born in the community. The education level of respondents is classified as below tertiary level (34.3%), tertiary level (16.3%), any diploma (12.6%) and Bachelor's degree (35.4%).

The occupation of the most respondents is concerned with the tourism related job which is (69.3%) and (30.7%) of respondents is not concerned with the tourism related job. Concerning with average monthly income of respondents, the majority of the respondents has earned between kyats 100000 and 200000 per month (32.3%), followed by above kyats 500000 (28%). The minority of respondents has below kyats 100000 (8.6%). Most respondents have average monthly tourism-related income above kyats

500000. The minority of respondents have average monthly tourism-related income below kyats 100000. Therefore the most of residents are working in tourism industry and they have fairly average monthly tourism-related income.

1) Factor Analysis

Factor analysis attempts to identify underlying variables that explain the pattern of correlation within a set of measured variables. Factor analysis is used in data reduction. Factor analysis can be used to screen variables for subsequent analysis. The variables should be quantitative at the interval or ratio level. One of the objectives of this study is to establish a unidimensional scale for the measurement of construct. To determine the appropriateness of factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy tests and the Bartlett's test of sphericity tests are examined. KMO index is range from 0 to 1. A KMO value of 0.9 is best and below 0.5 is unacceptable. KMO value with 0.6 suggests as the minimum value for a good factor analysis and that a significant Bartlett's test of sphericity is required (Tabachnick & Fidel, 2007). A rule of thumb suggests that factor loadings greater than 0.33 are considered to meet the minimal level of practical significance.

The attitude of community attachment is measured by five items. From a principal component factor analysis, all factor loadings are greater than 0.7 and load on only one factor. Results of the KMO measure of sampling adequacy test 0.880 and the Bartlett's test of sphericity ($p < 0.001$) indicate that data are acceptable for factor analysis. Cronbach's alpha reliability for five items is 0.874, and the factor represents 66.7% of the explained variance of the scale. Therefore, attitude of community attachment can be measured five items, and all items are valid and reliable.

Personal benefits from tourism are measured by five items. From a principal component factor analysis, all factor loadings are between 0.66 and 0.82. Results of the KMO measure of sampling adequacy test 0.834 and the Bartlett's test of sphericity ($p < 0.001$) indicate that data are acceptable for factor analysis. Cronbach's alpha reliability for five items is 0.829, and the factor represents 59.63% of the explained variance of the scale. Therefore, personal benefits from tourism can be measured by five items, and all items are valid and reliable.

The economic impacts of tourism are measured by thirteen items. From a principal component factor analysis, eight factor loadings are above 0.7 and other factor loadings are less than 0.33. Five factors are excluded. Therefore, these eight factors are used in the factor analysis. Results of KMO measure of sampling adequacy test 0.889 and the Bartlett's test of sphericity ($p < 0.001$) indicate that data are acceptable for factor analysis. Cronbach's alpha reliability for eight items is 0.914, and the factor represents 63.3% of the explained variance of the scale. Therefore, economic impacts of tourism

can be measured by eight items, and all items are valid and reliable.

Residents' support for tourism development is measured by five items from the literature. From a principal component factor analysis, five factor loadings are between 0.41 and 0.81. Results of KMO measure of sampling adequacy test (0.803) and the Bartlett's test of sphericity ($p < 0.001$) indicate that data are acceptable for factor analysis. Cronbach's alpha reliability for five items is 0.756, and the factor represents 51.9% of the explained variance of the scale. Therefore, residents' support for tourism development can be measured five items, and all items are valid and reliable.

2) Confirmatory Factor Analysis

Confirmatory factor analysis (CFA) is used to test the measurement model specifying the posited relations of the observed variables to the underlying constructs. CFA is used to confirm the measurement scale of attitude of community attachment, personal benefits from tourism, the perception of economic impacts of tourism and residents' support for tourism development. To test the reliability of the constructs, composite reliability (CR) and average variance extracted (AVE) are used. At least 0.7 of CR estimate indicates that the measurement scale which used to measure a construct is moderately reliable. If the composite reliability was not high enough to be accepted, the scales are revised by deleting items. To evaluate discriminant validity, AVE is used and AVE of all constructs have at least 0.5 (Fornell & Larcker, 1981). Hence, the constructs of attitude of community attachment, personal benefits from tourism, the perception of economic impacts of tourism and residents' support for tourism development retain five observed variables, four observed variable, six observed variable and four observed variable with acceptable results (CA, AVE, Tucker-Lewis index (TLI), comparative fit index (CFI), root mean square error of approximation (RMSEA) and standardized root mean square residual (SRMR).

3) Measurement Model

The overall measurement model consists of four latent variables and 19 measured variables. These latent and measured variables are presented in Table 1. The measurement model has 19 measurement equations and 6 covariances between latent variables. Before evaluating the model as a whole, it is necessary to evaluate the individual parameter estimates. The Z-statistic tests whether or not the parameter estimate is statistically difference from zero at 1% level of significance. An examination of the unstandardized parameter estimation reveals that all estimates are both reasonable and statistically significant. Assessing model fit is to examine the extent to which the measurement model is adequately represented by the measured variables. All

*EXPLORING THE ECONOMIC IMPACTS OF TOURISM DEVELOPMENT
IN BAGAN-NYAUNG OO REGION*

of the composite reliabilities are found to be above 0.80. All the variance extracted estimates are also above 0.6, which indicates satisfactory results of fit. Hence, the results indicate that the measured variables have high reliability and validity. Figure 1 presents the proposed measurement model.

Next, the overall measurement fit are assessed in the study. The χ^2 value for the model is 183.53 with 146 degree of freedom ($p = 0.0192 > 0.01$). The Chi-square statistic is insignificant; hence the measurement model is supported by sample variance and covariance data. Furthermore, other fit indices are TLI = 0.986, CFI = 0.988, RMSEA = 0.027 and SRMR = 0.04. The coefficient of determination is 0.994. The results of goodness-of-fit statistics indicate that the theoretical measurement model is a well-fitting model to the data.

Table 1. Constructs and Indicators for Overall Measurement Model

Constructs and Indicators
<p>Attitude of community attachment (CA) ca 1: The community is a good place to live for you. ca 2: The community is a good place for your job. ca 3: The community has increased your standard of living. ca 4: The community is safe place to live. ca 5: You enjoy living in this community more than other community.</p>
<p>Personal benefits from tourism (PBT) pbt 1: Personal income is related to tourism. pbt 2: Personal job is related to tourism. pbt 3: Family member's job is related to tourism. pbt 4: Personal conservation of local culture is related to tourism.</p>
<p>Economic impacts of tourism (Eco) eco1: Tourism development has more increased currently income and employment opportunities for residents than before. eco 2: Hotels, guest houses, restaurants, Lacquerware firms and cane firms have got more income from tourists because of tourism development. eco 3: The local economy has become over dependency on tourism. eco 4: Tourism is important because of getting foreign earnings. eco 5: Tourism development has more increased your living standard than before. eco 6: Local residents can get social benefits, higher education and improved health facilities from tourism development.</p>
<p>Support for tourism development (RSTD) rstd 1: The residents should be financially invested to tourism development. rstd 2: The residents should participate to increase the volume of tourists. rstd 3: The residents should be actively participated to develop local tourism industry. rstd 4: The residents should make tourism development because it has reduced the poverty the community</p>

Source: Survey Questionnaire (2018)

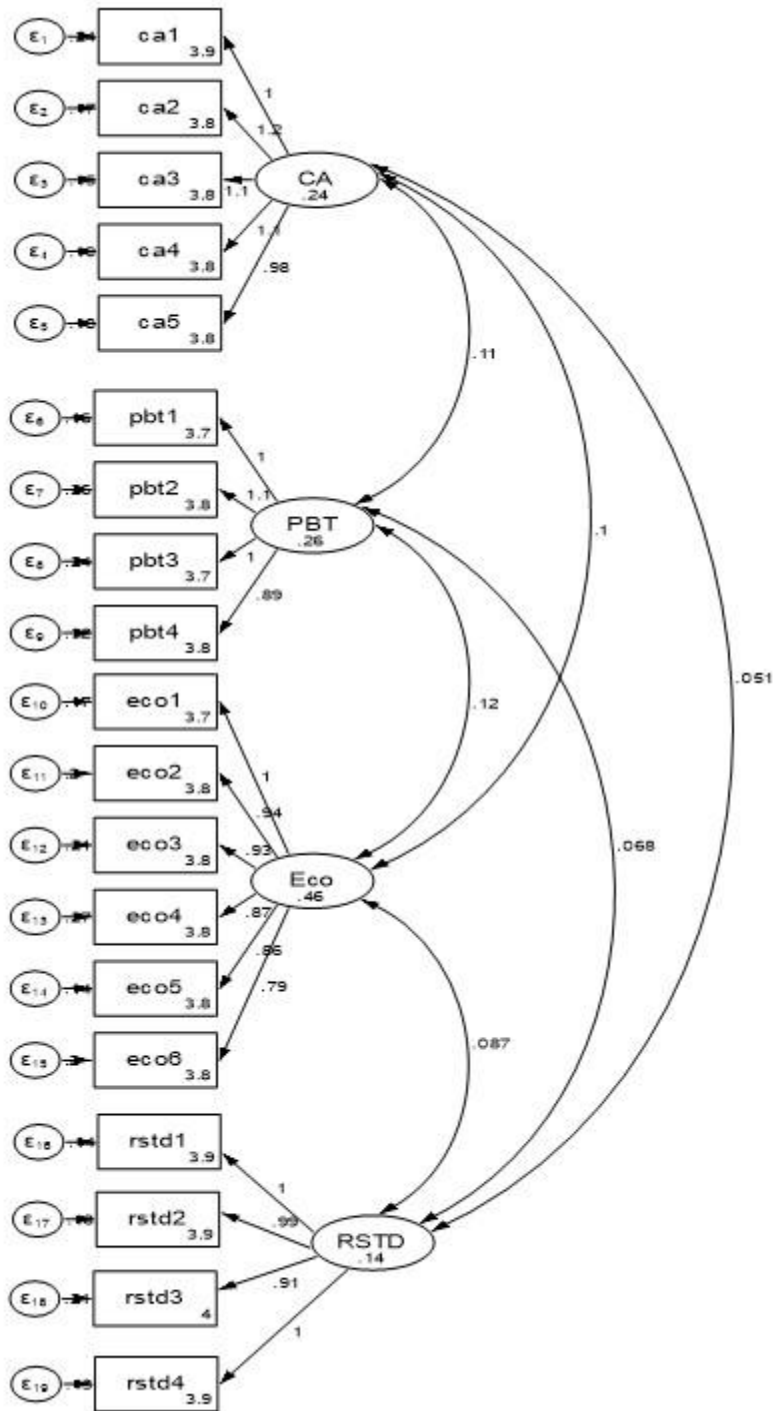
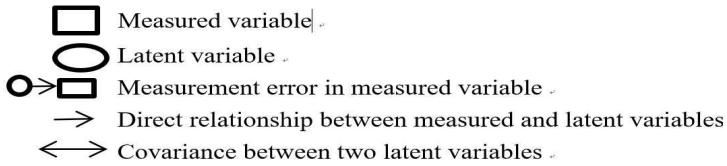


Figure 1. The Estimated Measurement Model



4) Structural Model

The structural model deals with the relationships among the four latent variables in the proposed model. Within the structural model, the estimates of the structural coefficients provide the basis for testing research analysis. Figure 2 presents the estimated structural model. The structural model specifies to indicate how these latent variables are related. The structural model can be analyzed to determine the extent to which these a priori hypothesized relationships are supported by sample variance-covariance matrix. The structural model indicates two latent exogenous variables and two latent endogenous variables. Hence, there will be two structural equations and two prediction errors. These two structural equations can be illustrated as follows:

$$Eco = \text{structural coefficient} \times CA + \text{structural coefficient} \times PBT + \text{prediction error}$$

$$RSTD = \text{structural coefficient} \times CA + \text{structural coefficient} \times PBT + \text{structural coefficient} \times Eco + \text{prediction error}$$

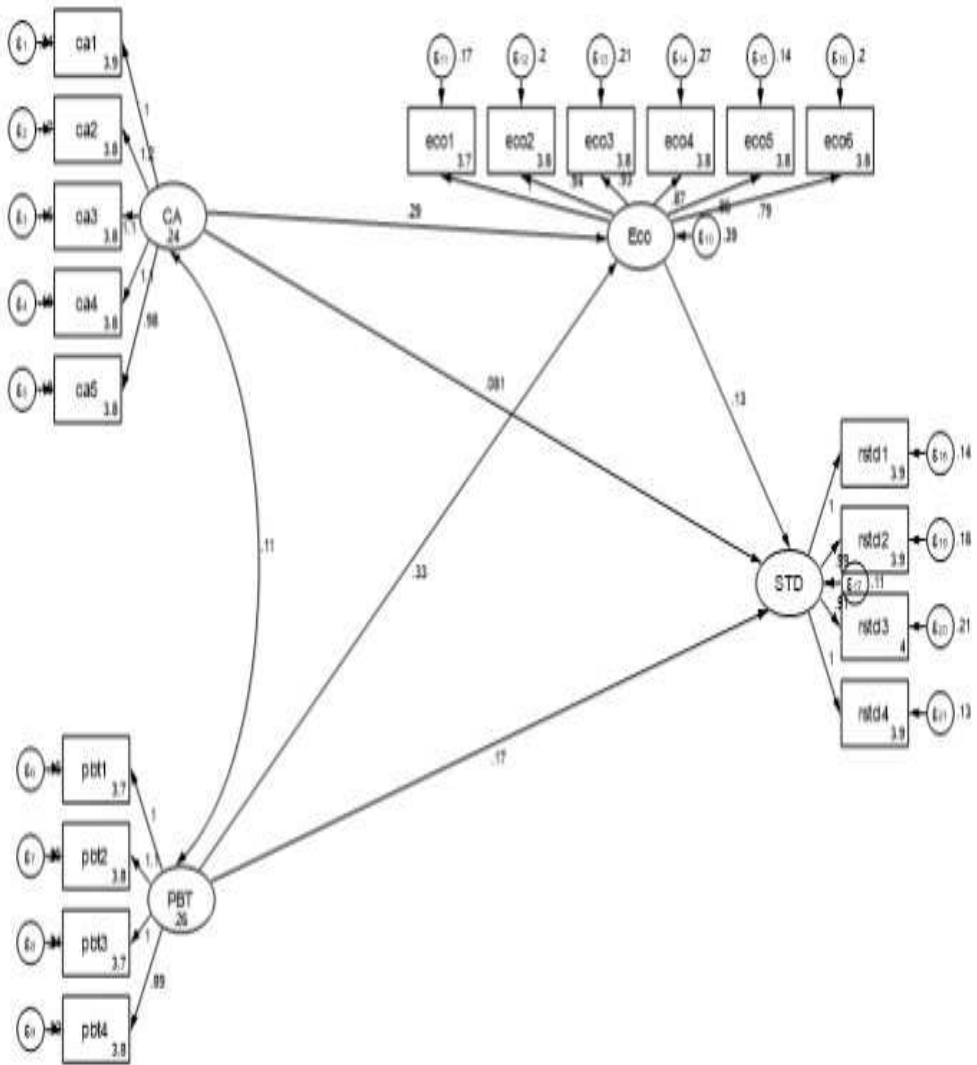


Figure 2. The Estimated Structural Model

- Measured variable .
- Latent variable .
- Prediction error in latent endogenous variable .
- Direct relationship between latent exogenous and endogenous variables
- ↔ Covariance between latent exogenous variables .

*EXPLORING THE ECONOMIC IMPACTS OF TOURISM DEVELOPMENT
IN BAGAN-NYAUNG OO REGION*

The unstandardized coefficients of attitude of community attachment is $\gamma_1=0.291$. This means that a 1-point increase on attitude of community attachment predicts 0.291-point increase on the perception of economic impacts, controlling for personal benefits from tourism. The unstandardized coefficients of personal benefits from tourism is $\gamma_2=0.33$. This means that a 1-point increase on personal benefits from tourism predicts 0.33-point increase on the perception of economic impacts, controlling for attitude of community attachment. This study showed that a significant positive relationship between attitude of community attachment and the perception of economic impacts; and a significant positive relationship between personal benefits from tourism and the perception of economic impacts. Hence, residents attached their community and received benefits from tourism; they perceived more economic impacts.

The unstandardized coefficients of attitude of community attachment is $\gamma_3=0.081$. This means that a 1-point increase on attitude of community attachment predicts 0.081-point increase on the support of residents for tourism development, controlling for other variables. The unstandardized coefficients of personal benefits from tourism is $\gamma_4=0.174$. This means that a 1-point increase on personal benefits from tourism predicts 0.174-point increase on the support of residents for tourism development, controlling for other variables. The unstandardized coefficients of the perception economic impacts of tourism is $\gamma_5=0.129$. This means that a 1-point increase on the perception economic impacts of tourism predicts 0.129-point increase on the support of residents for tourism development, controlling for other variables. The study found that a significant positive relationship between attitude of personal benefits from tourism and support for tourism development; a significant positive relationship between the perception of positive economic impacts and support for tourism development. Hence, residents received benefits from tourism, widely perceived economic impacts; they are more likely to support tourism development.

The review of the structural model shows that the Chi-square value is 183.53 with 146 degree of freedom ($p=0.0192 > 0.01$). The Chi-square statistic is insignificant; hence the structural model is supported by sample variance and covariance data. Furthermore, other fit indices are TLI =0.986, CFI=0.988, RMSEA =0.027 and SRMR=0.04. The coefficient of determination is 0.977. The results of goodness-of-fit statistics indicate that the theoretical structural model is a well-fitting model to the data.

An analysis of the estimated path coefficients in the proposed structural model reveals the significance, strength and direction of each proposed path. Four of the five proposed paths in the structural model are statistically significant, while one proposition is not significant. A total of five paths and the results are presented in Table 2.

Table 2. Direct, Indirect and Total Effects

Path	Direct effects	Indirect effects	Total effects
CA→ Eco	0.291***	-	0.291***
CA→ RSTD	0.081	0.037**	0.118**
PBT→ Eco	0.330***	-	0.330***
PBT → RSTD	0.174***	0.043**	0.216***
Eco → RSTD	0.129***	-	0.129***

***, **, * represent 1%, 5% and 10% level of significant

Source: Survey Data (2018)

The result of SEM indicates that the relationship between the attitude of community attachment and the perception of economic impacts of tourism is significantly and directly positive effect ($Z=3.23$, $P=0.001 < 0.01$). Hence, residents attached their community; they perceived more economic impacts of tourism. The result shows that the attitude of community attachment is significantly and indirectly positive effect residents' support for tourism development ($Z=2.36$, $p=0.006 < 0.01$). The attitude of community attachment indirectly influences the residents' support for tourism development through economic impacts of tourism as mediator variables. Hence, residents attached their community; they perceived more economic impacts of tourism and are more likely to support future tourism development.

The result indicates that personal benefits from tourism influence significantly, directly and positively the perception of economic impacts of tourism ($Z=3.61$, $p=0.000 < 0.01$). Hence, residents received benefits from tourism; they widely perceived economic impacts of tourism. The result investigates that personal benefits from tourism directly and significantly influence the residents' support for tourism development ($Z=3.06$, $p=0.002 < 0.01$) and indirectly and significantly influence residents' support for tourism development ($Z=2.56$, $p=0.011 < 0.05$). Thus, personal benefits from tourism influence not only directly but also indirectly the residents' support for tourism development through economic impacts of tourism as mediator variable. Therefore, residents received benefits from tourism; they widely perceived economic impacts of tourism and are more likely to support future tourism development. The result indicates that the perception of economic impacts of tourism positively and directly affect the residents' support for tourism development ($Z=3.43$, $p=0.001 < 0.01$). Therefore residents perceived economic impacts; they more support tourism development in the community.

III. Conclusion

The study examines the economic impacts of tourism on support of residents for tourism development. A sample of 350 respondents is used in the data analysis. Of the 350 respondents, 58.3% are male. The 57.1% of respondents are born in the community and 65.7% of respondents work in the tourism industry. The 36.8% of respondents have a Bachelor's degree and 37.7% of respondents have average monthly tourism-related income above 500000 kyats. These results imply that males work tourism industry and have got average monthly income above 500000 kyats. Moreover, most of the residents work in tourism industry and they are born in this area. In addition, tourism development of Bagan-Nyaung Oo Region is growth stage.

To establish a unidimensional scale for the measurement of construct, an exploratory factor analysis (EFA) with a principal component method is conducted. The factor loadings of measured variables have lower than 0.33, which are eliminated from the analysis. Therefore five factors of economic impacts are excluded in the factor analysis. Cronbach's alpha scores of all constructs are higher than 0.75. The measured variables explain acceptable variance of the constructs. Confirmatory factor analysis is conducted. Based on the CFA results, all of the constructs have satisfactory composite reliability (over 0.82) and average variance extracted (over 0.53).

The overall measurement model is tested to observe whether the theoretical measurement model fit the data well. A measurement model for the four latent variables is developed and tested. The unstandardized parameter estimation of measurement model is statistically significant and fit indices are acceptable. Therefore, overall measurement model is a well-fitting model to the data. In the study, the structural relationships between all latent variables are tested using data. Four of the five proposed paths in the structural model are statistically significant, while one proposition is not significant. The attitude of community attachment indirectly influences the residents' support for tourism development through economic impacts tourism as a mediator variable. Personal benefits from tourism influence not only directly but also indirectly the residents' support for tourism development through economic impacts of tourism as a mediator variable. This study finds that a positive significant relationship is found between perceived economic impacts of tourism and residents' support for tourism development. Therefore, residents attached their community and received benefits from tourism; they widely perceived economic impacts of tourism and are more likely to support future tourism development.

1. SUGGESTIONS

Tourism industry of Myanmar is increasing rapidly. Myanmar makes open economy to enter many tourists and enhance tourism development. Regarding with Myanmar tourism development, there are both positive and negative economic impacts of tourism. Tourism can contribute the positive economic impacts such as encourage economic growth, become a source of development benefits, increasing employment opportunities and higher standard of living. However, tourism can also contribute the negative economic impacts such as increasing living costs and taxation. Hence, effective tourism plans, policies, rules and regulations become necessary. Tourism Master Plan 2013-2020 states that State and Regional Tourism Councils should be established to undertake tourism planning and management at the subnational level. The master plan for Bagan is mainly intended for the long-term sustainability of local community development and heritage conservation. According to the long-term conservation of pagodas, Department of Archaeology, National Museum and Library should plan to limit the sunrise and sunset viewing over pagodas starting from the next tour season.

Concerning with the tourism development in Bagan-Nyaung Oo, the major findings of the study have the following suggestions. The first suggestion is that community attachment is the important factors to get residents' support for tourism development. The residents more attached to the community and perceived positive economic impacts of tourism; they will be more likely support to tourism development. Therefore, community attachment can be used to assess effectively support for tourism development.

The second suggestion is that personal benefits from tourism are the main influenced factors among other factors. Hence, the residents received benefits from tourism, and perceived positive economic impacts of tourism, they more supported tourism development. In addition to income and job opportunities from tourism are essential for residents to support for tourism development. Concerning with the results of the study, increasing income from tourism, creating employment opportunities and enhancing the standard of living are required in the tourist destinations. Therefore, government should implement planning and developing process of tourism. In consequences of developing process, the residents involved sustainable tourism development.

The final suggestion is about the sustainable tourism development in Bagan-Nyaung Oo Region and other tourist destinations in Myanmar. The perceived economic impacts tourism is a mediation factor. Regarding with increasing tourism development, the resident should perceive not only positive economic impacts but also negative economic impacts in tourism industry. Therefore, Myanmar Tourism Master Plan (2013-2020) and Responsible Tourism Policy are set down to support sustainable

tourism development.

2. LIMITATIONS AND FURTHER RESEARCH

This study has several limitations which provide the opportunities for further research. First, the proposed model is examined only in relation to a developed tourist destination and thus the generalizability of the findings may be restricted. Hence, further research is considered other tourist destinations such as Yangon, Mandalay and Sagaing. Moreover, comparison between Bagan and other tourist destinations that can be analyzed development of tourism industry. Second, the study is conducted during a particular point in time. Residents' perception of tourism impacts and place may change over different stages of the lifecycle of destination. Therefore, further research could investigate a needed longitudinal approach to tourism studies. Finally, the study focused only on residents' perception of economic impacts of tourism. Therefore, residents' perception of environmental, social and cultural impacts of tourism should be considered tourism researches.

REFERENCES

- Bramwell, B., & Lane, B. (1993). Sustainable Tourism: An Evolving Global Approach. *Journal of Sustainable Tourism*, 1(1), pp.1-5.
- Christaller, W. (1963). Some Considerations of Tourism Location in Europe: The peripheral regions-underdeveloped countries-recreation areas, *Regional Science Association, Papers XIII. Lund Congress 12*, pp.95-105.
- Fornell, C. G., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), pp.39-50.
- Gursoy, D. & Rutherford D. G. (2004). Host Attitudes toward Tourism: An Improved Structural Model. *Annals of Tourism Research*, 31 (3), pp.495-516.
- Hu, L.T. & Bentler, P.M. (1999), Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria versus New Alternatives, *Structural Equation Modeling*, 6 (1), pp.1-55.
- Jenkins, C. (1980). Tourism Policies in Developing Countries: A Critique. *International Journal of Tourism Management*, 1 (1), pp.22-29.
- Kline, R. (2005). *Principles and Practices of Structural Equation Modeling (2ndEds.)*. New York: Guilford Press.
- Lee, T. H. (2013). Influence Analysis of Community Resident Support for Sustainable Tourism Development, *Tourism Management*, 34, pp.37 - 46.
- McCool, S. F. & Martin, S. R. (1994). Community Attachment and Attitudes toward Tourism Development. *Journal of Travel Research*, 32 (3), pp.29-34.
- Perdue, R. R., Long, P. T., & Allen, L. (1990). Rural Resident Perceptions and Attitudes.

- Annals of Tourism Research, 14, pp.420-429.
- Tabachnick, B.G. and Fidell, L.S. (5thEds.)(2007),Using Multivariate Statistics. New York: Allyn and Bacon.
- Untong, A., Kaosa-ard, M., Ramos, V., Sangkakorn, K., & Rey-Maqueira, J., (2010). Factors Influencing Local Resident Support for Tourism Development: A Structural Equation Model, Best Paper Award in the APTA Conference 2010 at Macau, China.
- Var, t. & Kim, Y. (1989). Tourism Impacts and its Control, Quality of Life Studies in Marketing and Management, Proceeding of the Third Quality of Life/ Marketing Conference, pp. 292- 302.

A Study on Sexual Behavior, Sexual Morality and Recognition of Sexual Violence*²⁾

Sunghee Kim

Sunchon National University

ABSTRACT : The purpose of this research was performed to examine the sexual behavior, sexual morality and recognition of sexual violence among of college students. Data were collected from 315 students with questionnaire. The results are as follows. The 34.3 percents of students experienced sexual behavior such as intercourse approximately one time during the past three month. They had free sexual morality. The sexual morality was related with sex, religion, endurance, mass media and parental interest. Sexual behavior was influenced by existence of lover, drinking, and morality. Students wanted permission from the partner when he might have intention to have sex not to touch.

Key words : Sexual Behavior, Sexual Morality, Sexual Violence, Social Problem,

I. Introduction

In adolescence period, youth's interest concentrates on dating and relationship with opposite sex. Sexual behavior is natural phenomenon but there is some restriction on physical contacts or expression which is inconsistent with social morality or norms. Adolescents in past was required to suppress their sexual needs, but the value of purity has been changed and nowadays free sexual morality pervades consciousness of adolescents (Ko, 2001).

Adolescents have strong desire to do sexual contacts, so they are apt to commit misdeed because of immature frontal lobe. Adolescents' sexual behavior associated with negative social problems such as pregnancy, abortion, single unmarried mother or dating violence (Jeong, 2008).

* This paper was presented as a poster in 11th international conference of YUE, KOMYRA,& KHU , October 26, 2018.

Therefore lots of researches have been performed to get resources to grasp the real state of sexual behavior and morality (Kim, Park & Kim, 2002). They were mostly carried out to educate students to delay their sexual need or retrain with abstinence. Kim & Jeon(2007) revealed that college students had free sexual morality and some factors such as sex, dating, and drinking were related to sexual behavior. Kim & Kim(2008) found that the several variables which are sex, age, dating and knowledge of sex were influencing on sexual behavior. Ho(2009) found that free sex norms which permit intercourse before marriage explained increasing sexual experience. Male students were more permissive to sexual behavior and higher sexual impulse than female students (Sung, 2009).

Although there are lots of researches on sexual behavior, few studies have examined the permission of partner during sexual behavior. Male students were more permissive to sexual violence than female students (Ho, 2009). There are only a empirical researches on of Lee, Kim & Cho(2013) which examined the perception on sexual equality among college students

The social environment and culture around adolescents are changing rapidly. So this study will investigate the changing condition of sexual behavior and sexual morality among of college students expecting them to have a healthy relationship with partner or lover. It will examine the difference in sexual morality according to mass media, parents' intervening, religion, endurance and residence and their influence on sexual behavior. In addition to this the demand of permission on sexual behavior will be examined to prevent sexual violence.

II. Research Method

1. Sample

315 participants were selected among undergraduate students of university located in Jeunnam province during November, 2017. Students completed questionnaire composed 3 parts of sexual behavior, sexual morality and demand of permission on the sexual behavior.

The characteristics of the participants are as following table 1. The sample consisted of 50.8% female and 49.2% male. Most students (67.6%) did not live in their parent's home but in other residence such as dormitory. 65.1% of participants did not have religion and 33.7% did not have lover. As for the endurance level on sexual desire, 48.0% students were in high level. Drinking frequency was highest in rarely level (33.0%). The frequency of watching pornographic media was highest in rarely level

(39.7%). Parent's interference also was highest in rarely level (37.1%).

Table 1. The characteristics of participants

(N=315)

Variable	categories	Frequency (%)
Sex	female	160 (50.8)
	male	155(49.2)
residence	home	102 (32.4)
	not home	213(67.6)
religion	Having	110(34.9)
	Not having	205(65.1)
lover	Having	209(66.3)
	Not having	106(33.7)
Patience to sexual desire	Very patient	145(48.0)
	A little patient	140(44.4)
	Not patient	23(7.3)
	Never patient	7(2.2)
Frequency of drinking	None	64(20.3)
	rarely	104(33.0)
	sometimes	81(25.7)
	frequently	66(21.0)
watching frequency of Pornographicmedia	none	97(30.8)
	rarely	125(39.7)
	sometimes	65(20.6)
	frequently	28(8.9)
Parent's interference	none	99(31.4)
	rarely	111(37.1)
	sometimes	70(22.2)
	frequently	29(9.2)

2. Measurements

The sexual behavior during the past three months was examined with self reporting questionnaire. The items of sexual behavior were composed with 4 questions about usual touch, caress, kiss, and intercourse. Participants were asked about experience frequencies with a scale ranging from 1 to 5. The score of never experience was

marked as 1, 1-2times 2, 3-5 times 3, 6-9 times 4 and over 10 times 5. The reliability of items, Cronbach's α was 0.868.

The sexual morality was measured with 4 likerts and it was composed with 4 items about intercourse before marriage, intercourse with other who is not engaged, intercourse with one person during lifetime, intercourse with only engaged partner, and intercourse with only lover. The higher scores of sexual morality mean the higher open consciousness. The reliability, Cronbach's α was 0.768.

3. Data Analysis method

Data were analyzed using the program of SPSS 22.0. The statistics used were t-Test and ANOVA indentifying the difference of average between groups. Multi regression analyzed the factors influencing on the sexual behavior.

III. Results

1. Sexual behavior

Table 2 shows that college students experienced usual touch averagely 2-5 times (M=2.96), caress 1-2 times (M=1.94), kiss 2-3times (M=2.10), and intercourse 1time (M=1.68) during the past 3 months. Among the types of sexual behavior, the frequencies of usual touch was highest and kiss was next.

Table 2. Experience of sexual behavior type

	Mean	S.D
Usual touch	2.96	1.38
Caress	1.94	1.22
Kiss	2.10	1.33
Intercourse	1.68	1.10

The following table 3 shows the frequencies of each type of sexual behaviors. The most frequently occurring type experienced 'over 10 times' by participants was usual touch (19.7%). The type of highest percentages 'never' experienced types was 'intercourse' (65.7%). Usual touch, caress, kiss and intercourse were experienced 1-2times by 11.7~19.4% students. Intercourse and kiss were experienced 3-5 times by 14.5%-16.5% students.

Table 3. Frequencies of sexual behavior

Frequencies of sexual behavior	never (%)	1-2times (%)	3-5times (%)	6-9times (%)	Over 10times (%)
Usual touch	61(19.4)	61(19.4)	82(26.0)	49(15.6)	62(19.7)
Caress	172(54.6)	46 (14.6)	58(18.4)	22(7.0)	17(5.4)
Kiss	159(50.5)	47(14.9)	52(16.5)	33(10.5)	24(7.6)
Intercourse	207(65.7)	37(11.7)	47(14.9)	12(3.8)	12(3.8)

2. Sexual morality

When seeing average, most students do not agree with the opinion 'opposite to the intercourse before marriage ' and 'opposite to the intercourse only with one partner during lifetime'. Students tend to take a more neutral attitude on the intercourse only with spouse and the intercourse of engaged partner's with other person. They have a tendency to have sex only with lover.

Table 4. sexual morality

	Mean	S.D
Opposite to intercourse before marriage	2.92	0.93
Opposite to intercourse of engaged partner's with other person	2.76	1.00
Intercourse with one partner during lifetime	3.03	0.91
Intercourse only with spouse	2.82	1.00
intercourse only with lover	2.07	1.00

3. Difference of sexual morality according to demographic characteristics

Table 4 shows that there was significant gender difference in the sexual morality ($t=-3.843$, $p=0.000$). Female students were more conservative, on the other hand males were likely to be open to the sexual morality. The sexual morality of students with religion was significantly different from those who had not religion ($t=-6.098$, $p=0.000$). It depicts that students who had lover were more open-minded in sexual morality than others who had not lover ($t=-2.692$, $p<0.01$). The students who had more patience to sexual desire had more conservative thought than others ($F=13.522$, $p=0.000$). There

was significant difference in sexual morality according to frequencies of drinking. The participants who had not drunk were more conservative than those who had drunk ($F=30.761$, $p=0.000$). The sexual morality were higher in students who watched pornographic media with frequency ($F=33.666$, $p=0.000$) and who had parents interfering in their children's affairs than others ($F=4.079$, $p=0.000$).

Table 5. Difference in sexual morality

demographic characteristics	Categories	N	M	SD	t/F	Duncan
Sex	Female	160	12.80	3.97	-3.843***	
	Male	155	14.43	3.57		
residence	Home	102	13.08	4.22	-1.662	
	not home	213	13.84	3.67		
Religion	Have	110	11.75	4.30	-6.098 ***	
	Not have	205	16.00	3.20		
Lover	Have	209	13.19	3.92	-2.692 **	
	Not have	106	14.41	3.62		
Patience to sexual desire	Very patient	145	12.55	4.00	13.522 ***	a b c
	Patient	140	14.17	3.61		
	Not patient	30	15.99	2.61		
Frequency of drinking	None	64	10.03	3.80	30.761 ***	a b b b
	Rarely	104	14.00	3.42		
	sometimes	81	15.00	3.13		
	Frequently	66	14.72	3.36		
Frequency of watching Pornographic media	none	97	11.80	4.01	11.336 ***	a b b b
	Rarely	125	14.33	3.71		
	sometimes	65	14.27	3.33		
	frequently	28	14.96	3.16		
Parent's interfering in children's affairs	none	99	14.42	3.57	4.079 ***	a b b b
	rarely	117	13.57	3.85		
	sometimes	70	13.25	3.70		
	frequently	29	11.72	4.62		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4. Factors influencing on sexual behavior

The outcome of multi-regression analyses <table 5> indicates that sexual behavior influenced by whether students had lover or not, whether they were open-minded to sexual morality and how often they were drunk. The most influential factor on sexual behavior was the existence of lover ($\beta=15.438$, $p=0.000$). The next was sexual morality ($\beta=4.085$, $p=0.000$) and drinking($\beta=2.866$, $p=0.01$) in order.

Table 6. Factors influencing on sexual behavior

variables	B	B	t	p
Sex	0.085	0.009	0.200	0.841
Residence	-0.487	-0.051`	-1.272	0.204
Religion	-0.409	-0.044	-1.007	0.315
Existence of lover	5.802	0.614	15.438***	0.000
Patience	0.104	0.017	0.360	0.719
Drinking	0.559	0.130	2.866**	0.004
Pornographic media	0.440	0.092	1.737	0.083
Parent's control	0.179	0.0f38	0.912	0.363
Free sexual opinion	0.218	0.188	4.085***	0.000
F	39.600***			
R ²	0.539			

* $p<.05$ ** $p<.01$ *** $p<.001$

5. Recognition of sexual behavior as violence

Most students (62.5%) recognized the sexual behavior such as usual touch without permission as unpleasant behavior but not as violent act. Caress without permission was considered by 41.6% students as unpleasant and violent behavior. 35.9% students regarded the kissing without permission as unpleasant and violent behavior. Intercourse without permission was deemed as unpleasant and violent behavior by 70.8% students. It was appeared that most students thought that the usual touch was not problematic behavior but the sex without permission was violent.

Table 7. Recognition of sexual behavior as violence

	No problem (%)	unpleasant Not troublesome (%)	unpleasant not violent (%)	unpleasant and violent (%)	M (S.D)
Usual touch without permission	197(62.5)	61(19.4)	28(8.9)	29(9.2)	1.64(0.98)
Caress without permission	66(21.0)	60(19.0)	58(18.4)	131(41.6)	2.81(1.18)
Kiss without permission	87(27.6)	77(24.4)	38(12.1)	113(35.9)	2.56(1.23)
intercourse without permission	40(12.7)	21(6.7)	31(9.8)	223(70.8)	3.38(1.06)

IV. Conclusion

This study was carried out to investigate the actual condition of sexual behavior and to explore the factors influencing on it to prevent social problems. 315 participants of college students completed questionnaire composed of three parts such as sexual behavior, sexual morality and demanding permission on the sexual behavior.

The results are summarized as in the following. 14.9% of students experienced intercourse 3-5 times and 16.5% experienced kissing 3-5 times during the past 3 months. They have a tendency to assent to have sex with lover. They were mostly against the conservative norms emphasizing intercourse only with engaged partner or only with one person during lifetime.

There was significant difference in the sexual morality according to sex, religion, existence of lover, patience to sexual desire, frequencies of drinking, frequencies of watching pornographicmedia, and parents' interfering in their children's affairs. The sexual behavior was strongly influenced by existence of lover. Free sexual morality and drinking frequency also affected sexual behavior strongly.

Intercourse without permission was perceived highly as violent act, although most students thought that the usual touch was not problematic behavior.

Findings show that sexual behavior of adolescents has changed liberally along with the change of sexual morality, which is similar result to the Ko(2001)'s research. It appears that dinking makes adolescents vulnerable to sexual behavior. Also this paper shows that students require permission if the partner want to have sex. These outcomes suggest that the drinking causing sexual behavior related with social problems should be controlled and sexual morality asking permission in the case of

intercourse should be educated for prevention of violent problems.

References

- Ho, Sunmin(2009). Sexual knowledge, attitude and sexual behavior of the university students. Hanyang University graduate school. Master's thesis
- Jeong, K. S.(2008). Pregnancy and childbirth experience of unmarried teenage mothers. *J Korean Acad Child Health Nurs*, 14(2), 186-194.
- Kim, E.H. & Jeon, G-Y.(2007). The ecological variables influencing on youth's sexual behavior. *Family and Environment Research*, 45(7), 71-91.
- Kim, K-H., Park, K-S & Kim, S-K. (2002). Factors influencing sexual permissiveness in adolescents. *Journal of Korea Academy of Fundamental Nursing*, 9(3). 501-511.
- Ko, Yeon Suk(2001). A study on male and female university students' sexual attitude and sexual behavior. Ewha womens university. Master's thesis.
- Lee, E. S. & Kang, H. S. (2010). Factors influencing the experiences of sexual violence victims while dating as college students. *Korea J. Women Health Nurs*, 16(3), 266-275.
- Lee, Y.R., Kim, K. M., Choi, S.E. (2013). Awareness levels and influencing factors of sexual harassment and gender egalitarianism among college students. *Journal of Korean Academy of Community Health Nursing*, 24(1), 40-50.
- Sung, M. H.(2009). Relationship between sex role identity type, sexual behaviors and sexual impulse of university students. *Korean Journal of Women Health Nursing*, 15(1), 73-80.
- This paper was presented as a poster in 11th international conference of YUE, KOMYRA,& KHU , October 26 2018.

Industrial Sector Development of Myanmar

*Khin Thida Nyein**

Yangon University of Economics

ABSTRACT: This study investigates the development of Industrial sector in Myanmar during the period of 1988/89 and 2017/18. Employing data on energy, mining, processing and manufacturing, electric power, and construction, this study examines how each sector develops during the study period, and what a suitable fitted trend of each sector is based on time series data, and how much the value of each sector is for the coming 3 years based on time trend. Based on the analysis, it is observed that the production amount of natural gas considerably increases although the production of both crude oil and natural gas in energy sector decrease a bit. For mining sector, the period from 1996-97 to 2008-09 was the most productive period for gem production although the production amount of the rest years were not low. Processing and manufacturing sector increases significantly its production amount in 2017/18 compared with those in 1988-89 except the production of diesel oil. Regarding electric power, although the government has been undertaking many efforts to receive electricity, the whole country could not reach the target yet. At this moment in time, the government is undertaking National Electrification Project, aiming at achievement of electricity for all regions in Myanmar Universal Access by 2030. The construction sector also upgrades annually, and aims at reaching 80% of the rural roads which can be travelled in all seasons in 2030. According to the study, it can be said that all areas in Industrial sector has considerably developed during the study period. Based on the results, a suitable fitted trend for Industrial sector is exponential trend. According to the result, it is asserted the value of Industrial Sector will gradually increase for the coming 3 years.

Key words : Industrial Sector Development, Energy, Mining, Manufacturing, Construction,

I. Introduction

* PhD, Professor, Department of Economics, Yangon University of Economics

1. Background

Myanmar is located in Southeast Asia. Geographically, it is between two giant countries; India and China. Its frontier countries are Thailand and Lao PDR in the east and southeast, Bangladesh and India in the west and northwest, and the People's Republic of China in the north and northeast. Andaman Sea and the Bay of Bengal are in the south and southeast of the country. Total area of Myanmar is 261,228 square miles (677,000 sq. kilometers), which is the second largest country in Southeast Asia after Indonesia.

There are three seasons; rainy season, hot season and cold season in the country. It has 4 main streams: the Ayeyarwaddy River, the Chindwin River, the Sittaung River and the Thanlwin River which runs from north to south across the country. Topographically, Myanmar has hills and mountain ranges, valleys, the flat lands and river basin. Population of the country is 53.85 million according to 2018 statistical data.

Historically, Myanmar transformed from the centrally planned economic system to market-oriented economic one in late 1988. Since then, many economic reforms including industrial zones establishing across the country have been made, aiming at developing industrial sector. According to statistical data, the contribution of industrial sector to GDP is 12.8 percent in 2002/03, and 31.7 percent in 2017/18. The performance of industrial sector increases over two times during the period over ten years. This study, therefore, aims to investigate how industrial sector develop during the period of 1988/89 and 2017/18.

2. Objective of the study

This study aims to analyze how industrial sector develops during the period of 1988-89 and 2017-18, what a suitable fitted trend of industrial sector is, and how much the value of industrial sector for the coming three years is.

3. Method of Study

The development of industrial sector from 1988-89 to 2017-18 is depicted in this study by using descriptive analysis. In order to examine a suitable fitted trend of industrial sector, curve estimation regression model is utilized. Based on the result about suitable fitted trend of industrial sector, the value of industrial sector for the coming three years is projected.

II. Development of Industrial Sector

Based on the Ministry of Planning and finance, industrial sector consists of Energy, Mining, Processing and manufacturing, electric power and construction sector.

1. Energy Sector

Energy becomes from oil and natural gas which are natural resources. There are a number of oil wells in the middle of Myanmar; namely, Chauk, Yenanchaung, Minbu, Htaukshabin, and Myanaung. Before colonial period, Myanmar dug up the oil by hand. During colonial period, high technologies and machines were used to produce oil. In 1963 after independence, the Revolutionary Council nationalized all businesses including oil production, so all businesses became state-owned enterprises. Myanma Oil and Gas Enterprise undertook all the process from production to distribution. New test wells in oil fields in Yenanchaung, Dahutpin and Tagaung have been found. In addition, Myanma Oil and Gas Enterprise made lots of efforts to promote the production of oil from existing oil wells at Chauk, Yenanchaung, Mann, Htaukshabin, Myanaung and Shwepyitha oilfields for on-shore and gas for off-shore areas. Additionally, natural gas has been extracting with commercial scale for export from off-shore areas of Ayeyarwady and Taninthayi. The production of crude oil and gas during the study period is shown in the following table.

Table 1. Production of Crude Oil and Natural Gas in Energy Sector of Myanmar

S.N	Year	Crude Oil	Natural Gas
		(million US barrels)	(million cu.ft)
1	1988/1989	4.8	39085
2	1989/1990	5.5	39715
3	1990/1991	5.3	33645
4	1991/1992	5.5	31782
5	1992/1993	5.4	28303
6	1993/1994	5.2	38735
7	1994/1995	4.2	45599
8	1995/1996	4.3	54025
9	1996/1997	3.8	58579
10	1997/1998	3.6	63505
11	1998/1999	3.4	119983
12	1999/2000	3.5	219331
13	2000/2001	4.2	299314
14	2001/2002	4.9	310250

Industrial Sector Development of Myanmar

15	2002/2003	6.7	330251
16	2003/2004	7.5	349771
17	2004/2005	8.0	377430
18	2005/2006	8.5	396879
19	2006/2007	8.2	406129
20	2007/2008	8.5	419124
21	2008/2009	7.9	395934
22	2009/2010	8.0	421607
23	2010/2011	7.5	434984
24	2011/2012	7.1	448239
25	2012/2013	6.7	446110
26	2013/2014	6.7	459070
27	2014/2015	7.0	647581
28	2015/2016	5.8	672237
29	2016/2017	5.2	646259
30	2017/2018(End of March)	5.1	640404

Source: Ministry of Planning and Finance

At this time, there are 51 offshore blocks for natural gas production in Myanmar. According to the above data, it can be seen that the production amount of crude oil significantly increases during the period of 2002/03 and 2014/15, accounts for 6.7 million US barrels in 2002/03 and 7 million US barrels in 2014/15. The production amount of natural gas considerably increases from 1988-89 to 2015-16, accounts for 39,085 million cu.ft in 1988-89, and 672,237 million cu.ft in 2015/16. During the period of 2015/16 and 2017/18, the production of both crudeoil and natural gas decrease a bit.

2. Mining Sector

Mining sector includes various kinds of metallic, industrial and gem mineral deposits, specifically zinc-lead-silver, copper, tin-tungsten, antimony and gem stones. Monywa is popular place where the porphyry copper mine exists, and Bawdwin mine near Namtu is also popular place where the zinc-lead-silver mine exists. Moreover, gold, tin-tungsten and gem stones are being produced from various parts of Myanmar. Myanmar is rich in natural resources endowments such as oil, coal, lead, zinc, tin, tungsten, silver, gold, non copper, antimony and high quality precious stones like jade, ruby and emerald. Therefore, it cannot be denied that resource endowment is also a source of foreign income. Aiming at promoting the production of minerals, State-owned Mining Enterprise

collaborates with local and foreign entrepreneurs. The production of gold, jade and gems is shown in the following table.

Table 2. Production of Major Products of Mining Sector

	Particulars	Gold (Troy OZ)	Jade Kilos(000)	Gem Carat(000)
1	1988/89	994	131	170
2	1989/90	1405	660	214
3	1990/91	841	242	1187
4	1991/92	22598	163	1758
5	1992/93	20486	891	2272
6	1993/94	14030	584	4394
7	1994/95	19560	794	13976
8	1995/96	12702	1791	16146
9	1996/97	7496	4464	33759
10	1997/98	6475	6092	48157
11	1998/99	8598	6026	55369
12	1999/2000	9690	10882	39191
13	2000/2001	5267	10976	40885
14	2001/2002	25593	8325	47443
15	2002/2003	27556	11014	59163
16	2003/2004	33826	10955	58657
17	2004/2005	30415	15230	46695
18	2005/2006	22987	20712	29116
19	2006/2007	20140	20857	21584
20	2007/2008	5515	20863	24864
21	2008/2009	14824	33536	19666
22	2009/2010(End of March)	22590	26114	12377
23	2010/2011	27265	47456	14110
24	2011/2012	33515	43757	14595
25	2012/2013	25373	19209	14455
26	2013/2014	28791	15314	17786
27	2014/2015	42256	16701	15265
28	2015/2016	54503	35977	15218
29	2016/2017	46531	34655	12029
30	2017/2018(End of March)	52079	31678	8827

Source: Ministry of Planning and Finance

As shown in the above table, it is found that the Troy OZ of gold production and the Kilos of jade production significantly increase during the periods of 30 years. The period from 1996-97 to 2008-09 was the most productive period for gem production although the production amount of the rest years were not low.

3. Processing and Manufacturing

Myanmar has a considerable extent of natural resources, human resources, and processing and manufacturing industries. Based on geographical location, Myanmar is located in a strategic location. It is, therefore, said that these factors lead Myanmar to industrial development. According to the economic objectives laid down after transforming to market-oriented economic system from centrally planned economic system in late 1988, the government has been trying to achieve industrial development based on agro-based industries.

The sectoral policies of the manufacturing sector were¹⁾;

- (1) To enhance the share of manufacturing sector in the national economy,
- (2) To encourage the share of manufacturing sector in the national economy,
- (3) To encourage and expand the scope for international industrial co-operation and economic collaboration with the private sector,
- (4) To diversify production and export,
- (5) To acquire modern technology,
- (6) To achieve full capacity utilization, and
- (7) To protect from environmental pollution.

In addition, the government has established industrial zones in each and every region and state, and Naypyitaw region. Aiming at developing industries and businesses, Dawei Special Economic Zone, Thilawa Special Economic Zone, and Kyaukphyu Special Economic Zone are also being implemented. The following table shows the production amount of major commodities in Processing and Manufacturing Sector.

Table 3. Production of Major Commodities in Processing and Manufacturing Sector

No.	Particulars	Edible			Cement (M/T(000))	Diesel (Million Gallon)	Oil	Power tillers (Nos.)	Water pumps (Set)
		Rice (M/T(000))	Oil (Million viss)	Sugar (M/T(000))					
1	1988/89	7019	104	29	310	69.0	120	2015	
2	1989/90	7378	114	34	454	84.2	126	1765	

1) Myant Thein ,Economic Development of Myanmar(2004), P. 257

3	1990/91	7483	111	25	402	84.6	124	1905
4	1991/92	7021	81	53	443.2	92.4	55	2541
5	1992/93	7941.5	106.8	53.3	475.3	85.5	52	1300
6	1993/94	8795.3	98.3	48.4	401.8	87.8	804	6448
7	1994/95	9755.5	133.2	45.4	494.4	106.1	1675	8615
8	1995/96	9652.2	164.5	52.3	523.6	83.3	2774	8805
9	1996/97	9480.0	165.0	64.1	502.0	91.5	6521	5837
10	1997/98	9200.0	151.8	78.2	531.8	123.1	3336	8680
11	1998/99	9310.8	156.9	71.3	411.5	119.1	3015	2749
12	1999/2000	10834.4	176.0	77.3	488.7	116.1	5075	5014
13	2000/2001	11987.6	204.5	117.0	556.1	112.6	7097	7040
14	2001/2002	11826	237.3	248.4	838.2	97.1	6646	7311
15	2002/2003	11779	253.8	221.7	1752.0	114.0	9568	7617
16	2003/2004	12559	293.3	224.2	1614.5	77.9	9800	5232
17	2004/2005	13510	319.9	301.4	1770.8	61.6	17383	12081
18	2005/2006	14963	353.3	311.0	1730.8	54.1	9614	17887
19	2006/2007	16821	398.3	344.9	1840.2	72.8	17284	19457
20	2007/2008	17108	470.1	347.2	2004.1	55.9	17080	24877
21	2008/2009	17503	513.3	354.4	1998.1	50.6	11343	18513
22	2009/2010	18073	530.3	340.8	1797.9	32.9	13968	24977
23	2010/2011	17797.3	532.9	183.8	2023.4	63.1	13291	22921
24	2011/2012	15790.6	492.0	189.5	2123.9	47.0	11416	20504
25	2012/2013	15066.1	453.9	166.8	1911.6	43.6	8813	5476
26	2013/2014	15779.2	491.1	239.2	2185.2	39.7	4000	2161
27	2014/2015	16189.2	497.9	156.9	1517.7	42.7	4300	2968
28	2015/2016	16419.8	512.5	141.2	1810.4	40.0	3765	3418
29	2016/2017	16521.0	528.9	177.7	2635.9	40.0	3650	2495
	2017/2018							
30	(End of March)	17130.9	561.7	476.4	5511.4	33.5	11133	2447

Source: Ministry of Planning and Finance

Based on the above table, it can be said that the production amount of processing and manufacturing industries in 2017-18 increase significantly compared with those in 1988-89 except the production of diesel oil.

4. Electric Power

Electricity is very essential for economic development of a country. In the modern life of globalization age, it is said that people cannot live without electricity. Accordingly, Myanmar has also been trying to achieve enough electricity for the whole country. Currently, there are around 10 hydroelectric power stations in Myanmar; namely, Baluchaung, Chibwayage, Kabaung, Lower Paunglaung, Mone, Shweli I, Upper Paunglaung, and Yeywa.

Table 4. Electric Power Installation, Generation and Power Consumption in Myanmar

No.	Year	Installed Capacity (Megawatts)	Generation (Million K.W.H)	Power Consumption (Million K.W.H)
1	1988/89	706	2226	1428
2	1989/90	793	2494	1573
3	1990/91	804	2643	1675
4	1991/92	810	2676	1677
5	1992/93	807	3007	1832
6	1993/94	810	3386	2059
7	1994/95	845	3594	2218
8	1995/96	982	3762	2262
9	1996/97	1029	4130	2434
10	1997/98	1036	4550	2676
11	1998/99	1055	4579	2848
12	1999/2000	1171	4639	2910
13	2000/2001	1171	5118	3268
14	2001/2002	1160	4689	3041
15	2002/2003	1190	5068	3484
16	2003/2004	1191	5426	3846
17	2004/2005	1562	5608	3909
18	2005/2006	1701	6015	4353
19	2006/2007	1679	6155	4355
20	2007/2008	1900	6753	4438
21	2008/2009	1701	6622	5097
22	2009/2010	-	-	4961
23	2010/2011	-	-	10869
24	2011/2012	-	-	12311
25	2012/2013	-	-	12306
26	2013/2014	-	-	14315
27	2014/2015	-	-	15952
28	2015/2016	-	-	18232
29	2016/2017	-	-	20383
30	2017/2018(End of March)	-	-	22073

Source: Ministry of Planning and Finance

According to the strong effort of the government, the electrified towns and villages of Myanmar up to 2017 is shown in the following table.

Table 5. Electrified Towns and Villages of Myanmar up to 2017

Serial	Region/State	Numbers of Towns					Numbers of Villages				
		Towns by GAD	Electrified Township			To be electrified	Villages by GAD	Electrified Village			To be electrified
			Grid	Other	Total			Grid	Other	Total	
1	Kachin	30	12	18	30	-	2547	356	474	830	1717
2	Kayah	8	8	-	8	-	506	357	92	449	57
3	Kayin	18	6	12	18	-	2097	249	554	803	1294
4	Chin	15	6	9	15	-	1363	27	461	488	875
5	Sagaing	46	29	17	46	-	6019	1594	3348	4942	1077
6	Taninthayi	17	-	17	17	-	1228	-	716	716	512
7	Bago	51	51	-	51	-	6441	1549	422	1971	4470
8	Magway	30	30	-	30	-	4798	786	2287	3073	1725
9	Mon	16	13	3	16	-	1153	482	325	807	346
10	Rakhine	26	15	11	26	-	3738	222	1474	1696	2042
11	Shan	85	48	37	85	-	14334	1443	2486	3929	10405
12	Ayeyawaddy	40	35	5	40	-	11935	828	5873	6701	5234
13	Naypyitaw	8	8	-	8	-	795	407	94	501	294
Total		390	261	129	390	-	56954	8300	18606	26906	30048

Source: Ministry Of Electricity and Energy, <http://www.moe.gov.mm/en/ignite/page/80>

Although the government has been undertaking many efforts to receive electricity, the whole country could not reach the target. Therefore, the government is undertaking National Electrification Project. The purpose for National Electrification Project (NEP)² is "To achieve of electricity for all regions in Myanmar Universal Access by 2030". The objectives of National Electrification Project (NEP)³ are:

- (1) Manage to receive sufficient fund for the project to ensure access to electricity in the country as a whole.
- (2) The committee, serving as "single window", to coordinate with international development partners; local and international private sectors, including state's budget, for the investment fund of the plan.
- (3) Manage to adopt the least-cost approach in undertaking the project activities under National electrification plan.
- (4) Manage and supervise the implementation of the project to be considered beneficial to the people.
- (5) To set up clear directions and framework for private sector participation.
- (6) In an effort to provide electricity in off-grid areas, to handle with setting the

2) <http://www.moe.gov.mm/en/ignite/page/80>

3) <http://www.moe.gov.mm/en/ignite/page/80>

rate of power tariffs based on the amount of reasonable expenditure and returns.

5. Construction

Infrastructure development is very essential for economic development of a country. Ministry of Construction has been undertaking the development of highways, bridges, buildings, urban housing and development, and rural road development. One objective of the Ministry is "To become smooth transportation, low cost and save time for the goods due to the increases in the use of road network". Aiming at achieving socio-economic development of the whole country, the Ministry of Construction sets up the Mission as follows;

- (1) To develop and upgrade the existing road length (42121) kilometer to reach at least ASEAN Class III standard (18 ft width Asphalt Concrete or Concrete Roads) in 2030
- (2) To upgrade all the bridges to reach at least 24 ft two lanes -RC Bridge or PC Bridge in 2030
- (3) To develop the systematic Urban Planning in 330 cities in 2030 and develop and construct one million rooms in those cities with Public Private Partnership Programme in 2030
- (4) To annually upgrade and reach 80% of the rural roads in all the villages which can be travelled in all the seasons in 2030

Ministry of Electrical Power, Ministry of Agriculture, Livestock and Irrigation, Ministry of Border Affairs, Ministry of Construction, Township Development Committee, City Development Committee, and Department of Highways undertook the development of road infrastructure. The following table shows the lengths of roads in 2013, based on the availability of data.

Table 6. Road Lengths by Road Type and Responsible Agency, 2013

Responsibility Agency	Concrete	Bituminous	Macadam	Gravel	Earth	Track	Total
DOH for MOC+ State/regions	695	18,286	5,255	5,793	8,567	1,106	39702
MOALI+MOBA+T DCs	193	9,294	20,807	5,638	60,848	0	96780
Yangon CDC	1,108	1,766	0	551	1,032	0	4457
Mandalay CDC	55	1,034	172	0	491	0	1752

Naypyidaw CDC	795	276	67	1,652	476	0	3266
Army Corps of Engineers	393	685	1,035	171	8,142	0	10426
MEP	79	64	181	250	103	0	677
Total	3,319	31,406	27,517	14,053	79,658	1,106	157059

CDC = City Development Committee; DOH = Department of Highways; km = kilometer; MEP = Ministry of Electrical Power; MOALI = Ministry of Agriculture, Livestock and Irrigation; MOBA = Ministry of Border Affairs; MOC = Ministry of Construction; TDC = Township Development Committee

Source: ADB estimates based on Ministry of Construction data

III. Empirical Analysis

After transforming from centrally planned economic system to a market - oriented economic one in late 1988, the government has been undertaking several reforms measures, and encouraged the role of the private sector and invited to foreign investors. The main objectives of economic reforms⁴⁾ are: (1) to adopt a market-oriented system for the allocation of resources and the distribution of goods and services (2) to encourage private investment and entrepreneurial activity at home and (3) to open the economy for foreign direct investment and export promotion. In July of 2016, the government launched the overall framework that guides Myanmar's economic and social development. The economic policies⁵⁾ of the Union of Myanmar are:

- (1) Expanding our financial resources through transparent and effective public financial management.
- (2) Improving the operations of State-owned enterprises and privatizing those State-owned enterprises that have the potential to be reformed, while promoting and assisting small and medium enterprises as generators of employment and growth.
- (3) Fostering the human capital that will be needed for the emergence of a modern developed economy and improving and expanding vocational education and training.
- (4) Prioritizing the rapid development of fundamental economic infrastructure, such as electricity generation, roads and ports, and

4) Myat Thein, *Economic Development of Myanmar*(2004), P. 123.

5) https://themimu.info/sites/themimu.info/files/documents/Statement_Economic_Policy_Aug2016.pdf

establishing a data ID card system, a digital government strategy, and an e-government system.

- (5) Creating employment opportunities for all citizens including those returning from abroad and giving greater priority in the short term to economic enterprises that create many job opportunities.
- (6) Establishing an economic model that balances agriculture and industry and supports the holistic development of the agriculture, livestock and industrial sectors, so as to enable rounded development, food security and increased exports.
- (7) Asserting the right of individuals to freely pursue the economic opportunities they choose, so as to enable private sector growth in line with a market economy system; formulating specific policies to increase foreign investment; and strengthening property rights and the rule of law.
- (8) Achieving financial stability through a finance system that can support the sustainable long-term development of households, farmers and businesses.
- (9) Building environmentally sustainable cities, upgrading public services and utilities, expanding public spaces, and making greater efforts to protect and conserve our cultural heritage.
- (10) Establishing a fair and efficient tax system in order to increase government revenues and protecting individual rights and property rights through enacting laws and regulations.
- (11) Establishing technical systems and procedures to support intellectual property rights that can encourage innovation and the development of advanced technology.
- (12) Identifying the changing and developing business environment both in ASEAN and beyond, so as to enable our own businesses to situate themselves to take advantage of potential opportunities.

Accordingly, the improvement of industrial sector during the period of 1988/89 and 2017/18 is shown in the following table.

Table (7) Improvement of Industrial Sector during the period of 1988/89 and 2017/18

1985/86 Constant price							Kyats million
S.N	Year	Energy	Mining	Processing & Manufacturing	Electric Power	Construction	
1	1988/89	157.10	186.30	4094.30	283.30	688.00	
2	1989/90	173.00	275.40	4555.00	323.30	913.10	
3	1990/91	159.90	283.30	4560.30	339.60	1239.80	
4	1991/92	156.00	335.70	4376.40	362.50	1452.30	
5	1989/93	147.10	443.10	4850.00	475.40	1614.70	
6	1990/94	150.70	504.20	5305.90	591.50	1804.40	
7	1988/95	140.90	611.40	5756.90	619.80	2086.80	
8	1989/96	153.40	724.30	6191.60	660.40	2653.80	
9	1990/97	150.20	814.10	6476.40	745.20	3306.60	
10	1988/98	153.60	1055.50	6800.50	877.50	3630.60	
11	1989/99	236.00	1128.90	7222.10	830.00	3860.80	
12	1999/2000	393.00	1467.50	8271.90	947.80	4030.90	
2000/01 Constant price							Kyats million
S.N	Year	Energy	Mining	Processing & Manufacturing	Electric Power	Construction	
14	2000/01	4838.50	10193.70	182896.60	3444.40	46044.30	
14	2001/02	5171.40	10600.00	222833.70	3176.70	59602.80	
15	2002/03	6465.90	14033.40	286801.50	3878.30	95641.30	
16	2003/04	7132.50	15145.90	350020.80	4461.30	114527.00	
17	2004/05	7723.20	17479.20	436428.70	4787.90	129968.30	
2005/06 Constant price							Kyats million
S.N	Year	Energy	Mining	Processing & Manufacturing	Electric Power	Construction	
c23	2010/11	66994.90	299433.40	7900494.00	421882.70	1839334.70	
24	2011/12	64243.60	336973.00	8754616.40	443980.90	2004847.30	
25	2012/13	63390.10	310684.90	9483383.40	484041.20	2191895.50	
26	2013/14	65283.00	407170.50	10387879.60	551844.00	2550898.90	
27	2014/15	88821.00	610518.70	11370547.10	633345.90	2955949.60	
28	2015/16	88366.90	512226.70	12496231.20	716282.50	3149649.80	
29	2016-17	82077.10	572049.10	13659251.30	773459.20	3389915.30	
30	2017-18	92637.70	643874.40	15060282.00	822014.30	3597555.90	

2010/11 Constant price						Kyats million
S.N	Year	Energy	Mining	Processing & Manufacturing	Electric Power	Construction
18	2005/06	20075.70	69392.90	1572906.70	27652.30	461655.90
19	2006/07	22248.20	76546.50	1919888.80	30464.50	531902.90
20	2007/08	23083.30	81698.90	2326026.00	31935.30	623380.80
21	2008/09	24860.60	94735.20	2750743.30	35525.40	736260.70
22	2009/2010	24636.60	108619.50	3269513.70	41771.30	837560.40

Source: Ministry of Planning and Finance

Based on the above table, it can be said that each and every sector of Industrial sector has improved during the period of 30 years. Among 5 sectors in Industrial Sector, processing and manufacturing sector is leading sector. Construction sector is the 2nd most important in Industrial sector. Then, Electric power economy and Mining sector take the third and fourth place, and Energy sector is the least contribution of Industrial sector.

Table (8) Estimated Value of Industrial Sector from 2018/19 to 2020/21

In order to investigate a suitable fitted trend of industrial sector, and to estimate the value of industrial sector for the coming three years, curve estimation regression model is utilized. Time series data on industrial sector from 1988/89 to 2017/18 is used in this study, based on the assumption of unchanged time trend. Year 2000/2001 is a base year in this study. The fitted trend of industrial sector is exponential trend.

Let the exponential model equation be –

$$\begin{aligned}
 \ln \hat{Y}_t &= \ln(b_0) + b_1 t \\
 \ln(Y_t) &= \ln(b_0) + b_1 t \\
 &= 34973.904 + 0.184 t \quad \longrightarrow \quad \text{Equation(1)} \\
 &\quad (7.254)^{***} \quad (23.641)^{***}
 \end{aligned}$$

Where-

\hat{Y}_t = Estimated Gross Value Added(GVA)

b = Coefficients

t = time

$R^2 = 0.951$, computed F – value = 558.897

t values are presented in parentheses.

* ** = significant at 1 % level

Based on the coefficient of multiple determinations (R^2), F test, and t - test, the estimated trend in equation (1) is suitable for the industrial sector in Myanmar. By

employing equation (1), the values for the coming three years from 2018/19 to 2020/21 are estimated as shown in the following table. According to Table (8), it is found that the value of industrial sector will gradually increase during the coming three years.

Table 8. Estimated Value of Industrial Sector from 2018/19 to 2020/21

Year	Value Kyats (million)
2018/2019	10358274.47
2019/2020	12445565.02
2020/2021	14953464.41

Source: Estimated by equation (1)

IV. Concluding Remarks

This study analyzes the Industrial sector development of Myanmar during the period of 1988/89 and 2017/18. Using data on energy, mining, processing and manufacturing, electric power, and construction, this study examines how each sector develops during the study period, and what a suitable fitted trend of each sector is based on time series data, and how much the value of each sector is for the coming 3 years based on time trend.

Regarding energy sector, it is observed that the production amount of natural gas considerably increases although the production of both crude oil and natural gas decrease a bit. Concerning Mining sector, the period from 1996-97 to 2008-09 was the most productive period for gem production although the production amount of the rest years were not low. On the subject of processing and manufacturing, the production amount of processing and manufacturing industries in 2017-18 increase significantly compared with those in 1988-89 except the production of diesel oil. On the topic of electric power, although the government has been undertaking many efforts to receive electricity, the whole country could not reach the target yet. Therefore the government is undertaking National Electrification Project, aiming at achievement of electricity for all regions in Myanmar Universal Access by 2030. The construction sector also upgrades annually, and aims at reaching 80% of the rural roads which can be travelled in all seasons in 2030.

It is observed that each sector has considerably developed during the study period. Based on the results, a suitable fitted trend for Industrial sector is exponential trend. According to the result, it is asserted the value of Industrial Sector will gradually increase for the coming 3 years.

ACKNOWLEDGEMENT

I would like to express my very great appreciation to Professor Dr. Soe Win (Rector, Monywa University of Economics) and Dr. Win Tun (Director General, Ministry of Education) who always encourage me to write the research paper. I would like to offer my special thanks to the authorities from respective departments who provide me with necessary information and data. Finally, I wish to thank my entire family for their support and encouragement throughout my life.

References

- Central Statistical Organization (CSO), Statistical Year book, Ministry of National Planning and Economic Development (up to 2016/17) , Naypyitaw .
- Damodar N. Gujarati(1995), Basic Econometrics, Third-edition ,Singapore.blished by Japan Development Institute, Engineering Consulting Firms Association, (1995-6), Comprehensive Study On Sustainable Development For Myanmar, Japan.
- Michael P, Todaro and Stephen C. Smith(2003) , Economic Development (Eighth Edition), Pearson Education Limited ,England
- Ministry of National Planning and Economic Development ; Review on the Financial, Economic and Social Conditions of the Union of Myanmar (after 1988) (various issues)
- Myat Thein,(2004), Economic Development of Myanmar, Institute of South East Asian Studies , 30 Heng Mui Keng Terrace, Singapore
- Soe Win, Dr. (2007), Statistical Data Analyzing with SPSS, Monywa Institute of Economics, Monywa.
- Website
- http://burma.total.com/en/contexte/p_1_2.htm , Oil and Gas in Myanmar,
- <https://dlca.logcluster.org/display/public/DLCA/2.3+Myanmar+Road+Network;jsessionid=23BADA0E4DF59A0C94794BA696EBFD94>, Myanmar Road Network
- https://en.wikipedia.org/wiki/List_of_power_stations_in_Myanmar, List of power stations in Myanmar
- <https://www.mmtimes.com/>, Over the last year, Myanmar's energy sector stumbles in right direction
- <http://www.moe.gov.mm/en/ignite/page/80>, Current Electricity Supply & Proposed Electricity Supply for Development of Electric Sector
- http://moi.industry.gov.mm/sites/default/files/laws/2016/03/industrial_policy_21-3-2016english_version.pdf, Industrial Policy
- <https://myanmar.gov.mm/en/ministry-of-construction>, Ministry of Construction

A Study on Factors Affecting Child Care Teacher Job Stress through Review of Literature

Shin-Sook Lee

Sunchon National University,

ABSTRACT : Childcare teachers are the factors that determine the quality of day care, and the beliefs, values, and behaviors of daycare teachers are very important for infants and infants because they affect the personality and nature of infants and toddlers. Child care teachers are an important human environment for infants and young children. The teacher is a teacher who protects and educates infants, while at the same time contributing to the promotion of family welfare by supporting the parents of infants and toddlers. Childcare teachers are the factors that determine the quality of day care, and the beliefs, values, and behaviors of daycare teachers are very important for infants and infants because they affect the personality and nature of infants and toddlers. Teachers are also happy when their children are happy. It is self-evident that teachers and children are not happy if they are uneasy or stressed. The purpose of this study is to investigate the variables related to the stress of the child care teachers and to utilize them as basic data to improve the quality of child care by analyzing the methods to reduce the stress.

Key words : Child Care Teacher, Job Stress, Parent, Administration, Daycare,

I. Introduction

Recently, our society is highly aware of the importance of early childhood education due to the increase of dual-income families, various family structures, and changes in perception of childhood. In other words, it is well known that the educational environment and the living environment in early life are important bases for the healthy growth of infants and toddlers. Therefore, it is not too much to emphasize that day care institutions such as day nurseries and teachers are important people influencing infants.

Childcare teachers are the factors that determine the quality of daycare, and the

beliefs, values and behaviors of daycare teachers are very important for infants and toddlers because they affect the personality and personality of infants.

Child care teachers are an important human environment for infants and young children. The teacher is a teacher who protects and educates infants, while at the same time contributes to the promotion of family welfare by supporting the parents of infants and toddlers. In other words, a specialist who can acquire qualification through a series of training courses and provide the comprehensive growth of the infant's growth and development as well as comprehensive services for the parents, and the harmony of the interests of the infant and the parents (Sung Mi Young and four others, 2015). Childcare teachers are the factors that determine the quality of daycare, and the beliefs, values and behaviors of daycare teachers are very important for infants and toddlers because they affect the personality and personality of infants.

The quality of education can not surpass the quality of teachers, and many studies refer to teacher factors such as teacher qualities, professionalism, and teacher education as important factors that determine the quality of day care. Since there is no regular textbook designated for elementary, middle, and high school, all educational activities are operated and controlled by the teacher. In addition, teachers of younger children have a greater impact on the development and learning of children than older children, and are more closely involved in the lives of young children because they spend more time during the day. Thus, the quality of day care service is influenced by day care teachers. Childcare teachers are the factors that determine the quality of daycare, and the beliefs, values and behaviors of daycare teachers are very important for infants and toddlers because they affect the personality and personality of infants.

Teachers are happy that children are happy when they are happy. It is self-evident that teachers and children are not happy if they are uneasy or under stressful conditions. The results of this study are as follows. First, the effects of the stress on the teacher 's job performance as well as the stress on the teacher' s own physical and mental health were negatively affected. It also has a negative effect on colleagues. The main cause of job stress was the lack of time, the highest job-related factors (Park Eun-hye, 2011), and the related factors such as child-related, overcrowded class, and inadequate remuneration and working conditions.

Child care teachers engaged in child care services play an important role in determining the quality of child care by engaging in the overall development of infants and toddlers. Therefore, the stress experienced by the child care teachers directly affects the child care service, which must be resolved. It is necessary to clarify the factors of job stress felt by daycare teachers and to raise the quality of daycare as a process to raise infants and toddlers who are the future leaders

The purpose of this study is to investigate the variables related to the stress of the childcare teachers and to utilize them as basic data for improving the quality of

childcare by searching for ways to reduce job stress.

II. Literature Review

1. Job stress of child care teachers

1) Concept and role of child care teacher

A child care teacher is a person who carries out the concept of child care. Childcare teachers are those who contribute to the promotion of family welfare by fostering them as healthy members of society and supporting them by ultimately protecting the mind and body of infants and children and providing appropriate education. In other words, child care teachers are professionals who can harmonize not only the care and education of infants, but also the comprehensive services for their parents and the protection of rights and interests (Bae, Hye-ri, 2012)

Child care teachers have a role as caregivers, teachers, and exchanges for the whole development of infants and toddlers (Joe Mi-young et al., 2016). First, it is important that the caregiver who cares for infants and toddlers be the caretakers of parents. In other words, it gives parents the same comfort and confidence, and helps them to feel static stability. For infants and toddlers' health, they should play a professional role in nutrition and safety guidance. Second, since the child care teachers cover the concept of protection and education, they should grasp the potential of individual infants and apply appropriate teaching methods in order to fulfill their role as teachers. Since the speed of the infant and the family environment are different for each infant, individualized action plans should be made to provide appropriate activity programs and related data and to improve the quality of day care by efficiently using the procedures. In addition, the right attitude should be set as a teacher in order not to cause any bad influence on infant 's emotional development due to wrong behavior such as favoritism or verbal violence. Third, as an exchange student, daycare teachers need to develop efficient and positive interactions to interact with infants, parents, fellow teachers, and the local community. For example, it is efficient to rub your head or to react with laughter rather than expressing it in verbal expressions and vagaries of infants and young children, and to accompany non-verbal interactions such as shaking and hugging and maching your eyes. In addition, we will make an effort to establish good relations with parents and to actively participate in childcare-related events in the local community.

In addition to educating infants and toddlers, they spend a lot of time with them, which is a very important thing for infants and toddlers.

2) Stress

(1) Concept

Stress is experienced by everyone in everyday life, and many researchers have come up with various definitions of stress. Everyone living in modern society lives with big and small problems and difficulties. The difficulty or problem may be common to everyone and the reaction may be different. These problems and reactions are often explained in terms of stress. Stress-causing events are called stressors, and their types vary. The perception of stressors may be different according to individual or family characteristics, and the perceived stress may vary depending on the various resources the individual or family has in coping with stress or coping behavior. Stress refers to the nonspecific response that takes place in the body when Seley introduced it to modern medicine in 1920. This stress is a function that interferes with human function. When stressed, people react against stressor and try to solve or run away from it. The coping behavior that emerges when faced with a problem can be divided into problem-oriented coping and emotion-centered coping. Coping means a direct and positive response to resolve or reduce the stressor by changing the problematic situation or improving the environment. Emotional-centered coping is an avoidant and passive reaction to behaviors that control the negative emotional state due to stress rather than eliminating the cause of stress (Yoo, Young-Ju et al., 2000). Sometimes the stress increases the arousal and motivation level for the individual, and it also gives the confidence and vitality, so stress is not regarded as unconditionally.

(2) Job stress

The stress of the people in the workplace when they carry out the tasks related to their jobs is something that everyone is experiencing. Job stress is caused by various factors related to work in the work environment. Job stress of child care teacher is physical and psychological half that occurs in the process of performing work in day care center. For example, the nursery teacher always takes care of infants and young children and carries out various duties while preparing for unexpected situations such as safety incidents.)

In particular, as the parents recognize the importance of the development of infants and toddlers, the work intensity of the day care center increases, and the job stress of the daycare teachers is increased. It is no exaggeration to say that the quality of education for infants and young children is influenced by the quality of education. Especially, the role of day care teachers is more important because infants are affected by the nature of development.

It is evident that the stress that teachers receive will have negative consequences,

not only in the physical and psychological health of the individual, but also in child care activities in the classroom. It is difficult to draw the expected educational performance even if the educational contents, methods and educational media are equipped with deteriorating teacher 's ability to perform child care and negative effects on physical and mental health. Most teachers have bad results for infants and young children(Seley, 1976). As the concept of stress varies from scholar to worker, the concept of job stress is not clearly established.

The general categories of job stress concepts are as follows.

① **Job stress as a stimulation concept**

The definition of the stimulus concept for job stress is defined as the force that causes the individual to fall into tension and explains the same thing as causing pressure-transformation in physics (Kim, Yoo-jin, 2003). In other words, the stimulus itself is regarded as a stress, and the stress is an independent variation, and it examines the influence of the stress on the negative response. In this study, we used the concept of stressful approach as a way of understanding the stress of life events, but it was not possible to deny that the response was different according to individual stress despite the same stress (Doomyee 2009).

② **Job stress as a reaction concept**

The response approach focuses on the response to the individual by the potential stressors of the environment. This is because job stress is regarded as a universal response to external stimuli or demands, ie, environmental factors (Kim, Yoo-jin, 2003). In other words, when a person is in a stress situation, it means that the environment is uncomfortable and dysfunctional to the person (Hur, Song-yeon, 2011). This view pointed out that various stressors cause similar reactions, but they have limitations in that they can not explain the cause of stress (Shin, Hye-young, 2004).

③ **Stimulus - Job stress as a concept of reaction**

The definition of stimulus-response is the view that job stress occurs as a result of the interaction of environmental stimuli with the individual's somatic reaction, resulting from the interaction between stimulation of the environment and a unique response of the individual. In this study, the relationship between job stress and personal needs was examined. In other words, it can be said that when the demand of the environment exceeds the ability of the individual and the resources it has, or the environment that the individual demands, it is in a stressful situation.

④ **Job stress of childcare teachers**

When defining the general job stress concept or specific teacher job stress, it can be

seen that the organization characteristic and the personal attribute are related to each other. Job stress is the result of mutual adaptation between individual and environment incompatibility, role incompatibility, individual characteristics and potential sources of stress in working environment. In other words, it is the psychological dysfunction that the teacher experiences because of the inconsistency in the interaction process between teacher and teacher's working environment (Kim, Yoo-jin, 2003). Teachers' job stress can be summarized as anger or depression that usually accompanies the teacher due to the frustration and biochemical change of the individual in the school environment. Leach et al. (1984) describe two types of job stress in teachers: frustration of individuals working in the environment, and attempts by individuals to meet personal physiological responses and job demands due to negative evaluations.(Lee, 1999). In this paper, we will discuss the characteristics of the environment itself and the negative characteristics of the environment itself. In other words, the job stress of the child care teacher can be said to be the change of the individual's emotion, behavior, biochemistry, etc. from the imbalance between the need of the child care teacher and his / her ability in performing the job in order to achieve the purpose of the child care (Lee, Eun-Jin, 1999).

Job stress of child care teachers refers to the emotional, behavioral, and biochemical change of the individual from the imbalance between needs and needs of the child care teacher in the process of performing the job in order to achieve the purpose of child care. The results of this study are summarized as follows. First, the relationship between the job stress of the kindergarten teacher and the job stress of the kindergarten teacher is examined. First of all, research on the job stress of daycare teachers revealed that the family stress, social problems, eye problems, economic problems, religious problems, interpersonal problems, and other problems were caused by stress. Problems, economics, and other problems. A study on the job stress and coping methods of kindergarten teachers (1996) reported that they were the most stressful people in the 'work related factors', and the 'activity factors with original sons' and 'administrative support factors'. 'Economic stability factors', 'interpersonal factors', and 'personal factors'.

In the study of Lee, Eun-Jin (1999), the job stress of child care teachers showed the highest level of economic and social inclusion, followed by work related factors, activities with infants, parents related factors, administrative support factors,

In a study of job stress for childcare teachers, Sung, Young-hye (1994) found that among the five job stress sub-factors such as overwork, lack of support resources, relationship with superiors, relationship with fellow teachers, This was the most stressful experience for the childcare teacher.

The results of this study are as follows: First, the relationship between job stress and perceived professionalism of infant child care teachers (Kim, 2003) was negatively

correlated with job stress. Job stress showed the most significant correlation with socioeconomic status, Job ethics, and community serviceability. In other words, the perception of professionalism is lower in infant childcare teachers who feel that job stress is high. In the study of Harson (2001), the sub-factors showing high stress were economic stability. In the study of Doing Myung (2009), which investigated the job stress and coping style of early childhood education teachers related to integrated class, job stress level of integrated class early childhood education teachers was higher than average job stress level of early childhood education teachers. The results of this study are as follows. First, the results of this study are as follows. First, the results of the study are as follows. First, the relationship between the parents and the teacher, their internal conflicts, physical symptoms due to stress, The results of this study are as follows. First, the relationship between teaching efficacy and job stress was negatively correlated with the teaching efficacy and job stress of infant child care teachers. In other words, the higher the teaching efficacy of the infant child care teacher, the lower the job stress. In addition, personal teaching efficacy was found to affect job stress, and personal teaching efficacy had a significant negative influence on job stress. Among general characteristics, education level, monthly salary, and working time had significant effects on job stress.

As shown in several studies, the relationship between job stress and teacher 's educational activities is correlated with interdependence. In other words, the group with low job stress showed high job satisfaction and organizational cooperativeness. The results of this study are as follows: First, the teachers' job stress was higher than the second job stress, but the level of class fidelity, child attachment, job satisfaction, organizational cooperativeness decreased and the frequency of corporal punishment was high (Kim Ji Hyun, 1994; Kim Man Sung, 1992; Oh Kyung Hee, 1989; Lee Eun-Jin, 1999).

III. Factors Affecting Job Stress

There are numerous causes of job stress caused by the inadequacy of personal needs and job demands related to support and the desire of individuals and the inadequacy of job environment that can satisfy them. Job stress causes work-related factors to interact to change the physical and psychological state of an individual's mind and body from their normal state. Teachers' job stress not only negatively affects individual members of the organization but also hinders the development of early childhood education institutions. In other words, the job stress that the teacher feels shifts, the morale of the whole organization decreases, and the negative informal group is formed, which affects infants and children badly. In general, child care centers and

kindergarten teachers who work with occupational stress are reported to respond as follows (Cited in Ko, U-nin, 1970; Tomei, 2009). First, it shows a passive reaction to the teacher. It is to take protective action by attitude of teacher 's job stress to transfer to infant and to show passive counterattack to teacher or indifference to classroom situation. Second, it is expressed as an increase in inappropriate behavior. This is often the case when the teacher is emotionally punishing or responding indifferently to the needs of infants and children, often by tapping textbooks, parish tapes, and screaming. It has been reported that inappropriate behaviors such as foot rolls spread to all infants and toddlers. As a result, job stress of the teachers lowers the self - esteem of infants and not only hinders the activities and social development of infants, but also causes compensatory behavior. In addition, we can summarize the phenomenon that occurs due to the influence of teachers' job stress on teachers themselves (Conley, Schmidle & Shed, 1988; First, teachers are unable to control the class situation due to job stress. As a result, teachers tend to feel angry or emotional if they do not respond as they have induced themselves, and they extend the rest time excessively. Second, the teacher expresses the chronic job stress as academic and social dissatisfaction, and the phenomenon of wandering as a bystander who complains to the early childhood education society appears. In the end, the job stress felt by the teacher loses its teaching experience, and it also has negative consequences with its peers.

There are a variety of factors that are used in studies on job stressors. In this study, we investigated the relationship between the stress of the infant and the teacher, the relationship between the teacher and the teacher, and the relationship between the teacher and the parents. And stress caused by internal conflicts of teachers. The results of this study are as follows. First, the relationship between parental stress and parental stress was the highest.

In the study of the teachers 'job stress and fraud according to the kindergarten director' s type of leadership, Choi Jae - Sook (1991) showed that there are 6 factors such as administrative support, relationship with fellow teachers, teaching - learning activities, economic stability, And teachers' job stress in sub - factors. The results were as follows: First, the economic factors were the highest, the second was the relationship with the parents, and the lowest with the peer teachers. In the study of job stress and educational activities, Kim, Ji-hyun (1994) showed that job-related factors are the most stressful factors for kindergarten teachers, followed by activity factors, administrative support factors, and economic stability factors. (1996), who studied the stressors and coping methods of kindergarten teachers, found that they felt the most stress in work related factors, followed by activity factors with original sons, administrative support factors, economic stability factors, interpersonal related factors, Respectively.

The results of this study are as follows. First, the results of this study are as follows. First, the results of this study are as follows. First, Respectively. Specifically, job stress was

the highest (3.07), followed by an average of 2.94 working stress with infants. Also, job stress according to socio - demographic characteristics showed significant difference in age, education level and salary.(1999) found that children's activities, job-related factors, administrative support factors, and relationship with fellow teachers.(3.13), followed by work-related factors (3.00). The factors related to economic and social treatment were the highest in the teachers' job stress, This suggests that the economic treatment of kindergarten teachers is low in kindergarten teachers and elementary and secondary teachers, In addition, since childcare teachers' work is the protection and education of infants and young children, childcare hours last more than 9 hours, which increases stress. In the study on the perception of professionalism of infant child care teachers and job stress (Kim, Yoo Jin, 2003), sub-factors of job stress were classified into activities related with original sons, work related, administrative support, colleagues related, parents related, economic stability,(2.94), parental involvement (2.71), work related (2.66), administrative support (2.58), personal relationship (2.94)2.30), and peer relationship (2.14).

Her son-yeon (2001) investigates the job stress of daycare teachers by constructing related factors such as activity factors, administrative support factors, interpersonal factors, work-related factors, economic stability factors, and individual-related factors. Results showed that economic support factor (2.42), work related factor (3.09), activity factor with original sons (2.85), individual related factor (2.54), administrative support factor (2.42), interpersonal factor (2.37). Job stress was found to be the highest with parents (3.37), the following are the problems in the preparation of the education activities, 3.34, 3.35 in the working hours and workload, 3.30 in the satisfaction of the maintenance, and 3.24 in the construction of the nursery walls. On the other hand, the lowest stress was 1.79 points for consensus when the opinions of peers were different.

A study of the effects of job stress and efficacy on the quality of teacher behavior in day care center Shin, Hye - young (2004) consisted of 27 items of 4 sub - dimensions as a tool to measure job stress of day care teachers. The first factor is the lack of leadership and administrative support of the director (lack of awareness and insight about the administration of the nursery of the director, lack of emotional support for the teachers, and lack of administrative support for the childcare activities of the teachers)It was meaningful. The second factor is work overload (lack of usefulness of the time related to the teacher's work process, work beyond their own abilities or limitations, burden on the work that teachers are treated or institutionalized). The third factor is the teacher 's perceived stress due to interaction with fellow teachers in the organization, human relations, and unsuccessful communication. The fourth is the relationship with the parent, which means the stress caused by the difficulty experienced by the teacher in the relationship with the parent.

The results of this study are as follows: First, 2.59 points (5 points) were the first

factor to be the director, and 3.58 points were the second factor. The relationship with peers was 2.32 and the relationship with parents was 2.58 points. In other words, the teachers of day care centers perceived more stress from work overload than other factors. This is consistent with the study by Kim Ji-hyun (1995) that teachers feel the greatest stress on work-related factors.

In the study of the role of social status and robustness in the relationship between job stress and health in 138 middle and high school teachers (Park Yeong-ho, Kim Jung-in, 2000), major job stress factors perceived by teachers were bureaucratic operation (3.58(3.69)), overload (3.03), classroom management (3.56), and student guidance (3.76). One of the most important stressors for teachers was student guidance and classroom management. In the study of Kwon Sung-min (2012) analyzing the structural relationship between the transformational leadership of kindergarten presidents and the job satisfaction of early childhood teachers, the average of job stress of the six sub-factors was 2.54(2.58), disagreement with conflict (2.54), low treatment (2.97), overwork (2.26), and classroom management (2.64). Moracco and McFadden (1980) categorized job stress into five factors: administrative support, relationship with fellow teachers, activities with students, financial stability, and work overload. Administrative support refers to the stress caused by lack of administrative support from the principal, lack of insight, inadequate communication within the organization, and lack of awareness of the principal. The relationship with fellow teachers means the mutual application with peers and the stress caused by human relations. Activities with students mean the stress caused by the burden of student guidance and professions. Financial stability refers to the stress caused by insufficient remuneration or incompatibility with the responsibilities of the student. Business overload means stress due to work related burdens. do.

In this way, job stress is closely related to the reasons for leaving the teacher, and job stress has a negative effect on the teacher's job performance or relationship with the child, which may ultimately lower the quality of the child care. It will not be excluded.

As mentioned above, the common job stress mentioned in the research is summarized as follows.

① Business related factors

There is a questionnaire after hours of work, lack of teaching materials, information needed for day care activities, lack of help from clerical staff, heavy work, lack of preparation time for classroom work, excessive diagonal production requirements,(Kim, Yoo-jin, 2003).The factors related to work were found to be most stressful in many studies (Kang, E-sl, 2004; Shin, Hye-young, 2004; Lee, Eun-jin, 1999; Jang Mi-ah, 1996).

② Parent related factors (interpersonal factors)

Parental indifference, excessive attention, heavy demands, irrelevant relationships, protests due to safety accidents, selfish (overprotective) attitudes, overtime pay, excessive attention to the teacher's words, These late parents were included in the questionnaire. According to the study, there is a difference in the d job stress of the parents, but the stress level is generally low. Exceptionally, in the study by Do Myeong-ah (2009), stress from parental relationships was also the highest.

③ Factors related to peer teachers

The questionnaire contents included the peer-to-peer atmosphere, peer-to-peer, competition awareness, lack of assistant teachers, peer conflict, presence of factions, and communication difficulties. The results of this study are summarized as follows: First, there is a significant difference in the level of stress among the peer teachers (Kang, E-sl, 2011; Kim, Yoo-jin, 2003; Do Myeong-ah, 2009; Shin, Hye-young, 2004; Lee, Eun-jin, 1999; Hur, Shong-yeon, 2002).

④ Administrative support factors

Lack of administrative support from the director or administrative staff, operation of the facility that is not suitable for the actual situation, when my opinion is ignored, giving more responsibility than the authority, lack of freedom for the issue of facilities, inconsistency in the operation of childcare facilities, And lack of opportunities were included in the contents of the questionnaire (Kim, Yoo-jin, 2003). Administrative support factors have a moderate effect on teachers' job stress. In the study of Hur, Shong-Yeon (2002), it ranked 5th among 6 factors and ranked 5th among 7 factors (Kim Yu-jin, 2003), 3rd among 6 factors (Jang, Mi-ah, 1996), 4th among 6 factors(Lee, Eun-jin, 1999) and the fourth among the 7 factors (Kang, E-sl, 2011).

⑤ Compensation and economic instability factors

Low pay, fluctuations in salary days, and economic stability of occupations were included in the questionnaire (Kim, Yoo-jin, (2002),(2003), Lee Eun-jin (1999) and Kwon Sung-min (2012) have shown that economic anxiety is the most stressful. In the study of Kang di-san (2011), it showed the fifth highest stress.

⑥ Personal factors

Job-related rewards, and marriage-related problems. It is difficult to explain the tendency because individual factors are different from one study to another.

⑦ Activities with original sons

(Eg, the difficulty in motivating play, the infant causing the problem, the number of

infants, statistical techniques, basic lifestyle instruction, maladjusted infants, and infant diseases) were included in the questionnaire(Kim, Yoo-jin, 2003). The activity factors of the original sons were ranked 2-3 in the stress level.

IV. Summary and Suggestions

The overall level of job stress of childcare teachers was lower than the median score in most studies. The physical and mental health of daycare teachers directly affects the care services of young children. In addition to being responsible for the whole development of infants and toddlers, they provide guidance and guidance to infants and toddlers, as well as intervening in various problems that occur in day care centers. In the process, the teacher experiences physical and psychological burnout from poor working conditions such as disagreements and conflicts arising from the interaction between the organizational members and the infant and the parents, heavy work and time, unsatisfactory wages and lack of rest time, As a result of difficulty in performing tasks, it becomes difficult to establish positive relationships with infants and toddlers.

In this way, job stress of teachers negatively affects the quality of infant-to-school teachers, which is an important factor that lowers the quality of education for infants and young children. The results of this study are as follows: First, there is a negative correlation between childcare activities and job stress, as the research shows that the lower job stress of childcare teachers has a positive effect on childcare activities. The higher the job stress of teachers, the lower the quality and quality of childcare brass. In other words, it has a negative effect on infant attachment, punishment frequency, job satisfaction, organizational cooperativeness (Lee, Eun-jin, 1999).

Although there are differences in the expression of job stress among childcare teachers, there are many studies that report the highest job-related factors, overwork, and overloading. In some studies, economic and social factors, economic stability, Some studies have reported high. Therefore, it is necessary to pay attention to the ways to minimize the factors related to job stress of child care teachers. The results of this study are as follows. First, the variables related to the stress of childcare teachers were mainly focused on external factors (working conditions, physical environment, interpersonal relationship, etc.) And internal factors of childcare teachers (personality, psychological well-being) have not been in furthermore, individual, childcare, and national efforts should be made to cope with job stress. For example, the teacher himself needs to find out how to cope with stress and make efforts to use it. In other words, it is necessary to make efforts and beliefs to change the environment of oneself,

and a program for relieving and preventing the stress of individual teachers is also needed.

In the nursery, the teacher is positively involved in solving the problem positively in terms of the organization and personnel management of the child care center so that the level of job stress of the teacher does not increase. The teacher provides professional training and training opportunities to give confidence in his role, Efforts should be made to lower stress levels by encouraging and encouraging. In order to reduce the stress related to work, standardization of teaching profession, distribution of work hours, reduction of workload, etc., will reduce job stress. At the national level, it is important to establish the status of child care teachers, Effort is required.

High job stress reduces responsibility for job, lowers job performance, leads to loss of vitality and job turnover, makes passive attitude in immersing in child care organization, makes relationship between fellow teachers alike, and low attachment to organization(Jun, Sung-min, 2012). Job stress of daycare teachers directly affects the development of infants and toddlers, so various studies should be conducted to reduce job stress and increase job satisfaction. In addition, research should be carried out to solve job stress and cope with it.

References

- Kang, E-sl (2011). A Study on Teaching Efficacy and Job Stress of Infant Child Care Teachers. Nam Seoul University Master's thesis.
- Kwon, Sung-min (2012). A Study on the Structural Relationship between Transformational Leadership of Kindergarten and Job Satisfaction of Early Childhood Teachers. Yeungnam University Doctoral thesis.
- Kim, Yoo-jin (2003). A Study on the Professionalism Recognition and Job Stress of Infant Child Care Teachers. Duksung Women's University Master's Thesis.
- Kim, Ji-yeon (1995).A Study on Job Stress and Educational Activities of Kindergarten Teachers. Sookmyung Women's University Master's thesis.
- Do, Myeong-ah (2009). Job stress and coping strategies of early childhood education teachers. Daegu University Doctoral Thesis.
- Park, Young-Ho & Kim, Jeong-in (2000). The Role of Social Support and Robustness in the Relationship between Teacher 's Job Stress and Health. Education and Practice (Volume 10, Issue 1).
- Park, Eun Hye (2011). Early Childhood Teachers. Chang Ji Sa..
- Baek, Hye Ri (2012). Nursery Teacher. Dong Moon Sa.
- Seung, Mi Young, Kim, Jin Kyung, Seo, Joo Hyun, Mim, Mi Hee, and Kim, Yu Mi (2015). Nursery teacher. Hak Ji Sa.
- Sung, Young Hye (1994). A Study on the Job Stress of Child Care Teachers. Korean Society of Infant and Child Care.10.
- Shin, Hye Young (2004).The Effects of Job Stress and Efficacy on Teacher 's

- Behavioral Quality. Yonsei University Doctoral thesis.
- Yum, Yong Hee (1986). A Study on the Stress Factors and Degree of Middle and High School Teachers. Seoul National University Master's thesis.
- Yoo, Young Joo, Kim, Sun Ok & Kim, Kyung Shin (2000). Family Relations. Gyo Moon Sa.
- Lee, Eun Jin (1999). The Relationship between Child Care Teacher Job Stress and Child Care Activities. Sookmyung Women's University Master's thesis
- Jang, Mi Ah(1996). Job Stress and Coping Methods of Kindergarten Teachers. Ewha Womans University Master's thesis.
- Jo, Mi-young, Kwon, Kyung-sook, Ko, Kyung-hwa, Park, Jung-bin, Shim, Hyung Jin, Lee, Eun Hee. Jo, Yeon Kyung & Whang, In Ae (2016). Nursery teacher, Hak Ji Sa.
- Choi, Jae Sook (1991). A Study on Teacher 's Job Stress and Morale by Kindergarten Director's Leadership Type. Wonkwang University Master's thesis.
- Hur, Song Yeon (2001). A Study on Job Stress and Coping Methods of Child Care Teachers. Kyung Nam University Master's thesis.

School Health Education in Myanmar - Introduction of the new course Life Skills -

Gwon Osung

Juenju National University of Education

ABSTRACT : The issue of how to create an environment where children can grow healthy is a common theme among countries around the world. School is the biggest challenge of health education. Developing countries should be concerned about poverty and at the same time think about economic development. Students are the future leaders. Therefore, educational issues were always handled together in the development plan. Since the 1990s, lifelong technical education has been actively conducted around the world, centering on international organizations and NGOs. The Myanmar Ministry of Education has introduced a new school health education called "life skills" that meets these social conditions. In 1999, guidance guidelines were amended greatly. It is a great educational reform. In this article, we reviewed at Myanmar health education.

Key words : School Health Education, Life Skill, UNICEF, WHO,

I. Introduction

Myanmar has a strong norm of values based on Buddhism. Such characteristics will remain in school health education. This study focuses on newly established Life Skills subjects. It is part of an aid program for school health education conducted by international organizations. How it was introduced in developing countries? How does it relate to the traditional local value norms?

The issue of how to build an environment for children to grow healthy is a common theme among countries around the world. It is the biggest challenge of school health education.

Developing countries should be concerned about poverty and at the same time think about economic development. Students are the protagonists of the future. Therefore, educational problems have always been handled together in development plans.

Since the 1990s, life skills education has been actively developed around the world, centering on international organizations and NGOs. Prevention of AIDS and drug abuse is educational purpose. In Myanmar, AIDS and drug problems have become serious social problems due to the following problems.

1. Transition from socialist economy to market economy
2. Introduction of Money Economy
3. Socio-economic situation, such as the transition to an open-ended policy

The Myanmar Ministry of Education has introduced a new school health education called "life skill" in keeping with these social conditions. In 1999, the teaching guidance was greatly revised. It is a big educational reform.

Myanmar was established in 1987 as the least developed country (LLDC). The economic level is low, but the education level is relatively high. The literacy rate of adults in Myanmar is 84.4%. It is much higher than Laos or Bangladesh with similar economic levels. Myanmar has an average life expectancy of 53.6 years. Infant mortality rate is 79 per 1000 live births (UNDP, 2000). The level of health is almost the same or lower than those of these countries. Thus, the educational environment in Myanmar is relatively better. School health education is expected to play a major role in improving health. However, life skill education is a school health education based on Western modern ideas. Myanmar is fundamentally different from the West in terms of social norms and cultural factors. Could this be settled properly? However, little was mentioned about these issues. This issue should consider three themes: health, education and development. This has been the subject of a number of prior studies, centered on the World Bank. However, it tends to exclude cultural elements (climate, history, social structure, values, etc.). Few examples have examined school health education in relation to these cultural factors. Indeed, school health education in developing countries has been the focus of infectious disease management. This school health education focuses on the results rather than the implementation process. It should be quantifiable whether it is effective in disease prevention. So that it is evaluated as an effective means.

The research of Miura (1999) focuses on the modern aspect of school education and health care. It is a study that refers to the relationship between school health education and cultural factors. It is highly regarded as a pioneering research in this field. This study was based on the perspective of Miura. How does school education and health care, which are products of Western modernism, are related and transformed and settled with the traditional values norms of each country which grew up in history and climate. This is the theme of research.

II. Main subject

Life skills were originally developed by WHO as part of health promotion. It is defined as the constructive coping ability of problems in everyday life (Ministry of Education, 1999). Life skill is an education aiming at acquisition of life skill having such an idea.

Life skills for youth are aimed at:

- (1) Prevention of substance abuse
- (2) adolescent pregnancy
- (3) improvement of intellectual ability
- (4) prevention of bullying
- (5) prevention of AIDS
- (6) prevention of violence

It is mainly dealt with in the school health field. It is being implemented in all over the world regardless of developed and developing countries.

1. Myanmar's school health education and life skill education

In Myanmar, which is in a period of political and economic transition, education reform is also strengthening. By special education plan (2000-2003), the development of healthy citizens is the primary goal in primary education. In Myanmar, the Ministry of Health has played a central role in school health education. The Ministry of Health is a department that places importance on disease control. However, life skills training is being conducted by the Ministry of Education, both in planning, implementation and implementation. Because it deals mainly with children's health issues.

Life skill education is the basis of school health education. The following three questions arise.

- (1) What are the main factors that lead to the life skill education of the Ministry of Education?
- (2) What is the difference between school health education led by the Ministry of Health?
- (3) Why is the Ministry of Education involved in school health education?

According to the New Study Guidance conducted in 1999, Myanmar's basic subjects are as follows.

- (1) Grant basic education to Myanmar citizens to make them better workers. To improve the health and morality of the people by training physical and mental ability.

- (2) Make efforts to science to improve production capacity.
- (3) Preserving the culture and arts of the nation with interest in art.

In order to achieve these educational objectives, the teaching guidance has also been dramatically reorganized. Two new features of the new curriculum include.

(1) Both elementary and junior high schools are spending more time on subjects related to health. In the old curriculum, the health content was only part of the integrated activity. In the new curriculum, life skills are set as independent subjects. In the lower grades of elementary schools, there is a branch in general studies. In the upper grades, it is in social studies(WHO, 1997). The lower grades are three hours a week, the upper grades are two hours a week, and the junior high school is one hour a week. Physical education is four hours per week for elementary school and two hours for middle school.

(2) Learning about value norms is important. The integrated activities of the old curriculum included "morals and citizens". In Myanmar's school education, the emphasis of learning about the value norm is in Buddhist thought. For example, in the "Traditional Mythology of Myanmar" of middle school "morality and citizen", it is holding a king who admired the Buddhist priesthood and Buddhism as a great person. Their sermons and anecdotes are becoming a source of learning.

As mentioned above, the features of Myanmar Education Reform shown in the New Learning Guideline of 1999 is a combination of subjects related to healthy norms of Myanmar values. While establishing the concept born in Western modern society (hygienic living or modern health care), maintains and develops the lifestyle and traditional values of Myanmar. In some ways, two contradictory aspects exist in Myanmar's new educational reform. In the background, there is a need for scientific and modern thinking and knowledge while seeking anti-Westernism from the standpoint of preserving Myanmar's traditional culture. Therefore, development assistance is needed. Myanmar's government seems to be suffering from the worries of carrying out educational reforms.

2. Influence of UNICEF on the establishment of new "Life Skills"

Life skills education in Myanmar was first introduced in 1993. AIDS prevention was the first goal. In 1994-1996, it was conducted in 27 regions centered by Myanmar Maternity Welfare Association (MMCWA) and Myanmar Red Cross(MRC). There were 17280 youths aged 15-25 (UNICEF, 2002). In 1996, a consultant visited the Thai Red Cross. And technical cooperation for the development of teacher guidance. One of the advice from Thailand's experience was that medical knowledge alone could not prevent

the rapid expansion of AIDS. Simply preventing diseases like AIDS is not everything. There is a need to learn life and social skills to develop self-conscious attitudes and behaviors. As a result, the development of Myanmar 's life skills education was greatly influenced.

In 1998, a life skills program centered on UNICEF was conducted. School-centered healthy life and HIV AIDS prevention education were main subjects. The main subjects were students in grades 2-9. The purpose of the SHAPE(school based healthy-living and HIV/AIDS prevention education program) is to prevent and promote HIV / AIDS through positive attitude change and technology. The goal is to internalize the positive values and responsible attitudes necessary to maintain the health of the youth. It is the largest of the life skills training programs in Myanmar.

Pedagogy was based on child - centeredness, activity and process - oriented, participatory type, and interactive group learning. It promoted healthy attitude and practice through intermediate education, communication from children to parents, and community activities. The costs for the SHAPE program were \$ 746507 (1997-1999) (UNICEF, 2002). This cost is about 30% of the total amount of aid in Myanmar. Life skills education was introduced through the above process.

Life Skills became the official curriculum of Myanmar in 1998, in line with the UNICEF Life Skills Program (SHAPE). Until now, UNICEF has been involved in teacher training for life skills.

There is a wave of globalization in Myanmar. Economic activities of countries and companies are increasing, and exchanges with foreign countries are becoming active through development aid. As a result, the traditional culture and values of Myanmar are changing. The introduction of life skill education also shows the change in Myanmar society. The life skills education introduced in Myanmar is somewhat different in terms of goals and contents from that proposed by international organizations. In Myanmar, knowledge of basic health and hygiene necessary for everyday life such as hygienic water and nutritious meals is urgent. It is also necessary to have skills for find jobs, knowledge and functions to help in daily life, and environmental education. An integrated and practical life skills education aiming at so-called living improvement is necessary. It reflects differences of opinion with international organizations in practical training such as vocational training and life skills. Life skills in Myanmar include handicrafts and practical educational activities necessary for everyday life. However, life skills education suggested by international organizations does not include the skills and practical skills necessary for living. Life skills have been influenced by UNICEF, especially among international organizations working in Myanmar. However, opinions were divided on whether to include practical skills in life skill courses. There is also a distinctive difference in social skill items. It is based on traditional values based on Buddhism, such as compassion, mutual cooperation, courtesy, and discipline. It is very different

from the contents of life skills education proposed by international organizations.

The factors that gave rise to Myanmar's unique life skills education can be seen in two ways. Practical practical skill added and learning about social skills with traditional values of Myanmar based on Buddhist thought.

III. Conclusion

Two contradictory aspects exist in Myanmar's new educational reform. In the background, there is a need for scientific and modern thinking and knowledge while seeking anti-Westernism from the standpoint of preserving Myanmar's traditional culture. Therefore, development assistance is needed.

Life skills education in Myanmar was first introduced in 1993. AIDS prevention was the first goal. It was conducted in 27 regions centered by Myanmar Maternity Welfare Association (MMCWA) and Myanmar Red Cross(MRC). The advice from Thailand's experience was that medical knowledge alone could not prevent the rapid expansion of AIDS. There is a need to learn life and social skills to develop self-conscious attitudes and behaviors.

Life skills program centered on UNICEF was conducted. School-centered healthy life and HIV AIDS prevention education were main subjects. The purpose of the SHAPE is to prevent and promote HIV / AIDS through positive attitude change and technology. The goal is to internalize the positive values and responsible attitudes necessary to maintain the health of the youth. Pedagogy was based on child - centeredness, activity and process - oriented, participatory type, and interactive group learning. It promoted healthy attitude and practice through intermediate education, communication from children to parents, and community activities. Life Skills became the official curriculum of Myanmar in 1998, in line with the UNICEF Life Skills Program. Until now, UNICEF has been involved in teacher training for life skills.

Currently, aid programs for school health education are being developed in developing countries. However, most of them are not performing as expected. The goal of how to disseminate knowledge about health care is far ahead. Why do touch the drugs? Why are both the mind and body in an undesirable state? What kind of human relationship is there in the background of producing such behavior or psychology? Tied to these problems, there is lack of pedagogical viewpoint.

This study examined the significance of starting health education issues from the

relationship between local culture and traditional values in the development of school health education in Myanmar. But what do you see as a social norm in a multi-ethnic nation? How will you accept the critical thinking that is the basis of life skills education? There was not enough discussion on these points. A comparative study with a Buddhist country such as Laos or Cambodia in a socio-economic situation similar to Myanmar seems to require further research.

Reference

- UNDP (2000) Human Development Report
- Miura Yasuko (1999) Health, hygiene knowledge dissemination and school education in Thailand, Bangladesh and Japan
- Ministry of Education, Myanmar (1999) Learning Guidance
- WHO (1997) WHO Life Skill Program, JKYP Study Group Translation, Daisyukan Publishers
- UNICEF (2002) S.H.A.P.E in Myanmar
- UNICEF(1999) Situation analysis of children and woman in Myanmar.
- Yoshinaka Maki (1998) Civic Education in the Secondary Education Stage of Myanmar, Tsukuba univ. Thesis of Master's Degree in Education Studies.
- UNICEF(1992) The children in Buddhism.
- Yoshinaka Maki (2002) A study on school health education in Myanmar aiming at improvement of life, Tsukuba univ. Graduate School of Education.
- Yoshinaka Maki (1998) Civic Education in the Secondary Education Stage of Myanmar, Tsukuba univ. Thesis of Master's Degree in Education Studies.
- The Dictionary of Britannica (2005)
- Juen Dongjin(2003) The chracteristics of Japan's ODA policy toward the Asia-Pacific region and the prospects for economic cooperation with the DPRK, International Political Studies, 6 (1).
- Kim inah, 2006. "Myanmar lacquerware craft tradition and innovation." Pusan University of Foreign Studies Graduate School Master's thesis.
- Nwenwewin, 2011. "community attachment of the local people too, about the attitude of recognized impact on tourism, tourism development study: Myanmar Inle Lake eco-tourist
- Seo eunju, 2013. "Myanmar Promising Industry Analysis and Implications." "International Export-Import Bank of Korea Economic Research Institute"
<http://keri.koreaexim.go.kr>
- Daily finance. 2013/06/04. Air Lease Corporation Announces the Placement of Two New ATR 72.600s with Golden Myanmar

Eleven Myanmar. 2014/01/16. JICA to spend US\$ 25 billion on Yangon transport plan.

Eleven Myanmar, 2014/03/19. Booming tourism in Bagan nets fifth hotel zone.

Eleven Myanmar. 2014/03/19. Myanmar plans to invite foreign investments for railway sector.

Eleven Myanmar. 2014/03/20. Singapore the top investor in Myanmar hotels and tourism sector.

Eleven Myanmar. 2014/04/23. Thilawa SEZ to start building basic infrastructure.

Ministry of Hotels and Tourism. 2013. Myanmar Tourism Master Plan

2013-2020. Yangon: Ministry of Hotels and Tourism.

Timothy, Dallen J. 2011. Cultural Heritage and Tourism. Bristol: Channel View Publications.

Impact of Women's Empowerment on Under-Five Mortality in Myanmar

Maw Maw Khin · Sanda Thein***
Yangon University of Economics

ABSTRACT : Women's autonomy and empowerment has generally been recognized as one of most important factors of development. A lack of autonomy and empowerment may lead to negative outcomes on child health and mortality. There are a small numbers of study has analyzed links between women's empowerment and under-five mortality in Myanmar. This study tried to fill this gap to investigate the effect of women's empowerment on under-five mortality in Myanmar. Sample of 4815 ever married women aged 15-49 years who had their last childbirth in period 2010-2015 were drawn from 2015-2016 Myanmar Demographic and Health Survey. Furthermore, the logistic regression model had been specified and estimated to investigate the effect of women's empowerment on under-five mortality. Results showed that women who were more empowered (secondary level of education, participation in household decisions and contraceptive-use) were significantly less likely to experience under-five mortality. This highlights the importance of women's empowerment in efforts to reduce under-five mortality.

Key words : Demographic health survey, women's empowerment, Under-Five Mortality, Logistic Regression.

I. Introduction

In every country child mortality is a widely used indicator of health status of all population as well as the level of development of a country. Child mortality rate has received tremendous attention of researchers and policy makers since last 3-4 decades. It is defined the death of a child before the child's fifth birthday, which measures as the Under-Five Child Mortality Rate (U5MR). The reason behind the use of child

* Professor and Head of Department of Statistics, Yangon University of Economics

** Lecturer of Depart of Statistics, Yangon University of Economics

mortality as a measure of health status of the population is that the causes of child mortality are strongly related to general living condition, social well-being, quality of the environment and the level of economic development, that affect the health of entire population.

Under-five mortality has declined significantly over time, still remains high in many developing countries and varies widely across countries (WHO, 2013; Schell, et.al 2007). High child mortality, which indicates poor health of the population, has important implications at both micro and macro levels. Poor health results in a lower quality of human resources and lower productivity. Efforts are being made and strategies are being developed across all developing countries to reduce child mortality to an acceptable level. Reducing child mortality is one of the eight targets of Millennium Development Goals (MDGs) of United Nations (UN). Developing countries are struggling with this issue and targets are far to achieve.

Globally child mortality has been reduced to half from 12.7 million in 1990 to 5.9 million per year in 2015. This decline has prevented the death of 45 million children from the year 2000 onwards. Despite this remarkable reduced from the year 2000 onwards. Despite die each day in the success, still more than 16,000 children die each day in the world (WHO 2015). According to WHO (2015), the major causes of child mortality are prematurity, congenital sepsis, pneumonia, malaria, and birth complications. These conditions are associated with socio-economic factors, such as poverty, absence of education in mothers, and children born in rural areas. Additionally, the causes of malnutrition and problems in accessing health care or the lack of health infrastructure are associated with the socio-economic factors.

In Myanmar, around 56,000 children under five die in each year and 43,000 of them are younger than one month. Despite improvements, the country's under-five and infant mortality rates are the highest among ASEAN member countries, and many of these deaths are preventable. Under-five mortality rates are higher in the central plains, in rural areas, among families without formal education and among children from the poorest families. The principal causes of neonatal mortality (under 28 days of age) were prematurity birth asphyxia and sepsis, including pneumonia. The main direct causes of deaths among children under-five continue to be diarrhea, acute respiratory infections and malaria, exacerbated by underlying malnutrition, which contributes to around 50 percent of these deaths. Children born into the poorest households are almost twice as likely to die before age five as their wealthiest counterparts. However, poverty is not the only divider. Children are also at greater risk of dying before age five if they are born in rural areas or in a mother lacked basic education. In addition, the main causes of child death are lack of prenatal medical care and medical assistant during the delivery, delivering in poor health facilities, malnutrition, and preventable diseases like pneumonia, diarrhea and malaria. Access of pregnant women to antenatal care and

those women with skilled health personnel in attendance are critical interventions for combating preventable maternal and neonatal mortality.

According to the 2014 Myanmar Population and Housing Census (MPHC), under-five mortality was high compared to other countries in the region. Although previous estimates indicated a rapid decline during the 1960s and 1970s, with a substantial deceleration starting in the early 1980s, the decline has accelerated during recent year. An import issue in under-five mortality was that there was a substantial difference between child's genders. The male children were more likely to die than female children before age five by almost one third. Among the several variables considered as differentials of under-five mortality rates, women's parity was the most important variable. According to MPHC findings, the under-five mortality rate would be reduced by improving the living standard of people.

Meanwhile, ever since the 1994 International Conference on Population and Development in Cairo, women's autonomy and empowerment has been recognized as one of the most important factors of development and thus, it is identified as one of the development goals of national governments and international agencies. Many researchers have argued that women's empowerment is closely linked to positive outcomes for families and societies. Numerous studies have documented the role and importance of women for the health and overall well-being of their children and family members.

Empowered women, particularly those who are more autonomous, have increased bargaining power, relative to their husbands. It has often been argued that child health and investments in children are determined by intra-household resource allocation decisions, which are related to gender inequalities in the household. Thus, women's autonomy and empowerment can result in a decline in fertility and in child mortality rates.

There is considerable variation in the definition and conceptualization of women's empowerment. The United Nations Development Fund for Women (UNIFEM) has defined women's empowerment as "having access to and control over the means to make a living on a sustainable and long term basis, and receiving the material benefits of this access and control". World Bank defined empowerment as the "expansion of freedom of choice and action to shape one's life". Women's empowerment has also been defined as "an extension of a woman's ability to make strategic life choices in which these capabilities denied to her".

Measuring empowerment has proven difficult for several reasons. Malhotra and Schuler, have synthesized the six most common dimensions used to measure women's empowerment as economic, socio-cultural, familial/ interpersonal, legal, political and psychological. However, most frequently used indicators to measure empowerment in individual/household level are domestic decision-making, access to or control over

resources, and mobility/freedom of movement.

There are a small numbers of study has analyzed links between women's empowerment and under-five mortality in Myanmar. This study tried to fill this gap to investigate the effect of women's empowerment on under-five mortality in Myanmar. This study hypothesized that women who are more empowered are less likely to experience under-five mortality.

II. Data and Method

The study was based on analysis of population data from the 2015-16 Myanmar Demographic and Health Survey (MDHS). It was implemented by the Ministry of Health and Sports of the Republic of the Union of Myanmar. The funding for the MDHS was provided by the United States Agency for International Development (USADI) and the Three Millennium Development Goal Fund (3MDG). The MDHS 2015-16 was collected from December 7, 2015 to July 7, 2016 and was published in March, 2017. This is a nationally representative survey of Myanmar households with a stratified representative sample of 13238 households. All women age 15 to 49 who were either permanent residents of the selected households or visitors who stayed in the households the night before the survey were eligible to be interviewed. In half of the selected households (every second household), all men age 15 to 49 who were either residents or visitors who stayed in the households the night before the survey were eligible to be interviewed.

Thus, this study is based on 4815 ever married women belonging to the age 15 to 49 years. The sample covered those who lived in both urban and rural areas and also included women who had different level of education and occupation. The questions used in the survey questionnaire included all of the important characteristics such as child mortality or number of children death under five year, mother's age, education level, employment or working status, knowledge about contraceptive methods, place of residence, cooking fuel source, source of sanitization, source of water, delivery place, tetanus toxoid injection, etc.

Descriptive analysis was used to present the general characteristics of women under study such as gender of child, birth order, birth spacing, birth size, place of residence, wealth of household, source of cooking fuel, source of sanitization, source of water, delivery place, and tetanus toxoid injection, contraceptive use, going to health center, major HH purchase alone, visiting families alone, employment or working status, education levels, and age at first birth. In addition, logistic regression analysis is applied to investigate the most significant predictors of under-five mortality. In this analysis, the

average marginal effects were calculated to test the significance of logistic regression coefficients. Before the analysis, various variables were regrouped. For example birth spacing was recorded into two; less than equal 24 months old and more than 24 months old, birth order variable also divided by three groups namely first order, two-three order, and above third order, access to sanitization, access to water and delivery place were also grouped accordingly.

III. Results and Discussion

The demographic information of the respondents was analyzed in terms of marital status, gender, birth order, birth spacing, birth size, place of residence, wealth of the household, cooking fuel source, source of sanitization, source of water, delivery place, tetanus toxoid injection, contraceptive use, going to health center, major household purchase alone, visiting families alone, employment, education level.

Table (1) shows the demographic characteristics, environmental and socio-economic of 4815 ever married women who aged are 15 to 49 years. From table, the proportion of male babies born stood at (52.5%) compared to male babies (47.5%). Birth order 2-3 is (40.5) which is slightly larger than the remaining categories. Majority (54.5%) of the children born have birth spacing of more than two years and (86.6%) women received the tetanus toxoid injection during pregnancy compares with only (13.4%) who reportedly did not receive the injection. (65.9%) of women further reported that they gave birth at home, (27.6%) gave birth at government hospital compare to only (6.2%) who gave birth in private hospital. More than half (55.3%) of women use open wells are main source of water and only (12%) of women use piped water. Most of the women (40.6%) use pit toilet and (37.6%) of the women use flush toilet. For cooking fuel source, firewood is the main source of cooking fuel especially in the rural areas where it is easily accessible. The finding further reveals that respondent's participation in different household decision varies from (18.3%) in major household purchase to (40.5%) in seeking child healthcare. Similarly, respondent had say in the use of contraception is (52.7%) and mostly (95.9%) of the respondents are employed. Nearly one-half (44.3%) have primary education, (17.9%) of the respondents have no education, (31.0%) have secondary education and only (6.8%) have higher education respectively.

Table 1. Demographic, Environmental and Socio-economic Variables

Discrete variables	Percentage
Gender of the child	
Male	52.5
Female	47.5
Birth order	

Impact of Women's Empowerment on Under-Five Mortality in Myanmar

First order	32.2
2-3 order	40.5
Above third order	27.3
Birth spacing	
Less than 24 months	45.5
More than 24 months	54.5
Birth size	
Small	5.2
Average	71.5
Large	23.3
Type of residence	
Urban	21.0
Rural	79.0
Wealth of the household	
Poor	53.2
Middle	34.6
Rich	12.2
Cooking fuel source	
Electricity	14.1
LPG/Gas	0.4
Coal	14.9
Wood	66.2
Grass	1.7
Others	2.7
Source of sanitations	
Flush toilet	37.6
Pit toilet	40.6
No facility	18.7
Others	3.1
Source of water	
Piped	12.0
Public tap	4.5
Open well	55.3
Spring	5.2
River	9.5
Others	13.5
Delivery place	
Home	65.9
Government hospital	27.6
Private hospital	6.2
Non-government organization	0.3
Tetanus Toxoid Injection	
Immunized	86.6
Not immunized	13.4
Use of contraceptive	
Yes	52.7
No	47.3
Going to health center	
Alone	40.5
With husband	57.2
With other person	2.3
Major HH purchase alone	
Yes	18.3
No	82.7
Visiting families alone	
Yes	35.7
No	64.3

Employment	
Yes	95.9
No	4.1
Education	
No education	17.9
Primary	44.3
Secondary	31.0
Higher	6.8
Age at first birth	
< 15 age at first birth	2.7
15 age at first birth	97.3

Source: MDHS Data (2015-16)

Table (2) shows the total number of live births, total number of deaths and child mortality rates by residence. Based on the survey data, it can be seen that child mortality rate of Union is 47 deaths per 1000 live births. The child mortality rate of rural is much higher than that of the urban area.

Table 2. Child Mortality Rates by Residence

Place of Residence	Total Number of Live Births	Total Number of Deaths	Child Mortality Rates
Rural	3617	186	51
Urban	980	32	33
Union	4597	218	47

Source: MDHS Data (2015-16)

From the following Table (3), it is found that Chin State has the highest rate of child mortality (91 deaths per 1000 live births) and this was followed by Shan State (77) which is second largest among the States and Regions, then Taninthayi Region (61), Mandalay Region (51), Ayeyarwaddy Region (47), Kayin State (45), then Sagaing Region (42), Naypyitaw (39), Kachin State (38), Bago Region (37), Magway Region (34), Mon State and Yangon Region (33), Rakhine State (32), and Kayah State (27) respectively.

Table 3. Child Mortality Rates by Region

State and Region	Total Number of Live Births	Total Number of Deaths	Child Mortality Rates
Kachin	340	13	38
Kayah	369	10	27
Kayin	336	15	45
Chin	439	40	91
Sagaing	334	14	42
Taninthayi	310	19	61
Bago	270	10	37
Magway	261	9	34
Mandalay	255	13	51
Mon	239	8	33
Rakhine	346	11	32

Yangon	240	8	33
Shan	326	25	77
Ayeyarwaddy	300	14	47
Naypyitaw	232	9	39

Source: MDHS Data (2015-16)

Table (4) displays the summary results and marginal effects of Logistic regression. In this analysis, the under-five mortality is a dependent variable (if under-five mortality occurs =1, if not = 0) and mother's age, types of residence, household wealth, source of water, sanitation facilities, source of cooking fuels, birth order and size, health service, women empowerment variables are independent variables.

The aspects of women empowerment which are considered in this study include; women's participation in household decisions, women's freedom of movement, education, employment and contraceptive use.

The results of logistic regression model shows that mother's age, total number of under-five years children in a household, place of residence, household wealth status, births order and spacing and educational level are statistically significantly explain under-five mortality. An increase in the mother's ages by one year reduces the probability of under-five mortality by almost one percent. Mothers with less than three children had a lower probability of child death by 52.59 percent as compared to those mothers who had more than two children. This can be attributed to education levels. Educated mothers prefer fewer children whom they are able to take proper care of thus reducing the probability of under-five death. The finding is per our earlier expectations where households with more than two children under the age of five years in a household were expected to have high under-five mortality.

Women who lived in urban area had a 3.55 percent point lower probability of under-five death than women who lived in rural residence. An increase in the household wealth from poor to middle lowers the probability of under-five's death reduces by 5.29 percent. This can be attributed to education; educated mothers are more likely to be categorized as middle class; this implies that with the increase in wealth and health knowledge, the risks associated with under-five mortality is lowered.

Source of water was expected to improve the status of health the child and thus reduce mortality levels. Thus, open well and river water sources can be lowered the probability of under-five mortality by 0.06 and 0.53 percent respectively relative to those public tap and spring water sources. This could imply that majority of rural residents much rely on open well and river for source of water.

Clean cooking fuel source that is free from air pollution was expected to improve the status of health the child and thus reduce mortality levels. Thus, electricity and wood cooking fuel source lowered the probability of under-five mortality by 0.03 percent and 2.42 percent respectively relative to those using coal and LPG gas cooking

fuel. This can be explained through the fact that the study sample (79 percent) was drawn largely from rural areas where wood is the main source of cooking fuel.

Mother who birth spacing is more than two years is likely to reduce the under-five mortality by 4.26 percent compared to mother who birth spacing is less than equal two years. Child's birth weight is proxied by infant's size at birth (small, average, large) since most of the children birth weights were never reported. Children who were of average size at birth had a 3.29 percent lower probability of facing deaths as compared to infants who were of small sizes at birth.

The estimation also shows a child born in the government hospital has a higher chance of die beyond age five than a child born in the private hospital. Mothers who were place of private hospital have lower probability of under-five mortality by 0.17 percent compared to home delivery. Immunized for TTI are also important for the status of child health and reduce mortality rates. And Mothers who were immunized for TTI have a 1.95 percent lower probability of under-five mortality as compared to mothers who were not immunized for TTI.

Mothers who attained primary and secondary education have a 3.53 and 4.31 percent reduced probability of under-five mortality respectively as compared to mothers with no education. This can be as a fact that with higher education, child mortality risk is lowered. Education is supposed to increase mother's knowledge with regards to child care, disease prevention, pregnancy care and general health.

The coefficients of the variables measuring the participation of household decision making process, going alone to health center and visiting families alone are -0.0238 , 0.0041 , and 0.0187 respectively. These results indicate that the probability of under-five mortality are 2.38 percent less if mothers participate in household decisions and mothers who have going alone to health center and visiting families alone are 0.41 percent and 1.87 percent more likely to increase the probabilities of under-five mortality compared to those of reference groups. The coefficient of women employment shows 0.0154 suggesting that the probability of under-five mortality are expected to be 1.54 percent more if mothers participate in income generating activities compared to their counterparts.

Table 4. Marginal Effects of Child Mortality

Variable	Coefficients	Marginal Effects
Individuals factors		
Mother's age	0.2682 (1.35)***	0.0087 (1.34)***
number of children	- 1.6166 (-2.48) *	- 0.5259 (-2.41)*
number of children (ref.)		
15 years (age at first birth)	0.3793 (0.31)	0.0123 (0.31)
< 15 years (age at first birth) (ref.)		
Household factors		
Urban residence	-1.0918 (-1.43)***	-0.0355 (-1.41)***
Rural residence (ref.)		
Wealth middle	-1.6287 (-2.05) ***	- 0.0529 (-2.01)***
Wealth rich	-0.0912 (-0.14)	-0.0029 (-0.14)
Wealth poorest (ref.)		
Source of water		
Public tap	0.5596 (0.59)	0.0182 (0.59)
Open well	- 0.0183 (-0.03)	- 0.0006 (-0.03)
Spring	0.5513 (0.69)	0.0179 (0.69)
River	- 0.1644 (-0.23)	- 0.0053 (-0.23)
Others (ref.)		
Sanitation facilities		
Flush toilet	0.00048 (0.0001)	0.000015 (0.00001)
Pit toilet and others (ref.)		
Source of cooking fuel		
Electricity	-0.7423 (-1.04)	- 0.0032 (-0.12)
Wood	- 0.0994 (-0.12)	- 0.0242 (-1.04)
Coal and others (ref.)		
Child factors		
First order	0.4859 (0.54)	0.0158 (0.54)
Two- three birth order	0.3277 (0.55)	0.0106 (0.55)
Above third order (ref.)		
Average (size at birth)	-1.0133 (-1.36)***	-0.0329 (-1.35)***
Large (size at birth)	-0.7036 (-0.87)	-0.0228 (-0.87)
Small (size at birth) (ref.)		
Female	- 0.2990 (-0.74)	- 0.0097 (-0.74)
Male (ref.)		
24 months birth spacing	- 1.3104 (-2.86)**	-0.0426 (-2.72)**
24 months birth spacing (ref.)		
Health service variable		
Government-hospital	0.1295 (0.26)	0.0042 (0.26)
Private-hospital	-0.0537 (-0.05)	- 0.0017 (-0.05)
Home and others (ref.)		
Immunized for TTI	- 0.5998 (-1.13)	- 0.0195 (-1.12)
Not Immunized for TTI (ref.)		
Empowerment factors		
Primary education	-1.0835 (-1.11)	-0.0353 (-1.10)
Secondary education	-1.3232 (-1.50)***	-0.0431 (-1.48)***
Higher education	- 0.7309 (-0.91)	-0.0237 (-0.91)
No education (ref.)		
Contraceptive-use	- 0.2629 (-0.60)	- 0.0086 (-0.60)
No contraceptive-use (ref.)		
Going alone to health center	0.1248 (0.18)	0.0041 (0.18)
Going health center with husband	0.3963 (0.65)	0.0129 (0.65)
Others (ref.)		
Major HH purchase alone	-0.7334 (-1.04)	-0.0238 (-1.03)
Others (ref.)		
Visiting families alone	0.5776 (1.24)	0.0187 (1.23)
Others (ref.)		

Employment	0.4739 (0.43)	0.0154 (0.43)
Number of observations = 843: Iteration = 31: log likelihood = -107.8041: LR $\chi^2(31)=56.52, Prob>\chi^2=0.0034:PseudoR^2=0.2077$ ***,*** significant at the 1%, 5% and 10% level respectively, Z statistics in parenthesis. Dependent variable: if under-five mortality occurs =1, not occur = 0.		

Source: MDHS Data (2015-16)

IV. Conclusion

This study shows the effects of women empowerment on under-five mortality in Myanmar. The probability of child under-five mortality is substantially less for the children of those mothers, who are empowered, particularly through education, participation in the household decision making process. That is, women employment appears to influence the probability of child survival.

The logistic regression model is used to examine the role of six variables of women empowerment on the probability of under-five mortality when all other relevant variables are controlled. Of these variables of empowerment, three contribute positively to the child survival. Mother's participation in the household decision making process, secondary education and contraceptive use are the most important variables contribute to the reduction of under-five mortality. The women empowerment measured by employment status shows a positive effect on the under-five mortality. That is, the risk of under-five mortality is high for a working mother compared to a non-working mother. The children may have higher likelihood of survival because of additional expenditure for their wellbeing with the income of the mother's paid employment. On the contrary, mother's employment may results in less care and infrequent breastfeeding, which may reduce the chance of survival of child.

Other important factors affecting the survival of under-five children include health service variables (such as Private-hospital, Immunized for TTI), child factors (average (size at birth), female, more than 24 months birth spacing), source of cooking fuel (electricity, wood), source of water (open well, river), household factors (urban residence, wealth middle), individuals factors (less than three number of children). The male children are more likely to die than female children before age five. Economic conditions as measured by household wealth and access to electricity affect under-five mortality negatively. Locations of the household also play a role in determining under-five mortality.

Policy Recommendation

The study has shown that women who were more empowered would have better

outcomes on child health, especially in reducing under-five mortality. It can be strongly indicated the need for policy to promoting women empowerment to improve achievement in health development, especially in reducing under-five mortality.

References

- Carr M., (2000). Women's economic empowerment: key to development. In women's empowerment and economic justice; reflecting on experience in Latin America and the Caribbean, De Pauli L (Ed). New York: United Nations Development Fund for Women (UNIFEM).
- Hossain B., (2015). Women Empowerment and Infant Mortality in Bangladesh. Proceedings of the Australasian Conference on Business and Social Sciences 2015. Sydney (in partnership with The Journal of Developing Areas)
- Malhotra A., and Schuler S., (2005) Women's empowerment as a variable in international development. Washington DC: World Bank.
- Mason KO, and Smith HL., (2003) Women's empowerment and social context: results from five Asian countries. Washington DC: World Bank.
- Kabeer N., (2001) Reflection on the measurement of women's empowerment. In discussing women's empowerment-theory and practice. Stockholm: Swedish International Development Cooperation Agency.
- Narayan D., (2002) Empowerment and poverty reduction: a sourcebook. Washington, DC: World Bank.
- Presser H, Sen G, eds. (2000) Women's empowerment and demographic processes: moving beyond Cairo. New York: Oxford University Press.
- Rose Apunda (2016). Determinants of Child Mortality in Kenya: A research project submitted in partial fulfillment of the requirements for the award of degree of Master of Arts in Economics in the School of Economics, University of Nairobi.
- Ministry of Health and Sports (MoHS) and ICF.(2017). Myanmar Demographic and Health Survey 2015-16, Nay Pyi Taw, Myanmar and Rockville, Maryland USA: Ministry of Health and Sports and ICF.

Acknowledgement

We would like to thank MDHS for conducting survey, collecting information and published report from where we gathered information for our present study.

Appendix-1. Variable Definitions and Priori Expectations

Variables	Measure	Priori expectation
Mother's age	Mother's age at the time of child birth measured as a discrete variable with different age groups	Very young and very old women are likely to have high child mortality.
Mother's education	The level of education attained by the mother captured as no education, primary, secondary or higher education.	Higher education level is expected to be associated with low mortality levels.
Marital status of the mother	Mother's marital status; captured as either married or not married	Married women are expected to have lower risk of child mortality.
Number of children under 5 years	The number of live children a mother has had for the past five years.	Household with more than 2 children under the age of 5 years are expected to have high child mortality rate.
Gender	Sex of the child which is either male or female.	Girls are expected to have lower mortality risk than boys.
Birth order	The child's birth order in the family, it is captured as first, second, third and above 3.	Mortality is expected to be high at first birth and above 3 birth order.
Birth spacing	The birth spacing between children captured as less than 24 months or more than 24 months.	Birth spacing of 24 months or more is expected to decrease child mortality.
Birth size	Refers to the size of the baby at birth as reported by the mother. It is captured as small, very small, average, large or very large babies.	Small size and very large babies are expected to be associated with high mortality risks.
Residence type	Household's residence whether in rural or in urban area.	Urban residents are expected to have low mortality risks as compared to rural areas.
Wealth of the Household	The households are categorized as poor, middle or rich households.	Children born from poor families are expected to have high mortality risks.
Cooking fuel Source	Source of cooking fuel used by households. It is categorized as use of electricity, LPG, wood, charcoal or dung.	Clean cooking fuel is associated with low mortality risks.
Access to sanitation	Availability of sanitation services in households, it is captured as no facility, flush toilet, pit toilet	Clean human waste disposal availability reduces mortality risks.

Impact of Women's Empowerment on Under-Five Mortality in Myanmar

	and ventilated improved toilet.	
Access to water	Source of drinking water for households. Whether piped, well, rainwater, river water.	Clean drinking water is expected to improve child survival.
Delivery	Place where child was born, either at the hospital or non-hospital deliveries.	Hospital delivery is expected to lower child mortality
Tetanus Toxoid injection	Captures as whether mother received immunization or not.	Children whose mothers are immunized are expected to have lower mortality risks.

A Study on the Voluntary Activation of Jeollanam-do by linking with Korea's National Volunteer Basic Plan

Shin-Sook Lee

Sunchon National University

ABSTRACT : The rapid change of society, the weakening of community consciousness, and the reduction of social trust, the solution of human desires of new people is causing many social problems and it is necessary to make appropriate joint efforts to cope with them. But our volunteering is very low compared to other countries. In particular, the proportion of elderly population in Jeonnam is relatively high, which is significantly higher than in other provinces. Therefore, it is necessary to encourage the activation of volunteer activities considering the geographical, regional and economic specificity of Jeonnam. Therefore, the purpose of this study is to investigate the status of volunteer activities in Jeollanam - do and the direction of volunteer activities in order to activate volunteer activities in Jeollanam - do. The results of this study will be used as basic data for effective voluntary policy and program development in Jeonnam region.

Key Words : Voluntary Activation of Jeollanam-do, National Volunteer Basic Plan, voluntary evaluation system

I. Introduction

The solution of the human desire of new people due to the rapid changes in society, the weakening of the consciousness of community and the decrease of social trust are causing many social problems and need appropriate joint efforts to cope with it. However, our volunteer activity is extremely low compared to other countries. In particular, there is a relatively high proportion of elderly people in Jeonnam, which is significantly higher than those in other provinces. Therefore, it is necessary to encourage revitalization of volunteer activities considering the geographical, regional and economic specificity of Jeonnam.

On the other hand, as the quality of life of the citizens increases and the level of

consciousness increases, the demand for administrative services increases, and social problems such as social polarization, poverty, and increasing social marginalization become tasks to be solved by the central government and local governments. Citizen participation is linked to volunteering in that it requires voluntary participation and sacrifice. Volunteerism is a key element not only in solving various social problems but also in forming community of community.

Volunteering in Korea began with state-led movements such as the 1960s Red Cross Movement and the 1970s Saemaul Movement. In the late 1970s and 1980s, civilian volunteer groups and volunteer agencies were established, and grassroots volunteer activities were launched in earnest. In 1996, volunteer centers were established. With the enactment of the Basic Act on Volunteer Activities in 2005, the legal and institutional basis for volunteer activities was established. Since then, the rate of volunteer participation has steadily increased over the 2000s (Choi, Mi, and Lee, 2017).

In the diversification of society and policy environment, it is necessary to expand and re-establish the traditional perception recognized as the concept of voluntary service or simple service-provided volunteer service and to continuously promote volunteer activities.

Although volunteer activities are varied, we focus on the role of volunteer center and conduct surveys on residents to understand the current status of volunteer activities. I would like to find out how to activate.

Considering the problems of the community in the formulation of policy and volunteer activation strategies to support local volunteer activities should be considered as a basic condition. Therefore, the purpose of this study is to revitalize the volunteer activities of Jeollanam - do by investigating the status of volunteer activities of Jeollanam - do residents and future direction of volunteer activities. The results of this study will be used as basic data for the development of effective volunteer activity policies and programs in Jeonnam.

II. Theoretical Background

1. Volunteering

1) Concept of volunteering

If you literally explain the meaning of the word volunteer, you can explain it as 'to volunteer and serve for yourself. The Ministry of Government Administration and Home Affairs proposes the Latin *voluntas*, which emphasize 'voluntary will' as the root of

English volunteering, and 'voluntarily participates in the corporation organization that carries out public affairs and prevention of social problems,(Voluntary activities) "(www.1365.go.kr) as" Activities to achieve the realization of self-fulfillment and self-realization by providing necessary services based on the principle of human respect and democracy "

Volunteer Activities The Basic Act defines volunteer activities as "voluntary efforts by individuals or organizations to voluntarily provide time and effort for the community, the nation and the human society."These definitions are activities that provide direct services to people who need help in the traditional sense (Kim Young-ho, 2003) and include organizations and organizations that foster and support volunteer activities as well as voluntary activities in accordance with volunteerism spirit.(2005).

The Declaration of Volunteers in the World, proclaimed in 1990, states that volunteering is voluntary participation, selection, and decision-making by volunteers, and that actively participating in local communities enhances the quality of life by strengthening human potentiality and solidarity.

2. Volunteer Management System

A professional volunteer management system is needed to effectively utilize the volunteers who have taken over the effort and time to meet the volunteer's expectation of volunteer activities (Liu, Gi-hyeong, etc., 2013). In this regard, it is revealed that the level of satisfaction of volunteers' education experiences and activities is highly related to the volunteer's aggressiveness. At the same time, volunteer recruitment strategies and management strategies of volunteer centers actively provide volunteer education,(Kim, Sung-kyung, 2007). In this study,

Volunteer management is the process of recruiting and selecting volunteers, training and deployment for effective activities of volunteers, supervision and evaluation that plays an important role in the future development of volunteer individual growth and volunteering, It is the stage of compensation.

The activities of volunteers recruited through effective methods are linked to the effectiveness of volunteer activities. A key part of the recruitment and selection process is to select volunteers who have the knowledge or attitude to perform well the job they need. will be.

Education and training also help to enhance the self-awareness and motivation of volunteers and help them understand the social implications of volunteer activities (Ryu, Ki-hyung et. al., 2001).

It is important that volunteers determined through recruitment, selection, and education are placed in appropriate duties based on expectations, goals, motivation, abilities, and institutional needs. Misplaced placement can halt the sense of

accomplishment of volunteers and have a negative impact on the evaluation of agency (Ryu, Ki-hyung et. al., 2013). Guidance and supervision of volunteer managers is an important part of the individual growth of volunteers. Indifference to volunteers is a factor that decreases the sustainability of volunteer participation.

Systematic evaluation of volunteer activities is an essential step to improve the effectiveness of volunteering in the future by improving existing activities and preventing potential problems.

Volunteer organizations have various accreditation and com. Volunteer organizations have various accreditation and compensation systems, and they are responsible for encouraging them to participate actively in volunteering (Ryu, Ki-hyung et. al., 2001).

2. Volunteer Support System in Korea

The Korean government has enacted the Basic Law on Volunteer Activities (2006), which aims to promote volunteer activities and contribute to the construction of a happy community. Based on this, the National Basic Plan for Promoting Volunteer Activities) 'As the first, second, and third divisions. Currently, the 3rd National Basic Plan is underway

1) Basic Act on Volunteer Activities

In Korea, the Basic Act on Volunteer Service (hereinafter referred to as the "Basic Act") and the Enforcement Decree of the Act provide basic information on volunteer activities. The basic directions presented in Article 2 of the Basic Law are as follows. First, volunteer activities should be promoted in the direction of enhancing the ability of the people to cooperate. Second, volunteer activities should be carried out under the principle of unprepared, voluntary, public interest, nonprofit, non-sectarian, and non-sectarian. Third, all citizens should be able to participate in volunteer activities regardless of social background such as age, gender, disability, region, educational background. Fifth, the policy for promoting volunteer activities should be based on the basic spirit of cooperation between the public and private sectors. The scope of the volunteer activities determined by the Basic Law is shown in Table 1 below.

Table 1. Scope of volunteer activities

sco-pe	① Activities on social welfare and health promotion ② Activities on community development and development ③ Activities on environmental conservation and conservation of nature ④ Activities on promoting rights and interests of vulnerable groups and on youth development and protection ⑤ Activities on education and counseling ⑥ Activities to promote human rights and peace ⑦ Activities to prevent and guide crime ⑧ Activities related to traffic order and basic order system ⑨ Activities on Disaster Management and Disaster Relief ⑩ Activities on Culture, Tourism, Arts and Sports Promotion ⑪ Activities on Anti-Corruption and Consumer Protection ⑫ Activities on Resident Election ⑬ International Cooperation and Outside Service Activities ⑭ Office Support in Public Administration Sector ⑮ Activities necessary for the performance of public service projects or promotion of the welfare of residents
--------	---

The Basic Law may establish a 'Volunteer Promotion Committee' (Article 8) to review key policies on volunteer activities, and a 'Korea Volunteer Council' to promote and promote volunteer activities nationwide (Article 17) A volunteer center for the development, promotion, linkage, and cooperation of volunteer activities can be established by national institutions and local governments (Article 19).

It also states that the National Basic Plan for the promotion of volunteer activities should be established every five years (Article 9), and that an annual plan shall be established and enforced in accordance with this Basic Plan (Article 10). In this way, the government has established legal grounds to establish and consolidate institutional environment for revitalization of volunteer service.

2) National Basic Plan for Volunteer Promotion

(1) The first National Basic Plan (hereinafter referred to as the first plan)

The primary plan covers five policy areas under the vision of a "volunteer country - a happy society." Each policy area is promoting volunteer value enhancement and participation. The following are the specific tasks for each area, such as improving the efficiency of the infrastructure, training the core manpower, establishing the research infrastructure, and promoting international exchange. The following are the tasks as below. Implementation of volunteer activity policy. The protection of the purity and value of volunteerism, the creation of public and private infrastructure, and the implementation of networking among volunteer groups, centers, and related organizations. The following Table 2 presents the detailed tasks for each of the first

National Basic Plan policies.

Table 2. Details of the 1st National Basic Plan

Policy area	Policy task	Detailed task
1 . Promote volunteer social activities and promote participation	1-1. Spreading volunteer culture	1-1-1. Activation of volunteer citizen public information
		1-1-2. Expanded support for volunteer events
	1-2. Establishment and support of volunteer lifelong education system	1-2-1. Establish and support volunteer education in school education system
		1-2-2. Activate youth volunteer activities and participation
		1-2-3. Activate adult volunteer training and participation
	1-3. Establishment of desirable volunteer recognition and compensation culture and system	1-3-1. Investigation and model development of voluntary recognition and compensation
1-3-2. Expansion of desirable recognition and compensation culture		
Policy area	Policy task	Detailed task
2. Increase efficiency of volunteer support infrastructure	2-1. Improvement of laws and ordinances	2-1-1. Revised Basic Law on Volunteer Activities
		2-1-2. Voluntary activity related laws and ordinances
	2-2. Enable organizational infrastructure and networks	2-2-1. Support for the development of the Korea Volunteer Council
		2-2-2. Fostering local volunteer centers
		2-2-3. (Tentative name) Promotion of national volunteer center establishment
		2-2-4. Fostering volunteer professional organizations
		2-2-5. Grassroots volunteer group and network business support
	2-3. Building physical infrastructure	2-3-1. Construction of Volunteer Computerized Management System
		2-3-2. Composition of volunteer promotion resources
		2-3-3. Establishment of volunteer center

3. Manage volunteer activities and cultivate key personnel	3-1. Standardization of volunteer activity management system	3-1-1. Survey of volunteer activity management system
		3-1-2. Production and distribution of volunteer activity management standard manual
	3-2. Training volunteer managers	3-2-1. Development of standard model for professional volunteer manager qualification process
		3-2-2. Professional volunteer manager Educational institution introduction of certification system
		3-2-3. Support volunteer manager training and training programs
	3-3. Nurture volunteer leaders and professional volunteers by field	3-3-1. Developed Volunteer Leaders and Professional Training Manuals
3-3-2. Support volunteer leader training and training programs		
4. Establishment of research infrastructure for volunteer activities	4-1. Research on volunteer activity	4-1-1. National Survey of Volunteer Activities
		4-1-2. Volunteer Center and Group Operation Survey
		4-1-3. Support volunteer research activities
	4-2. Volunteer Program Development	4-2-1. Development and support of volunteer specialization programs by ministries
		4-2-2. Developed standard manual for volunteer activity by subject and field
		4-2-3. A Study on the Establishment Model of Korean National Volunteer Corps
	4-3. Development and evaluation of volunteer evaluation system	4-3-1. Volunteer Center Evaluation
		4-3-2. Government volunteer policy promotion evaluation

Policy area	Policy task	Detailed task
5. Activation of volunteer activity international exchange	5-1. Strengthen international cooperation and exchange	5-1-1. Supporting international events and participation
		5-1-2. Overseas Service Project Support
		5-1-3. Overseas Volunteer Exchange and Cooperation

Source: Ministry of Government Administration and Home Affairs (2007). First National Basic Plan for Promotion of Volunteer Activities ('08~'12)

The strategy is classified according to the subject and the stage. The strategy for each subject is divided into three parts: government, civil-government cooperation, and civil roles. First, the government encourages and supports voluntary action laws and regulations, the creation of financial resources, the establishment of voluntary integrated support systems and management systems, the institutional design necessary for promoting volunteer activities, and the participation of the private sector. It plays a role. In addition, the government should strive to improve the conditions and volunteer activities of civilian volunteers through cooperation with the public and the private sector, It suggests that the complementary relationship should be maintained. Lastly, the private sector should encourage the participation of citizens who demonstrate their professionalism and creativity, such as volunteers' discovery, education, placement, guidance and management, and to strengthen their autonomous and responsible role in solving volunteer activities .

The phase-by-phase implementation strategy sets the base period, the activity phase, and the activity phase, which are divided into three stages, from the beginning of the first phase of the project to the second phase of the 2017 period. From 2008 to 2010, this is the foundation of the foundation. In this period, the establishment of institutional basis such as laws and regulations, the introduction of the training system of volunteer human resources, the construction of physical infrastructure such as comprehensive information. From 2011 to 2012, we will concentrate on human resources such as volunteer leaders and managers, promote volunteer activities by subject and field, promote professionalism, establish volunteer network base and network-type business development. And development and promotion of service programs.

(2) The Second National Basic Plan (hereinafter referred to as the Second Plan)

The second plan was established with the participation of advisory committees composed of 11 experts who were recommended by relevant ministries, research services for related basic plans, related ministries and municipalities. Here, we acknowledge the contribution of social capital production to the national economy and suggest the importance of volunteering. The second plan, like the first plan, covers five policy areas. Each policy area consists of volunteer culture and participation, volunteer support infrastructure, volunteer management and development, volunteer research and evaluation, and volunteer international cooperation. The following table 3 is a detailed project for each policy area of the Second National Basic Plan.

Table 3. Details of the 2nd National Basic Plan

Policy area	Policy task	Detailed task	
1 . Volunteer culture and participation	1-1. Establishment and diffusion of volunteer culture	1-1-1. Definition of volunteer concept of unification	
		1-1-2. Promote voluntary and non-voluntary values of volunteering	
		1-1-3. Openness of volunteering and promotion of participation of the underprivileged	
		1-1-4. Volunteer Publicity and Campaign	
	1-2. Government - Business - Civil Society Partnership	1-2-1. Trial Lifelong Education Volunteer University Operation	
		1-2-2. Volunteer events and festival support	
	1-3. Expand volunteer participation by life cycle	1-3-1. Activate student volunteer	
		1-3-2. Activation of volunteer talent sharing	
		1-3-3. Activate retirees and seniors volunteering	
	2. Volunteer Support Infrastructur e	2-1. Institutional and policy improvement	2-1-1. Revision of basic laws and related laws
2-1-2. Activation of volunteer promotion committee			
2-2. Building a physical infrastructure		2-2-1. Creating a Volunteer Promotion Fund	
		2-2-2. Improve volunteer computer system	
2-3. Establishing private infrastructure		2-3-1. Strengthening role of representative body of private volunteers.	
		2-3-2. Revitalize the role of volunteer center	
		2-3-3. Expand volunteer organization and support	
3. Volunteer managemen t and developmen t		3-1-3. Support volunteer manager training and training programs	3-1-1. Development and dissemination of standard model of volunteer activity management system
			3-1-2. Standardize volunteer activity manager training and qualification process
	3-1-3. Support volunteer manager training and training programs		

*A Study on the Voluntary Activation of Jeollanam-do by linking
with Korea's National Volunteer Basic Plan*

Policy area	Policy task	Detailed task
3. Volunteer management and development	3-2. Development of volunteer citizen leadership and volunteer program development	3-2-1. Foster a community volunteer leader
		3-2-2. Development of volunteer specialization program by department / region
4. Volunteer Research and Evaluation	4-1. Survey of volunteer activities	4-1-1. National Survey of Volunteer Activities
		4-1-2. Survey of volunteers by sector
		4-1-3. Volunteer Center Operation Survey
		4-1-4. Volunteer Group Operation Survey
	4-2. Support volunteer research activities	4-2-1. Korean Volunteer White Paper Published in Korean and English
		4-2-2. Support volunteer journal publishing
		4-2-3. Support policy research activity
	4-3. Improvement and evaluation of volunteer evaluation system	4-3-1. Improvement and implementation of volunteer center evaluation system
		4-3-2. Government Volunteer Policy Award and Evaluation.
5. Volunteer Global Cooperation	5-1. Activation of volunteer international development cooperation	5-1-1. Development of volunteer international development cooperation program
		5-1-2. Overseas volunteer program maintenance and development
	5-2. Activation of volunteer international exchange	5-2-1. Volunteer international exchange program maintenance and development
		5-2-2. Expansion and enhancement of international exchange network
	5-3. Construction of volunteer international business management system	5-3-1. Construction of volunteer international business management system

Source: Ministry of Government Administration and Home Affairs (2013). Second National Basic Plan for Promotion of Volunteer Activities (2013 ~ 2017)

The second plan defines the basic direction as spiritualization of public-private partnership, strengthening of volunteer value, government, business and civil society

partnership, cross-sectoral approach, monitoring and evaluation. In addition, the basic direction is to establish an empirical basis and basis for the establishment of the Third National Basic Plan. Based on this, the second plan will mature the volunteer culture through citizen participation.

(3) The Third National Basic Plan (hereinafter referred to as the Third Plan)

In the third phase, 11 government ministries and 17 municipalities participated in the establishment of the project, and after extensive consultation process including experts Delphi survey, survey and public hearing, volunteer type according to age group such as student, middle age, And plans for the volunteer work of the whole nation.

The Third National Basic Plan is to present the vision of "Growing volunteer, Korea together" as a vision, △ Volunteer culture and participation, △ Volunteer infrastructure, △ Volunteer management and business, △ Volunteer research and evaluation, Voluntary international exchange and cooperation, 17 policy issues, and 36 detailed tasks. The 3rd Basic Plan emphasizes the new value of volunteerism such as citizenship and publicity and promotes the voluntary service of volunteer in the civil society through the project of youth volunteer group carrying out national and local agenda related projects, Service models will be discovered and disseminated.

In order to promote the volunteer participation culture, the participation level and area are expanded. In order to revitalize the volunteer service by the life cycle, 'career-customized service' (Ministry of Education) centered on student selection, 'self-(Leisure), carefully-worn and elderly volunteers (Welfare Department), and plans to continue expanding volunteer programs tailored to each area of work such as disaster, environment, culture, education, and welfare to be. In addition, the volunteers in the specialized areas such as talent donation and pro bono are also emphasized to enhance the efficacy of activities and to create social value. The third basic plan emphasizes the new value of volunteerism such as citizenship and publicity, In order to deepen the role of volunteering in society, we plan to identify and spread social problem solving volunteer models such as Youth Volunteer Group project carrying out national and local agenda related projects.

Meanwhile, in order to further upgrade and specialize the related infrastructure and management system to support citizen's volunteer activities, the nationwide volunteer center will be privatized to establish a self-centered platform for self-government and establishment of a national organization for systematic support of volunteer activities. We will deepen related education to nurture professional volunteer workforce and strengthen the guarantee of human rights and safety of volunteer field.

Furthermore, we will gradually link up the volunteer portals that are operated by each department so that we can use them as a single ID. We will also build a big data-based volunteer service and supply matching service in the portal.

In addition, we are seeking ways to improve the performance management system based on current time certification and to recognize volunteer activities based on content and value. The third plan covers the five policy areas as well as the first and second plans. Each policy area includes volunteer culture and participation, volunteer support infrastructure, volunteer management and development, volunteer research and evaluation, volunteer international cooperation

The following table 4 is a detailed project of the 3rd National Basic Plan policy area.

Table 4. Details of the 3rd National Basic Plan

Policy area	Policy task	Detailed task
1 . Volunteer culture and participation	1-1. Extension of civic value of volunteering	1. Expanding the recognition of citizen-based volunteerism * Fostering volunteer citizen leaders
		2. Public-based volunteer model support * Social Problem-Solving Volunteer, Youth Volunteer Group
	1-2. Improved access to daily volunteer participation	3. Development and expansion of volunteer programs by life cycle * Volunteer for youth, family, new middle-class, civil servants
		4. Access to volunteer time and space participation * Expanding online service, living unit
	1-3. Expansion of volunteer participation area of society base	5. Establishment of volunteer base for special social area * Volunteer support for disaster relief, establishment of volunteer base for specialized social areas for each department
		6. Expansion of public sector volunteering * Local governments and government offices
	1-4. Promote volunteerism and improve campaign impact	7. Expansion of participation in volunteer work * Volunteer participation events and campaigns by sector
		8. Strengthening public relations to promote volunteer participation culture * Volunteer brand spread, promotion method

2. Volunteer Infrastructure	2-1. Improvement of volunteer public support organization	1. National unit volunteer support organization established * Established independent voluntary central organization
	2-2. Strengthening the volunteer center's civic center and professional capacity	2. Enhancement of volunteer governance in the country and region * Volunteer promotion promotion activation, local promotion promotion 3. Volunteer Center Raise the civic center and expertise * Civilization, budget and manpower expansion and management 4. Diversification of Volunteer Center Resources * Allow voluntary donation of funds by the center, private funding 5. Establishment of cooperation system between related sectors of volunteer center * Enhancement of regional center role, external cooperation
	2-3. Functional innovation of volunteer portal	6. Enhancement of user-centered volunteer portal service * Big data matching service, inter-portal ID 7. Established voluntary participation certification system * Participation authentication output function in portal

Policy area	Policy task	Detailed task
3. Volunteer Management and Business	3-1. Volunteer Manager Strengthen professional competence and social position	1. Strengthen volunteer manager education execution system * Educational contents advancement, designation of education specialized agency 2. Establishment of Social Status of Volunteer Managers * 'Volunteer Manager' job listing, Code of Ethics
	3-2. Volunteer Support and Management Strategy Innovation	3. Development and implementation of educational program for each stage of volunteer growth * Standard education contents development, education task force 4. Diversification of social recognition methods for volunteering * Expansion of award, diversification of recognition and compensation program 5. Ensure human rights and safety in the volunteer field * Development of on-site human rights guidelines, expansion of accident insurance 6. Expanding the scope of volunteer demand and strengthening management * Find new customers in the non-profit sector, quality of activities

*A Study on the Voluntary Activation of Jeollanam-do by linking
with Korea's National Volunteer Basic Plan*

	3-3. Volunteer Strategy Project and Project Support	<p>7. Talent donation and pro bono activation * Talent donation, pro bono activity model spread, platform</p> <hr/> <p>8. Support localized and innovative volunteer programs * Solving community problems and community programs</p>
4. Volunteer Research and Evaluation	4-1. Support volunteer research and academic activities	<p>1. Systematic volunteer research and development * Enhancement of policy research functions such as designation of research institute</p> <hr/> <p>2. Building a vigorous volunteer research ecosystem * Expansion of R &D support, support for private academic events and seminars</p>
	4-2. Improvement of volunteer survey	<p>3. Conducted a nationwide and local volunteer survey * 2020 National Survey Survey, Wide Area Survey</p> <hr/> <p>4. Improvement of volunteer survey system * Standardization of actual survey items, increase of sample number in the mid- to long-term</p>
	4-3. Publication and preservation of volunteer records	<p>5. Publish volunteer statistical information and records * Statistical information on sustainable production, annual report, white paper</p> <hr/> <p>6. Systematic management and utilization of volunteer records * Expansion of archive utilization, permanent exhibition hall</p>
	4-4. Development and implementation of voluntary evaluation system	<p>7. Establishment of Appropriate Evaluation System of Volunteer Policy * National Basic Planning Performance Evaluation, Local Government Joint Evaluation Method</p> <hr/> <p>8. Evaluation of voluntary economic and social impact * Economic and Social Impact</p>
5. Volunteer International Exchange and Cooperation	5-1. Activation of volunteer international development cooperation	<p>1. Promoting organized multidisciplinary overseas volunteer projects * Abroad volunteer dispatch, support for strengthening volunteer capacity of developing country</p> <hr/> <p>2. Effective performance evaluation of overseas volunteer projects * Performance evaluation by institution and business, establishment of medium-term performance system Promotion of multi-sector overseas volunteer projects</p>
	5-2. Activation of volunteer	3. Expanding links with international volunteer events

	international exchange	* Participation in international events · Domestic attraction
		4. Diversification and improvement of international exchange network * Diversification and exchange program of partnership institutions
	5-3. Cooperation and cooperation between domestic and foreign voluntary sectors	5 Strengthen partnership and return system between domestic and foreign voluntary sector * Establishment of a system of exchanges and a system of exchange between domestic and foreign volunteers

Source: Ministry of Government Administration and Home Affairs (2018).The Third National Basic Plan for Promoting Volunteer Activities (2018-2022)

The third plan is a paradigm for expanding volunteer value based on citizenship and publicity, and aims to implement volunteer ecosystem of linking and circulation with structure of volunteer governance implementation of cooperation and responsibility. In addition, we plan to expand volunteer models for social problem solving through the promotion of volunteering by lifecycle and the establishment of nationwide infra infrastructure centered on the private sector.

III. Conclusions and Recommendations(Activation plan)

In 2018, the National Basic Plan for the Third Volunteer Promotion is under way. In other words, volunteer culture and participation, volunteer infrastructure, volunteer management and business, volunteer research and evaluation, volunteer international cooperation and cooperation are under way with the vision of growing volunteer, together with Korea. In particular, the Third Basic Plan aims to highlight the new value of volunteering and deepen the role of volunteer service in civil society. Therefore, the development and dissemination of specialized volunteer programs that meet the regional characteristics of 22 basic autonomous entities in Jeonnam should be done. In addition, since Suncheon city takes mixed direct management mode, it shows different aspect from other local government and it is requested to develop specialized program for it.

Also, it is necessary to develop a legal support system to promote local volunteer activities. The guidelines for activating the comprehensive volunteer center proposed by the Ministry of Government Administration and Home Affairs include information on how to stop or add insurance or deductions for volunteers, how to enter the volunteer center, how to organize and operate the volunteer center, It must be included in the Support Ordinance. Therefore, it is necessary to enact the bylaws and to review the

contents in the areas where the ordinances have already been enacted, so that the contents of the missing parts should be supplemented and revised. Therefore, it is necessary to develop and disseminate specialized volunteer programs in accordance with the regional characteristics of the 22 basic local governments in Jeonnam. In addition, since Suncheon city takes mixed direct management mode, it shows different aspect from other local government and it is requested to develop specialized program for it.

Meanwhile, public-private partnership should be strengthened, but mutual cooperation and reasonable support system should be agreed upon. Local governments and municipalities should be aware of the importance of volunteering and concentrate on promoting publicity and strengthening partnerships in local councils and communities.

Finally, quantitative expansion of budgets and scales can not be an alternative, and the efficiency of qualitative maintenance should be maximized. It has been found that it is reasonable to meet the qualitative standard for strengthening the expertise so that the full-time human resources of the comprehensive volunteer center can be effectively managed rather than expanding quantitatively. Therefore, in reality, the budget should be considered considering the level that can meet the minimum conditions for strengthening the professionalism of the center worker and maintaining the durability of the work. In addition to satisfying these conditions, it is necessary to ensure that professional activities can be settled in accordance with the role assignment among the employees for a reasonable center operation.

In addition, it is necessary to establish the supply and demand for volunteer activities and to strengthen the public-private partnership, but mutual cooperation and consensus must be reached for a rational support system. Local governments and municipalities should be aware of the importance of volunteering and concentrate on promoting publicity and strengthening partnerships in local councils and communities.

Finally, quantitative expansion of budgets and scales can not be an alternative, and the efficiency of qualitative maintenance should be maximized. It has been found that it is reasonable to meet the qualitative standard for strengthening the expertise so that the full-time human resources of the comprehensive volunteer center can be effectively managed rather than expanding quantitatively. Therefore, in reality, the budget should be considered considering the level that can meet the minimum conditions for strengthening the professionalism of the center worker and maintaining the durability of the work. In addition to satisfying these conditions, it is necessary to ensure that professional activities can be settled in accordance with the role assignment among the employees for a reasonable center operation.

In addition, it is necessary to establish the supply and demand for volunteer activities and to strengthen the public-private partnership, but mutual cooperation and consensus

must be reached for a rational support system. Local governments and municipalities should be aware of the importance of volunteering and concentrate on promoting publicity and strengthening partnerships in local councils and communities.

References

- Kim Young Ho (2005). A Study on the Satisfaction and Persistence according to the Participation Type of Youth Volunteer Activity - Focused on Ulsan Metropolitan City. *Youth Studies*, 12 (1).
- Kim Sung Hye (2017). A Study on the Improvement of Volunteer Support System - Focused on the Volunteer Center of the Borough of Seoul Metropolitan Government -.
- However (2014). "Volunteerism". The Academy.
- Ji Hoon (2008). "Tendency of Customization and Direction of Amendment of Law after the Implementation of the Basic Act on Volunteer Activities". Korea Volunteer Forum National Assembly Hearing.
- Ministry of Government Administration and Home Affairs (2007). "The First National Basic Plan for Promotion of Volunteer Activities ('08 -'12).
- Ministry of Government Administration and Home Affairs (2012). "Second National Basic Plan for Promoting Volunteer Activities (2013-2017)".
- Ministry of Government Administration and Home Affairs (2016). "Volunteer Center Operation Guidelines for Volunteering"
- Ministry of Public Administration and Security (2018). Volunteer Promotion 3rd National Basic Plan ('18 ~ '22)
- Choi, Mi - Hee, Lee Hye - Rim (2017). The Actual Condition of Volunteer Service in Seoul and its Activation Plan. Seoul Research Institute
- Hong Bong Sun (2010). Constitution and Application of Analysis Criteria for Activation of Volunteer Center. *Social Science Research*, 26 (2). 201-228.
- Studer, S. (2016). Volunteer Management: Responding to the Uniqueness of volunteers. *Nonprofit and Voluntary Sector Quarterly*, 45(4). 688-714.
- 1365 volunteer (sharing portal).

ENTREPRENEURIAL EDUCATION IN MYANMAR WITH THE REFERENCE TO KOREAN EXPERIENCE

*Nu Nu Lwin**

Yangon University of Economics

ABSTRACT : Entrepreneurship has long been recognized as a major contributor to country's economy and serve as a backbone of economic growth of developing economies. In Myanmar, the government endeavors to promote entrepreneurship and SMEs sector in its transition to market-oriented economy. However, SMEs in Myanmar are still facing several challenges to survive and compete with flooding numerous imported products under the context of regional economic integration. Among several important factors for SME development, entrepreneurial education is fundamental one to nurture start-up business and promote entrepreneurial activities. This paper aims to identify the needs for entrepreneurial education in Myanmar with the references to Korean experiences in promoting entrepreneurial activities. The study found that government's role in building up and upgrading human capital is a main contribution factor of SME development in Korea. The government laid down the policies that nourish the capabilities of young generation and encourage them to engage in entrepreneurial activities. In Myanmar, even though entrepreneurial education programs have been offered by public organizations including universities and partly supported by private organizations including not-for-profit organizations, young generation are still weak in capabilities for new business start-ups. This paper proposed some policy recommendations for promoting entrepreneurial education in Myanmar.

Key words : Entrepreneurship, SMEs, entrepreneurial education, human capital, new business start-up.

I. Introduction

Entrepreneurship has long become recognized as a powerful tool for creating jobs and serving backbone of an economy. Myanmar government has given special attention

* Professor, Dept. of Management Studies, Yangon University of Economics, Email: drnunulwin.yie@gmail.com

to promote Myanmar SMEs through creating a conducive business environment for SMEs. In SME Policy published in 2015, the government has prioritized human resource development, support for technical development and innovation, capital funding, better infrastructure, gaining a foothold

in the marketplace, reasonable taxes and regulations, and the creation of suitable businesses. However, SMEs in Myanmar face several challenges mainly access to finance, market access, R&D in technology, managerial skill, and human resource development. Among these challenges, developing human resources is critical and well-equipped entrepreneurs are fundamental for development of SMEs in Myanmar. To this end, entrepreneurial education can develop the insights needed to discover and create opportunities for entrepreneurs and gain the ability to successfully start and manage SMEs.

Korea nowadays has one of the most promising and emerging nations in Asia for start-ups and business ventures. It has witnessed a great upsurge of entrepreneurship and proliferation of SMEs since late 1990s. This is a significant development given the fact that large conglomerate enterprises (chaebol) have historically dominated the Korean economy. Nowadays, the new ventures and SMEs account for a bigger share of the economy and contribute the country's economic development. For this reason, it is worthwhile to study how Korea nurtured their manpower and promoted entrepreneurial activities and to learn how their policy environment create to upsurge of entrepreneurship and SMEs in Korea.

Therefore, this study is conducted with the aim to identify the needs for entrepreneurial education in Myanmar with the references to Korean experiences and to find out the possible measures to nurture entrepreneurial start-up businesses in Myanmar.

II. Literature Review

1. Role of Entrepreneurship

Entrepreneurship is a distinctive character that defines the entrepreneurs different from managers or employees (Carland et al., 1984). Entrepreneurs are known to search for and take innovative, proactive and risk-taking actions. Entrepreneurship is a defining characteristic of entrepreneurs who continuously search and identify new business opportunities and create new values for growth (Brockhaus, 1980).

Entrepreneurship is regarded as one of the most important determinants of economic development of a country. History of the economic development of nations

bears evidence to the fact that commitment of entrepreneurs through capital formation, technical breakthrough, market expansion and organization of manufacturing units was instrumental and the emergence of new groups in society willing and able to supply capital and enterprise is a crucial aspect of economic progress.

Entrepreneurship is one of the key elements that will lead to a successful business performance under highly uncertain business conditions. Drucker (1985) argued that entrepreneurs are those that sense changes in the future and find ways to adapt to this change.

Entrepreneurs who can use this change as a chance will affect the productivity of resources and earn entrepreneurial profits. To start a business, an entrepreneur should have an ability to identify entrepreneurial opportunities at the beginning. From the sensing an opportunity to creating goods and services and delivering them in hand of customer normally takes a long time and require strong endeavor to do so. It is critical for entrepreneurs to make the rational decision to earn profits despite the risks that follow with it. To realize its goals, entrepreneurs need to tolerate high risks from starting a business since he is pursuing an opportunity through a venturesome approach.

In any society, the rate of technical progress and so of economic development depends mainly on the number and ability of entrepreneurs available to do it. Throughout the world over past decades, entrepreneurs have created millions of new business. Entrepreneurship and SMEs play a key role in leading the nation toward certain basic economic objectives such as creating more employment opportunities or new technological innovations, helping to achieve high economic growth and higher living standards. Ironically, the development of entrepreneurship and SMEs depend mainly on how much the economic policy of the nation prosper them while the development level of a country partly relies on the development of entrepreneurship and SMEs.

2. Entrepreneurial Education

Entrepreneurial education is a process in which all series of education and training activities provide entrepreneurial behavior, entrepreneurial knowledge, and the feasibility of business activities. As traditional business education fails to meet the changing needs of the environment, entrepreneurial education that enhances entrepreneurial attitudes and abilities has increased in the undergraduate and graduate schools of universities. While traditional business education emphasizes the establishment and operation of large enterprises, the entrepreneurial programs emphasize creativity, imagination, proactiveness, and risk taking that can respond to an uncertain environment (Jones & English, 2004). Additionally, entrepreneurship education attempts to encourage entrepreneurs to develop or start their own business (Linan, 2004). Entrepreneurial

education provides learning opportunities to those who are interested in job creation or small business development, organizing resources at risk, and building a business (Bechard & Toulouse, 1998). In other words, entrepreneurial education focuses on the expertise used to discover and commercialize business opportunities.

Many scholars pointed out that entrepreneurship courses not only provide students basic knowledge and skill for entrepreneurship but also make students have a positive attitude towards entrepreneurship. Timmons (1994) claimed that entrepreneurial education should focus entrepreneurship skills such as the ability to create high performing culture, the ability to connect and network and the ability to lead and work in teams. To succeed, entrepreneurs should have the necessary skills to deal with entrepreneurial problems. Improved skills may increase students' confidence on entrepreneurship and promotes the chances of entrepreneurial success.

Many researchers claimed that entrepreneurship can be learned and taught. Through entrepreneurship education, students can study the factors that lead to failure in entrepreneurship and can avoid the same mistakes. Entrepreneurship education may also reduce the negative image of entrepreneurship and business failure.

Entrepreneurial education can legitimize the entrepreneurship as a viable career option and develop entrepreneurial culture among students (Kirkley, 2017). Entrepreneurship courses may help students find their role models to become entrepreneurs. According to Peterman and Kennedy (2003), after finishing entrepreneurship education, participants showed significantly higher perception of desirability and feasibility of starting a business.

Kuttim et al. (2014) confirmed, based on the empirical study of 17 country students, participants in entrepreneurship education showed higher entrepreneurial intentions. Through the empirical investigation on science and engineering students, Souitaris et al. (2007) found that because of psychological inspiration, entrepreneurship programs raised the overall entrepreneurship intention. Noel (2001) also highlighted entrepreneurship majoring graduate students showed stronger intentions to start their businesses because education could affect self-efficacy.

III. Entrepreneurial Education in Korea

Over the past 60 years, Korea achieved remarkable economic development from absolute poverty of GNP per capita of \$60 to becoming an OECD member nation with \$20,000 GNP per capita. Korea's economy grew as one of the world's top 10 economies and world's 7th largest trading nation in 2016. The driving force for Korea's high economic growth was the utilization of human resources, whereas other natural

resources are scarce. One of the reasons for remarkable growth of Korea is its emphasis on developing human resources in their education system mainly focus on entrepreneurial education.

Drucker (2003) appraised Korea as a country with the strongest entrepreneurship in the world. He stated that first generation entrepreneurship at the early stages of growth was not created through combining innovative ideas or developing new products, but by reinterpreting preexisting production factors. It was the spirit of creating the opportunities out of nothing that resulted in the entrepreneurship with "can-do" spirit.

The demand for human resources in the industry was filled by people trained in the required technology through the public education system. The public entrepreneurship education system, led by the central government, has been developed with specific purposes, ranging from the youth BizCool program in 2002, a support program for graduate schools of entrepreneurship in 2004, startup education for college students in 2005, and the Technology Startup Academy. Basically, there are four entrepreneurship education programs for teenagers, college students, and adults, established under the Small and Medium Enterprise Establishment Act. Among others, universities are the most active in providing courses and internship opportunities.

BizCool Program: Startup and management education programs for elementary, middle and high school students to educate them on the entrepreneurial spirit and the ability to commercialize their ideas, and to prevent youth unemployment by enhancing self-employment ability.

College Entrepreneurship Education: Spread a startup environment and enhance understanding of startups by educating potential entrepreneurs on startup capacity, such as forming business minds and entrepreneurial spirit for college students. University entrepreneurship education focus on support for opening and managing entrepreneurship courses in the regular curriculum with credits, while university startup clubs promote developing marketable startup items, business plan competitions, and study abroad opportunities to support internationally cooperative activities.

Graduate School of Entrepreneurship: Securing business competitiveness for global competition with entrepreneurship education for graduate students by systematically spreading knowledge and entrepreneurial spirit to potential entrepreneurs or entrepreneurs with advanced technology and original ideas.

Technology Startup Academy: The academy is for adults with job experience who may want to start their own venture business, usually, in the field of their previous work. It is likely that they don't have startup and management knowledge, the government provides the academic program through universities and public institutions. It includes a two-part program: the first step is to enhance startup and management knowledge and capacity for the creation and the early stage of operation of the new

firm, and the second step is to increase the new firm's viability through management consulting services, such as accounting, legal, financial, and mentoring services.

Regarding consistency of qualifications, the National Technical Qualifications Act was enacted in 1973 to merge various certification regimes operated by the individual ministries and agencies and to introduce an officially unified certification processes. The qualifications system is operated by the Human Resources Development Service (HRDS) which was transformed in 1991 from Vocational Training Management Corporation established in 1982. HRDS manages the institutions responsible for training of the instructors for public training institutes and established also operates a vocational training research institute.

Moreover, in order to reinforce SME manpower education and training, the SME Training Institute established in 1982 with the aims of promoting technologies and managerial skills under the SMIPC provides various educational opportunities for employees. Provincial Training Institutes are also established to assist SMEs in meeting their manpower needs. In addition, Korea Technical Education University was established in 1991. To address the labor shortage especially in 3D shops, Industrial Technology Training Systems for foreigners was set up in 1993 and the elderly volunteer groups were organized in 1996.

Korean Polytechnic Colleges (currently there are 40 campuses) were founded by reorganizing various vocational specialization schools and technical colleges in 2005 with the aim of fulfilling the skill-labor demand of the industries. Furthermore, SME Management and Technology Service Teams provide specialize consulting and on-the-spot services to firms across the nation.

At the same time, Korea Chamber of Commerce and Industry (KCCI) operates vocational training centers in competition with public Polytechnic Colleges. The KCCI places emphasis on (i) the course development to adapt to changing industry demands, (ii) improvement in training methods, (iii) increased utilization of training facilities, (iv) flexibility in training occupations, and (v) reduction in vocational training expenses. Some teaching innovations were introduced such as the utilization of simulation classes, modular teaching programs, programmed teaching and learning materials, and hiring of external instructors.

Moreover, the Ministry of Labor initiated the e-Learning support policy as a part of a skills development system, so that the foundation is laid to provide lifetime education opportunities for all workers. Since then, the number of incumbent workers participating in enterprise e-Learning increased gradually and it has well positioned as an important methodology for training of incumbent workers.

IV. Entrepreneurial Education and Human Resources Development in Myanmar

While human resources development plays a critical role in development of SMEs, Myanmar is still facing several challenges in this regard. Weak linkage between education and industry sector, mismatch in demand and supply of labor market, limited improvement in skill and know-how of trainers and instructors in technical and vocational schools are main issues that to be tackled for human resources development of SMEs, in general, and lack of entrepreneurial promotion, in particular, in Myanmar.

Although entrepreneurial education is not exactly specified in national education policy, the government articulates entrepreneurial education policy in drafted SME policy, industrial policy and national economic development plan. Previously, Ministry of Science and Technology (MOST) is mainly responsible for Technical and Vocational Education in the Public sector. It establishes (4) Centre of Excellence (COE), and (28) Technological Universities.

For entrepreneurial education, teaching materials and curriculum has yet to offer in basic education. However, (36) Technical High Schools under Ministry of Education and (6) Industrial Training Centers under Ministry of Industry are established to provide technical and vocational education for those who dropped-out from junior high school.¹⁾

At higher education level, in Myanmar, three universities: Yangon University of Economics, Monywa University of Economics, and Meiktila University of Economics offer subjects on entrepreneurship and small business management in its undergraduate and post-graduate courses. Despite national network of entrepreneurial education among universities has yet to establish in Myanmar, all Universities of Economics annually review the courses including subjects on entrepreneurship at joint meeting of Board of Studies of these Institutes. These universities adapted their curriculum with the syllabus agreed under ASEAN University Network (AUN) for bachelor and master degree in Business Administration courses even though they cannot offer yet a degree in entrepreneurship.

Every Universities of Economics has the internship program that is compulsory for business-major students. These universities also regularly conduct seminars and workshops relating to SMEs in collaboration with private sector. In addition, private sectors including trade associations and private schools regularly held business plan competitions with the collaboration of Universities of Economics. They also provide customized training courses and offer awards and scholars for business major students in the universities.

1) http://www.smedevelopmentcenter.gov.mm/?q=en/hrd_eng

Moreover, Myanmar-India Entrepreneurship Development Centre (MIEDC) has been established since 2008 at Yangon University of Economics with the collaboration of Entrepreneurship Development Institute of India (EDII) under Initiative for ASEAN Integration (IAI) program. MIEDC offers several short-courses to public relating to entrepreneurship including Entrepreneurship Development Course, New Enterprise Creation Course, and etc.

Moreover, 20 registered technological high school also serve as technological incubators in Myanmar.²⁾ Now, two incubators from Yangon and Mandalay are being planned to establish as business incubators through collaboration of SDC and MOST with the support of GIZ.

Furthermore, Yangon University of Economics has established a Business Skills Development Center at its campus since 2014, with the collaboration of PepsiCo Company and United Nations Educational Scientific and Cultural Organization (UNESCO) with the aims to create employment opportunities for the young people, to improve their skill and knowledge, and to nurture skill workforce for private and public sectors.

As non-formal Education, Ministry of Industry operates six Industrial Training Centers around the country. Ministry of Labor, Employment, and Social Security also offers entrepreneurial education at three Skill Training Centers mainly focus on vocational training and skill development. Moreover, Republic of the Union of Myanmar Federation of Chambers of Commerce (RUMFCCI), Myanmar Industrial Association (MIA) and Myanmar Engineering Society (MES) provide several courses supporting for entrepreneurial learning and SME management although these programs can be offered at the limited location especially in main cities.³⁾ Moreover, private sector institutions and non-governmental organizations (NGO) conduct several entrepreneurial education courses in different areas. (Appendix-A)

SMEs play a significant role in the country's economic, social and political development through employment creation, resource utilization, income generation, and promotion of investment from local and abroad. However, recently, SMEs in Myanmar are facing several challenges to achieve economies of scale and competitiveness to penetrate regional and international market under the liberalization measures on trade and investment especially in ASEAN Economic Community (AEC). Among several challenges, lack of skills to start-up and develop a business is a major hurdle for promoting entrepreneurship and developing SMEs in Myanmar.

The main barriers in human resources development are skill mismatch between demand and supply of labor market, weak linkage between academic and SMEs sector for promotion of entrepreneurial learning and technical and vocational skill

2) http://www.smedevelopmentcenter.gov.mm/?q=en/incubation_center_eng

3) http://www.umfcci.com.mm/index.php?_2MnJjaWc=_1dHJhaW5pbmc&http://www.umfcci.com.mm/index.php?_2MnJjaWc=_1ZG9tTVGYWN0

development, lack of unified skills standards and certification system, limited resources for business incubators and science parks for upgrading capability of entrepreneurs, lack of strategy for training need analysis, curriculum development and vocational training system.

These weaknesses are mainly related with government policy and government agencies and authority concerns are mainly responsible to develop institutional and physical infrastructures and to create conducive environment for SMEs in order to overcome such challenges. On the other hand, the encouraging situations for SME can be found out as effective representation of SME interest and supports for international market expansion. The main supporting factors is taking part by the institutions especially from private sector including RUMFCCI, MIA, MES, and local non-governmental institutions which are actively participating promotion of SMEs' interests including entrepreneurial education. In fact, these organizations mainly represent the private sector and naturally, they are trying to promote their interests. Nevertheless, it can be recognized as encouraging points of SME development in Myanmar.

The study on the experiences of Korea in entrepreneurship education has some useful implications for Myanmar SME sector. The experience of Korea in its distinguishing education policy of government in promoting entrepreneurial education can be greater use in drawing lessons for other developing countries like Myanmar.

Entrepreneurship can be viewed as the main factor for Korea to have created global corporations like Samsung, Hyundai and LG. The reasons for Korea's educational development were the passion for education for those individuals who recognize learning as the fairest means of raising the individual's socio-economic position and the attention and support by both family and society who recognize the need for education. The government also strategically made large efforts to make education one of the key forces for national development.

Based on the experiences of Korea, this study proposes specific policy options for action to overcome the challenges and thereby, in order to promote entrepreneurial education and to develop SMEs in Myanmar. The most important agenda is to inaugurate an institutional framework including strong SME policy, strategies, and effective and well-functioning institutions for promoting entrepreneurship in Myanmar. In addition, the cooperation and coordination between political, industrial and academic sectors is crucial for to promote entrepreneurship and SMEs. The specific policy recommendations are summarized below.

√ To facilitate entrepreneurial learning in primary and secondary schools by equipping teachers with knowledge and skills and teaching material;

√ To promote entrepreneurial education by offering the degree in entrepreneurship

at least in three Universities of Economics;

√ To facilitate the partnerships between academe and SME sector to remedy the skill mismatch in demand and supply of labor market;

√ To establish business incubators and science parks to upgrade and facilitate the capability of entrepreneurs and SMEs;

√ To create an environment which encourage and grant innovativeness and R&D activities;

√ To set up the linkage and network between academic institutions and business sectors for promoting innovativeness of SMEs;

√ To establish a system of accreditation of training program providers.

By adopting and implementing above mentioned measures, SMEs can be expected to contribute the economic, social and political development of Myanmar through better employment opportunity, high tax revenue, and overall improvement in national technological capabilities. At the same time, SME sector will have better investment choices, accessible ways of financing, acquisition of new technology and innovation, and capable human resources and thus, are expected to be capable of facing the challenges and realizing the fruitful benefits in the foreseeable future.

REFERENCES

- Bechard, J.P. & J.M. Toulouse (1998), "Validation of A Didactic Model for The Analysis of Training Objectives in Entrepreneurship", *Journal of Business Venture*, 13, 317–332.
- Brockhaus, R.H. (1980), "Risk Taking Propensity of Entrepreneurs", *Academy of Management Journal*, 23(3), 509-520.
- Byun, C., C.S. Sung, J.Y. Park, & D.S. Choi, (2018), "A Study on the Effectiveness of Entrepreneurship Education Programs in Higher Education Institutions: A Case Study of Korean Graduate Programs", *Journal of Open Innovation: Technology, Market, and Complexity*, 4(26). Available at <www.mdpi.com/2199-8531/4/3/26/pdf>
- Carland, J.W., F. Hoy, W.R. Boulton & J.A.C. Carland (1984)," Differentiating Entrepreneurs from Small Business Owners: A Conceptualization", *Academy of Management Review*, 9(2), 354-359.
- Cheong, S. & H. Kim (2001) "An Exploratory Study on Success factors in Small Business Startups", *The Korean Venture Management Review*, 4(2).
- Cho, Y.H. & J. Lee, (2018), "Entrepreneurial Orientation, Entrepreneurial Education and Performance", *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(2), 124-134. Available at <<https://doi.org/10.1108/APJIE-05-2018-0028>>
- Drucker, P. F. (1985) *Innovation and Entrepreneurship: Practice and Principles*, New York: Harper Business.
- Drucker, P.F. (2003), *Managing in the Next Society*, St. Martin's Press.
- Friedl H. & R. D'Hauwers (2014), *Starting Up in Myanmar: A First Guide*. Available at <<https://e27.co/starting-myanmar-first-guide-20141119/>>
- Han, S.H. ICT development in Myanmar, Tokyo Institute of Technology, Available at <www.ocw.titech.ac.jp/index.php?module=General...0...pdf>
- Jones, C. & J. English, (2004), A Contemporary Approach to Entrepreneurship Education. *Education Training*, 46, 416–423.
- Kim, L. & J.B. Nugent (1999) "Korean SMEs and Their Support Systems", *Fulfilling the Export Potential of Small and Medium Firms*. Boston: Kluwer.
- Kirkley, W.W. (2017), "Cultivating Entrepreneurial Behavior: Entrepreneurship Education in Secondary Schools", *Asia Pacific Journal of Innovation and Entrepreneurship*, 11(1), 17-37.
- Korea National Statistical Office (2001) *2000 Census on Basic Characteristics of Establishments*, Seoul, Korea.
- Kourilsky, M.L. (1995), *Entrepreneurship Education: Opportunity in Search of Curriculum*, Center for Entrepreneurial Leadership, Kansas City: Ewing Marion Kauffman Foundation.
- Kuttim, M., M. Kallaste, U. Venesaar, & A. Kiis, (2014), "Entrepreneurship Education at University Level and Students' Entrepreneurial Intentions", *Procedia-Social and Behavioral Sciences*, 110, 658-668.
- Linan, F. (2004), *Intention-Based Models of Entrepreneurship Education*, Seville: University of Seville.
- Lee, J.W. & S.D. Chang (1998) "A Conceptual Study on the Success Factors of High-Tech Ventures", *The Korean Venture Management Review*, 1(2)
- Milio, S., E. Garnizova & A. Shkreli (2014), "Assessment Study of Technical and

ENTREPRENEURIAL EDUCATION IN MYANMAR
WITH THE REFERENCE TO KOREAN EXPERIENCE

- Vocational Education and Training (TVET) in Myanmar", *ILO Asia- Pacific Working Paper Series*, International Labour Organization.
- Nay Pyi Taw News (2013) U Thein Sein delivers an address at Small and Medium Enterprises Development Central Committee meeting at Presidential Palace. 14 January 2013. Nay Pyi Taw, Myanmar.
- Noel, T.W. (2001), "Effects of Entrepreneurial Education on Intent to Open a Business", *Frontiers of Entrepreneurship Research*, Babson Conference Proceedings.
- Nugent, J.B & S.J. Yhee (2002) "Small and Medium Enterprises in Korea: Achievements, Constraints and Policy Issues", *Small Business Economics*, 18(1-3), 85-119.
- Ozsoy, O., D. Oksoy, & K. Kozan (2001) *The Characteristics of Turkish Entrepreneurs and Their Enterprises*, Long Island, NY: College of Business, Alfred University.
- Park, S. & S. Kim (2011) "South Korean SME's Entrepreneurship in the Globalizing Economic System focused on Yuyang DNU", *the 56th annual ICSB world conference*, June 15-18, 2011, Sweden.
- Sakong, I. & J. Jones (1981) *Government, Business and Entrepreneurship in Economic Development*, Seoul: Korean Development Institute.
- Scarborough, N.M. (2013) *Essentials of Entrepreneurship and Small Business Management*, 7th Ed, New Jersey: Pearson.
- Souitaris, V., S. Zerbinati, & A. Al-Laham, (2007), "Do Entrepreneurship Programmes Raise Entrepreneurial Intention of Science and Engineering Student? The Effect of Learning, Inspiration and Resource", *Journal of Business Venturing*, 22 (4), 566-591.
- Timmons, J.A. (1994), *New Venture Creation: Entrepreneurship for the 21st Century*, Burr Ridge: Irwin.
- Win, T.K. (2006) Legal Status of Intellectual Rights in Myanmar, WIPO/ESCAP Colloquium on Intellectual Property United Nation Conference Centre, Bangkok.

APPENDIX-A

List of Private Sector Institutions and Non-Governmental Organizations (NGO) Offering Entrepreneurial Education

Organization	Functions
Myanmar Business Executives (MBE)	A network of successful Myanmar business people providing capacity development in social business, microfinance, humanitarian work and business education
Myanmar Woman Entrepreneurs Association	Awareness and support for women entrepreneurs, humanitarian support
Myanmar Young Entrepreneurs Associations	Network of entrepreneurs that organizes training opportunities and awareness increasing events. Aims to start an incubation program called NEST where they will provide mentorship, office space and training.
Myanmar Entrepreneurship Development Agency	Business people who train young entrepreneurs on business skills, starting a business, marketing and access to finance. They aim to use their income from training to provide financing to entrepreneurs. Implementing agency for GIZ program
Entrepreneurship Development Network Asia (EDNA) Myanmar	EDNA Myanmar delivers entrepreneurship education and supporting enterprise development across Myanmar.
Center for Vocational Training (CVT)	CVT offers business management training courses called Young Entrepreneurs for Myanmar (YE4M) for aspiring and existing young entrepreneurs in Myanmar offered in collaboration with the Swiss Academy for Development (SAD).
British Council	Skills for social entrepreneurs program, training business trainers, incubation, knowledge exchange
BCB/HP-Life	BCB is an implementation agency with local business experts for HP-Life. HP LIFE is a global program that trains aspiring entrepreneurs and small business owners to use IT and business skills to create opportunities to transform their business
PS Business School	Business school provides different programs on (social) entrepreneurship and conduct a yearly entrepreneurship competition.
GIZ	Vocational training, financial sector development, entrepreneurship development with business skills trainings, loans for SMEs, and capacity building for government. Aims to link the different education providers in Myanmar.
International Labor Association (ILO)	Provide entrepreneurship and business skills education all over the country for entrepreneurs to assist them to receive funding and thus create jobs.

Source: Friedl H. & R. D'Hauwers (2014), *Starting Up in Myanmar: A First Guide*

Administrators' Leadership Styles and Teachers' Organizational Commitment at Higher Education Institutions in Myanmar

*Myint Myint Kyi**

Yangon University of Economics

ABSTRACT: The main objective of this study is to examine an impact of leadership styles on the commitment and performance of teachers of Higher Education Institutions (HEIs) under the Ministry of Education. The specific objectives of this study are: to explore the leadership styles, to analyze the factors influencing leadership styles, to examine the influence of leadership styles on teachers' commitment and to analyze the relationship between teachers' commitment and their performance in HEIs. There are nine HEIs in Yangon. There is total 2304 staff at executive level: 293 associate professors: 1482 lectures and 529 assistant lectures. Among them, 10 percent of the total number of teaching staff (230 teachers) is determined as sample area of this study. The result showed that organizational factors (organizational structure and university climate) are relating to administrators' authentic and servant leadership styles, and these organizational factors and administrators' innovative strategy are influencing on transformational leadership. For charismatic leadership, personal factors (innovative strategy and strategic planning) are important. For teachers' affective and normative commitment, all four styles of leadership are important. However, only charisma of administrators is needed for continuance commitment. All three types of organizational commitment (affective, normative and continuance commitment) can generate teachers' formal professional development, less-formal professional development and teachers' consciousness on their needs of professional development. Thus, for teachers' professional development, administrators should practice contemporary leadership styles. Moreover, they also need to upgrade the organizational factors (organizational structure and organizational climate) which are important for effective practice of leadership styles which can elicit the better attitudes such as obligation, love and loyalty to universities.

Key words : Leadership Styles, Higher Education, NESP, HEIs, Organizational Commitment

* Dr. Myint Myint Kyi, Professor, Department of Management Studies, Yangon University of Economics

I. Introduction

The higher education sector in Myanmar is going to be changed according to policies of higher education, promulgated in National Education Law, starting from the 2016-17 academic year. Thus, higher education institutions endeavor education development activities such as ensuring accessibility, promoting quality, enhancing diversity, institutional framework, national education strategic plan (NESP) of 2016-2021, and overcoming challenges of the current education system.

At present, Ministry of Education and all related stakeholders are trying to transform higher education institutions into autonomous institutions, and higher education institutions (HEIs) are weighing on internationalization and quality assurance. For international level or regional level quality accreditation, quality of HEIs must be upgraded, and their quality can be represented by students' quality and teachers' quality. Since students' quality largely tied with teachers' quality or teachers' performance or teachers' professional development, the first step for quality of HEIs is to improve teachers' quality which would be relating to their commitment. Highly committed teachers will try for continuously improving their professional value because they would like to teach professionally and they also would like to contribute to the reputation and ranking of HEIs with their professionalism and skills. However, their commitment would be varied with their administrators' leadership styles.

Leadership is the incremental influence that a person has beyond his or her formal authority (Vecchio, 1987). Leadership is the influential increment over and above mechanical compliance with the routine directives of the organization (Katz & Kahn 1978). In modern organizations, leaders become prefer contemporary leadership styles to be practiced to lead and to motivate subordinates. Similarly, at HEIs, effective administrators are practicing contemporary leadership styles such as servant leadership, authentic leadership, charismatic leadership, and transformational leadership. Their weight given to various leadership styles may be relating to some organizational factors and their strategic practices such as organizational structure, institution climate, strategic planning and innovative strategy.

II. Rationale of the Study

In Myanmar, Ministry of Education is functioning with the vision to create an education system that will generate a learning society capable of facing the challenges of the Knowledge Age, and implementing short and long-term education development plans. While Ministry develops national level development plans, the HEIs also have to

develop institutional level development plans. Thus, they urgently need to find the ways for effective reforms at the institutional level. During this time of reforms, leadership styles of HEIs' administrators are very crucial for moving their institutions forward. However, there is no formula to choose a best leadership style for gaining efficient participation from teachers. Some administrators are practicing contemporary leadership styles to persuade their teachers to participate with high commitment. However, it is not sure which is the most appropriate leadership style for teachers' high commitment. Some administrators rely on their authenticity while some are trying for charisma. Some administrators like to support to their teachers, and they are happy to develop their teachers to delegate high responsibilities and authority to them. Since it is the time for transformation, some administrators choose the transformational style of leadership. Their choice may be relating to the characteristics of their HEIs (e.g., organizational culture) and their strategic skills (e.g., strategic planning).

Teachers of HEIs would give back different commitment to different leadership styles of their administrators. They would be affective to their institutions, or would show normative commitment or continuance commitment relating to the leadership styles of their administrators.

It is not sure which type of commitment will lead to their professional development. Their conscientiousness on their needs of professional development, and their effort for professional development are very important for development of education sector in Myanmar. Such need and effort would be relating to their commitment level and their commitment would depend on administrators' leadership styles. However, their administrators cannot choose leadership styles freely, specific organizational factors and personal factors can influence on their choice.

This research presents the factors influencing leadership styles of administrators, relationship between leadership styles and teachers' commitment, and effect of commitment on teachers' professional development at HEIs.

1. Research Questions

- 1) Which factors are influencing on leadership styles of administrators at HEIs?
- 2) What leadership styles are dominating at HEIs?
- 3) How are leadership styles relating to teachers' commitment at HEIs?
- 4) Is teachers' commitment leading to their professional development at HEIs?

2. Research Objectives

1. To identify factors influencing leadership styles of administrators at HEIs.
2. To examine the relationship between leadership styles and teachers' commitment

at HEIs.

3. To analyse the relationship between teachers' commitment and their professional development.

3. Background Theory

The theories of leadership have evolved from traits, behaviors and situations to a more change-oriented approach. The four key types of leadership in this new environment are – Authentic Leadership, Servant Leadership, Charismatic Leadership, and Transformational Leadership.

4. Leadership Styles

1) Authentic Leadership

Gardner et al. (2005) presented the self-based model of authentic leadership. According to this model, factors improving authentic leadership are self-awareness and self-regulation. Self-awareness includes leader's values, emotions, identity and goals. Self-regulation includes internationalized regulation, balanced processing of information referring to the unbiased collection and interpretation of self-regulated information, authentic behavior, and relational transparency: leader displays high levels of openness, self-disclosure, and trust in close relationship. Some predecessors of authentic leadership are family influences, early challenges, educational and work experiences, trigger events such as crises, promotion or stretch assignment.

Authentic leaders have integrity and high commitment to ethical values. Thus, they can develop positive organizational commitment of followers.

2) Charismatic Leadership

While some authors indicated that charisma represents the ability of a leader to exercise diffuse and strong influences over the beliefs, values, behaviors, and performance of followers through his/her vision, behaviors, beliefs, and personal examples (Conger, 1999, House, R., & Shamir, B., 1993) others have suggested that "charisma is the ability to influence others positively by connecting with them physically, emotionally, and intellectually" (Aaltio-Marjosola, I & Takala, T., 2000). Studying different views and definitions, it is safe to conclude that charisma is an indefinable personal quality that is based on the emotional aspects of both the leaders and the followers. Robbins (1992) specified some of the characteristics that differentiate the charismatic

leaders from non- charismatic leaders. These characteristics are self-confidence, strong faith in vision, out of ordinary behavior, and change seeking behavior. House (1977) also presented five key behavioral aspects of charismatic leaders: role modeling, image building, articulation of goals, showing confidence, and arousing follower's motives.

3) Transformational Leadership

Transformational leaders are similar to charismatic leaders, but they are distinguished by their special ability to bring about innovation and change by recognizing followers' needs and concerns, helping them look at old problems in new ways, and encouraging them to question the status quo. Transformational leaders inspire followers not just to believe in the leader personally, but to believe in their own potential to imagine and create a better future for the organization.

Transformational leaders create significant change in both followers and the organization. Northouse (2007) suggests that transformational leaders motivate followers to do better than they earlier expected by providing empowerment, acting as role modeling, creating a vision, acting as change agent, and as social architects. Bass and Avolio (1989) claim that transformational leaders engage in much more with their colleagues than with a simple exchange process. They behave in different ways to achieve superior results by using factors better known as the "Four I's" (Avolio, Waldman & Yammarino, 1991). These elements are idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

4) Servant Leadership

Greenleaf (1977) stated the servant leadership by explaining that a leader's primary motivation and role is service to others. Servant leaders develop and help people to strive and flourish (Russell & Stone, 2002). Servant leadership is a belief that organizational goals will be achieved on a long term basis only by first facilitating the growth, development and general well being of the individuals who comprise the organization (Stone et al, 2004). The best test of the leader is whether those served grow as persons and whether while being served they become healthier, wiser and abler themselves to become servant leaders (Wheeler, 2011).

5. Organizational Commitment

Organizational commitment is defined as "a state in which the employee identifies with a particular organization and its goals, and wishes to maintain membership in the organization (Robbins, 1992). Allen & Meyers (2004) constructed a Three-Component

Model (TCM) of commitment, which measures three forms of organizational commitment: affective commitment, normative commitment and continuance commitment.

1) Affective Commitment

Affective commitment is measured by the individual's desire to stay with the organization. An employee's affective commitment is dependent on the employee's positive feelings towards the organization and is often the result of organizational policies and activities that promote a positive connection with the work group (Liou, Shwu-Ru, 2008).

2) Normative Commitment

Manion (2004) claimed that this kind of commitment arises from the person's sense of obligation to the organization. It is also a reflection of how much a person's values and beliefs are aligned to the organization's core values. Karrass (as cited by Allen & Meyer, 2004) said that normative commitment is positively related to performance.

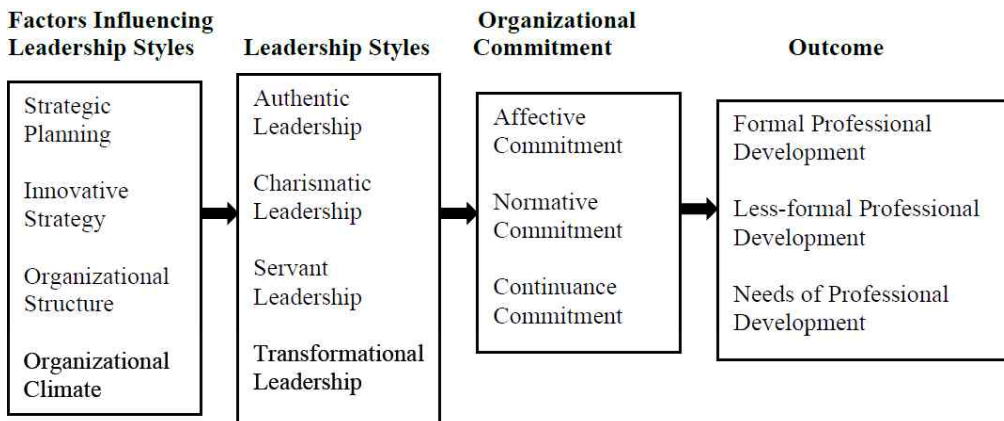
3) Continuance Commitment

Continuance commitment is cost-based. This kind of commitment is grounded on the value that the employee derives from the organization. With this kind of commitment, employees stay primarily to avoid losing something of value (income, benefits, seniority). Employees with high continuance commitment stay because they feel that they have few alternatives outside.

III. Conceptual Model of the Study

The conceptual model of this study is shown in Figure (1).

Figure 1. Conceptual Model of the Study



Source: Developed for this Study

In this study, the major assumption is that leadership styles of administrators have impact on teachers' organizational commitment and this commitment will also lead to teachers' outcome (professional development) at HEIs. The outcome is approached from three aspects: formal professional development, less-formal professional development and teachers' awareness on their needs of professional development.

The four factors such as strategic planning, innovative strategy, organizational structure and organizational climate are influencing on leadership styles of administrators at HEIs. The former two are personal factors and the latter two are organizational factors. As leadership styles of administrators at HEIs, contemporary styles are considered: authentic leadership, servant leadership, charismatic leadership, and transformational leadership.

1. Sampling

According to the records of 2011, there are 47 universities under the Ministry of Education and there are altogether 951 administrators in 47 Universities. Among them, 164 are from administrative sector and 787 from academic sector. In this study, public universities are considered as the higher education institutions. The administrators are at the positions of Professor level and above, and the scope of this study is limited to include teaching staff only. Thus in a university, the administrators are Rector, Pro-rector(s), and Professors/Heads of Departments working at respective university. This study focuses on the teaching staff from 9 universities which are located in Yangon and under the management of the Ministry of Education. In these nine universities, there are 201 administrators: 9 rectors/ deans, 14 pro-rectors, 100 professors (heads), and 78 professors. As subordinates, there is total 2304 staff at executive level: 293 associate

professors: 1482 lectures and 529 assistant lectures. Among them, 10 percent of the total number of teaching staff (230 teachers) is determined as sample area of this study. Simple random sampling method is applied.

2. Data Collection

Questionnaire method is applied to collect data from teachers. Since they are educated, the questionnaire has not yet been translated from English to Myanmar language. However, to receive

accurate responses from teachers, the appointment with rector/dean is made first, followed by explanation about questionnaire, and finally questionnaires are distributed to teachers. One week is given to teachers to fulfill the questionnaires. Then questionnaires are collected.

3. Research Instrument

The structured questionnaire is used to collect data from teachers working at nine HEIs located in Yangon. The questionnaire consists of five parts: demographic characteristics, factors influencing leadership styles, leadership styles, organizational commitment, and outcome including formal professional development, less-formal professional development, and needs for professional development. Measurement items for 4 parts are with Likert type 5-point scales. For these four variables, data are collected by focusing on teachers' perception on each of the question items of variables. Questions are not with Likert type for demographic characteristics.

4. Data Analysis Method

Descriptive study is practiced to present the demographic characteristics of respondents. Frequency distribution tables as well as mean value tables are developed for descriptive analysis. Analytical approach is applied to test the hypotheses of finding significance between variables such as influencing factors, leadership styles, teachers' organizational commitment, and teachers' outcome. Multiple linear regression method is applied.

5. Validity Test and Reliability Test

Pilot study is conducted with 50 teachers. The objective of this pilot study is to validate the questionnaire format and question wordings. Some question items which

are not relevant in Myanmar HEIs context are removed from questionnaire. Wordings which are ambiguous and complex for respondents are modified. Then, the revised questionnaire is used for large scale survey of this study.

With validity test by factor analysis, the determinant, KMO value and Bartlett's test value are checked. If determinant value is greater than 0.00001, multicollinearity is not a problem for data. If KMO value is greater than 0.5, the patterns of correlation are relatively compact and the factor analysis will yield distinct and reliable factors. If Bartlett's test is significant ($p < 0.001$), factor analysis is appropriate. After factor loadings, all of the items in each factor should have relatively high loadings (greater than 0.40) on the factor they belong to.

Cronbach's alpha is used to construct the reliability measure in this study. Cronbach's alpha value for each variable is checked whether it is greater than 0.7. Results from reliability and validity test are shown in Table (1).

Table 1. Results from Reliability and Validity Test

Sr. No.	Factors	Reliability Cronbach's Alpha	Validity KMO
1	Strategic Planning	0.606	0.625
2	Innovative Strategy	0.884	0.851
3	Organizational Structure	0.607	0.694
4	Organizational Climate	0.846	0.741
5	Authentic Leadership	0.780	0.736
6	Servant Leadership	0.729	0.755
7	Charismatic Leadership	0.698	0.635
8	Transformational Leadership	0.622	0.554
9	Affective Commitment	0.790	0.790
10	Normative Commitment	0.742	0.736
11	Continuance Commitment	0.752	0.678
12	Formal Professional Development	0.804	0.744
13	Less-Formal Professional Development	0.608	0.687
14	Needs of Professional Development	0.755	0.657

Source: Survey Data, 2018

IV. Findings from Analysis

1. Demographic Characteristics

At the first step, descriptive analysis has been conducted to present the demographic characteristics of respondents. Demographic characteristics are shown in Table (2).

Table 2. Demographic Characteristics of Respondents (N = 230)

Variable	Description	Frequency	Percent (%)
Gender	Male	70	30.4
	Female	160	69.6
Service in this School	1-2	47	20.4
	3-5	87	37.8
	6-8	79	34.4
	9+	17	7.4
Service in Teaching at HEIs	1-2	37	16.1
	3-5	64	27.8
	6-8	81	35.2
	9+	48	20.9
Highest Education	Master	160	69.6
	Ph. D	56	24.3
	Other	14	6.1
Position at Work	Associate Professor	33	14.4
	Lecturer	130	56.5
	Assistant Lecturer	67	29.1

Source: Survey Data, 2018

2. Factors Influencing Leadership Styles

1) Strategic Planning

The teachers' perception on administrators' strategic planning are shown in Table (3).

Table 3. Strategic Planning of Administrators

Sr. No.	Items	Mean
1	Administrators develop strategy for teaching and curriculum improvement.	3.80
2	Administrators make their own decisions. *	3.41
3	Administrators are being free in implementing and evaluating their own decisions.	3.29
4	Administrators develop an overall strategy to determine why subordinates are failing to meet goals and what to do to correct the situation.	3.43
5	Administrators identify the causes of the problems.	3.51
6	Administrators prioritize causes of problems.	3.37
Sr. No.	Items	Mean
7	Administrators choose the most effective method/strategy to counteract the causes of problems.	3.67
8	Administrators generate alternative strategies for solving problems before making choices.	3.35
9	Administrators choose the most attainable strategies from among alternatives.	3.49
10	Administrators use the results of evaluation for revising decisions.	3.55
Strategic Planning Mean		3.48

Source: Survey Data, 2018

As shown in Table (3), teachers perceived that administrators have neutral practice of strategic planning. The teachers' perception on administrators' practice of developing innovative strategy are shown in Table (4).

Table 4. Innovative Strategy of Administrators

Sr. No.	Items	Mean
1	Administrators promote new strategies for school improvement.	3.68
2	Administrators encourage faculty development.	3.73
3	Administrators encourage the use of staff (teacher) and student journals for professional interaction.	3.44
4	Administrators share new ideas about teaching he/she read or comes across with staff (teacher) members.	3.54
5	Administrators readily accept teachers' ideas and programs.	3.43
6	Administrators facilitate teachers' creativity.	3.56
7	Administrators facilitate students' creativity.	3.54
8	Administrators encourage teachers to do more creative teaching than maintain strong /tight discipline.	3.68
9	Administrators encourage teachers to exhibit students' work.	3.63
Innovative Strategy Mean		3.58

Source: Survey Data, 2018

As shown in Table (4), teachers perceived that their administrators are practicing above average level of developing innovative strategy. The teachers' perception on organizational structure are shown in Table (5).

Table 5. Organizational Structure

Sr. No.	Items	Mean
1	Administrator is the main source of all ideas.	3.67
2	Administrator allows academic committees to make their own decisions.	3.43
3	Administrator asks and receives feedback from all academic committees.	3.59
4	Administrator is constantly emphasizing the enforcement of rules and standards	3.57
5	Administrator encourages committees to plan effectively.	3.74
6	Administrator enforces rigid rules to obtain compliance from teachers.	3.14
7	Administrator is strict with teachers.	3.18
8	Administrator is strict with students.	3.11
9	Administrator promotes students' participation at the classroom level.	3.78
10	Administrator motivates teachers to encourage students to learn.	3.93
11	Administrator allows teachers to enter his/her office freely, even when he/she is busy at work.*	3.46
12	Administrator allows the respective teachers for student service the freedom to make and implement decisions.	3.37
13	Administrator allows the respective teachers the freedom to plan and implement disciplines for students at classrooms.	3.56
14	Administrator allows the respective teachers the freedom to plan and implement the teaching methods for student academic development.	3.73
Organizational Structure Mean		3.52

Source: Survey Data, 2018

As shown in Table (5), teachers perceived that their administrators are contributing

to development of good organizational structure with their above average level of effort. The teachers' perception on organizational climate are shown in Table (6).

Table 6. Organizational Climate

Sr. No.	Items	Mean
1	The administrator (rector and pro-rector) represents the university.	3.91
2	The teachers represent the university.	3.80
3	Teachers are integrated into their work in university.	3.86
4	The teachers show high expectations for students.	3.82
5	Teachers show high expectations for students.	3.72
6	Teachers spend extra time to help students.	3.49
7	The administrator (rector and pro-rector) shows high expectations for students.	3.83
8	Student performance has improved.	3.67
Sr. No.	Items	Mean
9	Teachers work cooperatively with one another.	3.73
10	Students show positive feelings toward the university.	3.69
11	Teachers show positive feelings towards the university.	3.80
12	Student attendance has increased significantly.	3.54
13	Teachers are interested in regular attendance.	3.92
14	The school is well kept and conducive to student learning.	3.82
Organizational Climate Mean		3.76

As shown in Table (6), teachers perceived that their administrators are highly committed to development of good organizational climate.

2) Leadership Styles

Servant Leadership

Administrators' servant leadership practices can be seen in Table (7).

Table 7. Administrators' Servant Leadership

Sr. No.	Items	Mean
1	Others would seek help from him/her if they had a personal problem.	4.6
2	He/She emphasizes the importance of giving back to the community.	4.8
3	He/She can tell if something work related is going wrong.	4.6
4	He/She gives others the responsibility to make important decisions about their own jobs.	4.8
5	He/She makes others' career development a priority.	5.0
6	He/She cares more about others' success than his/her own.	2.8
7	He/She holds high ethical standards.	2.4
8	He/She cares about others' personal well-being.	5.0
9	He/She is always interested in helping people in the community.	5.0
10	He/She is able to think through complex problems.	4.6
11	He/She encourages others to handle important work decisions on their own.	4.8
12	He/She is interested in making sure others reach their career goals.	5.0
13	He/She puts others' best interests above his/her own.	2.8
14	He/She is always honest.	2.8
15	He/She takes time to talk to others on a personal level.	5.0
16	He/She is involved in community activities.	5.0
Sr. No.	Items	Mean
17	He/She has a thorough understanding of the organizational and its goals.	4.6
18	He/She gives others the freedom to handle difficult situations in the way they feel is best.	4.4
19	He/She provides others with work experiences that enable them to develop new skills.	4.2
20	He/She sacrifices his/her own interests to meet others' needs.	3.0
21	He/She would not compromise ethical principles in order to meet success.	3.4
22	He/She can recognize when others are feeling down without asking them.	3.8
23	He/She encourages others to volunteer in the community.	3.8
24	He/She can solve work problems with new or creative ideas.	3.8
25	If others need to make important decisions at work, they do not need to consult him/her.	3.8
26	He/She wants to know about others' career goals.	4.1
27	He/She does what he/she can to make others' jobs easier.	3.4
28	He/She values honesty more than profits.	3.7
Servant Leadership Mean		4.1

Source: Survey Data, 2018

As shown in table (7), teachers perceived that their administrators are practicing servant leadership. The authentic leadership practice of administrators is shown in Table (8).

Table 8. Administrators' Authentic Leadership

Sr. No.	Items	Mean
1	Administrator admits mistakes when they are made	2.3
2	Administrator asks you to take positions that support your core values	1.6
3	Administrator listens carefully to different points of view before coming to conclusions	2.4
4	Administrator knows when it is time to reevaluate his or her positions on important issues	3.4
5	Administrator display emotions exactly in line with feelings	3.5
6	Administrator make difficult decisions based on high standards of ethical conduct	3.9
7	Administrator seek feedback to improve interactions with others	3.8
8	Administrator show I understand how specific actions impact others	3.7
Authentic Leadership Mean		3.1

Source: Survey Data, 2018

As shown in Table (8), teachers perceived that their administrators are not too authentic. The charismatic leadership of administrators is shown in Table (9).

Table 9. Administrators' Charismatic Leadership

Sr. No.	Items	Mean
1	Influences others by developing mutual liking and respect	3.8
2	Readily recognizes barriers/forces within the organization that may block or hinder achievement of his/her goals	4.8
3	Engages in unconventional behavior in order to achieve organizational goals	4.4
4	Entrepreneurial: seizes new opportunities in order to achieve goals	4.8
5	Shows sensitivity for the needs and feelings of the other members in the organization	4.6
6	Uses nontraditional means to achieve organizational goals	3.2
7	In pursuing organizational objectives, engages in activities involving considerable self-sacrifice	2.8
8	Readily recognizes constraints in the physical environment (technological limitations, lack of resources, etc.) that may stand in the way of achieving organizational objectives	4.1
9	Advocates following non-risky, well-established courses of action to achieve organizational goals	4.6
10	Provides inspiring strategic and organizational goals	3.3
11	Readily recognizes constraints in the organization's social and cultural environment (cultural norms, lack of grassroots support, etc.) that may stand in the way of achieving organizational objectives	4.6
12	Takes high personal risks for the sake of the organization	3.8
13	Inspirational: able to motivate by articulating effectively the importance of what organizational members are doing	3.4
14	Consistently generates new ideas for the future of the organization	2.6
15	Exciting public speaker	4.6
16	Often expresses personal concern for needs and feelings of other members in the organization	4.3
17	Tries to maintain the status quo or the normal way of doing things	4.4
18	Often exhibits very unique behavior that surprises other members in the organization	3.4
19	Recognizes the abilities and skills of other members in the organization	3.8
20	Often incurs high personal costs for the good of the organization	4.4
Sr. No.	Items	Mean
21	Appears to be skillful performer when presenting to a group	3.2
22	Has vision: often brings up ideas about possibilities for the future	3.3
23	Readily recognizes new environmental opportunities (favorable physical and social conditions) that may facilitate achievement of organizational objectives	3.4
24	Recognizes the limitations of other members in the organization	3.8
25	In pursuing organizational objectives involving considerable personal risk	2.8
Charismatic Leadership Mean		3.9

Source: Survey Data, 2018

As shown in Table (9), teachers are sure that their administrators have charisma over them. The transformational leadership of administrators is shown in Table (10).

Table 10. Administrators' Transformational Leadership

Sr. No.	Items	Mean
1	Administrator tries to enhance my internal motivation when s/he wants to motivate me for a task.	4.0
2	Administrator knows about our competencies, work-related personal concerns and needs and how to motivate each of us.	4.3
3	Administrator makes me feel that what I do is valuable and useful.	3.5
4	Administrator encourages us to generate ideas and gets our suggestions while planning and conducting work.	4.5
5	Administrator makes the workplace feel like a family environment.	4.8
6	Administrator informs me about the short or long term potential contributions of my work	4.5
7	Administrator not only appreciates my ideas, but also encourages me to put them into practice.	2.3
8	Administrator is a role model with the way s/he conducts work, his/her personality and communication skills.	4.5
9	Administrator encourages me to freely express my ideas.	3.8
10	Administrator encourages me to question the status quo, to produce new solutions and supports my creativity.	3.5
11	Administrator encourages us to follow the innovations in the field.	4.5
12	Administrator thrills us with the things we can do and succeed at by reminding us of our specifications and abilities.	3.5
13	Administrator tries to convey all the information to us about the work processes.	3.2
Sr. No.	Items	Mean
14	Administrator plans trainings for the areas I am in need of improving.	3.5
15	Administrator makes me feel like there are things s/he could also learn from me.	4.1
16	Administrator makes me feel that s/he cares about me, not only as an employee, but also as a person.	4.5
17	Administrator considers our personal interests and abilities, when s/he allocates tasks in the team.	3.8
18	Administrator sets us performance goals and rewards us as much as we succeed.*	4.2
19	Administrator lets me use part of my work hours for new projects that I have in mind.	4.3
20	Administrator supports our attendance to personal and professional development seminars.	4.5
Transformational Leadership Mean		4.0

Source: Survey Data, 2018

As shown in Table (10), teachers perceived that their administrators are transforming the institutions.

3. Organizational Commitment

In this study, the three forms of organizational commitment: affective commitment, normative commitment and continuance commitment are analysed. The descriptive analysis results are shown in Table (11).

Table 11. Teachers Organizational Commitment

Sr. No.	Items	Mean Values
	Affective Commitment	
1	I would be very happy to spend the rest of my career in this organization	3.77
2	I really feel as if this organization's problems are my own	2.78
3	I do not feel like part of the family at my organization *	3.41
4	I do not feel emotionally attached to this organization *	3.63
5	This organization has a great deal of personal meaning for me	4.23
6	I do feel a strong sense of belonging to my organization*	3.47
Overall Mean		3.55

Normative Commitment		
1	I do not feel any obligation to remain with my current organization*	3.75
2	Even if it were to my advantage, I do not feel it would be right to leave my organization now.	3.58
3	I would feel guilty if I left my organization now.	3.44
4	This organization deserves my loyalty.	3.71
5	I would not leave my organization right now because I have a sense of obligation to the people in it.	3.59
6	I owe a great deal to my organization.	3.82
Overall Mean		3.65
Continuance Commitment		
1	It would be very hard for me to leave my organization right now, even if I wanted to.	3.19
2	Too much of my life would be disrupted if I decided I wanted to leave my organization right now.	3.12
3	Right now, staying with my organization is a matter of necessity as much as desire.	3.19
4	I feel that I have too few options to consider leaving this organization.	3.52
5	One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.	3.22
6	One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice; another organization may not match the overall benefits I have here.	2.93
Overall Mean		3.20

Source: Survey Data, 2018

According to survey results, it is found that teachers are staying at their universities/collages due to their commitment to obligations to their organizations. They also have affection with their organizations. They are not staying at their organizations with the reasons of no places for them outside and switching costs.

4. Teachers' Outcome

Teachers' outcome is measured with three criteria: formal professional development, less formal professional development, and needs of professional development. The survey results on outcome are shown in Table (12).

Table 12. Teachers' Outcomes

Sr. No.	Items	Mean Values
Professional Development		
1	Courses/workshops (e.g. on subject matter or methods and/or other education-related topics)	1.90
2	Education conferences or seminars (where teachers and/or researchers present their research results and discuss educational problems)	1.73
3	Qualification program (e.g. a degree programme)	1.78
4	Observation visits to other schools/organizations	1.94
5	Participation in a network of teachers formed specially for the professional development of teachers	2.59
6	Individual or collaborative research on a topic of interest to you professionally	2.22
7	Mentoring and/or peer observation, coaching, as part of a formal school arrangement	1.88
Overall Mean		2.00
Less-Professional Development		
1	Reading professional literature (e.g. journals, evidence-based papers, thesis papers)	2.48
2	Engaging in informal dialogue with your colleagues on how to improve your teaching	2.85
Overall Mean		2.67
Needs of Professional Development		
1	Content and performance standards in my main subject field(s)	2.26
2	Student assessment practices	2.45
3	Classroom management	2.69
4	Knowledge and understanding of my main subject field(s)	2.46
5	Knowledge and understanding of instructional practices (knowledge mediation) in my main subject field(s)	2.21
6	ICT skills for teaching	2.88
7	Teaching students with special learning needs	2.28
8	Student discipline and behavior problems	2.59
9	School management and administration	2.22
10	Teaching in a multicultural setting	2.33
11	Student counseling	1.18
Overall Mean		2.32

Source: Survey Data, 2018

Since the maximum mean score is 3, it can be concluded that teachers' outcome measured with three criteria is at the high level.

5. Testing Hypotheses

1) Testing Hypothesis (1)

Hypothesis (1): Personal factors and organizational factors are significantly influencing on leadership styles.

Hypothesis (1a): Strategic planning is significantly influencing on authentic leadership style.

Hypothesis (1c): Organizational structure is positively relating to servant leadership style.

Hypothesis (1d): Organizational climate is positively relating to charismatic leadership style.

Hypothesis (1b): Innovation strategy is positively relating to transformational leadership style.

Results from testing Hypothesis (1a) is shown in Table (13).

Table 13. Factors Influencing Authentic Leadership

	Authentic Leadership				VIF
	Coefficient	Beta	t	Sig.	
(Constant)	3.399		76.591	.000	
Strategic Planning	-.024	-.020	-.439	.661	1.006
Innovative Strategy	-.060	-.055	-.954	.341	1.650
Organizational Structure	.483*	.315*	5.347	.000	1.699
Organizational Climate	.019*	.299*	4.919	.000	1.813
R	.515				
R ²	.265				
Adjusted R ²	.257				
F statistics	32.414*			.000	
Durbin-Watson	1.723				
* Statistically significant at 5% level					

Source: Survey Data, 2018

For the regression coefficient and significant level of each independent variable, it can be seen that the two variables; organizational structure and organizational climate; have a positive relationship with authentic leadership of administrators at HEIs. The coefficients are 0.483 and 0.019 at a statistical significant level of 5 percent (p-value = 0.000). Results from testing Hypothesis (1b) is shown in Table (14).

Table 14. Factors Influencing Servant Leadership

	Servant Leadership				VIF
	Coefficient	Beta	t	Sig.	
(Constant)	3.431		89.740	.000	
Strategic Planning	-.018	-.018	-3.383	.702	1.006
Innovative Strategy	.074	.083	1.364	.173	1.650
Organizational Structure	.365*	.290	4.693	.000	1.699
Organizational Climate	.007*	.129	2.014	.045	1.813
R	.436				
R ²	.190				
Adjusted R ²	.181				
F statistics	21.070*			.000	
Durbin-Watson	1.721				
* Statistically significant at 5% level					

Source: Survey Data, 2018

For the regression coefficient and significant level of each independent variable, it can be seen that two variables: organizational structure and organizational climate have positive relationships with servant leadership of administrators at HEIs. The coefficients are 0.365 and 0.007 at the statistical significant level of 5 percent (p -value = 0.000 and 0.045) respectively. Results from testing Hypothesis (1c) are shown in Table (15).

Table 15. Factors Influencing Charismatic Leadership

	Charismatic Leadership				VIF
	Coefficient	Beta	t	Sig.	
(Constant)	1.182		5.766	.000	
Strategic Planning	.180*	.198	3.482	.001	1.623
Innovative Strategy	.156*	.181	3.467	.001	1.367
Organizational Structure	.199*	.229	4.722	.000	1.172
Organizational Climate	.073	.099	1.807	.072	1.509
R	.531				
R ²	.282				
Adjusted R ²	.272				
F statistics	28.165*			.000	
Durbin-Watson	1.734				
* Statistically significant at 5% level					

Source: Survey Data, 2018

For the regression coefficient and significant level of each independent variable, it can be seen that three variables; strategic planning, innovative strategy, and organizational structure have a positive relationship with charismatic leadership of

administrators. The coefficients are 0.180, 0.156, and 0.199 at a statistical significant level of 5 percent (p-value = 0.001, 0.001, and 0.000) respectively. Results from testing Hypothesis (1d) are shown in Table (16).

Table 16. Factors Influencing Transformational Leadership

	Transformational Leadership				VIF
	Coefficient	Beta	t	Sig.	
(Constant)	1.749		6.566	.000	
Strategic Planning	-.014	-.017	-.364	.716	1.017
Innovative Strategy	.168*	.192	3.561	.000	1.342
Organizational Structure	.161*	.184	3.483	.001	1.295
Organizational Climate	.119*	.196	3.153	.002	1.775
R	.476				
R ²	.226				
Adjusted R ²	.211				
F statistics	14.928*			.000	
Durbin-Watson	1.759				

* Statistically significant at 5% level

Source: Survey Data, 2018

For the regression coefficient and significant level of each independent variable, it can be seen that three variables; innovative strategy, organizational structure, and organizational climate have a positive relationship with transformational leadership of administrators. The coefficients are 0.168, 0.161, and 0.119 at the statistical significant level of 5 percent (p-value = 0.001, 0.001, and 0.002) respectively.

2) Testing Hypothesis (2)

Hypothesis (2): Leadership styles of administrators are influencing on teachers' organizational commitment at HEIs.

Hypothesis (2a): Authentic leadership and servant leadership are positive relating to affective commitment of teachers at HEIs.

Hypothesis (2b): Transformational leadership is significantly influencing on normative commitment of teachers at HEIs.

Hypothesis (2c): Charismatic leadership is positively relating to continuance commitment. Results from testing Hypothesis (2a) are shown in Table (17).

Table 17. Effect of Leadership Styles on Affective Commitment

	Affective Commitment				VIF
	Coefficient	Beta	t	Sig.	
(Constant)	.263		1.160	.247	
Authentic Leadership	.198*	.179	3.459	.001	1.623
Servant Leadership	.254*	.243	5.107	.000	1.367
Charismatic Leadership	.191*	.180	4.097	.000	1.172
Transformational Leadership	.166*	.185	3.706	.000	1.509
R	.638				
R ²	.408				
Adjusted R ²	.399				
F statistics	49.389*			.000	
Durbin-Watson	1.750				
* Statistically significant at 5% level					

Source: Survey Data, 2018

For the regression coefficient and significant level of each independent variable, it can be seen that the four variables; authentic leadership, servant leadership, charismatic leadership and transformational leadership have a positive relationship with affective commitment of teachers at HEIs. The coefficients are 0.198, 0.254, 0.191, and 0.166 at a statistical significant level of 5 percent (p-value = 0.001, 0.000, 0.000, 0.000) respectively. Results from testing Hypothesis (2b) are shown in Table (18).

Table 18. Effect of Leadership Styles on Normative Commitment

	Normative Commitment				VIF
	Coefficient	Beta	t	Sig.	
(Constant)	.981		3.366	.001	
Authentic Leadership	.013	.013	.299	.765	1.017
Servant Leadership	.211*	.198	4.172	.000	1.295
Charismatic Leadership	.171*	.231	4.146	.000	1.775
Transformational Leadership	.092*	.115	2.223	.027	1.522
R	.613				
R ²	.376				
Adjusted R ²	.364				
F statistics	30.747*			.000	
Durbin-Watson	1.761				
* Statistically significant at 5% level					

Source: Survey Data, 2018

For the regression coefficient and significant level of each independent variable, it can be seen that three variables; servant leadership, charismatic leadership and transformational leadership have positive relationship with normative commitment of teachers at HEIs. The coefficients are 0.211, 0.171, and 0.092 at a statistical significant

level of 5 percent (p-value = 0.000, 0.000, and 0.027) respectively. Results from testing Hypothesis (2c) are shown in Table (19).

Table 19. Effect of Leadership Styles on Continuance Commitment

	Continuance Commitment				
	Coefficient	Beta	t	Sig.	VIF
Constant	.428		1.544	0.001	
Authentic Leadership	.023	-0.085	.558	0.464	2.049
Servant Leadership	.093	0.136	1.913	0.242	2.043
Charismatic Leadership	.168*	0.664	2.263	0.000	1.695
Transformational Leadership	.015	0.041	5.423	0.719	2.024
R		0.697			
R Square		0.486			
Adjusted R Square		0.460			
Durbin-Watson		2.006			
F (P<0.05)		18.705*		0.000	

Source: Survey Data, 2018

For the regression coefficient and significant level of each independent variable, it can be seen that one variable; charismatic leadership has positive relationship with continuance commitment of teachers at HEIs. The coefficient is 0.168 at a statistical significant level of 5 percent (p-value = 0.000).

3) Testing Hypothesis (3)

Hypothesis (3): Teachers' organizational commitment is positively relating to teachers' outcome.

Hypothesis (3a): Teachers' affective commitment is positively relating to teachers' formal development.

Hypothesis (3b): Teachers' normative commitment is positively relating to needs of professional commitment.

Hypothesis (3c): Teachers' continuance commitment is relating to less-formal professional development. Results from testing Hypothesis (3a) are shown in Table (20).

Table 20. Relationship between Organizational Commitment and Formal Professional Development

	Formal Professional Development				
	Coefficient	Beta	t	Sig.	VIF
Constant	.007		.211	0,001	
Affective Commitment	.198	-0.152	4.464	0.225	2.049
Continuance Commitment	.080	0.079	1.864	0.526	2.043
Normative Commitment	.085*	0.662	2.480	0.000	1.695
	R	0.634			
	R Square	0.402			
	Adjusted R Square	0.372			
	Durbin-Watson	2.008			
	F (P<0.05)	13.282*		0.020	

Source: Survey Data, 2018

For the regression coefficient and significant level of each independent variable, it can be seen that one variable; normative commitment has positive relationship with professional development of teachers at HEIs. The coefficient is 0.085 at a statistical significant level of 5 percent (p -value = 0.000). Results from testing Hypothesis (3b) are shown in Table (21).

Table 21. Relationship between Organizational Commitment and Needs of Professional Development

	Needs of Professional Development				
	Coefficient	Beta	t	Sig.	VIF
Constant	1.572		8.053	0.000	
Affective Commitment	.248*	0.628	3.781	0.000	1.695
Continuance Commitment	.608	0.063	21.008	0.557	2.024
Normative Commitment	0.063	0.187	1.651	0.088	2.043
	R	0.740			
	R Square	0.548			
	Adjusted R Square	0.525			
	Durbin-Watson	2.033			
	F (P<0.05)	23.965*		0.001	

Source: Survey Data, 2018

For the regression coefficient and significant level of each independent variable, it can be seen that one variable; affective commitment has positive relationship with needs of professional development of teachers at HEIs. The coefficient is 0.248 at a statistical significant level of 5 percent (p-value = 0.000). Results from testing Hypothesis (3c) are shown in Table (22).

Table 22. Relationship between Organizational Commitment and Less-formal Professional Development

	Less Professional Development				
	Coefficient	Beta	t	Sig.	VIF
Constant	1.364		3.366	0.622	
Affective Commitment	.428*	0.350	.299	0.002	1.834
Continuance Commitment	.023*	0.581	4.172	0.000	1.791
Normative Commitment	.093	0.061	4.146	0.554	1.635
R		0.772			
R Square		0.596			
Adjusted R Square		0.571			
Durbin-Watson		2.025			
F (P<0.05)		23.268			

Source: Survey Data, 2018

For the regression coefficient and significant level of each independent variable, it can be seen that two variables; affective commitment and continuance commitment have positive relationship with less professional development of teachers at HEIs. The coefficients are 0.428 and 0.023 at a statistical significant level of 5 percent (p-value = 0.00 and p-value = 0.02).

V. Conclusion and Recommendations

From this research, it can be concluded that the three types of commitment are important for teachers' outcome at HEIs in Myanmar. Teachers' formal professional development is resulted from their normative commitment, their self-notice of needs of professional development is the result of their affective commitment, and their less-formal professional development come out from affective commitment and continuance commitment. Thus, for teachers' good outcome, they need to stay at their HEIs with the sake of obligation to and their love to their organizations.

Moreover, HEIs also need to support them with both financial and non-financial incentives because they will be staying long if the switching cost is high. For improving affective commitment of teachers, administrators must be skillful in practicing all four leadership styles concerning different levels of teachers' ability and maturity. For normative commitment, administrators should practice servant leadership, charismatic leadership and transformational leadership. For continuance commitment, leaders should practice charismatic leadership. Thus, for effective development of HEIs, administrators must be able to practice different leadership styles. From analysis, in this study, it is

found that organizational factors (organizational structure and organizational climate) are important for practicing authentic leadership and servant leadership.

For transformational leadership, not only organizational factors but also innovative strategy practice is necessary. Personal factors are very important for practicing charismatic leadership. Thus, HEIs need effective organizational structure and good organizational climate. Moreover, administrators must also be strategic and innovative.

Limitations and Needs for Further Research

This research accounted for only some contemporary leadership styles. In Myanmar HEIs, administrators may be practicing other leadership styles effectively. Thus, as further research, other relevant leadership styles should be considered. Moreover, this research only focuses on HEIs located in Yangon, and this research exclude demonstrators and tutors from sample area.

Thus, ups to time availability, these teachers should also be considered. In this research, only four specific factors are included in analysis on factors influencing leadership styles. Since many factors can influence on leadership styles, some more factors should also be considered if it is appropriate.

Acknowledgements

First and foremost, I would like to thank Dr. Tin Win, Rector, Yangon University of Economics for giving me an opportunity to do this research, and giving chance me to submit this paper to selection process of sending authors to KOMYRA conference. I also would like to convey an exceptional heartfelt gratefulness to 23rd batch MBA students of MBA Programme, Department of Management Studies, Yangon University of Economics for their enthusiastic interest and participation in data collection for this research. I wish to convey a special thanks to administrators (rectors, pro-rectors, and professors) of surveyed universities for permission to collect data at their universities. I also extend my profound thanks to teachers participated as respondents in the survey for this research. I thank with pleasure to all who lovingly and patiently have helped and given me special assistance in the accomplishment of this research.

References

- Aaltio-Marjosola, I. & Takala, T. (2000). Charismatic leadership, manipulation and the complexity of organizational life, *Journal of Workplace Learning: Employee Counselling Today*, 12(4), 146-158.
- Allen, N. J. & Meyer, J.P. (1990) The Measurement and Variables Associated with Affective, Continuance and Normative Commitment to the Organization, *Journal of Occupational Psychology*, 63, 1- 12
- Avolio, B.J., Waldman, D.A. & Yammarino, F.J. (1991) Leading in the 1990s: The Four I's of Transformational Leadership, *Journal of European Industrial Training*, 15, 1-8.
- Bass, B. M., & Avolio, B. J. (1989) Potential biases in leadership measures: How prototypes, leniency, and general satisfaction relate to ratings and rankings of transformational and transactional leadership constructs, *Educational and Psychology Measurement*, 49, 509-527.
- Conger, J.A. (1999) Charismatic and transformational leadership in organizations: An insider's perspective on these developing streams of research, *Leadership Quarterly*, 10(2), 145-189.
- Gardner, W., & Avolio, B. (Eds.) (2005) Authentic leadership theory and practice: Origins, effects and development: Monographs in leadership and management. New York: Elsevier Science.
- Greenleaf, R. K. (1977). Servant leadership: A journey into the nature of legitimate power and greatness. New York: Paulist Press.
- House, R. J. (1977). A 1976 Theory of Charismatic Leadership. In J. G. Hunt & L. L. Larson (Eds.), *Leadership: The cutting edge* (pp.189-207). Carbondale, IL: Southern Illinois University Press.
- House, R., & Shamir, B. (1993). Toward the integration of transformational, charismatic, and visionary theories. In M. Chemers & R. Ayman (Eds.), *Leadership theory and research: Directions and perspectives* (pp. 81-107). San Diego, CA: Academic Press.
- Katz, D., & Kahn, R. L. (1978). *Social psychology of organizations*, 2nd ed. New York: John Wiley.
- Liou, Shwu-Ru (2008). An Analysis of the Concept of Organizational Commitment, *Nursing Forum*, 43(3),116-125.
- Manion, J. (2004). Nurture a culture of retention. *Nursing Management*, 35(4), 28-39.
- Northouse, P. G. (2007). *Leadership theory and practice*, 3rd ed. New Delhi: Sage.
- Robbins S. (1992). *Essentials in Organizational Behaviour*. Prentice-Hall International Editions.
- Russell, R. F. & Stone, A. G. (2002). A Review of Servant Leadership Attributes: Developing a Practical Model. *Leadership and Organization Development Journal*, 23(3), 145-157.
- Stone, A. G., Russell, R. F., & Patterson, K. (2004). Transformational versus Servant Leadership: A Difference in Leader Focus, *The Leadership & Organization Development Journal*, 25(4), 349-361.
- Vecchio, R.P. (1987). Situational Leadership Theory: An Evaluation of a Prescriptive Theory. *Journal of Applied Psychology*, 72, 444-451.
- Wheeler, D. W. (2011). *Leadership for High Education: Principles and Practices*, Hoboken, N.J Jossey Bass

Appendix 1.

Yangon University of Economics Research Questionnaire

Objective: This questionnaire is intended to apply for interview with teachers working at public universities of Myanmar. It will be used only for a survey that will be conducted in a research required to submit for conference of Korea Myanmar Research Association. Research topic is "Administrators' Leadership Styles and Teachers' Organizational Commitment at Higher Education Institutions in Myanmar"

Date: -----

25.	encourages the use of staff and student journals for professional interaction.	1	2	3	4	5
26.	shares new ideas about teaching he/she read or comes across with staff members.	1	2	3	4	5
27.	readily accepts teachers' ideas and programs.	1	2	3	4	5
28.	facilitates teachers' creativity.	1	2	3	4	5
29.	facilitates students' creativity.	1	2	3	4	5
30.	encourages teachers to do more creative teaching than maintain strong /tight discipline.	1	2	3	4	5
31.	encourages teachers to exhibit students' work.	1	2	3	4	5
With respect to school climate, I am proud of the way:						
32.	the administrator (rector and pro-rector) represents the school.	1	2	3	4	5
33.	the teachers represent the school.	1	2	3	4	5
34.	teachers are integrated into their work in school.	1	2	3	4	5
35.	teachers show high expectations for students.	1	2	3	4	5
36.	teachers spend extra time to help students.	1	2	3	4	5
37.	the administrator (rector and pro-rector) shows high expectations for students.	1	2	3	4	5
38.	teachers work cooperatively with one another.	1	2	3	4	5
39.	students show positive feelings toward the school.	1	2	3	4	5
40.	teachers show positive feelings towards the school.	1	2	3	4	5
41.	the school is well kept and conducive to student learning.	1	2	3	4	5

II. Leadership Styles

Authentic Leadership

Instructions: The following survey items refer to your administrator's style, as you perceive it.

Judge how frequently each statement fits his or her leadership style using the following scale:

Very rare 1	Once in a while 2	Sometimes 3	Fairly often 4	Frequently 5
----------------	----------------------	----------------	-------------------	-----------------

My Administrator...

1	admits mistakes when they are made	1	2	3	4	5
2	asks you to take positions that support your core values	1	2	3	4	5
3	listens carefully to different points of view before coming to conclusions	1	2	3	4	5
4	knows when it is time to reevaluate his or her positions on important issues	1	2	3	4	5
5	display emotions exactly in line with feelings	1	2	3	4	5
6	make difficult decisions based on high standards of ethical conduct	1	2	3	4	5
7	seek feedback to improve interactions with others	1	2	3	4	5
8	show I understand how specific actions impact others	1	2	3	4	5

Servant Leadership

Key: 1 = Strongly disagree 2= Disagree 3 = Undecided 4 = Agree 5 = Strongly agree

1	Others would seek help from him/her if they had a personal problem.	1	2	3	4	5
2	He/She emphasizes the importance of giving back to the community.	1	2	3	4	5
3	He/She can tell if something work related is going wrong.	1	2	3	4	5

Please complete the following **demographic items** by checking the appropriate space.

1. Sex: Male ----- Female -----
2. Number of years in this school: 1-2 ----- 3-5 ----- 6-8----- 9+ ----
3. Number of years of teaching experience: 1-2----- 3-5----- 6-8----- 9+ --
4. Highest educational level: Bachelors ----- Masters ----- Ph.D.-----

I. Factors Influencing Leadership Styles

Instruction: Please circle one response to each statement using the following scale:

Key: 1= Never; 2=Rarely; 3= Sometimes; 4=Often; 5=Very Often

The Administrators, in strategic planning , wants teachers to:						
1.	develop strategy for teaching and curriculum improvement.	1	2	3	4	5
2.	make their own decisions	1	2	3	4	5
3.	be free in implementing and evaluating their own decisions.	1	2	3	4	5
4.	develop an overall strategy to determine why we are failing to meet our goals and what to do to correct the situation.	1	2	3	4	5
5.	identify the causes of the problems.	1	2	3	4	5
6.	prioritize causes of problems.	1	2	3	4	5
7.	choose the most effective method/strategy to counteract the causes of problems.	1	2	3	4	5
8.	generate alternative strategies for solving problems before making choices.	1	2	3	4	5
9.	Choose the most attainable strategies from among alternatives.	1	2	3	4	5
10.	Use the results of evaluation for revising decisions.	1	2	3	4	5
The Administrator, in his/or organizational structure :						
11.	is the main source of all ideas.	1	2	3	4	5
12.	allows academic committees to make their own decisions.	1	2	3	4	5
13.	asks and receives feedback from all academic committees.	1	2	3	4	5
14.	is constantly emphasizing the enforcement of rules and standards	1	2	3	4	5
15.	encourages committees to plan effectively.	1	2	3	4	5
16.	enforces rigid rules to obtain compliance from teachers.	1	2	3	4	5
17.	promotes students' participation at the classroom level.	1	2	3	4	5
18.	motivates teachers to encourage students to learn.	1	2	3	4	5
19.	allows teachers to enter his/her office freely, even when he/she is busy at work.	1	2	3	4	5
20.	allows teachers for making decision freely with student service.	1	2	3	4	5
21.	allows teachers the freedom to plan and implement disciplines for students at classrooms.	1	2	3	4	5
22.	allows teachers the freedom to plan and implement the teaching methods for student academic development.	1	2	3	4	5
The Principal, in his/her innovative strategy :						
23.	promotes new strategies for school improvement.	1	2	3	4	5
24.	encourages faculty development.	1	2	3	4	5

*Administrators' Leadership Styles and Teachers' Organizational Commitment
at Higher Education Institutions in Myanmar*

4	He/She gives others the responsibility to make important decisions about their own jobs.	1	2	3	4	5
5	He/She makes others' career development a priority.	1	2	3	4	5
6	He/She cares more about others' success than his/her own.	1	2	3	4	5
7	He/She holds high ethical standards.	1	2	3	4	5
8	He/She cares about others' personal well-being.	1	2	3	4	5
9	He/She is always interested in helping people in the community.	1	2	3	4	5
10	He/She is able to think through complex problems.	1	2	3	4	5
11	He/She encourages others to handle important work decisions on their own.	1	2	3	4	5
12	He/She is interested in making sure others reach their career goals.	1	2	3	4	5
13	He/She puts others' best interests above his/her own.	1	2	3	4	5
14	He/She is always honest.	1	2	3	4	5
15	He/She takes time to talk to others on a personal level.	1	2	3	4	5
16	He/She is involved in community activities.	1	2	3	4	5
17	He/She has a thorough understanding of the organizational and its goals.	1	2	3	4	5
18	He/She gives others the freedom to handle difficult situations in the way they feel is best.	1	2	3	4	5
19	He/She provides others with work experiences that enable them to develop new skills.	1	2	3	4	5
20	He/She sacrifices his/her own interests to meet others' needs.	1	2	3	4	5
21	He/She would not compromise ethical principles in order to meet success.	1	2	3	4	5
22	He/She can recognize when others are feeling down without asking them.	1	2	3	4	5
23	He/She encourages others to volunteer in the community.	1	2	3	4	5
24	He/She can solve work problems with new or creative ideas.	1	2	3	4	5
25	If others need to make important decisions at work, they do not need to consult him/her.	1	2	3	4	5
26	He/She wants to know about others' career goals.	1	2	3	4	5
27	He/She does what he/she can to make others' jobs easier.	1	2	3	4	5
28	He/She values honesty more than profits.	1	2	3	4	5

Charismatic Leadership

Your Administrator:

1	Influences others by developing mutual liking and respect	1	2	3	4	5
2	Readily recognizes barriers/forces within the organization that may block or hinder achievement of his/her goals	1	2	3	4	5
3	Engages in unconventional behavior in order to achieve organizational goals	1	2	3	4	5
4	Entrepreneurial: seizes new opportunities in order to achieve goals	1	2	3	4	5
5	Shows sensitivity for the needs and feelings of the other members in the organization	1	2	3	4	5
6	Uses nontraditional means to achieve organizational goals	1	2	3	4	5
7	In pursuing organizational objectives, engages in activities involving considerable self-sacrifice	1	2	3	4	5

8	Readily recognizes constraints in the physical environment (technological limitations, lack of resources, etc.) that may stand in the way of achieving organizational objectives	1	2	3	4	5
9	Advocates following non-risky, well-established courses of action to achieve organizational goals	1	2	3	4	5
10	Provides inspiring strategic and organizational goals	1	2	3	4	5
11	Readily recognizes constraints in the organization's social and cultural environment (cultural norms, lack of grassroots support, etc.) that may stand in the way of achieving organizational objectives	1	2	3	4	5
12	Takes high personal risks for the sake of the organization	1	2	3	4	5
13	Inspirational: able to motivate by articulating effectively the importance of what organizational members are doing	1	2	3	4	5
14	Consistently generates new ideas for the future of the organization	1	2	3	4	5
15	Exciting public speaker	1	2	3	4	5
16	Often expresses personal concern for needs and feelings of other members in the organization	1	2	3	4	5
17	Tries to maintain the status quo or the normal way of doing things	1	2	3	4	5
18	Often exhibits very unique behavior that surprises other members in the organization	1	2	3	4	5
19	Recognizes the abilities and skills of other members in the organization	1	2	3	4	5
20	Often incurs high personal costs for the good of the organization	1	2	3	4	5
21	Appears to be skillful performer when presenting to a group	1	2	3	4	5
22	Has vision: often brings up ideas about possibilities for the future	1	2	3	4	5
23	Readily recognizes new environmental opportunities (favorable physical and social conditions) that may facilitate achievement of organizational objectives	1	2	3	4	5
24	Recognizes the limitations of other members in the organization	1	2	3	4	5
25	In pursuing organizational objectives involving considerable personal risk	1	2	3	4	5

Transformational Leadership

Our administrator...

1	tries to enhance my internal motivation when s/he wants to motivate me for a task.	1	2	3	4	5
2	knows about our competencies, work-related personal concerns and needs and how to motivate each of us.	1	2	3	4	5
3	makes me feel that what I do is valuable and useful.	1	2	3	4	5
4	encourages us to generate ideas and gets our suggestions while planning and conducting work.	1	2	3	4	5
5	makes the workplace feel like a family environment.	1	2	3	4	5
6	informs me about the short or long term potential contributions of my work	1	2	3	4	5
7	not only appreciates my ideas, but also encourages me to put them into practice.	1	2	3	4	5
8	is a role model with the way s/he conducts work, his/her personality and communication skills.	1	2	3	4	5
9	encourages me to freely express my ideas.	1	2	3	4	5

10	encourages me to question the status quo, to produce new solutions and supports my creativity.	1	2	3	4	5
11	encourages us to follow the innovations in the field.	1	2	3	4	5
12	thrills us with the things we can do and succeed at by reminding us of our specifications and abilities.	1	2	3	4	5
13	tries to convey all the information to us about the work processes.	1	2	3	4	5
14	plans trainings for the areas I am in need of improving.	1	2	3	4	5
15	makes me feel like there are things s/he could also learn from me.	1	2	3	4	5
16	makes me feel that s/he cares about me, not only as an employee, but also as a person.	1	2	3	4	5
17	considers our personal interests and abilities, when s/he allocates tasks in the team.	1	2	3	4	5
18	sets us performance goals and rewards us as much as we succeed.*	1	2	3	4	5
19	lets me use part of my work hours for new projects that I have in mind.	1	2	3	4	5
20	supports our attendance to personal and professional development seminars.	1	2	3	4	5

III. Teachers' Commitment

Sr. No.	Description	1	2	3	4	5
<i>Affective Commitment</i>						
1	I would be very happy to spend the rest of my career in this organization					
2	I really feel as if this organization's problems are my own					
3	I do not feel like part of the family at my organization *					
4	I do not feel emotionally attached to this organization *					
5	This organization has a great deal of personal meaning for me					
6	I do feel a strong sense of belonging to my organization*					
<i>Continuance Commitment</i>						
1	It would be very hard for me to leave my organization right now, even if I wanted to.					
2	Too much of my life would be disrupted if I decided I wanted to leave my organization right now.					
3	Right now, staying with my organization is a matter of necessity as much as desire.					
4	I feel that I have too few options to consider leaving this organization.					
5	One of the few negative consequences of leaving this organization would be the scarcity of available alternatives.					
6	One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice; another organization may not match the overall benefits I have here.					
<i>Normative Commitment</i>						
1	I do not feel any obligation to remain with my current organization*					
2	Even if it were to my advantage, I do not feel it would be right to leave my organization now.					
3	I would feel guilty if I left my organization now.					

4	This organization deserves my loyalty.					
5	I would not leave my organization right now because I have a sense of obligation to the people in it.					
6	I owe a great deal to my organization.					

Note: * Reversed score items

IV. Performance

In this survey, **professional development** is defined as activities that develop an individual's skills, knowledge, expertise and other characteristics as a teacher.

Please only consider professional development you have taken **after** your initial teacher training/education.

(i) During the last 18 months, did you participate in any of the following kinds of professional development activities, and what was the impact of these activities on your development as a teacher? Yes No

If "Yes", for each question below, please mark one choice in part (A). If you answer 'Yes' in part (A) then please mark one choice in part (B) to indicate how much impact it had upon your development as a teacher.

	Description	(A) Participation		(B) Impact			
		Yes	No	No Impact	Small	Moderate	Large
a	Courses/workshops (e.g. on subject matter or methods and/or other education-related topics)						
b	Education conferences or seminars (where teachers and/or researchers present their research results and discuss educational problems)						
c	Qualification program (e.g. a degree programme)						
d	Observation visits to other schools/organizations						
e	Participation in a network of teachers formed specially for the professional development of teachers						
f	Individual or collaborative research on a topic of interest to you professionally						
g	Mentoring and/or peer observation, coaching, as part of a formal school arrangement						

(ii) Thinking about less formal professional development, during the last 18 months, did you participate in any of the following activities, and what was the impact of these activities on your development as a teacher?

*Administrators' Leadership Styles and Teachers' Organizational Commitment
at Higher Education Institutions in Myanmar*

For each question below, please mark one choice in part (A). If you answer 'Yes' in part (A) then please mark one choice in part (B) to indicate how much impact it had upon your development as a teacher.

	Description	(A)		(B)			
		Participation		Impact			
		Yes	No	No Impact	Small	Moderate	Large
a	Reading professional literature (e.g. journals, evidence-based papers, thesis papers)						
b	Engaging in informal dialogue with your colleagues on how to improve your teaching						

(iii) Thinking of your own professional development needs, please indicate the extent to which you have such needs in each of the areas listed.

Please mark one choice in each row.

	Description	No need at all	Low level of need	Moderate level of need	High level of need
a	Content and performance standards in my main subject field(s)				
b	Student assessment practices				
c	Classroom management				
d	Knowledge and understanding of my main subject field(s)				
e	Knowledge and understanding of instructional practices (knowledge mediation) in my main subject field(s)				
f	ICT skills for teaching				
g	Teaching students with special learning needs				
h	Student discipline and behavior problems				
i	School management and administration				
j	Teaching in a multicultural setting				
k	Student counseling				

Thank you very much for your participation.

ENTREPRENEURSHIP IN MYANMAR: CREATION AND DEVELOPMENT OF NEW FIRMS

Nu Nu Lwin · Thant Pyie Sone Aung***
Yangon University of Economics

ABSTRACT: This study aims to identify and compare the factors affecting each stage of entrepreneurial process in creating manufacturing and service firms in Myanmar and to identify the barriers of doing business in Myanmar. The survey is conducted based on 105 firms in Yangon Region. The data are gathered by face to face interview with structured questionnaire. This study uses chi-squared method to test the significant statistical difference between the two data sets. It is found out that economic factors are the main motivators for starting a business, work experience is most important source for assessing resources and there is weak interaction between education and real world experience of entrepreneurs. Moreover, the study finds out that there are barriers like financial and technology assessment in Myanmar Economy. For encouraging entrepreneurship in Myanmar for the aim of economic development, government sectors should provide good infrastructure for the startup and for their survival and add skills training like presentation skill and selling methods in the school education. In addition, the entrepreneurs should take more competitiveness and creativities to their products or services.

Key words : Entrepreneurship, Business Creation Process, Barriers, Work Experience, Myanmar

I. Introduction

The impact of entrepreneurship on economic growth is related to the entry of different types of firms into the economy those that bring innovation to the marketplace and broaden the scope of business; those that channel resources toward exploiting these innovative ideas; and those that perform the same activities with greater efficiency. (Binks and Vale, 1991) These findings have led to the implementation of different types of initiatives and policies designed to encourage entrepreneurship, including the introduction of educational and training programs, the promotion of consulting support for entrepreneurs, and the facilitation of access to financing.

Therefore, for the economic development of Myanmar, the creation of new firms is necessary and so does their success. Thus, this study emphasizes on entrepreneurship which refers to the creation of a new firm.

Although Myanmar is now changing in political, social and economic, Myanmar's economic situation is still facing a lot of challenges. Most of the SMEs in Myanmar believe that the development of AEC is also a big challenge and they won't compete with the foreign SMEs even though most researchers said that SMEs are the major source of economic growth and employment and the private sector of Myanmar has received many attentions during Myanmar's opening and ongoing transition period.

In this study, entrepreneurship is defined as the capacity to create and develop new firm. Generally, a new firm develops through five stages; inception, start-up, early development, expansion and maturity. Like the proverb "Make a good start to ensure the happy ending", having a good start is important for the long term success of the business. Thus, this study focuses on three early stages of the business creation process: from the initial motivation to become an entrepreneur to the network and contacts to solve the problems they faced, to do the business success and survival.

The goal of this research project is, therefore, to identify areas of innovative action for the promotion of small and medium-sized enterprises in Myanmar and hence to contribute the economic development of Myanmar. This paper presents the factors affecting entrepreneurship and behavior of dynamic enterprises at each stage of the entrepreneurial process as well as barriers of doing business in Myanmar.

II. MATERIALS AND METHODS

This research examines and analyzes the factors affecting the entrepreneurial activities in Myanmar. Thus, a survey is conducted among Myanmar SMEs. The secondary data source for the study is based on 2015 Myanmar Business Survey Report. Thus, sample firms are selected based on the survey frame from 2015 Myanmar Business Survey Report by Central Statistical Organization Myanmar (CSO). This study use stratified random sampling method. For randomization, the districts are firstly randomized. From each district list, the townships are randomly selected and then from each township, four firms are randomly selected. After 33 times of randomization, 130 firms are selected for survey.

For getting the reliable data and getting things done efficiently, the university students were trained as interviewers for survey. Field survey was conducted during the period from September 24th 2018 to 7th November, 2018. One hundred and five firms have responded that represents 65 percent response rate. Among these 105 firms, there

are 54 manufacturing firms and 51 service firms. (Table 2).

In this study, Chi Square analysis is applied to check the significant differences regarding entrepreneurial factors between service firms and manufacturing firms. The greater the chi-square value, the more correlation there is between the two groups and the lesser the probability of getting the similar value by chance.

Table 1. Sample Characteristics

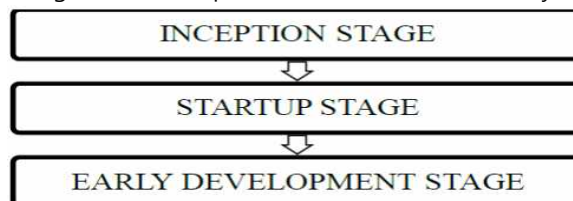
Number of firms contacted	160
Number of firms that responded	105
Sample firms by sector - Service firms	51(49%)
Manufacturing Firms	54(51%)

Source: Own Complication

1. Conceptual Framework

This study focuses on factors affecting firm creation process as well as the achievement and experiences of entrepreneur. Figure 1 represents the conceptual framework of the study. As shown in the figure, this study analyzes the factors affecting at Inception, Start-up, and Early development stages of creating manufacturing and service firms. Thus, the result of this comparison is expected to identify the potential factors and barriers on business creation process in Myanmar Economy so that the potential entrepreneur could create a firm by taking the experience of the former entrepreneurs and hence, contribute to economic development

Figure 1. Conceptual Framework of the Study.



Source: Own Complication

2. Objectives of the Study

This study mainly aims to identify the factors affecting each stage of entrepreneurial process in creating manufacturing and service firms in Myanmar and to compare and contrast these influencing factors between those two sectors. Based on this aim, the objectives of the study are specified as follows:

- √ To analyze and compare the factors affecting entrepreneurial activities at each

stage of the business creation process in manufacturing and service firms in Myanmar.

√ To examine the barriers of doing business in Myanmar.

III. RESULTS AND FINDINGS

There will be two parts in this section. The first one is factors effecting entrepreneurial process and the other is barriers of doing business in Myanmar.

1. Factors affecting entrepreneurial activities

Among five stages of doing business in Myanmar, the first three factors are the foundation of the success of the firms' development because these are the foundation for the long term success of the firms. Thus, in this study, only the factors affecting at the first three stages of entrepreneurial process are examined.

1) Inception Stage

This is the stage at which the entrepreneur starts thinking about starting a new venture. Three factors identified in inception stage are 1) motivators to start thinking to create a firm 2) Opportunity awareness and acceptance and 3) factors effecting final startup decision.

(1) Motivation to be an Entrepreneur

Motivation is the primary force for start thinking of being entrepreneur. Table 3.1 presents the main motivation to become entrepreneur. Thus, the study shows that in non-economic motivators, self-realization and being own boss as well as to improve income and to become wealthy are the most important for entrepreneur with highest percentage. Thus, youths get intention to be ntrepreneurs by making them willingness to get self-realization.

Table 2. Motivation to become Entrepreneur

Motivation Factors	Manufacturing	Service	χ^2 Sig.
Non-Economic Motivation			
For self-realization	64.81	66.67	0.905
To be own Boss	61.11	62.75	0.809
To obtain Social Status	48.15	45.10	0.949
To contribute to society	35.19	25.49	0.766
To follow the family tradition in business	24.07	21.57	0.900
Because they were unemployed	16.67	19.61	0.878
Because they could not go further in education	11.11	5.88	0.800
Economic Motivation			
To improve income	61.11	70.58	0.903
To become wealthy	51.85	56.86	0.876

Source: Survey Data (2018) Note: Percent of "Very Important" and "Important" in each group

The two data sets are statically significant at 0.01 levels with Pearson Chi-square value nearly 1 and greater than 0.5. Thus, it can be generally concluded that there is no difference between the two data sets. Therefore, non-economic motivators like being own boss, and self-realization as well as economic motivators like to improve income and to become wealthy are the important motivators for the start of the new venture whether it is manufacturing or service firms in Myanmar.

The presence of entrepreneurial skills also motivates the potential entrepreneurs to start their own venture. Three main sources of twelve entrepreneurial skills are identified in this study. The entrepreneurs surprisingly state that work experience is the main source of getting these skills because above fifty percent of the entrepreneurs think that work experience is most important and education as well as family context is not important source of entrepreneurial skill for Myanmar Entrepreneurs. Thus, work experience they have also motivators for Myanmar Entrepreneurs. Table 4 shows the sources of entrepreneurial skills.

Table 3 Sources of Entrepreneurial Skills

	Education		Work Experience		Family Context	
	Numbers of Firms	Percent	Numbers of Firms	Percent	Numbers of Firms	Percent
a) Problem solving	32	30.48	57	54.29	26	24.76
b) Business motivation	29	27.62	52	49.52	29	27.62
c) Risk/uncertainty taking	31	29.52	67	63.81	11	10.48
d) Negotiating skills	32	30.48	57	54.29	19	18.09
e) Teamwork	31	29.52	56	53.33	23	21.90
f) Creativity	40	38.09	54	51.43	15	14.28
g) Technical knowledge	46	43.80	55	52.38	7	6.67
h) Marketing	26	24.76	64	60.95	21	20.00
i) Administration	23	21.90	63	60.00	19	18.09
j) Planning skills	32	30.48	58	55.24	18	17.14
k) Communication skills	38	36.19	63	60.00	9	8.57
l) Motivating others	33	31.43	62	59.05	14	13.33

Source: Survey Data (2018)

The reaction of Myanmar's entrepreneurs' family to startup decision also motivates entrepreneurs because almost all of the people around the entrepreneurs encourage them to start their own business. Moreover, no strong negative reactions to this decision are occurred. Strongest positive encouragement was occurred from the nuclear family members and which value is statistically significant at 0.01 levels with Pearson's correlation value of 0.667. Thus, family and friends of Myanmar entrepreneurs are the motivators for starting a business. Table 4 states the reaction for startup decision.

Table 4 Reactions to Start Up Decision

Response from	Agree		Disagree		χ^2 Sig
	Manufacturing	Service	Manufacturing	Service	
Nuclear Family	75.93	74.51	11.11	11.76	0.667
Colleagues	66.67	64.71	29.63	31.37	0.380
Friends	62.96	60.78	5.56	5.88	1.000
Teachers	62.96	58.82	1.85	1.96	0.317
Other family members	51.85	50.98	18.52	19.61	0.409
Previous Boss	44.44	41.17	1.85	1.96	0.449

Source: Survey data (2018)

(2) Business Opportunity

Motivation without opportunity is not an outcome. Therefore, sources of business

opportunity and identification of business opportunity are stated in this section. In Myanmar case, individual customers are the main source of business opportunity although there may be greater benefits in cooperating with large firms. Only a small numbers of firm provide products or services which are new to Myanmar Market. Thus, uniqueness of products or services is required in Myanmar and new opportunities for the potential entrepreneurs. Figure 5 shows the sources of business opportunity and innovativeness of products or services.

Table 5 Business Opportunity

Unit: Percent

Sources of Business Opportunity	Manufacturing	Service
Individual Customer	81.48	72.55
Corporations which had produced the same products/service	11.11	23.53
Corporations which didn't produce same products/service	7.41	3.92
Innovativeness of Products/ Service		
Existing products/services	88.89	68.63
New products/services	11.11	31.37

Source: Survey Data (2018)

However, Myanmar entrepreneurs do research on the market demand of their products or services before starting their new ventures and mostly they discover that increasing in demand. Thus, awareness of market situation is important for getting opportunity. Table 3.5 presents the market situation of the entrepreneurs' products or services before startup.

Table 6. Market Demand of Entrepreneurs' Products/Service

Unit – Percent

	Manufacturing	Service	χ^2 Sig
Increasing demand	59.26	62.75	0.817
Stable Demand	24.07	27.45	
Declining Demand	14.81	9.80	

Source: Survey data (2018)

Most of the entrepreneurs identify the opportunity from interacting/ discussing with other people, from their previous work experience or newspaper articles. Table 3.6 states the sources of business opportunity in Myanmar. The Pearson's Chi-squared value of all sources of information for both manufacturing and service firms approach to 1 with all are greater than 0.5. Thus, there is no statistical significant difference between

the two variables. Therefore, their network, their experience and newspaper articles are the most important source of the business opportunity for entrepreneurs. Thus, creating network, past experiences are the most important sources of business opportunity.

Table 7. Information Sources of Business Opportunity

Unit – Percent

	Manufacturing	Service	x² Sig
a) Interacting/discussing with other people	83.33	84.31	0.611
b) Experience in a previous job/task	79.63	80.39	0.937
c) Reading a newspaper article	57.41	56.86	0.878
d) Reading a magazine article	42.59	39.22	0.669
e) Internet	27.78	29.41	0.811
f) Visiting a trade fair	25.93	23.53	0.948
g) Television, radio	25.93	23.53	0.736
h) Reading academic papers	25.93	21.57	0.897

Source: Survey Data (2018)

(3) Factors Affecting the Final Startup Decision

There are two main factors affecting the final startup decision of entrepreneurs. They are economic factors, and non-economic factors. In Myanmar case, most of the entrepreneurs believe that economic factors are more important than non-economic factors. Among economic factors, having better income, improving family income and making fortune are most important factors. Table 3.7 shows factors affecting final startup decision of entrepreneurs. Moreover, entrepreneurs decide to start new ventures through many non-economic factors. In non-economic motivators, being own boss, self-realization, willingness to face challenges, to be like the entrepreneurs they admire and having influence in community are the most important motivators for startup decision.

Since the Pearson value of all the variables except self-realization and social reputation is more than 0.6, there is no statistically significant difference between the two data sets. Thus, these factors have strong correlation between the two data sets while the other two factors have moderate correlation between the two data sets.

Table 8. Factors Affecting Final Startup Decision

Unit – Percent

	Manufacturing	Service	χ^2 Sig
Economic Factors			
a) To have a better income	94.44	90.20	0.961
b) Family income/assets	88.89	84.32	0.890
c) To make a fortune	81.48	78.43	0.967
d) Expected growth of the national economy	50.00	41.18	0.965
e) Availability of finance	42.59	25.49	0.705
f) Size and growth of the market	37.04	31.37	1.000
g) Availability of public support (e.g., training)	33.33	33.33	0.874
h) Number and size of competitors	31.48	21.57	0.933
i) Compliance cost	16.67	11.76	0.820
j) Risk of bankruptcy	1.85	3.92	0.972
Non-economic Factors			
a) To be own boss	70.37	64.71	0.772
b) For self-realization	64.81	68.62	0.416
c) To be confronted by continuous challenges	61.11	64.7	1.000
d) To be like a person admire (father, friend, somebody in town)	59.26	58.82	0.542
e) To have influence in community	55.56	50.98	0.643
f) To gain social reputation/status	46.30	39.22	0.532
g) To contribute to society	46.30	39.21	0.665
h) Because unemployed	11.11	11.76	0.993

Source: Survey Data (2018),

Note: Percent of "Important" and "Very Important" in each group

2) Startup Stage

This is the stage at which the entrepreneur starts build their own venture. An entrepreneur's objective at this stage is to acquire the resources like fund, human capital and facilities and to combine and use in optimal way to get the better result according to the business plan and the tools he had prepared.

Table 3.8 states the major factors affecting the mobilization of resources. In case of assessment of resources, work experience becomes the most important factor in obtaining key technology and other sources. As the Pearson's values of both factors are 0.445 and 0.454, respectively, there is a moderate correlation between the two data sets and work experience is the most important factor for acquiring resources.

Table 9. Major Factors Affecting the Mobilization of Resources

Unit: Percent

	Key Technology			Other Resources		
	Mf	Service	χ^2 Sig	Mf	Service	χ^2 Sig
Work Experience	81.48	82.36	0.445	68.52	54.90	0.454
Undergraduate Education	24.07	56.86	0.770	11.11	31.37	0.730
Postgraduate Education	11.11	35.29	0.455*	22.22	29.41	0.875

source: Survey Data (2018)

Note: * significant at 0.05 level; others significant at 0.01 level, Mf = Manufacturing

Moreover, they use financial resources mostly from their own saving or saving from the founding partner. Table 3.9 shows the sources of finance that Myanmar entrepreneurs used. The external financial sources are not ranked as important because they need collateral or a lot of interest to get external financial help. The consequences of this will be explained in the barriers of doing business in Myanmar section.

Table 10. Financial Sources at Startup Stage

Unit: Percent

	Manufacturing	Service	Total
Personal Saving of founding Partner	79.63	84.31	81.90
Relatives/ Friends	33.33	47.06	40.00
Private Investors who are not relative	19.60	19.61	18.09
Venture Capital	11.11	17.65	14.29
Personal Credit Card	18.52	7.84	13.33
Public Institution (Loan/ Guarantee)	5.56	7.84	7.62
Banks: Loan	6.48	11.76	6.67
	N=54	N=51	N=105

Source: Survey data (2018)

Note: Percent of moderate and great source of fund

3) Factors Affecting the Early Development Stage

Early development stage is the third and one of the most important stages of the firms' success. Thus, the scope of entrepreneurs' activities expands market penetration and corporate managerial aspects in this stage. Thus, there are two major types of factors affecting early development stage. They are factors affecting ability of market penetration and solving problems that the entrepreneurs faced during their process of business creation.

In case of market penetration, as in the table 3.10, only entrepreneur of the service firms believe that they have competitiveness in service quality. Most of the

entrepreneurs think that they have less competitive in quality, research and design and finally, price competitiveness in compare to larger firms or other firms. Thus, competitiveness to the products or services are required in the product or services of Myanmar and can do spirit of entrepreneurs are required for the long term success of the firms.

Table 11. Company's Strength in Comparison with Main Competitors

Unit: Percent

	Manufacturing	Service
1) Service	37.04	72.55
2) Quality	29.63	41.18
3) R&D, design	18.52	31.37
4) Price competitiveness	12.96	11.76

Source: Survey data (2018)

Note: Percentage of firms that stated they have competitiveness

There are many problems that entrepreneurs face in their process of creating business which are also the barriers of doing business in Myanmar. Moreover, there are many sources that help entrepreneurs in solving the problems. According to Table 12, family and friends are the main support for solving the problem which states the Myanmar culture of family unity. Moreover, the college of entrepreneurs and suppliers or customers of entrepreneurs are also great support for problem solving.

Table 12. Support for Problem-solving at Early Development Stage

Unit: Percent

	Manufacturing	Service	Total
1. Family/friends	64.81	90.19	77.14
2 Colleagues	51.85	82.35	66.67
3 Suppliers/customers	50.00	80.00	64.76
4. Public institutions	11.11	7.84	9.52
5 Consulting firms	1.85	15.68	8.57
6. Trade associations	3.70	9.80	6.67
7. Universities/Research institutions	3.70	5.88	4.76

Source: Survey data (2018)

2. Barriers of Doing Business in Myanmar

Barriers are the blockage of firms' creation process and therefore, the awareness of

barriers provides greater opportunity and firms' success. For this purpose, this section explains the barriers of doing business in Myanmar that the future entrepreneurs aware these barriers. Four types of barriers are identified in this study. They are information assessment barriers, financial assessment barriers, technology assessment barriers and others. According to the survey done in Myanmar, around 20 percent of the respondent state that they have lack of access to the information they required and around 30 percent don't consider these information as necessary. This information is required for the firm success and the lack of these information make difficulty in business creation process. Table 13 states the percentage of respondents who have lack of access information they required.

Table 13. Percentage of Entrepreneurs with Lack of Information before Start Up
Unit: Percent

Type of Information	Manufacturing	Service	χ^2 Sig
a) Competitive size of plant	25.90	39.22	0.894
b) Number and characteristics of potential competitors	27.78	25.49	0.869
c) Competitive size of investment	24.07	25.49	0.808
d) Size of the market	24.07	23.53	0.786
e) Competitive Technical knowledge and its assessment	22.22	17.64	1.000
f) Characteristics of the market	18.52	13.73	0.830
g) Types and Assessment of Distribution channels	11.11	13.73	0.906

Source: Survey Data (2018)

Thus, there are one third of entrepreneurs in the respondents who don't have accessed on the information they had required. All the variables are significant at 0.01 level with Pearson's Chi-squared value of more than 0.78. Thus, there is a strong correlation between the data sets and therefore, both manufacturing and service firms' entrepreneurs had faced difficult information assessment barrier.

Table 14. Consequences of no access to External Financial Sources

Unit: Percent

	Manufacturing	Service
a) Started with Smaller Venture than desirable competitive venture	50.00	58.82
b) Started later than the estimated time	42.59	33.33
c) Required Partners	35.18	47.06
d) Started with a less-than-desirable level of technology.	25.93	7.84
e) Required large client or supplier support	27.78	5.88
f) Other	22.22	21.59
g) Don't have difficulty with limited access	20.37	21.57

Source: Survey data (2018)

Note: Percent of no access to financial sources

The second barrier is financial assessment barriers. As stated in the previous section in Table 3.9, most of the entrepreneur uses own savings or their partner's one. Thus, they face a lot of choices like to start their own venture smaller than they had expected. Thus, they have a lot of difficulties. The consequences of no external financial sources are shown in table 3.13. Moreover, most of the entrepreneurs stated that they don't have easy access to external financing like bank loan because of a lot of document requirements and collateral even though they have great business plan. Thus, they started the firms which are smaller than the size they firstly intended to build, taking more time to start their new ventures, required more partners, starting with outdated technology, or others. Therefore, providing investment loan effectively and efficiently is important for the development and success of the SMEs in Myanmar.

Today is the technology age. Thus, the assessment of technology is important for not only starting a new business but also important for ease of doing business and long term success of the business. However, there is technology barrier in Myanmar. Table 15 shows difficulty in assessment of key technology in Myanmar economy.

Table 15. Difficulty in Assessment of Key Technology

Unit: Percent

	Manufacturing	Service	Total
Personal network	64.81	59.31	61.9048
Commercial Network	78.89	68.63	73.3333
Institution and other	92.96	75.29	83.8095

Source: Survey Data (2018) Note: Percent of no assessment to key technology

According to the survey, 78.89 percent of the manufacturing entrepreneurs and 67.74 percent of the entrepreneurs identify that they don't assess to key technology

from all of personal network, commercial network, institutions and other sources. Percentage of each of the source is not less than 50 percent. Thus, generally, the result says that assessment of key technology is one of the barriers of doing business in Myanmar. There are other barriers that the entrepreneurs need to overcome.

Table 16. Problems Entrepreneurs Faced

Unit: Percent

	Manufacturing	Service	Total
a) To get clients	55.32	62.50	59.05
b) To manage/operate the venture	39.02	62.50	50.48
c) To hire managers	46.88	53.13	49.52
d) To adapt the product/services to the customer need	50.00	46.88	48.57
e) To finance and manage the cash flow	41.67	50.00	45.71
f) To certify quality standard	34.38	54.54	43.81
g) To hire skilled workers	40.00	43.75	41.9
h) To get suitable suppliers	39.47	43.75	40.95
i) To manage the relationship with large clients	37.50	40.62	39.05
j) To have suitable equipment	28.95	48.00	38.05
k) To get information about the market	41.03	34.38	37.14
l) To manage operations of a factory	34.38	21.74	27.62

Source: Survey data (2018)

The problems entrepreneurs need to handle are also the barriers of doing business in Myanmar for entrepreneurs. According to the survey in Myanmar, as in the Table 3.15, trying to get client, manage or operate the venture, to hire skilled workers and so on are the greatest problems that the entrepreneurs had encountered and thus, these are also the greatest barriers for them. Thus, for manufacturing firms, to get client, to adapt their products to the customers' need and to hire good manager are the greatest barriers they face while these previous factors, financial management, maintaining quality standard and trying to get suitable equipment are the greatest barriers for service business.

IV. DISCUSSIONS

This study analyzed the factors affecting on the business process of two major types of firms; manufacturing and service firms in Yangon region. The total numbers of firms in the survey is 105 firms. This study emphasizes on the study of business creation process and barriers of doing business in Myanmar.

The entrepreneurs in Myanmar believe that economic motivators are more important than non-economic motivators while their previous work experience is more important for the firm success than educations. This is the reason why their first venture starting age is around 30. Moreover, they also think that education or research in University is not very much important for their business even though there can be significant outcome from the cooperation with academic institutions.

Thus, Myanmar entrepreneurs need to aware that there can be great outcome from the collaboration between academic research and practical business environment. Moreover, government policy needs to address the weak linkage between the education and business world and to provide the opportunity for students to understand real business world. Therefore, in addition to business skill, creative mind, presentation skill, in hand experience through internship program are necessary in order to promote entrepreneurship in Myanmar.

Moreover, the entrepreneurs also state that there are barriers like information assessment, financial assessment, technology assessment and other barriers. These barriers make the business in Myanmar more difficult to run. In addition, all these resources are important not only for the future entrepreneurs who would like to start his own venture but also it's important for the business owner. Thus, the easy assessment of these resources makes the business process in Myanmar become easier. However, for information assessment, the transparency of the information and regulations are required and the new findings on Myanmar economy are also required. This is also the link between the education and business because the study on the Myanmar economy and business environment could provide a lot of contribution to the ease of doing business and economic development of Myanmar.

As for financing barriers, the ease of getting efficient and effective financial sources are required because some entrepreneurs who have great idea cannot expand their firms because they don't have enough amount of finance. Although the opening of Myanmar economy is good enough, it will not be a great choice if it cannot cover the running of existing SMEs. Thus, there are two points that need to be considered; from entrepreneur' side, they need to make more creative product or services with great quality and from government side, they need to provide great infrastructural support including financial and electricity. Moreover, ease of getting the high quality technology support is also important for the long term success of business.

V. CONCLUSIONS

This study only emphasizes on entrepreneurship in Myanmar based on the

comparative study of manufacturing and service firms in Yangon. This could only represent the factors that are influencing at each stage of the business creation process in manufacturing and service firms regardless of the influence of location factors like rural and urban or inside industrial zone or outside industrial zone as well as regardless of the importance of firm size. Thus, further research should be emphasized by adding these types of views in analysis which would provide greater explanation to the Myanmar Economy and business creation process in Myanmar.

REFERENCES

- Baek and Ra. (2002). *Entrepreneurship in Korea* (Revised first edition ed.). Seoul: Korea Institute for Industrial Economic and Trade & Inter American Development Bank.
- Bernhardt, Kanay De and Jones. (2016). *Myanmar SMEs' Participation in ASEAN and East Asian Regional Economic Integration – with a Focus on Processed Food and Apparel Manufacturing*. Yangon: CESD Economic Reforms Working Paper (1).
- Binks and Vale. (1991). *Entrepreneurship and Economic Development*. London: McGraw Hill.
- CSO. (2015). *Myanmar Business Survey Report, Nay Pyi Taw, Myanmar: Ministry of Planning and Finance*.
- CSO. (2018). *Myanmar Micro, Small and Medium Enterprise Survey 2017. Nay Pyi Taw Myanmar: Ministry of Planning and Finance*.
- Kantis, Ishida and Komori. (2002). *Entrepreneurship in Emerging Economies. Inter-American Development Bank*.

A SPOTLIGHT ON WELL-BEING OF MYANMAR'S YOUTH*

May Kyaw Soe, Naing Naing, Nann Sandi Moon, Ye Htet
Parami Institute of Liberal Arts and Sciences

ABSTRACT: As GDP is found to not be indicating all aspects of the state of well-being of a given country, there are a number of new measurements which focus on human development with different dimensions and different approaches. However, currently, most of the indicators developed for well-being of a country measure people from every age group. In this specific survey, the measurement has been narrowed down to the youths between 16 to 35 years old with a detailed questionnaire for a research project on discovering well-being of Myanmar's youths with different approaches, rooted in human development. The findings of this research support findings of many other development reports, notably the Human Development Report 2018 published by the UNDP.

Key words : Well-being, Human Development, Happiness, Health, Education, Youth, Myanmar, Yangon,

I. Introduction

Is GDP a good indicator to measure the well-being of the citizens in a country? As an indicator, GDP is widely used for measuring the economic growth of the country and is issued annually. For 2018, a total of 191 countries issued their own GDP numbers. Though it is widely used, there are many arguments spreading around the world regarding its limitations and reliability to indicate the state of the country's development. The most significant weakness is that GDP does not measure all aspects

* This version: December 2018. We are grateful to our advisor Dr. Christina Hans for invaluable inspiration, advice and guidance. We also thank Michelle Leanne Korte, Thein Zaw Oo and Zin Nwe Win from Innovations for Poverty Action as well as students from the 4th cohort of Parami Leadership Program for continuous feedback, comments and suggestions. Lastly, we are thankful to 158 survey participants in various locations of Yangon for their time and effort, which allowed us to carry out this piece of research.

of development, but only measures the production of the goods and services of its country. At the same time, there are other important things to take into account such as human resources, natural resources and environmental resources. Sophie Mitra, Professor of Economics at Fordham University, writes that GDP has many limitations and captures only a very narrow slice of economic activity: goods and services.¹⁾ She argues that the economy is about people and the US needs to get over its obsession with GDP in *The Conversation*.

In an article titled "Again, stop talking about GDP" from September 16, 2018, Richard Mahapatra pinned that GDP can be improved as a result of floods happening in the country.²⁾ However, this does not mean that the citizens are feeling happier or have an improved well-being as a consequence. Hence he is claiming that GDP is not the best way to indicate the growth of a country.

Overall, there seems to be a consensus among some economists that GDP is limited for assessing the state of well-being of a country. In her book "Donut Economics", Kate Raworth, for example, states that GDP is not good enough to indicate the good condition of a country. There are many factors which are affecting badly to environments and people living there even though the GDP rate is growing higher as a consequence. Since GDP accounts only for production of goods and services, it largely ignores effects on the environment. For production, many industries are built up and used up, and thus occupying spaces in the land. In turn, there will be less trees than before and nature environments are turned into factory spaces. Also, every industry needs fuel to run, such that as a result, the air pollution will be higher in the industrial zones. A huge amount of carbon dioxide is emitted because of industrial production. Global-warming, air pollution, water pollution and land pollution are increasing day by day, mainly because of industrial processes. Sustainable environment and the well-being of people become a crucial thing to consider.

According to World Bank, the GDP growth of Myanmar amounted to 6.4% in 2017, a slight increase from 5.9% in 2016.³⁾ In its forecast, the World Bank expects that the GDP growth of 2018 in Myanmar will be around 6.7%, which means that the economic growth of Myanmar is following an upward trend. At the same time, in 2017, Myanmar faced a crisis between Rakhine and Rohingya issues. There was the outbreak of violence in Rakhine state, and both Rakhine and Rohingya badly suffered from this situation. But 2017 GDP growth indicated that Myanmar's economy is developing, not counting on the well-being of people.

1) Mitra, Sophie. *The Conversation*. "The US needs to get over its obsession with GDP". 5 December 2018. www.theconversation.com/the-us-needs-to-get-over-its-obsession-with-gdp-101065

2) Mahapatra, Richard. *Down to Earth*. "Again, stop talking about GDP". 5 December 2018. www.downtoearth.org.in/blog/economy/again-stop-talking-about-gdp-61512

3) The World Bank. GDP data for Myanmar. 5 December 2018. data.worldbank.org/country/myanmar

In 2018, most of the places in Myanmar were flooded. In July 31 2019, an article titled "More than 100,000 forced to flee homes in Myanmar floods" written by Angus Watson and Bani Sapra for CNN showed that many people had suffered from floods and lost their homes and their properties.⁴⁾ But GDP growth of Myanmar is still expected to show a steady increase.

Well-being is a measurement of being comfortable, healthy or happy. It mainly focuses on how people feel and how they function and is concerned with both a social and a personal level. If people encounter disasters caused by high levels of production, it can raise concern about their properties and their living in developing countries. GDP as an indicator doesn't cover all well-being of people, it only accounts the physical properties. In order to measure the well-being, there is growing consensus that both economic well-being and other social, health and environmental factors should be taken into consideration, leading to the development of other well-being indicators.

This paper assesses data and information on the current state of health, education and overall well-being among random youths of Myanmar, mostly from Yangon. To do so, paper-based survey and online tests were run as of random weekdays in November 2018 in 3 different places in Yangon (Mahabandoola Park, Inya Lake and Hledan Center). The focus of the survey is on Yangon since it is the most developed as well as the largest city of Myanmar.

This survey mostly targets education and health, followed by overall measurement of wellbeing.

In summary, we find that a majority of the youth enjoy learning, even though many of them are not satisfied with teaching methods used. On the other hand, 70% of youths state that the skills they received from their education are applicable in their current work. In the health sector, a majority of the youth is in good health, but they would like to acquire more health knowledge on nutrition.

The remainder of the paper is organized as follows: Section 2 contains a literature review. Section 3 outlines the methodology used and demographic data on survey participants. Section 4 presents empirical results of the survey. And Section 5 concludes.

II. LITERATURE REVIEW

With a growing agreement on the weakness of GDP for measuring well-being among scholars, many countries consider the need to develop another indicator. There are a number of indicators already in existence for well-being, as well as a sustainable

4) Watson, Angus and Sapra, Bani. CNN. "More than 100,000 forced to flee homes in Myanmar floods". 5 December 2018. edition.cnn.com/2018/07/31/asia/myanmar-floods-intl/index.html

and healthy environment. Comparing those indicators to one another, well-being is mostly measured by people's satisfaction on health, education, economic and healthy environments. Bhutan has started using Gross National Happiness (GNH), which indicates the state of citizens' happiness, instead of using GDP. In GNH, there are nine domains; psychological well-being, health, time use, education, cultural diversity and resilience, good governance, community vitality, ecological diversity and resilience, and living standards. GNH covers the concepts of both subjective and objective well-being for citizens. HDI (Human Development Index) was developed by the United Nations and is a summary measurement of the average achievement in a number of key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. Another indicator which is similar to HDI is PQLI (Physical Quality of Life Index), which is developed by Overseas Development Council. It measures life expectancy, infant mortality rate and literacy rate. PQLI and HDI are similar to one another, the main difference between the two being the inclusion of income in HDI and exclusion of the same from PQLI. In a sense, HDI represents both physical and financial attributes of development and infant mortality rate and indexed life expectancy.

PQLI, on the other hand, has only the physical aspects of life. There are also numbers of well-being indicators which emerged in EU and UN. Some examples are Genuine Savings (GS), NAMEA and Material flow accounts, National Accounting Matrix, Material flow accounts (MFA), and Genuine Progress Indicator (GPI) / Index of Sustainable Economic Welfare (ISEW) indicators.

Among all indicators mentioned above, HDI is the most popular and up-to-date indicator giving an assessment for Myanmar. According to "Human Development Indices and Indicators: 2018 Statistical Update", HDI is based primarily on international data from the United Nations Population Division (the life expectancy data), the United Nations Educational, Scientific and Cultural Organization Institute for Statistics (the mean years of schooling and expected years of schooling data) and the World Bank (the GNI per capita data). Myanmar's HDI value is 0.578 in 2017, and its position is 148 out of 189 countries and territories. Myanmar's HDI value has been increased from 0.358 to 0.578 from 1990 to 2017, which constitutes an increase of 61.5%. However, this report also shows that Myanmar's HDI is below the average of 0.733 for countries in East Asia and the Pacific.⁵⁾

Given the data availability for Myanmar in the HDI, most of the dimensions chosen in this paper are similar to those contained in the HDI. The main distinguishing aspect of this survey is the focus on well-being of youths between 16 to 35 years in

5) Human Development Indices and Indicators: 2018 Statistical Update; Briefing note for countries on the 2018 Statistical Update: Myanmar :http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/MMR.pdf

education and health dimensions. We specifically measure only people surveyed in Yangon, because Yangon is the most developed city in Myanmar. This characteristic coincides with our focus to find out whether people are feeling higher well-being with more economic development. How many youths in Yangon are feeling well-being and what would their desires be for the sake of wellbeing? The development in Yangon and Myanmar in general cannot be denied as everyone is living in this fast developing modern world. The question is, however, how the sustainable environment will be built up during development. In this research, the state of well-being is measured diversely according to the applicant's current state as well as their design of a solution for a sustainable environment in the future.

III. METHODOLOGY AND DATA

In this research, we carry out a survey with the aim of indicating Myanmar youth's satisfaction and well-being. To indicate well-being of youth from Myanmar, we mainly focus on education and health section.

We chose these two sectors as they play the important role and constitute the basic needs for young people. Education consists of job opportunities, teaching curriculum and the education which they have purchased. The aim of the education section is to uncover problems regarding education in different places and regions. People from different background express their opinions upon how they think of our education system. Health consists of the living standard of the people and potential needs for improving it. The focus is on discovering whether a person is having a good health or not. In a second step, we then intend to find out what is needed to improve this specific area.

The main research method employed in this paper is a survey. The survey is carried out primarily in paper format, with the aim to collect evidence on each individual's concerns. Throughout the survey, we approached every individual person with a paper based survey in order to provide any additional explanation or means for understanding which might be necessary. A small part of survey respondents has also been collected online, sending google forms via mail. The survey using paper format was conducted at Mahabandoola Park (46.4%), Hledan (23.2%), Inya Lake (13.2%). Additionally, we collected 17.2% of responses online (indicated as people's home locations while taking it). The distribution is also depicted in Figure 1.

A SPOTLIGHT ON WELL-BEING OF MYANMAR'S YOUTH

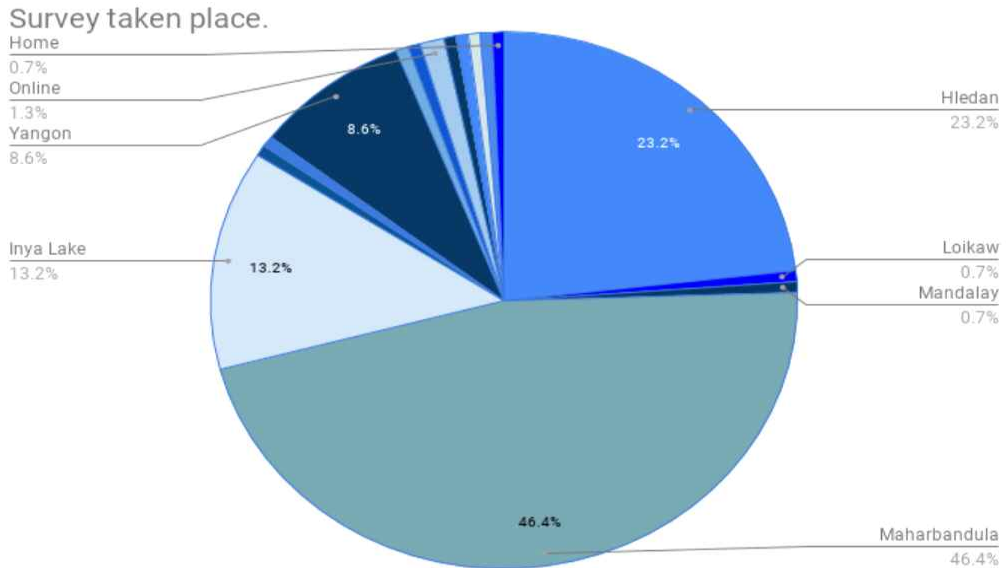


Figure 1. Place of Survey

The defined age group for youth according to Myanmar Youth Policy is between 16 to 35 years old. We want our research to be representative so we choose from age 16 – 35. The sample has then been divided into groups as they have different types of people among the age as shown in Figure 2.

Myanmar has a population of 53,855,7354 people, among which 48.4% are male and 51.16% are female. To ensure that the survey is representative regarding gender, we collected responses according to the categories of Male and Female, but for those who are not comfortable to answer this question we provide an option of "Prefer not to say". Male-female ratios of our sample are displayed in Figure 3.

Age Group

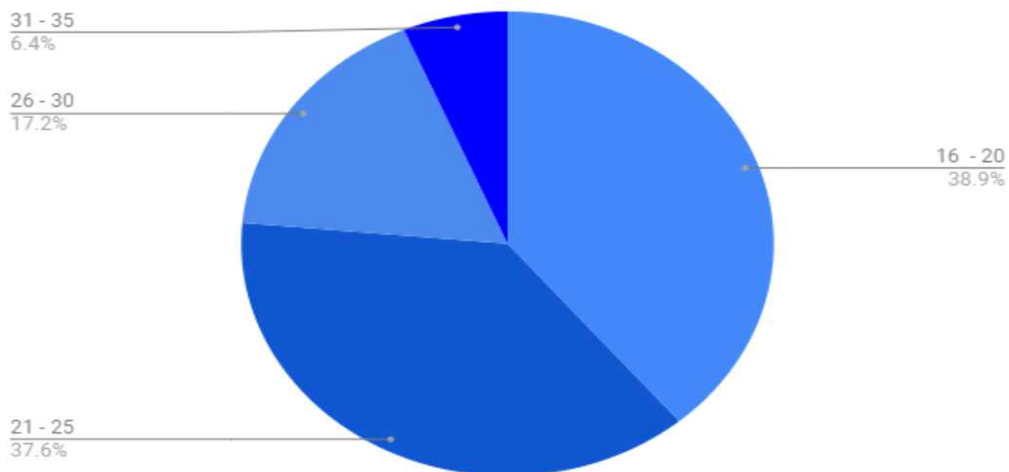


Figure 2. Age Groups

Sex

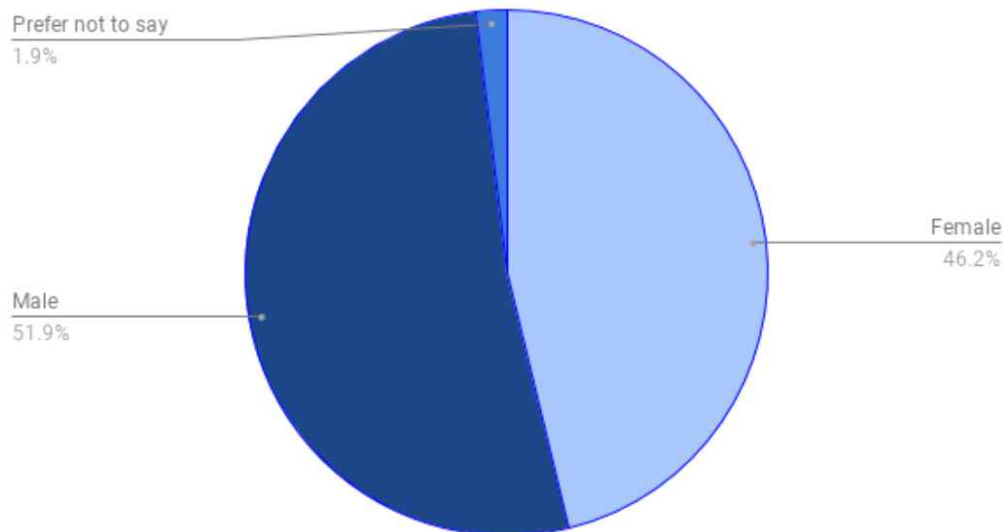


Figure 3. Sex

A SPOTLIGHT ON WELL-BEING OF MYANMAR'S YOUTH

In this research, Myanmar youth has a predominantly single status. Among the 158 respondents, 85.4% are single and 12% are married. Only 2.5% are divorced and separated. Based on the respondents, our research mainly focuses on the youth who are single.

Marital Status

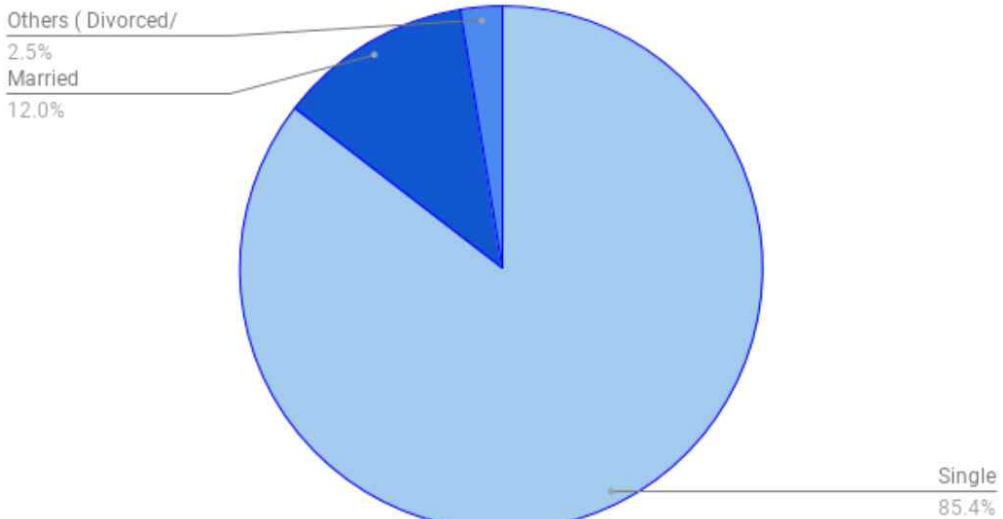


Figure 4. Marital Status

As shown in Figure 5, we got the data from different regions in terms of people's residency, but the majority of people asked are from Yangon 77.6%. Other regions are Ayeyarwaddy 4.6%, Mandalay 2.6%, Nay Pyi Taw 2.6%, Sagaing 2.6%, Magway 2.0%, Rakhine 1.3%, Tanintharyi 1.3%, Kayah 0.7% and Unknown 0.7%.

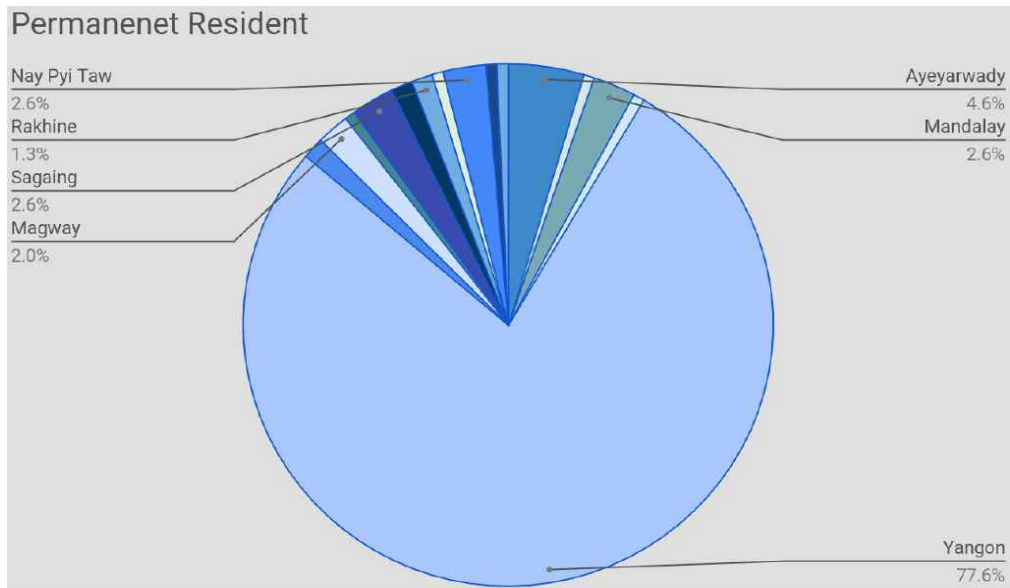


Figure 5. Place of Residence

IV. EMPIRICAL RESULTS

This section presents empirical findings of the survey distinguished into three categories: education, health and overall well-being.

1. EDUCATION

The first dimension investigated is the current occupation of survey participants. Occupations are divided into five categories: working experience more than 5 years and less than 5 years, self-employed, looking for a job and students. Results are displayed in Figure 6.

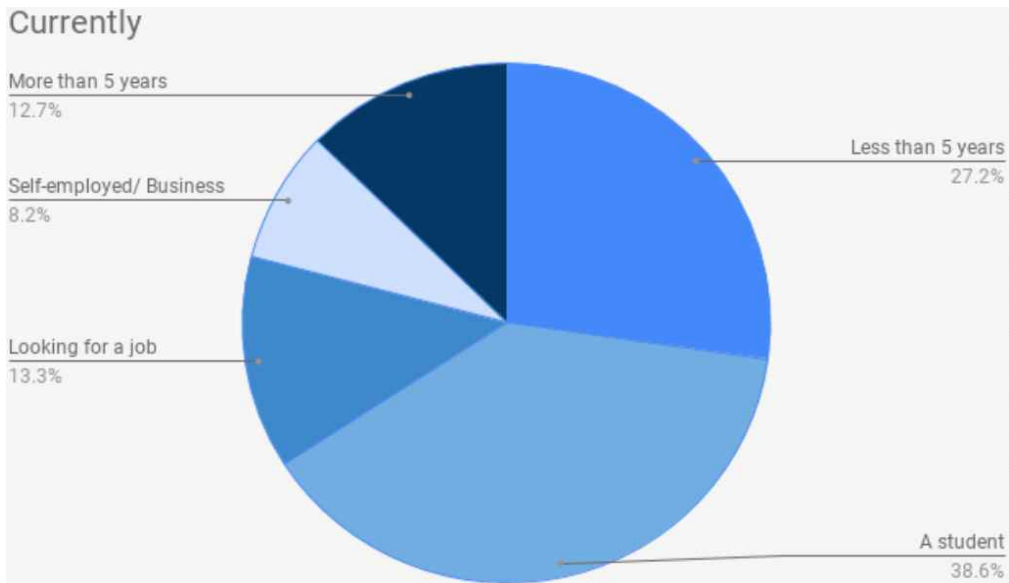


Figure 6. Working Experience

Among the five chosen categories, 38.6% of participants say that they are currently students and 13.3% are still looking for a job. There are also 8.2% of business owners who are selfemployed.

27.2% of youth have less than 5 years of working experience and only 12.7% have more than 5 years of working experience. Overall, we can see that more than 1/3 of the youth from Myanmar are still attending universities and schools, and only a small amount started their own business and decided to be self-employed. Furthermore, most of the youth who are employed have less than 5 years of working experience, which is in accordance with the age groups of participants.

To inspect the dimension of highest education levels attained, we used four categories. We would like to know whether young people surveyed have already graduated or what is the highest education level they have attended.

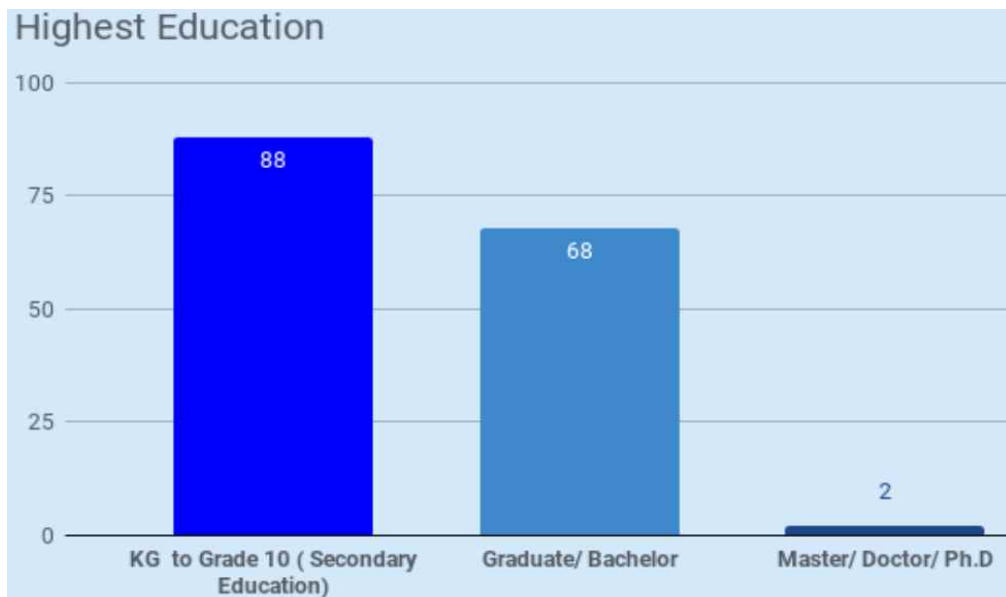


Figure 7. Highest Education Level

According to Figure 7, more than half of the youth from Myanmar has the highest education level of until Grade 10. And 43% of youth have graduated with a Bachelor's degree. But only 1.3% of youth surveyed have the highest education level of Master, Ph.D. and Doctor, hence only a very small share of youth from Myanmar have reached the highest education level. At the same time, none of the youth surveyed has the lowest education level below Grade 4.

After investigating the highest educational attainment, our next topic of interest are the different types of schools attended. Many types of school exist in Myanmar, among which government schools are the basic education system. But there are some other school types such as private institutions as well as monastery, church and religious education systems.

According to schools attended, people will also have different background knowledge as well as a different education research. Figure 8 displays results.

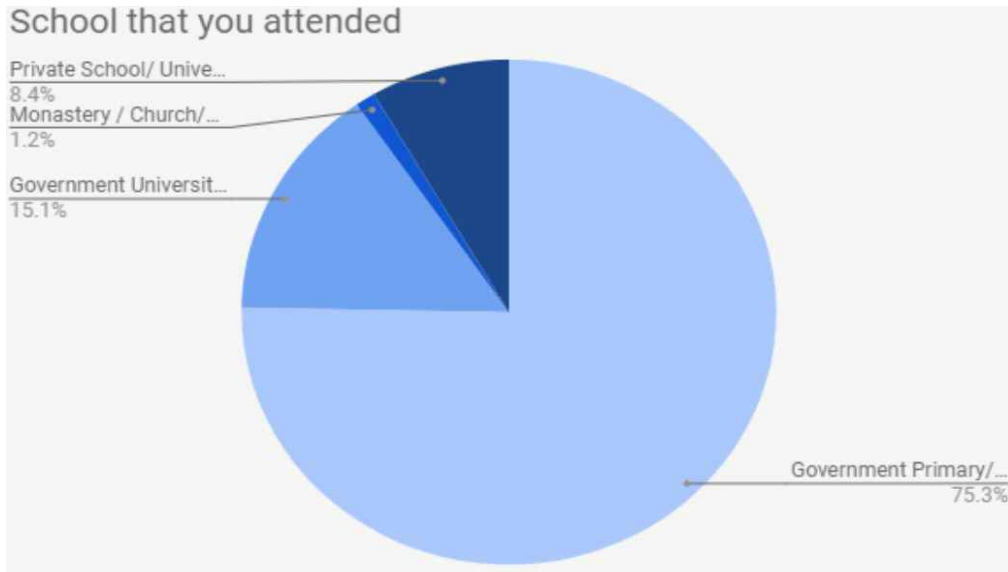


Figure 8. Schools Attended

We find that a majority of youth from Myanmar attended government schools (either primary or secondary or both). Youth attendance rate of government universities is 46.2%. Private schools and universities are attended at a rate of 12% and monastery and others occasions have a rate of 2.5% each.

After collecting education demographics we investigate individual perspectives, starting with people's satisfaction with the education system in Myanmar. Figure 9 displays satisfaction along five different dimensions: Curriculum and syllabus, teaching methods and materials, school activities and involvement (freedom of choosing), class time vs break time and accessibility to job offer after education.

Overall satisfaction of personal education

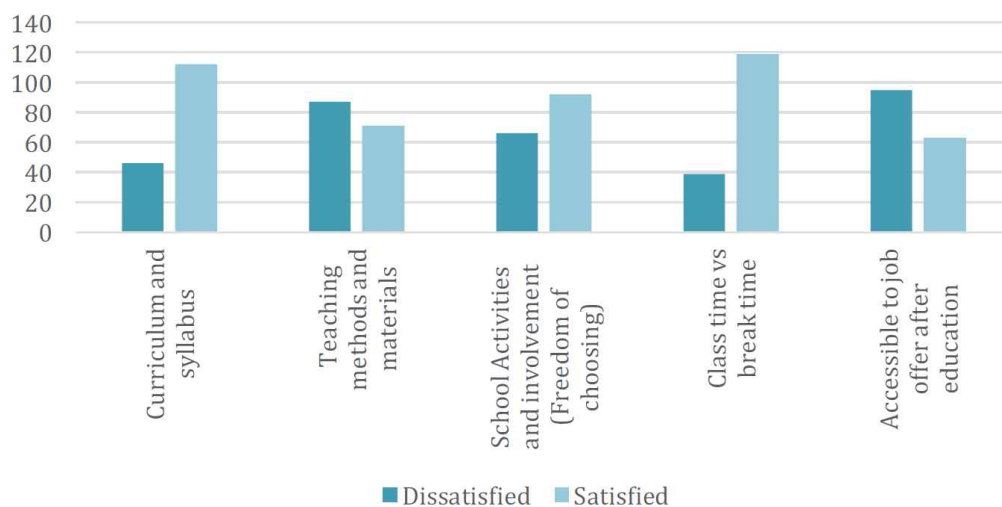


Figure 9. Satisfaction with the education system

Of the five categories, class time vs break time and curriculum syllabus experience the highest satisfaction among survey participants: more than 50% of youth are satisfied with the categories of curriculum syllabus and class time versus break time. On third place rank school activities and involvement with 58% satisfaction.

In the other categories, teaching method and job accessibility, people surveyed show an overall dissatisfaction. For teaching methods 45% are satisfied and 55% are dissatisfied, and for job accessibility 40% are satisfied and 60% are dissatisfied. According to the research, youth from Myanmar are overall not satisfied with the teaching methods employed as well the job accessibility after the academic years. In average across all categories, less than 15% of youth still have a high satisfaction upon the education in Myanmar.

The next topic investigated is whether youth agrees with the saying "Learning is fun". Results are shown in Figure 10.

How much do you agree with the saying "Learning is fun"

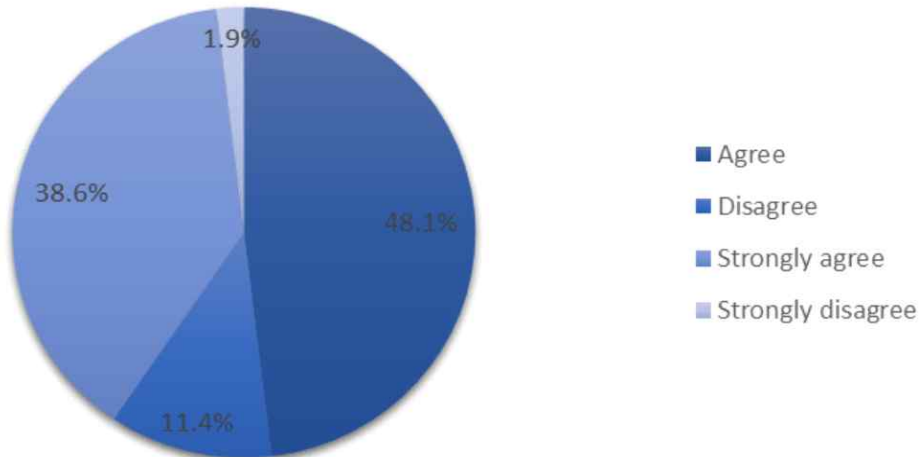


Figure 10. Agree and Disagree on the saying "Learning is fun."

We can see many youth are in agreements with the saying "Learning is fun." Figure 10 shows that only 2 out of 10 people disagree or strongly disagree with this particular saying, while nearly than 80% of youth agree that learning is fun. 38% of participants stated that they strongly agree with the saying.

The last dimension of the education section is concerned with whether youth feels like they can apply skills gained in their education to their work. Results can be found in Figure 11.

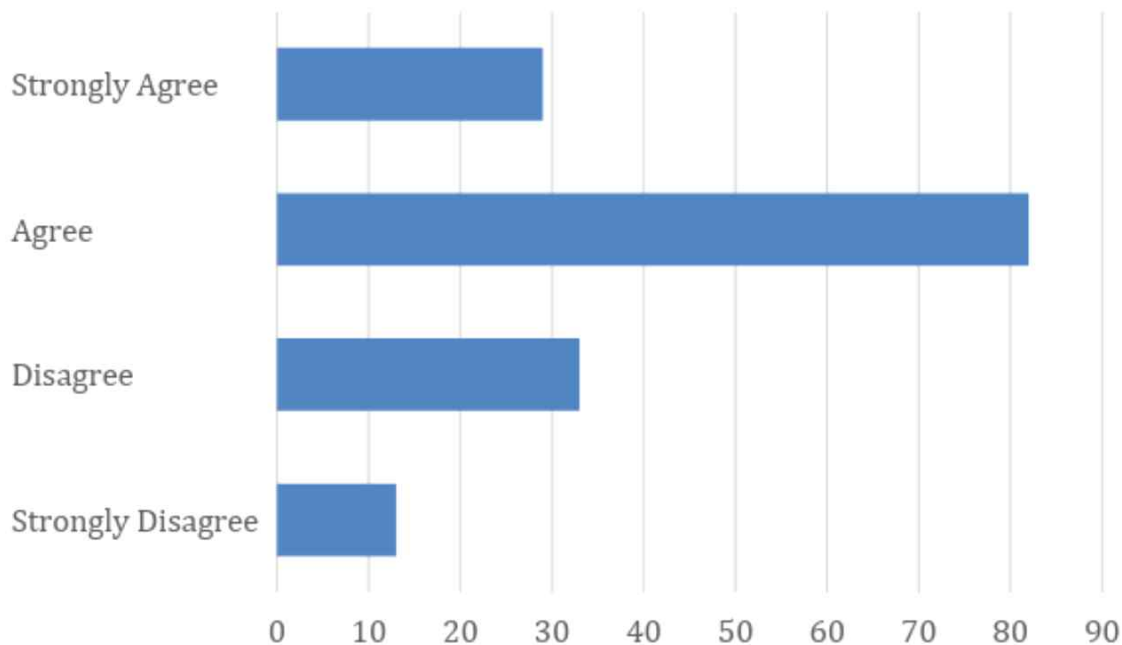


Figure 11. Education skills can apply to work

We can see that 70% of youth think that they can apply their education skills in their workplace. On the other hand, 20.9% of youth disagree and 8.3% of youth strongly disagree.

Although many young people are not satisfied with job accessibility, this Figure shows that a large majority of youth still think that they can applied their education skills to their work.

2. HEALTH

Health is defined, as a state of high-level physical, emotional, social, cognitive and spiritual wellness (Shank & Coyle, 2002.⁶) Results for an assessment of people's health over the past 12 months are displayed in Figure 12.

6) Shank&Coyle, 2002: The Power of the Positive: Leisure and Well-Being :

Health condition within last 12 months

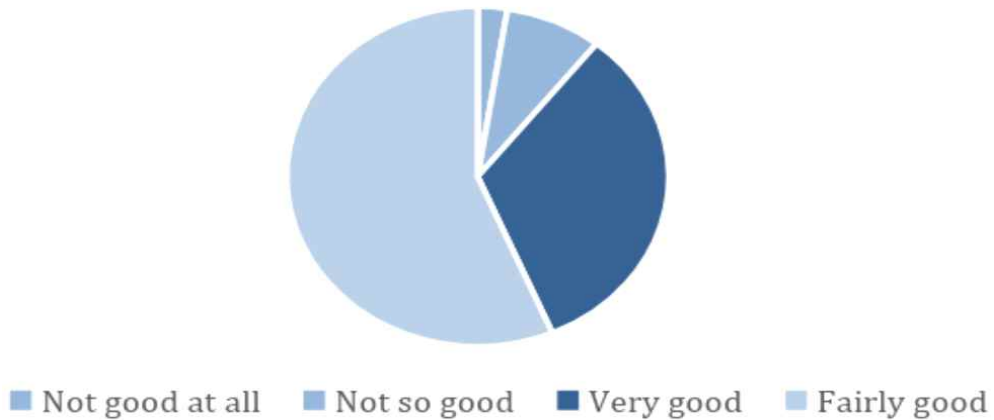


Figure 12. Health condition within last 12 months

In terms of the health section, 89.3% of people feel like they have been very and fairly healthy and only 10.7% say that their health has not been good over the last 12 months. We can see that nearly 90% of youths in Yangon feel like they are in good health.

The next dimension in our research investigated which are the most important areas to improve in order to keep everyone healthy within people's communities. We framed this question as a multiple choice question, where participants were asked to mark the three most important areas according to their own opinion. Statistics about how often each area was chosen across the sample are displayed in Figure 13.

Most Important areas to improve in order to improve everyone's healthy in the community

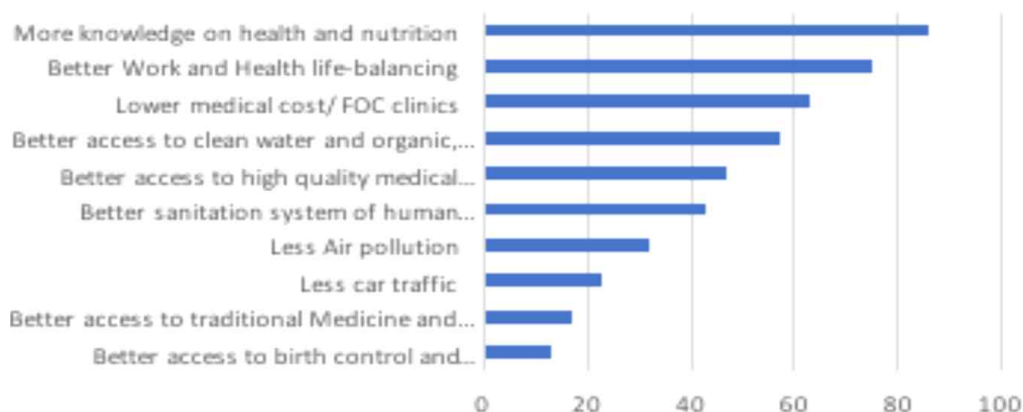


Figure 13. Most important areas to improve in order to keep everyone healthy

Over half of youths (54.4%) said that one of the three most important areas to improve to be able to keep everyone healthy in our community is accessing more knowledge on health and nutrition followed by getting better work and health life balancing answered by nearly half of youths. Everyone has to depend on the medical clinics and hospitals in order to recover from an illness. People are regularly concerned about the medical cost whether high cost in clinics or hospitals. 39.9% of people said that one of their three main concerns is not getting reasonable or free cost from the medical clinics and hospitals. In the HDI report, the current government expenditure on health is 4.9% of the country's GDP (only 3.397 USD billions out of 69.32 USD billions). There is another area receiving as much concern as not getting free cost from the medical clinics, that is the area of getting better access the fresh air and organic, chemical free food; 36.1% of youths answered that getting the fresh air and organic, chemical free food at Yangon is one of the three most important areas to get better health. (in HDI 2018 report, the life expectancy of Myanmar is 66.7 years, ranking 148 out of 158 countries.) Although the area of more knowledge on health and education is the highest concern, the area of getting better access to birth control and reproductive health education is the least concern of the youths; only 8.2% of youths (13 out of 158) are worried about this area. According to the HDI report, infant mortality rate of Myanmar is currently 40.1 out of 1000 lives births 4.01%.⁷ Lastly, many people in Yangon rely on the Yangon Bus Service system to commute every day. As the Yangon government starts emphasizing the easy access to the transportation system and modernized buses, people concerns of traffic jam reduce; only 14.6% of

youths are worried about the car traffic in Yangon.

3. OVERALL WELL-BEING

While this survey is mostly centred at health and education sectors, it is understandable that only with health and education's indication it is not possible to say how happy people are. To bridge this gap, a section of overall well-being is included in the survey to collect general information of people's happiness over certain domains.

According to Darleen Jordan's presentation of well-being,⁷⁾ there are three pillars of sustainable development for a state: Social Well-being, Economic Well-being and Environmental Well-being. His definition brings well-being as a content state of being happy and healthy and prosperous. In this survey, there are 9 domain areas to cover these three pillars: (1) Fulfilling Jobs and Income (2) Housing, Residence and Recreational public parks (3) Transportation (4) Community and Social friendliness (5) Government and governance (6) Healthy Environment (7) Accessible to Technology (8) Work-life balance and (9) Life satisfaction. Results are shown in Figure 14.

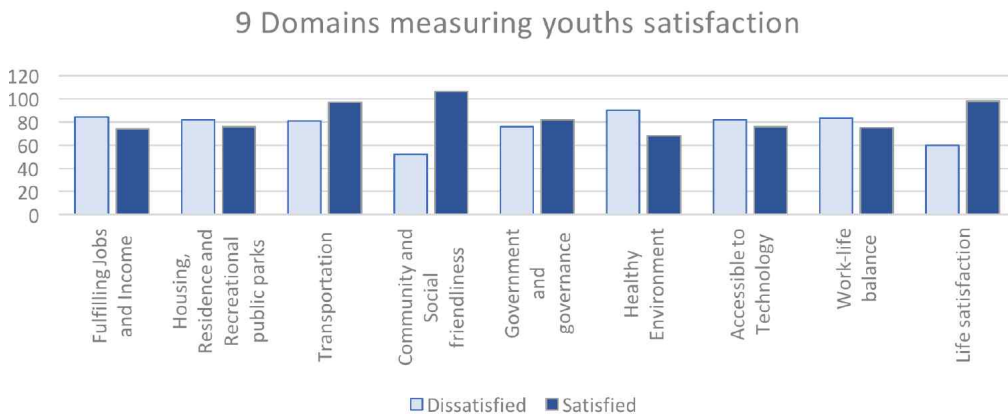


Figure 14. 9 domains measuring youth satisfaction

Out of 155 applicants, 14.10% have shown their satisfaction on the community and social friendliness whereas 13.04% have shown their dissatisfaction on living in a healthy environment. In the HDI, Employment!to!population!ratio!(%!ages!15!and!older) is indicated as 64.6.⁸⁾ In our survey, a ratio of satisfied to dissatisfied 1:1.3 shows that a

7) Human Development Program: United Nation Development Programme: <http://hdr.undp.org/en/countries/profiles/MMR>

8) Unknown Author. United Nations Development Programme. Human Development Reports. Human

majority of participants thinks their jobs are not fulfilling. An interesting follow up question on this would be why people are unhappy of their current job, which will need further. One-third of a day time is invested for a job and if a person is not happy with that time, it is impossible to maintain peace in the human environment in every aspect.

Finally, the survey shows another interesting data aspect regarding jobs for youths. In the last section of the survey, the applicant has to rate 6 domains where they consider the most important to least important to improve. The 6 domains are (1) Transportation system, (2) Health care service and system, (3) job opportunities for fresh graduates/internship opportunities (4) Accessible to social and networking activities (5) reliable electric supplies and accessibility to information technology and (6) accessible of getting loan from bank for education or business purposes. We used responses to this question to construct an indicator of domain importance: we weight responses according to the rank given, and then calculate a total score for each domain based on how often it was given a specific rank. Results for the ranking are shown in Figure 15.

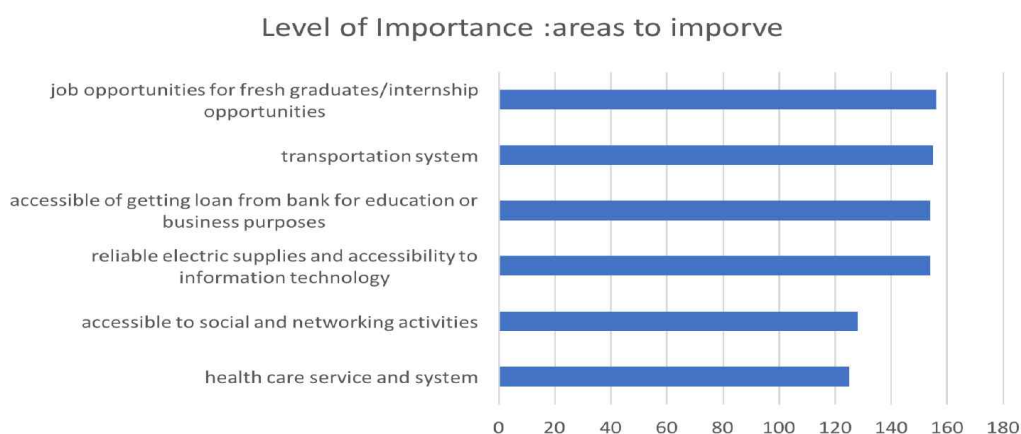


Figure 15. Areas to improve overall

According to the data collected, we can see that the ranking are very similar in the top half. People rate job opportunities for fresh graduates / internship opportunities of the highest importance. It could possibly because of the target demographic age being 16 – 35 years. And the importance of transportation system comes in second, followed by reliable electric supplies, accessibility of IT and accessibility of loans from banks.

V. CONCLUSION

In this paper, we have concentrated on well-being in the areas of education and health of youth in Yangon. Youths who took the survey had an overall enjoyable learning experience regardless of disliking in the teaching methods. They have concerns in accessing health knowledge on nutrition and they have a demand in work-life balance jobs and opportunities. As for a brief overview of overall well-being, the survey has shown that they are satisfied with their community where they are living and they are fond of their social life.

At the same time, they are not satisfied with the health state of their environment. On the other hand, the survey has shown that the job opportunities for fresh graduates / internship opportunities are a major concern. Both public and private sector need to create more fresh graduate jobs in order to prevent a high unemployment rate.

In the health sector, many youths are having overall healthy characteristics, potentially due to their young age, and their only concern is to get more health knowledge on nutrition. Nearly ninety percent of the youths are in good health, but 54.4% of the youths are concerned by a need for more knowledge on the health and nutrition to improve everyone's health in the community. One question remaining after this survey about health is why they would like to acquire more health knowledge on nutrition and why they are concerned mostly with this part. Further research is needed on this topic.

Regarding policy implications, this paper shows a need for awareness programs or workshops to the youths, which could potentially be provided by government institutions. Besides, government schools need to explain effectively the importance of good health and well-being to their students. While the government currently focuses on improving transportation systems, this does not seem to be the main focal point for people in our survey. According to this research, after comparing the highest concerns of education, health and overall well-being data, the spotlight for youth in Myanmar is on job opportunities and nutrition knowledge. In our data, a majority of the youth enjoys learning despite their dissatisfaction with teaching methods. Also 70% of youths agree that they can apply their obtained skills in education in their work environment. Above facts show that many youths have potential skills to achieve better education. If the government could make an education reform with respect to teaching methods, a significant improvement in the education of Myanmar's youth might happen.

References

- Human Development Indices and Indicators: 2018 Statistical Update; Briefing note for countries on the 2018 Statistical Update: Myanmar
: http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/MMR.pdf
- Human Development Program: United Nation Development Programme
: <http://hdr.undp.org/en/countries/profiles/MMR>
- Mahapatra, Richard. Down to Earth. "Again, stop talking about GDP". 5 December 2018.
www.downtoearth.org.in/blog/economy/again-stop-talking-about-gdp-61512
- Mitra, Sophie. The Conversation. "The US needs to get over its obsession with GDP". 5 December 2018
www.theconversation.com/the-us-needs-to-get-over-its-obsession-with-gdp-101065
- Shank & Coyle, 2002: The Power of the Positive: Leisure and Well-Being : The World Bank. GDP data for Myanmar. 5 December 2018.
data.worldbank.org/country/myanmar
- Watson, Angus and Sapra, Bani. CNN. "More than 100,000 forced to flee homes in Myanmar floods". 5 December 2018.
edition.cnn.com/2018/07/31/asia/myanmar-floods-intl/index.html

APPENDIX: SURVEY QUESTIONNAIRE

Measuring Well-being of Youths in Myanmar

This is the survey form of the project : "Measuring Wellbeing of Youths in Myanmar" conducted by Parami PLP 4th Cohort students.

* Required

1. Survey taken place in

2. Permanent Residence (Township/ State)

3. Age *

Mark only one oval.

- 16 - 20
- 21 - 25
- 26 - 30
- 31 - 35
- Above 35

4. Sex *

Mark only one oval.

- Female
- Male
- Prefer not to say

5. Marital Status

Mark only one oval.

- Single
- Married
- Others (Divorced/ Separated/...)

6. Are you currently *

Mark only one oval.

- Less than 5 years working experienced employee
- Looking for a job
- A student
- Self-employed/ Business Owner
- More than 5 years working experienced employee

Education

7. Your highest Education *

Mark only one oval.

- KG to Grade 10 (Secondary Education)
 KG to Grade 4 (Primary Education)
 Graduate/ Bachelor
 Master/ Doctor/ Ph.D

8. What type of school did you attended? (Mark all that apply) *

Check all that apply.

- Government Primary/ Secondary School
 Government University/ institute/ College
 Private School/ University / Education
 Monastery / Church/ Religious Education/ Non-formal Education
 Others.

9. Please, rate your overall satisfaction of followings for your personal education: (1 = Not satisfied at all, 4 = Very Satisfied) *

Mark only one oval per row.

	Not satisfied at all	Not so satisfied	Satisfied	Very Satisfied
Curriculum and syllabus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teaching methods and materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
School Activities and involvement (Freedom of choosing)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Class time vs break time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Accessible to job offer after education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. How much do you agree with the saying " Learning is fun"?

Mark only one oval.

- Strongly disagree
 Disagree
 Agree
 Strongly agree

A SPOTLIGHT ON WELL-BEING OF MYANMAR'S YOUTH

11. **How much do you agree with the statement " I can apply skills gained from my education in my work"**

Mark only one oval.

- Strongly disagree
- Disagree
- Agree
- Strongly agree

Health

12. **Over the last 12 months would you say your health has been**

Mark only one oval.

- Not good at all
- Not so good
- Fairly Good
- Very Good

13. **To be able to keep everyone's healthy in your community, what are the 3 MOST IMPORTANT AREAS to improve? ***

Check all that apply.

- Better access to high quality medical treatment
- Better access to traditional Medicine and health care
- Lower medical cost/ FOC clinics
- More knowledge on health and nutrition
- Better access to birth control and reproductive health education
- Better access to clean water and organic, chemical free food
- Better sanitation system of human disposal and sewage
- Less Air pollution
- Less car traffic
- Better Work and Health life-balancing

Overall Wellbeing

JOB SATISFACTION OF SEAFARERS IN MYANMA FIVE STAR LINE

Mya Thandar · Hnin Darli Ma Ma Ko
Yangon University of Economics

ABSTRACT: The shipping industry has become one of the most important modes of transport sector. The growth of the sector can be better met by well and motivated employees or seafarers. The organizations need to provide different kinds of facilities and to make satisfy their employees. So, this paper tries to examine the factors such as HRM practices, environmental factors and demographic factors affecting job satisfaction for seafarers Myanmar Five Star Line. It found that compensation and benefits, career management, work-life balance, employee engagement, age, number of dependents and position are correlated with job satisfaction. Work-life balance and employee engagement are key determinants of job satisfaction, among HRM practices and environmental factor. The conditions of employees in the study can be taken as most of them are satisfied with their jobs. It found that they are provided with sufficient wages and benefits. In addition, job satisfaction is positively correlated with employee retention. That is, the seafarers satisfy in working on ship, this satisfaction persuades them to continue working in the same workplace. If they produce good performance, it would benefit the shipping industry.

Key words : Job satisfaction, Employee retention, Seafarers

I. Introduction

Shipping is one of the most international industries and has been a key role in transport industry, in world trade and in globalization.¹⁾ The growth of the world economy and the growth of seaborne trade interact through labor specialization and widening the markets. This growth has necessitated increasing need for employee skills and training in order to meet the expected growth. This improvement sought can

1) <https://www.reference.com/vehicles/types-sea-transportation-347abd5a5b7eac15?qo=cdpArticles>

better met by well-trained employees and seafarers.

Seafarers refers to any person who is employed or engaged in any capacity on board a seagoing ship navigating the foreign seas other than a government ship used for military or non-commercial purposes. The growing percentage of international business still done by sea, the seafarers spend relatively long period far from their family. A seafarer spends about half of his prime life onboard; hence the job environment influences his personality to a large extent.²⁾

Job satisfaction is directly linked to needs of a person; if his physiological and psychological needs are more or less being met he is satisfied. Satisfaction of human resource finds closely linked to highly motivated employee. Lack of job satisfaction causes the employees to act defensive behavior, to be absent from the work and sometimes to resign from the organization. Thus job dissatisfaction is very costly for the organization.

In Myanmar, one of the transport organizations under the Ministry of Transport, Myanmar Five Stars Line, plays a vital role in supporting the country's strategic seaborne trade development and national economic development. And it is important for the organization to achieve management efficiency by increasing employee job satisfaction in this organization. This paper aims to study on the job satisfaction of seafarers in Myanmar Five Stars Line.

II. Objectives of the Study

The objectives of the study are;

- 1) To determine the level of employee satisfaction of seafarers,
- 2) To find factors which affect the job satisfaction of seafarers and
- 3) To investigate the relationship between the job satisfaction and employees retention of seafarers in Myanmar Five Star Line.

III. Method of the Study

For primary data collection, the stratified random sampling was applied and the regression model was used to analyze the job satisfaction of seafarers. In terms of literature reviews, the secondary data on job satisfaction were obtained from respective books, documents and websites.

2) <http://research.lpubatangas.edu.ph/wp-content/uploads/2016/02/APJARBA-2016.2.1.06.pdf>

IV. Scopes and Limitations of the Study

The study area and target population are recent working seafarers from Myanmar Five Star Line. The survey questionnaire was distributed to one third of the total population with various ranks and the survey was conducted in October 2018.

V. Job Satisfaction

In reviewing the literature it becomes apparent that job satisfaction can be defined in many ways. Job satisfaction has been an important focal point for organizational and industrial psychology. In defining job satisfaction the reference is often made to Locke's (1976) description of job satisfaction as a positive and pleasurable emotional condition, which is due to the job experiences and appraisal.

Similarly, job satisfaction refers to an individual's feeling or state of mind giving heed to the nature of individual's work. (McNamara n.d.) Further explains that job satisfaction can be influenced by a diversity of job dimensions, inter alia, the quality of the employee's relationship with their supervisor, the status of the physical environment in which the individual works, degree of fulfillment in work.

In direct contrast, job satisfaction as an individual's mental state about the job. Robbins et al. (2003) add that an individual with high job satisfaction will display apposite attitude towards their jobs, and the individual who is dissatisfied will have negative attitude about their jobs. This definition is expanded by Greenberg and Boran (1995) who defines job satisfaction as an individual's cognitive, affective and evaluative reactions toward their jobs.

The concept of job satisfaction has gained importance for two important reasons. Firstly, job satisfaction can be an indicator for someone's general mental wellbeing. If a person is unhappy at work, it does not seem likely that this person will be happy in general. Secondly, job satisfaction will improve happiness at work and consequently, will improve work motivation and job performance. (Arnold et al., 1998) Achieving a high level of employee performance is considered the common goal for many organizations. Employee's satisfaction could enhance to the success of an organization since employees who exhibit a higher level of satisfaction tend to put more effort in their jobs that may then lead to better job performance (Pushpakumari, 2008).

Hence, for an organization to achieve a higher level of performance, a satisfying working context and environment is a must. Job satisfaction can be considered as the attitude and feeling employees have towards their job. The feelings and attitudes are divided into two categories, which are the positive and negative attitudes (Armstrong,

2006). Pleasant feelings and positive attitudes tend to show that employees are satisfied while negative and unpleasant feelings exhibit dissatisfaction of employees. Briefly, job satisfaction refers to how employees feel about the job and to which extent the value of the job is consistent to the employees' needs.

A lack of satisfaction and commitment to the organization can also cause an employee to withdraw and begin looking for other opportunities. Employee retention refers to the ability of an organization to retain its employees. A simple can represent employee retention. However, many consider employee retention is relating to the efforts by which employers attempt to retain employees in their workforce. In this sense, retention becomes the strategies rather than the outcome.

VI. Conceptual Framework of the Study

The findings and conclusions of the previous studies support that job satisfaction has direct relationship with HRM practices and environmental factor. Job satisfaction which is the dependent variable can be influenced by HRM practices such as compensation, career management, work-life balance, employee engagement and working environmental factor like job hopping culture. Therefore, HRM practices and working environmental factor are considered as independent variables.

The researches show that there is direct relationship between job satisfaction and employee retention. Again, job satisfaction is independent variable and employee retention is the dependent variable for it. Therefore, the conceptual framework for this study which is illustrated (in Figure 1) has been built up based on the results and findings of empirical studies of job satisfaction of seafarers.

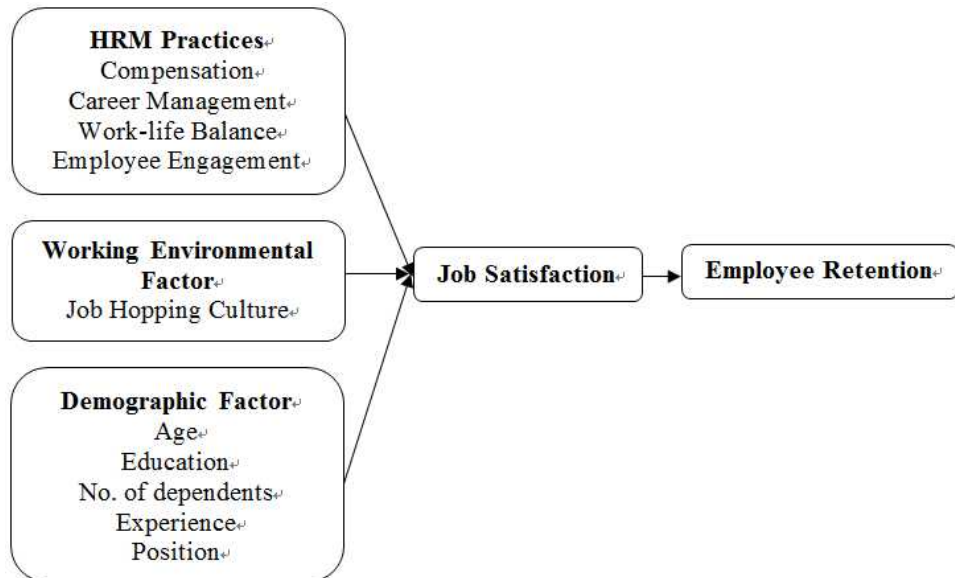


Figure 1. Conceptual Framework of the Study

Source: Own Compilation

VII. Myanmar Five Star Line

Myanmar Five Star Line, an admirable variety of vessels that it has managed, successfully fulfilling the shipping needs of nation's export and import, both domestic and international, moving cargo and people alike.

Myanmar Five Star Line, the national flag carrier with a track record of building excellence for more than 50 years in shipping service, has reached a significant milestone in its history of maritime transport linkage with other country across international waters. There are totally (19) vessels of Myanmar Five Star Line in 2018 and Foreign Going Vessels are (14) vessels and Coastal Vessels are (5) vessels.

The Seaman Emolument Control Division (SECD) of the Department of Marine Administration (DMA) carries out the recruitment, registration and placement of Myanmar seafarers, which is directly under the Ministry of Transport. No person unless licensed under the provision of Myanmar Merchant Shipping Act is allowed to engage or supply Myanmar seafarers to be employed onboard sea going vessels.

Ship owners wishing to employ Myanmar seafarers are required to contact SECD directly or through a manning agent or through a local representative in Yangon to enquire the terms and conditions of the agreement to be signed between the SECD

and the prospective shipping company or manning agent. Local representatives may be appointed by a forgiven ship owner or agent to select the crew and to attend other matters relating to the agreement of crew on behalfs of principals.

VIII. Analysis on Job Satisfaction of Seafarers

The primary data were collected through questionnaires and the stratified random sampling method was used in order to identify the job satisfaction of seafarers in various ranks from MFSL. The respondents were selected from currently working seafarers from MFSL. The data analysis is based on survey data and the Statistical Package for Social Science (SPSS) software was used in data analysis. The results and findings are obtained from descriptive analysis, reliability analysis, correlation analysis and regression analysis.

In this study, there were totally 482 seafarers with 20 various ranks in MSFL. They were divided into two stratum, officer level and others level. There are 244 seafarers in officer level and 238 seafarers in other level. Among them, one third from each level (81 and 80), a total of 161 seafarers were randomly selected.

1. Demographic Profile of Respondents

There are 5 questions regarding the personal details of respondents such as age, education level, marital status, position and working experience.

Table 1. Number of Respondents by Age, Education, Marital Status and Working Experience

Age	Frequency	Percentage
21 - 30 years	64	39.8
31 - 39 years	53	32.9
40 - 49 years	16	9.9
Over 50 years	28	17.4
Total	161	100
Education	Frequency	Percentage
High- School	101	62.7
Graduated	60	37.3
Post-Graduated	0	0

Total	161	100
Marital Status	Frequency	Percentage
Single	62	38.5
Married	99	61.5
Total	161	100.0
Work Experience	Frequency	Percentage
Under 3 years	33	20.5
3 – 6 years	86	53.5
7 – 10 years	21	13
Over 10 years	21	13
Total	161	100

Source: Survey Results

According to Table (1), majority of respondents were between the ages of 21-30, which were amounted almost 40% of total respondents. Followed by the age 31-39 which amounted 53%, age over 50, which was 17.4% and age 40-49 was about 10%. As a result, if the ages get older, the number of seafarers is reduced but in age of over 50 has increased in number due to the reason of the ship in MFSL go near the country and it can get shore leave easily. The minimum age required is 16 years for seafarers, even though there is no under 20 years seafarer in MSFL.

Regarding with educational level, majority of respondents has highest education completed in high school level with 62.7%. Followed by graduates which is 37.3% and no one has post graduate level because the career of seafarers do not need to be post-graduated.

In terms of marital status of the respondents, it indicates that out of 161 respondents, 38.5% are married and the rests are single.

Dealing with working experience, 53.5 percent of the respondents have experience 3 – 6 years followed by 20.5 percent of the respondents have less than 3 years, 13 percent of the respondents have 7 – 10 year and only 13 percent of the respondents have over 10 years, respectively. Generally, seafarers who have experience with least 6 years are seen in MFSL and they are trying to get their sea service. And seafarers, who spent their experience for over 6 years at MSFL left and have worked in foreign shipping line for higher salary. But, seafarers who want to work flexibly, who do not want to go away from home country, keep working in MFSL.

2. Positions of Respondents

Table (2) shows seafarers the positions of respondents from officer and other levels at MFSL.

Table 2. Positions of Respondents

Position (Officer Level)	Frequency	Percentage
Master	10	6.2
Chief Officer	10	6.2
Second Officer	9	5.6
Third Officer	8	5.0
Chief Engineer	9	5.6
First Engineer	9	5.6
Second Engineer	8	5.0
Third Engineer	8	5.0
Junior Engineer	1	0.6
Electrical Officer	5	3.1
Deck Cadet	2	1.2
Engine Cadet	2	5.0
Total	81	50.3
Position (Other Level)	Frequency	Percentage
Boson	8	5.0
Fitter	8	5.0
A/B	17	10.6
O/S	12	7.5
Oiler	14	8.7
Wiper	4	2.5
Ship Cook	9	5.6
Mossman	8	5.0
Total	80	49.7
Grand Total	161	100

Source: Survey Data (2018)

3. Reasons for Seafaring Career of Respondent

Most of respondents (96.3%) choose Seafaring Career for the reason of higher salary than any other works, and followed second by family tradition with (46%), because seafarers field is more easy to enter with unstring condition, as father or uncle are

seafarers, it is more suitable to choose seafarer as career. Only 28% of the respondents chose this career for the opportunity to travel as the reason. The reason of carrier flexibility is about 20%. And the reasons of job security and adventurous life are 5.6% and 5%, respectively. The reason of long leave period, lack of opportunity ashore, carrier in maritime industry and not sure are included in the questionnaire but no one answer as reason for seafarers career.

Table 3. Reasons for Seafaring Carrier

Reasons for Seafaring Carrier	Frequency	Percentage
High Salary	155	96.3
Adventurous Life	8	5
Opportunity to travel	45	28
Family Tradition	74	46
Job Security	9	5.6
Carrier Flexibility	32	19.9

Source: Survey Data (2018)

4. Descriptive Statistics and Reliability of the Variables

Descriptive statistics are used in this study not only to express the demographic characteristics but also to describe the mean and standard deviation of the observed variables. According to the mean values of the items, the respondents generally agree the four HRM practices except job-hopping culture of environmental factors. Job-hopping questions are inverse questions. In this study, four HRM practices and one working environmental factor, employee job satisfaction and employee retention have been measured. Each factor includes different number of items and is measured on five-point Likert scale. As shown in Table (4), Career Management scale includes 10 items, Compensation and Benefits scale includes 10 items, Work-life Balance scale includes 10 items, Employee Engagement scale includes 10 items and Job Hopping Culture includes 5 items, Job Satisfaction scales includes 10 items and Employee Retention includes 10 items. There is usually having five options. The option normally is strongly disagree, disagree, neutral, agree, and strongly agree. All questions in section of the questionnaire for employee use Likert scale, therefore the respondent can fill up their answer by choosing among five options.

Table 4. Descriptive Statistics

Factor	Mean	Standard Deviation
Job Satisfaction	4.005	0.4165
Career Management	4.192	0.3012
Compensation and Benefits	3.273	0.3166
Work-life Balance	3.821	0.4525
Employee Engagement	3.911	0.3696
Job Hopping Culture	2.113	0.4726
Employee Retention	3.794	0.4069

Source: SPSS Outputs

According to the Table (4), the mean values of the job satisfaction and career management are 4.005 and 4.192, respectively. It shows that the respondents are well agreed with job satisfaction and career management. The means of work-life balance, employee engagement and employee retention are 3.821, 3.911 and 3.794, respectively. Thus, the respondents are also agree with work-life balance, employee engagement and employee retention. The mean of compensation and benefits is 3.273, so the respondents are neither satisfy nor dissatisfy with the compensation and benefits of MFSL. The mean of job-hopping culture is 2.113, so the respondents are disagreed with this factor. But, the questions of these factors are opposite, if the respondents are disagreed in this factor; they would continue to work in MFSL. Based on the survey data, the reliability or the consistency among the variables was checked by using Cronbach's Alpha values.

Table 5. Reliability Test from Employee Responses on Scale Items

Factor	No. of Items	Cronbach's Alpha
Career Management	10	0.819
Compensation and Benefits	10	0.715
Work-life Balance	10	0.884
Employee Engagement	10	0.861
Job Hopping Culture	5	0.857
Job Satisfaction	10	0.890
Employee Retention	10	0.885

Source: SPSS Outputs

The values of Cronbach's Alpha coefficients are shown in Table (5). It is observed that the factors of the alpha values are more than 0.8 except the compensation and benefits. Based on the Table (5) Cronbach's Alpha for job satisfaction is 0. 890 which is

the highest value among all factors. The alpha value of compensation and benefit is 0.715 but is acceptable. Computed alpha values for other factors exceed 0.8. Therefore, internal consistency of items to the concepts is good.

5. Correlation Analysis of the Variables

Correlation analysis is method of statistical evaluation used to study the strength of a relationship between two, numerically measured, continuous variables. The following are the results of correlation between job satisfaction and HRM practices and working environment factor, the correlation between demographic factors and job satisfaction and the correlation between job satisfaction and employee retention.

6. Correlation between Job Satisfaction and HRM Practices and Working Environmental Factor

In this study, Pearson correlation coefficient is used to measure the relationship between dependent variable and each independent variable. In order to see how independent variables are correlated with job satisfaction, Pearson correlation coefficients are calculated and the results are presented in Table (6).

Table 6. The Correlations of the Job Satisfaction and HRM Practices and Working Environmental Factor

	CM	C	EE	WL	JH	JS
CM	1					
C	.272**	1				
EE	.477**	.599**	1			
WL	.481**	.512**	.765**	1		
JH	-.228**	-.382**	-.410**	-.325**	1	
JS	.472**	.501**	.768**	.792**	-.338**	1

Source: SPSS Outputs

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

CM= Career Management, C= Compensation, EE= Employee Engagement,
 WL= Work-life Balance, JH= Job Hopping Culture, JS= Job Satisfaction.

According to Table (6), the career management, the compensation, the employee engagement, and work-life balance have significance correlation with job satisfaction at the 0.01 levels. There is direct relationship between HRM practices and job satisfaction. The better the HRM practices in the organization, the higher the job satisfaction of the seafarers.

On the other hand, there is a negative relationship between job hopping culture and job satisfaction at 1% level of significance. It can be said that the lower the job hopping culture, the higher the job satisfaction of seafarers. The estimated correlations between the factors are not excessively high (e.g., < 0.90 in absolute value). This is result indicated the acceptable discriminated validity (Kline, 2011).

7. Correlation between Job Satisfaction and Demographic Factors

In order to see how demographic factors are correlated with job satisfaction, Pearson's correlation coefficients are calculated and the results are presented in Table (7).

Table 7. The Correlation between Job Satisfaction and Demographic Factors

	Age	Edu	Dpt	Exp	Position	JS
Age	1					
Edu	-.102	1				
Dpt	.625**	-.104	1			
Exp	.333**	-.059	.116	1		
Position	-.252**	-.160	.018	-.183*	1	
JS	.199*	.019	.284**	-.008	-.220**	1

Source: SPSS Outputs

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

*Correlation is significant at the 0.05 level (2-tailed).

Edu= Education, Dpt= Dependent, Exp= Experience, JS= Job Satisfaction, ER= Employee Retention.

Table (7) shows that age and number of dependents have significance correlation with job satisfaction at the 0.05 and 0.01 levels, respectively. There is positive relationship between demographic factors such as age and number of dependents and job satisfaction. In contrast, there is a negative relationship between position and job satisfaction at 1% level of significance.

If the ages of the respondents are older, the satisfaction level is higher. Because seafarers with old ages cannot get easily jobs in other companies than in this organization. And the more the number of dependents, the higher the satisfaction level. If the respondents have more dependents, he would be able to satisfy most of the conditions of the organization. But, the higher level of position has the lower level of satisfaction because the higher level can get facilities and salaries than ordinary level in other shipping line.

8. Correlation between Job Satisfaction and Employee Retention

In order to see how job satisfaction and employee retention, Pearson's correlation coefficients is calculated. The result shows that the correlation coefficient of job satisfaction and employee retention is 0.606 at 1% level of significance. This indicates that there is a direct relationship between job satisfaction and employee retention. If the job satisfaction is higher, the employee retention is also higher.

9. Regression Analysis of the Variables

The following results show the relationship between job satisfaction and HRM practices and the relationship between job satisfaction and employee retention.

10. Relationship between Job Satisfaction and HRM Practices and Environmental Factor

Multiple regression analysis was applied to investigate the relationship between job satisfaction and HRM practices and working environmental factor. To develop the multiple regression model, the job satisfaction was used as dependent variable and career management, compensation, work-life balance, employee engagement and job hopping culture were used as independent variables. The results are presented in Table (8).

Table 8. Relationship between Job Satisfaction and HRM practices and Working Environmental Factor

Independent Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.218	.356		.612	.541
CM	.092	.072	.066	1.281	.202
C	.031	.075	.023	.412	.681
WB	.328	.071	.356	4.624	.000
EE	.531	.080	.471	6.649	.000
JH	-.012	.044	-.014	-.284	.777
N=161 R ² =.694 F=70.367 (Sig. 0.000)					

Source: SPSS Outputs

CM= Career Management, C= Compensation, EE= Employee Engagement, JH= Job Hopping Culture.

The R square is 0.649 that reveals 64.9% of the total variance in job satisfaction is explained by HRM practices and environmental factor variables. In addition, individual coefficients have positive signs except job hopping culture. Therefore, it can be said that there is an inverse relationship between job satisfaction and job hopping culture. However, the independent variables such as career management, compensation, work-life balance and employee engagement have the direct relationship with job satisfaction. Out of the five independent variables, work-life balance and employee engagement are significant.

The magnitude of each coefficient indicates the amount how much the score of dependent variable will change if the score of an independent variable increase by 1 unit while other things remain unchanged. If the score of the work-life balance increases by 1 unit, while other factors remain unchanged, the job satisfaction score will increase by 0.328 units. If the score of the employee engagement increases by 1 unit, while other factors remain unchanged, the job satisfaction score will increase by 0.531 units.

In term of magnitude of standardized coefficients for employee engagement (beta=0.356), work-life balance (beta=0.471) and the coefficients are significant at 1% level for these two independent variables.

Therefore, work-life balance and employee engagement are key determinants of job satisfaction among five dimensions of HRM practices and environmental factor.

11. Relationship between Job Satisfaction and Employee Retention

Simple linear regression analysis was applied to investigate the factors for employee retention. To develop the regression model, the employee retention was used as dependent variable and job satisfaction was used as independent variable and the results are shown in Table (9).

Table 9. Relationship between Job Satisfaction and Employee Retention

Independent Variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.424	.248		5.740	.000
Job Satisfaction	.592	.062	.606	9.601	.000
N=161		R ² =.367	F=92.171	(Sig.0.000)	

Source: SPSS Outputs

The R square value of 0.367 reveals 36.7 percent of total variance in employee retention is explained by job satisfaction. The above results show that the coefficient of job satisfaction is significant at 1% level.

If the score of the job satisfaction increase by 1 unit, the score of employee retention will increase by 0.592 units. This shows that there is a direct relationship between mean job satisfaction and employee retention. In other words, it can be said that job satisfaction affects the employee retention of this organization.

IX. Conclusion

The findings from the data analysis of this studies and recommendations based on the findings are stated as follows.

Findings

According to the findings of this study, there are abundant younger seafarers than the older one but over 50 are become larger again because the ship in MFSL are near going from the country, it can get shore leave easily and it does not take long time on board and at most a month to apart from country. So, older seafarers are preferred to work in MFSL. Another demographic factor like education, there are more high school level than graduates. The seafarers work can be chosen when it has high school level of education. The 61.5 percent of seafarers are married and rest is single. Majority of the seafarers have the 2 or 3 number of dependents. Generally, who spent their experience for a least 6 year are over more than the people who over 6 year. The 96% of the seafarers choose their career life for the high salary and other reasons are adventurous life, opportunity for travel, family traditional, job security and career flexibility The study finds that most of the seafarers well satisfy with the career management. They received sufficient training in this organization to enable to do their job effectively. The training they receive for their job is adequate and there also offer to new seafarers to fit with organization and their job. And they also gain new knowledge, skills and abilities to perform tem work after training accomplished. Most of the seafarers are satisfied with their senior-junior relationship. There have good relationship, understand well and respect each other. It may be pleased to work within this condition.

From the study of compensation and benefits point of view, the seafarers are neither agree nor disagree with these factors. The salary of this organization cannot be compare with other organizations the non-monetary benefits, such as vacation time, medical insurance and health care are well satisfied. Compensation is satisfactorily reviewed from time to time and received on time monthly.

Based on the results on employee engagement, the seafarers well satisfy with that factor. The sealers, especially the officer's level can feel the organization problem as their own and can decide how to solve and they get plenty of freedom to decide how to do. For ordinary seamen level, they are recognized and valued their ideas, suggestion and option and the senior create a motivation and supportive work. And most of them assist their duty as to gain working experience in the job.

The respondents well satisfy with the work-life balance factors. Most of the seafarers think their working life balance well with their lives. They can easily take time off for home crisis such accidents and illness. They satisfy with the amount of time they spent at work. The physical working condition and the food on board are just satisfied for them.

From the point of view of job hopping culture, the seafarers disagree with switching jobs as a kind of habit. Most of the seafarers do not want to switch jobs because of their colleagues and for no apparent reason.

According to the survey findings of a study on job satisfaction of the seafarers, they generally satisfy with kind of work, position and responsibly. Most of them utilize their skills, abilities and experience in their present positions. They also satisfy the salary, benefits, job training program, work schedule and empowerment in doing in their job.

According to the results of correlation analysis, there was direct relationship between HRM practices and job satisfaction but negative relationship between job hopping culture and job satisfaction. In addition, there is direct relation between job satisfaction and demographic factors like age, dependent but job satisfaction is negatively related to the position. Furthermore, job satisfaction is positively correlated to career management, compensation, employee engagement, work-life balance but job satisfaction and job hopping culture are negatively correlated.

Based on the results of regression analysis, it is found that work-life balance and employee engagement are the key determinants of the job satisfaction among HRM practices and working environmental factor. It also found that job satisfaction can effect of the employee retention.

Recommendations

The employee on job satisfaction is one of the major issues faced by every organization. It is a main task of every employee to motivate his subordinates or to create the "will to work" among the subordinates. It should also be remembered that an employee might be immensely capable of doing some work; nothing can be achieved if he is not willing to work.

The conditions of employee in the study can be taken as most of them are satisfied with their jobs. This can also be said that they are being provided with sufficient wages and benefits. However, there are still some conditions that are needed to be provided such that all employees can have access to extra benefits.

Although the results of the findings show as the majority of the respondents being at the satisfaction level, not at all the respondents have agreed to that satisfaction. So, it is need that all employees are satisfied with the total compensation and provisions. That is, the seafarers are satisfied in working on the ships, this satisfaction will persuade them to continue working in the same workplace. Then, it will also motivate them to work full effort and this in turn will lead to increase in productivity where this would be beneficial to the shipping industry.

The salary raise should be decided on good performance because employees would be more committed to work to the maximum extent, as the incentive is the increase of salaries. If they produce good performance, it would also benefit the shipping industry. In this study, it is able to find some of the important factors, which satisfy the seafarers. Factors like career management, compensation and benefits, employee engagement, work-life balance, job hopping culture, job satisfaction and employee retention. Also, as mentioned above, the key to job satisfaction is, infect, in the fit between the objective conditions of the job and the employee's expectations.

The human resources can play an important role in the realization of the objectives. The human resources have been introduced by few years ago, so far not very effective yet. If human resources are not properly motivated, the management will not be able to accomplish the desired results. Therefore, human resources should be managed with at most care to inspire.

REFERENCES

- Armstrong, M. (2009). *Armstrong's Handbook of Human Resource Management Practice* (Eleven ed.). United Kingdom.
- Aung Min, (2013). "A Study on Recruitment and Prospects of Seafarers in Myanmar". Unpublished MPA Thesis, Yangon University of Economics, Yangon.
- Ayap, C. D., & Macalalad, J. A. (n.d.). *Work Values and Job Satisfaction among Seafares in J-Phil Marine Incorporated*. Asia Pacific Journal of Academic Research .
- Byars, L., & Rue, L. W. (2010). *Human Resource Management* (Ten ed.).
- Delyser, D. (2010). *The Sage Handbook of Qualitative Geography*.
- International Labor Conference. (2016). *Maritime Labour Convention*. International Labor Conference. Geneva.
- Jatau Solomon, U. (2002). *Ship Manning and Safety, Problem in the Recruitment Selection and Retention of Seafarers*. Maritime Education and Training.
- May Phyu Kyaw, (2013). "A Study on Job Satisfaction of Employees in Selected Private Service Enterprise". Unpublished MPA Thesis, Yangon University of Economic, Yangon.
- May Than Nwe, (2014). "A Study on Job Satisfaction of Restaurant Employees in Yangon, a Case Study in Pyi Thu Yin Pyin Park, Dagon Township". Unpublished MPA Thesis, Yangon University of Economics, Yangon.
- Min Thura, (2014). "A Study on Motivation of Job Satisfaction of General Administration Department Officers in Yangon Region". Unpublished MPA Thesis, Yangon University of Economics, Yangon.
- Nistor, C., & Surugiu, G. (2009). *Maritime Human Resources Competitiveness through Proper Implementation of Safety Management*. University of Oradea, Oradea.
- Parvin, M. (2011). *Factors Affecting Employee Job Satisfaction of Pharmaceutical*. Australian Journal of Business and Management Research, 1 (9), 113-123.
- Rodrigue, J. P., & Notteboom, T. (2017). *Transportation and Economic Deveopment*. New York: Routledge.
- Sedrick, K., Jing, L., & Liyanarachchi, G. (2015). *Determinants of job satisfaction of Sri Lankan seafarers and tendency of selecting shore based jobs*. Colombo International Nautical & Engineering College (CINEC) Campus, Department of Safety and Surviva. Malabe: Proceedings of 8th International Research Conference, KDU.
- Seng, L. C. (2016). *Leadership and Job Satisfaction among Foreign Seafarers in Maritime Industry*. Human Leadership, 2 (2), 44-57.
- Websites <https://en.wikipedia.org/wiki/Job-satisfaction>
<https://en.wikipedia.org/wiki/Employee-retention>
https://en.wikipedia.org/wiki/Compensation_and_benefits

Study on Implications of Vietnam's ICT Development to North Korea

Shinwon Kang
Sunchon National University

ABSTRACT: The information and telecommunications industry can be expected to have a ripple effect of exchanges and economic cooperation between the two Koreas in other industrial sectors as an essential infrastructure of the national economy and society. In other words, exchange and cooperation between the two Koreas is the easiest industry to pursue the common interests of both countries through substantial exchanges between the government and the private sector. As such, the information and communication industry is a promising field for pursuing common interests between the two Koreas, but the level of North Korea's technology is so poor that it is difficult to cooperate practically. In other words, it is necessary to promote gradual and gradual cooperation in consideration of the difference of the system between the two Koreas and the information communication gap. Therefore, this paper analyzed the development of information and communication in Vietnam, a similar socialist country in North Korea, and sought implications for cooperation with North Korea.

Key words : ICT industry in North and South Korea, Doimeye, ICT development policy, Foreign Investment Law, export competitiveness,

I. Introduction

ICT has received great attention as one of the most promising and necessary fields of inter-Korean exchange cooperation. Information and Communication When you combine the technology capital of the south and north of the workforce as one of the industry has been estimated that there could be a promising conducting inter-Korean cooperation items. Not only did few expectations for its effects in that it can be an effective 'means' that allows you to increase the efficiency of the exchanges and cooperation made in other areas. In other words, information and communication can

be a good medium to shorten the time and effort required for the two Koreas to get close to each other.

On the other hand, between the North and South cooperation of Telecommunications induce alternating north and south, cooperation many-sided and distributes the unified cost medium to long term and would be the ability to induce the enhancement of understanding between the North and South. So far, cooperation between the two Koreas in the information and telecommunication sector can be regarded as staying in the early stages. If cooperation is further strengthened in the future, it will be possible to maximize synergies and develop various programs of high quality.

In order to prepare for the cooperation between the two Koreas, Vietnam was selected as a research target country. Vietnam is a country in close economic cooperation with Korea, and the information and communication industry has developed through the opening of the economy and acceptance of capitalism in socialist countries. Vietnam had a similar social structure to North Korea before its opening. Therefore, if we look at the reversal of the information and communication industry in Vietnam, it is estimated that there will be implications for the development of related industries in North Korea.

In this paper, we examined Vietnam 's information and communication policy and development model and suggested some implications for North Korea.

II. Economic Policy and Growth in Vietnam

Vietnamese government development aid and foreign investment are driving the economy. After the collapse of the communist economy, the economy collapsed, leading to poverty. In 1986, under the slogan of "Doismo", pragmatic economic policies were introduced. Since the end of the 1980s, several laws have been amended to protect property investment by foreigners. In the 1990s, the law was introduced into the international community such as ASEAN.

In December 1986 at the 6th National Congress of the Communist Party of Vietnam, adopting the pragmatic economic policy "Doi Mai" to introduce a partial market economy system, it transformed into a reform and opening line like China. The agenda of the 4th Five-Year Plan (1986 ~ 1990) promoted the liberalization of the economy by selecting 23 million tons of food production by 1990 and 70% export increase for 5 years.

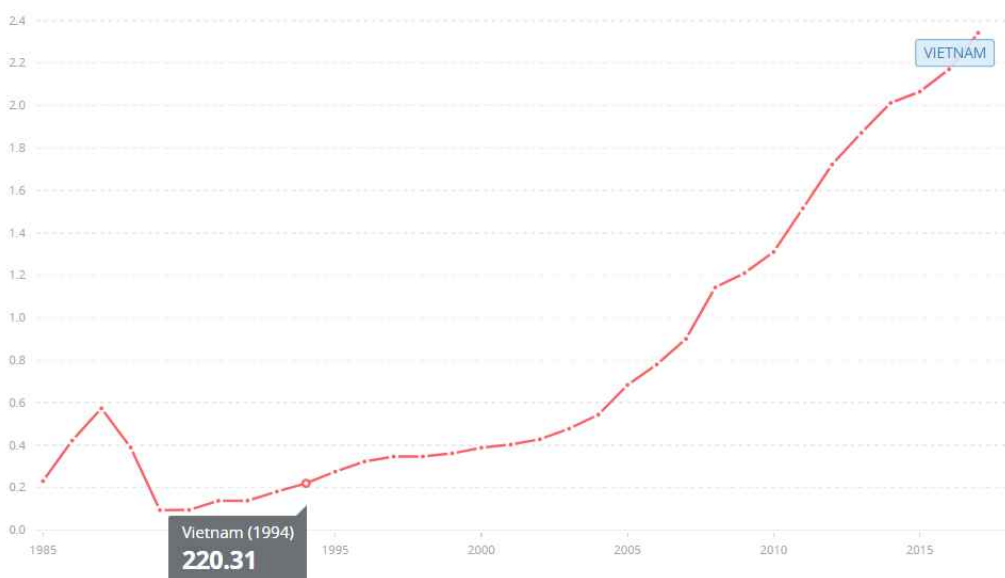
The Foreign Investment Law was promulgated in December 1987, and the Land Act was amended in 1993 to grant land rights, lien rights, and license rights. However, ownership of the land has been held by the state in the public sense. In 1994, the "Bankruptcy Act" came into effect, and in January 2000, the corporate law became

effective. In 1996, the 8th Conference of the Communist Party of Vietnam adopted a political report with the goal of entering the industrialized countries by 2020, with "industrialization and modernization" as the two strategies.

In 1995, the ASEAN and AFTA joined the APEC in 1998, and in July 2000 signed the Vietnam-US trade agreement. In July 2000, the first "Securities Trading Center" was opened in Ho Chi Minh City and expanded to Hanoi in 2005. In January 2007, it officially joined the WTO, and in December 2008 officially signed the Vietnam-Japan Economic Partnership Agreement (EPA).

Since the "Doi Moi" policy, the Vietnamese economy has grown at an annual average rate of 8% or more since 1989 and continued to grow at a rapid rate of more than 9% in 1995 and 1996.¹⁾

Figure 1. Trend in GDP in Vietnam (1960-2018)²⁾

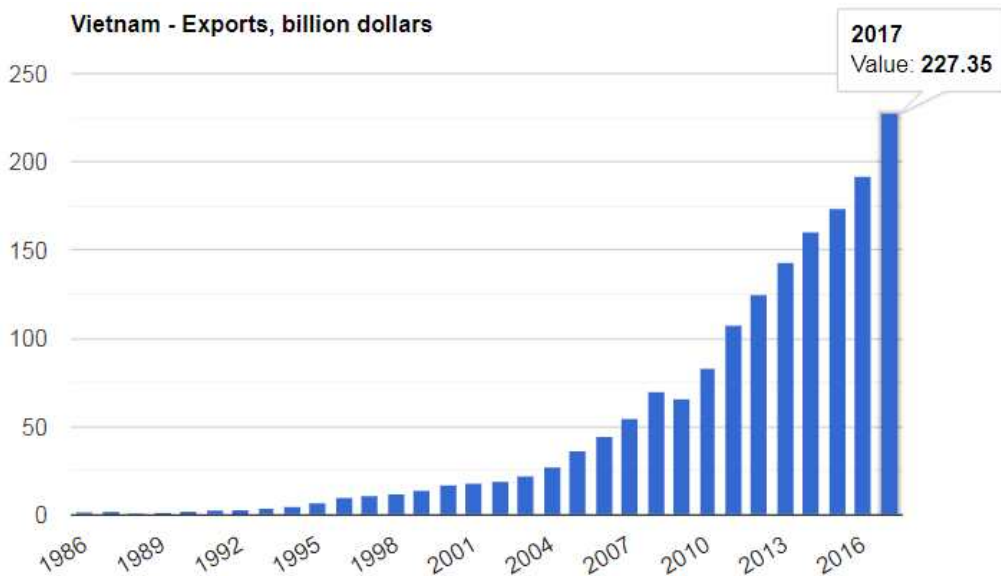


Source: World Bank national accounts data, and OECD National Accounts data file, 2018.

1) It is a slogan from the Sixth Congress of the Communist Party of Vietnam in 1986 and is a reform concept advocated to achieve the goal of a communist-based mixed economy. "Doi Moi" (Vietnamese: Đổi mới) is a commonly used term in Vietnam. It is a term referring to these reforms. It is mainly aimed at a new direction in economy (price stabilization, international division of labor industrial structure, improvement of productivity) and finance.

2) <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?contextual=default&locations=vn>

Figure 2. Vietnam export trend (1986-2016)



Source: <https://www.theglobaleconomy.com>

III. Vietnam's ICT development policy and competitiveness

1. ICT development policy

According to the ICT development index announced by the ITU in 2012, Vietnam ranks 81st among the total member nations, rising 5th from the previous year and ranked 12th out of 27 countries in the Asia-Pacific region. ICT development index is measured by ICT approach, ICT application, ICT technology, and Vietnam has high utilization of IT application (ITU, 2012).

For the first time in 1993, ICT policy was established in Vietnam, which was approved by the government of the Ministry of Science, Technology and Environment (MOSTE) drafted in 1991. In 1994, the National Program on Information Technology Steering Committee (NPITSC) was established. In 1995, the Commission established the 'IT 2000 Plan' (KIEF 2015).

'IT 2000' includes the development of about 20,000 IT specialists through PC diffusion and IT education, revitalizing R & D for IT application development, seeking government support for IT industry development, and building network for data communication .

In the 1990s, if strategies and projects for building an IT infrastructure were pursued, the need for administrative information became more important in the 2000s, and implementation plans for related application development began to be established. In 2001, ICT application development plan for the construction of administrative information management system was established through the resolutions 81 and 112, and the ICT Master Plan 2005 was established by resolution 95 of 2002. The 'ICT Master Plan 2005' includes implementation plans such as promotion of ICT utilization, development of Internet and communication network, development of ICT industry including software and hardware industry, and establishment of e-government system.

Since July 2009, the Vietnamese Parliament has begun a deliberation process on the new telecommunication law, which will focus on expanding the private investment and foreign investment in the telecommunication market, and passed the Telecommunications Law on November 23 of the same year. . The revision of the Telecommunications Act was followed by the opening of the telecommunication market by 2012 with the signing of the World Trade Organization (WTO) in January 2007.³⁾

On the other hand, foreign companies were able to invest only in the form of Business Cooperation Contracts (BCC), which could not hold assets until 2005. In principle, joint ventures that are capable of long-term investment or management rights were limited. On the other hand, the revised Communications Act allowed the establishment of network infrastructures for all companies including private companies, and clarified the gradual opening of the telecommunications market to foreign investors in accordance with the WTO rules. We have relaxed regulations in the telecommunications industry and shifted to market-friendly methods such as auction or qualification examination methods for communication resource allocation methods such as frequency, telephone number, domain name and Internet address. Regarding foreign investors, it has been necessary to register investment companies in central and local governments several times. However, in the future, it will be necessary to conduct business registration procedures, change the business registration certificate or investment registration certificate, It is now possible to conduct business.

3) WTO The WTO is an organization that aims to resolve disputes and conflicts between countries in accordance with the right to adjudicate economic disputes between countries and to use the enforcement rights of the rulings and norms. The World Trade Organization (WTO) deals with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible (<https://www.wto.org/>).

Table 1. Major laws and regulations related to telecommunications in Vietnam

Division	Contents
Law of Telecommunications	<ul style="list-style-type: none"> - Telecommunications Law - Passed in November 2009 - Telecommunications business, universal service regulation - Provide the rights and duties of telecommunication users and enterprises as well as equipment and construction.
Law on Radio Frequencies	<ul style="list-style-type: none"> - Radio frequency method - Passed in November 2009
Law on Information Technology	<ul style="list-style-type: none"> - Information and Communication Law - Passed in June 2006 - Regulations on the use and development of IT applications - protection of intellectual property rights in development

Source: Vietnam MIC

Table 2. Main contents of revision bill of communication law in Vietnam

Field	Existing	Improvement plan
Construction of communication infrastructure	<ul style="list-style-type: none"> - Only government and state-owned enterprises 	<ul style="list-style-type: none"> - Establishment of all enterprise communication infrastructure including private enterprise
Investment Scope of Foreign Investors	<ul style="list-style-type: none"> - It is limited to the form of BCC that can only secure return on investment. Foreign companies can not acquire assets 	<ul style="list-style-type: none"> - Gradually open the communication market, allowing joint venture and business management and possession.
Communication resource management	<ul style="list-style-type: none"> - government led 	<ul style="list-style-type: none"> - Promotion of market-led communication resource management
Communication resource allocation method	<ul style="list-style-type: none"> - Opaque licensing scheme 	<ul style="list-style-type: none"> - Application of qualification examination and auction method when auctioning communication resources such as frequency, telephone number, domain, IP address
Business registration procedure	<ul style="list-style-type: none"> - Individual registration to central / local government 	<ul style="list-style-type: none"> - Unification of the process by the company registration process only

In 2010, the Vietnamese government announced plans to implement various

programs for ICT industry and infrastructure upgrading. ICT 459 strategy (1755 / QĐ-TTg, 2010), Vietnam IT 2011-2015 program (1605 / QĐ-TTg, 2010) and Vietnam IT 2015-2020 program.

Table 3. Vietnam Vision and Strategy for ICT Development

Strategy Sector	Vision and Goal
Information technology Human resource training	<ul style="list-style-type: none"> - Up to 2015, 30% of ICT graduates will gain expertise, become fluent in foreign languages and enter the global ICT market, and 50% of the population will use the Internet - By 2020, 80% of ICT graduates will gain expertise, become fluent in foreign languages, enter the global ICT market, secure 1 million ICT workers in Korea, and use 70% of the population.
Information technology industry	<ul style="list-style-type: none"> - Up to 2015, the design and production technology of information and telecommunication equipments will be gradually developed to replace imports, domestic consumption and export, and top 15 software and digital contents development. - R & D capacity enhancement and software and digital content development to be able to develop new products by 2020.
High speed Communication base	<ul style="list-style-type: none"> - By 2015, 80% of the population will be able to utilize the high-speed network and enter the ITU's network competitiveness rankings. - By 2020, more than 95% of the population will be able to use the high-speed network and enter the ITU's network competitiveness.
Diffusion of informatization	<ul style="list-style-type: none"> - All households have phones by 2011. - By 2015, 20 ~ 30% of the households will use PCs and high-speed networks, and 90% of the households have TVs, and 80% of them can watch digital TV. - By 2020, most households in the nation can use digital services and 50 ~ 60% of households can use PCs and high-speed networks. 20 ~ 30% of them use optical fiber networks. Watch digital TV in most households across the country.
Information technology application	<ul style="list-style-type: none"> - By 2015, most public services for individuals and businesses will reach levels two or three (the e-government phase of the UN), and 80% of companies and organizations will adopt IT technology (management and production). IT technology is spreading to education, healthcare, defense, and IT technology into various social issues. - By the year 2020, the e-government sector has developed, including the top one-third of the UN e-government rankings, and most government services targeting the public and corporations have reached at least four levels. In most industries, IT is combined.
Establishment of ICT company and development of ICT market	<ul style="list-style-type: none"> - Training IT companies worth \$ 10 trillion by 2015. - Training IT companies worth \$ 15 trillion by 2020.

Resolution 1755 / QĐ-TTg, announced by the Ministry of Information and Communications (MIC) in September 2010, is called the ICT 459 strategy, and Vietnam has established an ICT vision to achieve by 2020. MIC has divided Vietnam's ICT vision and strategy into six categories: training information technology personnel, fostering information technology industry, expanding broadband communication base, spreading informatization, developing information technology application, establishing related companies and industrial development in 2015 and 2020. And presented goals to be achieved.

Specifically, by 2015, the information and telecommunications industry will grow to \$ 12.5 billion in hardware, \$ 2 billion in software, and \$ 1.5 billion in IT services. To this end, we will increase the proportion of IT exports to 60%, and provide IT and foreign language education for 50,000 to attract \$ 5 billion in foreign investment to foster the industry.

In order to realize these vision and goals, the ICT 459 strategy is divided into four priority projects, five implementation programs and nine solutions. The four major projects are strengthening citizens' accessibility to ICT, building e-government, building application development capabilities, and strengthening national ICT control capacity.

In order to improve the institutional infrastructure to foster ICT industry, the Vietnamese government enacted electronic trading law, intellectual property law and information technology law in July 2006. In detail, e-banking, e-finance, e-commerce, e-government, And enacted and enforced the anti-spam enforcement ordinance. In addition, MIC was established by benchmarking the Korean government for the development of the ICT industry. MIC officially controls the systematic implementation of the ICT industry master plan.

In summary, the 1990s can be regarded as the beginning of Vietnam 's ICT policy. During this period, the legal and institutional basis for ICT development and the basic infrastructure construction have been achieved. And since 2000, based on this ICT infrastructure, policy efforts have been made to spread information throughout the country, including application development for ICT utilization. In 2010, the company is pursuing policies aimed at leaping to the international level through IT talent development, fostering the IT industry as a new growth engine, building broadband infrastructure throughout the country, and applying IT technology to the socioeconomic and defense sectors.

Vietnam has been revising its telecommunication law in order to stimulate investment of foreign information and telecommunication companies as the demand for investment has surged with the continuous growth of mobile communication. In particular, demand for data services is rising rapidly due to the increase in the Internet usage rate. According to the Gartner report, the size of the IT service market in Vietnam is estimated to be US \$ 620 million in 2012 and will grow by about 14-18%

per year.⁴⁾⁵⁾

Also, since joining the WTO in 2008, IT outsourcing and hardware overseas production using Vietnam's abundant low-wage labor have been growing very rapidly. As major IT companies such as Intel, Hewlett Packard, Panasonic and Samsung Electronics build and operate production facilities in Vietnam, Vietnam is rapidly emerging as an IT production base in Asia. According to statistics for 2013, Samsung Electronics accounted for 18% of Vietnam's overseas exports. HP, IBM and other foreign companies, and FPT and other domestic companies are rapidly growing.

The Vietnamese government is also continuing to privatize public enterprises to reform its economic structure. The privatization of state-owned enterprises and the liberalization of the financial sector are two key aspects of market reform.

Meanwhile, the Vietnamese government expanded its competition in ICT. Since the deregulation of the Vietnamese government in 1995, the Vietnamese government has been promoting the participation of new operators in the market through various competition promotion policies. As the price competition in the mobile communication market progressed, the Ministry of Information and Communication (MIC) reorganized the rate regulation on mobile communication in July 2007 from the licensing system. As a result, the mobile phone call rate has dropped to about 5,000 per minute (about 25 cents).

The Ministry of Information and Communication (MIC) plans to establish a mobile number portability (MNP) guideline in order to promote fair competition among mobile operators in Vietnam, and originally planned to take effect by the end of 2011. However, Respectively.

In June 2014, the Prime Minister's Office approved the reform of the telecom market and started privatization of the state-owned mobile operator Mobifone, and in December 2014, the government owned 100% of the capital of 15 trillion won (about \$ 681 million) In August 2014, the Ministry of Information and Communication (MIC) officially approved the plan to convert MobiFone to MobiFone Telecommunications Corporation. Vinaphone's parent company, VNPT, a mobile rivals, is also preparing to launch its business in 2019, and this change has also changed the market for Vietnam's mobile communications market, where three major operators dominate 93% of the market.

2. ICT export competitiveness in Vietnam

Vietnam has attracted intensive investment from global ICT companies in Asia,

4) Gartner(2012), IT Services Market Attractiveness Assessment(Vietnam). (August 1)

5) IDC(2012), Vietnam ICT 2012 Top 10 Prediction. (February); Gartner, IT Services Market Attractiveness Assessment.

including Korea and Japan, as its value as an ICT consumer market and production base has increased. Vietnam's ICT market grew by 4.9% in 2017, reaching US \$ 129.3 billion, with CAGR of 6.9% over the past five years (2013-2017).

Table 4. Vietnam-World ICT Trade Status

(Unit: billion dollars,% year-on-year)

division	2010	2011	2012	2013	2014	2015
Exports of all industries	722	969	1,145	1,320	1,505	1,621
(Growth rate)	(26.5)	(34.2)	(18.2)	(15.3)	(14.0)	(7.7)
ICT export	84	145	252	375	420	540
(Growth rate)	(57.0)	(74.2)	(73.6)	(48.4)	(12.0)	(28.6)
(ICT portion)	(11.6)	(15.0)	(22.0)	(28.4)	(27.9)	(33.3)
All industry imports	848	1,067	1,138	1,320	1,493	1,661
(Growth rate)	(21.3)	(25.8)	(6.6)	(16.0)	(13.0)	(11.3)
ICT Imports	118	166	248	346	372	457
(Growth rate)	(21.6)	(40.5)	(49.2)	(39.3)	(7.6)	(22.8)
(ICT portion)	(14.0)	(15.6)	(21.8)	(26.2)	(24.9)	(27.5)
All industrial trade balance	-126	-98	7	0	12	-40
ICT trade balance	-35	-21	4	29	47	82

Vietnam has been promoting the transition from the government-led economic growth to privately-led economy through the privatization of public corporations and encouraging investment by improving the investment environment for foreign companies. The law is being revised in July 2015 to improve the conditions for foreign investment.

It is showing rapid growth thanks to ICT outsourcing and hardware overseas production by foreign global companies utilizing Vietnam's rich low-wage labor force. Domestic (Samsung and LG Electronics) and global companies (Intel, HP, Panasonic, etc.) have been building and operating production facilities in Vietnam since 2009.

Samsung Electronics is ranked second among the top 100 companies, and many

foreign companies such as MS (US) and Canon (Japan) are also included, and it can be seen that foreign companies have made steady progress in Vietnam.

Table 5. Status of ICT Companies among Vietnam's Top 100 Companies

ranking	Company Name	Field	Owners hip type	Established Year
2	Samsung Electronics Vietnam Co.,Ltd	Electronic	FDI	2008
5	Viettel Mobile	Communication	State	1994
7	VNPT(Vietnam Posts and Telecommunications Group)	Communication	State	2006
22	Microsoft Mobile Vietnam	Electronic	FDI	2011
24	MOBIFONE Corporation	Communication	State	1993
28	Saigon STEC Co.,Ltd	Electronic	FDI	2007
29	FPT Corporation	Communication	Partial privatization	1998
35	Canon Vietnam Company Limited	Electronic	FDI	2001
44	Vinaphone(Vietnam Telecom Services Company)	Communication	State	1993
61	Mobile World Investment Corporation	Electronic	Private	2004

Vietnam is improving its global competitiveness through various line-ups and advancement into partner companies in the initial assembly of mobile phones. Vietnam has the largest production capacity among the overseas production bases of smart phones on the basis of cheap labor and low price level. Driven by the launch of the second mobile phone plant in 2013, has surpassed China to become the largest production facility for smart phones. In addition, the company has expanded its lineup of products such as home appliances (TV, air conditioner, washing machine), computer and peripheral devices (tablet PC, monitor), smart watch and health care band.

Table 6. Investment status of major ICT conglomerates in Vietnam

division	Time	Name of Company	Investment Details
	2011	Samsung	Operation of mobile phone 1 plant
	2013		Operation of mobile phone 2 plant

Study on Implications of Vietnam's ICT Development to North Korea

Samsung	2020	Electronics	Establishment of consumer electronics complex
	2016		Approved plan to establish R & D center
	2015	Samsung Display	Operation of panel module assembly plant
	2010	Samsung SDI	Operation of small battery pack factory
	2016		Planned construction of polarizing film plant
	2015	Samsung Electric	Camera module, mobile substrate factory operation

Korea's entry into Vietnam is expected to accelerate further. Starting with Samsung Display in 2014, Samsung Electronics, Wisol, Hansol Technics and other related affiliates and affiliates have entered into overseas production.

Vietnam's ICT exports were fastest growing and ranked 11th in global ICT exports in a short period of time. Vietnam's exports of ICT continued to rise markedly, boosting its status as a global production base.⁶⁾

ICT exports expanded dramatically in 2012 (US \$ 25.2 billion), and world ranking ranks 11th in terms of ICT exports in 2015 (US \$ 54 billion).⁷⁾

6) The ratio of ICT exports to total industry in Vietnam (%): (2011) 8.6 → (2012) 12.7 → (2013) 19.1 → (2014) 24.9 → (2015) 25.9.

7) Vietnam's ICT export ranking: (2011) 27th → (2012) 18th → (2013) 16th → (2014) 14th → (2015)

Table 7. ICT exports of major countries in the world

(Unit: US \$ millions,%)

Country	2011	2012	2013	2014	2015	CAGR
China (including Hong Kong)	9,546	10,345	11,228	11,534	11,619	5.0
United States of America	2,480	2,519	2,549	2,622	2,568	0.9
Korea	1,598	1,636	1,791	1,830	1,794	2.9
Germany	1,977	1,850	1,888	1,982	1,762	△2.8
Singapore	1,547	1,497	1,561	1,563	1,478	△1.1
Taiwan	1,337	1,382	1,410	1,502	1,392	1.0
Japan	1,782	1,718	1,478	1,430	1,302	△7.5
Mexico	909	968	1,001	1,070	1,066	4.1
Netherlands	1,279	881	899	934	805	△10.9
Malaysia	817	793	782	835	767	△1.6
Vietnam	145	252	375	420	540	38.9
Thailand	487	484	478	520	510	1.2

Vietnam is achieving high growth rate due to the increase in exports of local production bases due to the increase in global sales of Samsung Electronics mobile phones. Global ICT market demand has been on a steady rise due to the recent increase in global trade and the expansion of the device and telecommunication service market. In recent years, Vietnam has been enjoying its advantage as an export base through production base through low labor costs, substantial concluding of FTA with EU, and participation in AEC (ASEAN Economic Community) in difficult circumstances such as strengthening protection trade of major countries, More and more. In particular, considering the share of electronics and telecom equipment, including mobile phones, which are showing an export advantage index, as well as the share of the home appliances to be expanded in the future, Vietnam's ICT exports are expected to increase gradually.

IV. CONCLUSIONS AND IMPLICATIONS

The information and telecommunications industry can be expected to have a ripple effect of exchanges and economic cooperation between the two Koreas in other industrial sectors as an essential infrastructure of the national economy and society. In other words, exchange and cooperation between the two Koreas is the easiest industry to pursue the common interests of both countries through substantial exchanges between the government and the private sector.

As such, the information and communication industry is a promising field for pursuing common interests between the two Koreas, but the level of North Korea's technology is so poor that it is difficult to cooperate practically.

Therefore, this paper analyzed the development of information and communication in Vietnam, a similar socialist country in North Korea, and sought implications for cooperation with North Korea.

First, the SWOT analysis of the information and communication industry exchange and cooperation aspects of the two Koreas reveals that there are problems in various aspects of North Korea.

In Vietnam, on the other hand, it was comparable to North Korea until the 1980s. It started to develop with the opening policy of "Doimyo" in the 1980s. In order to develop the information and telecommunication industry in Vietnam, it attracted foreign aid and foreign investment, and promoted the reform and opening policy with the continuous policy commitment such as joining the WTO.

Although North Korea has many disadvantages and weaknesses, it can be analyzed that it will develop similar to Vietnam if reform investment is opened through reform and openness.

Table 7. Inter-Korean information and telecommunication industry interchange cooperation aspect SWOT analysis

Strengths (internal, positive)	Weaknesses (internal, negative)
<ul style="list-style-type: none"> - The World's Leading IT Infrastructure in South Korea - South Korea's Capital / Technology / Market Building Capability - North Korea's abundant labor force and low wage level 	<ul style="list-style-type: none"> - Extreme technological gap between the two Koreas - Low labor productivity - Absolute lack of information and communication industry facilities and equipments such as North Korea's industrial infrastructure - Inadequate legislation on information and communication, including the opening of North Korea - Investment guarantee, low degree of openness
Opportunities (external, positive)	Threats (external, negative)
<ul style="list-style-type: none"> - Progressive development of information and communication industry in North Korea - Market expansion to North Korea and China - Expect a synergistic effect from other industries - Reduced costs and tax exemptions in close proximity 	<ul style="list-style-type: none"> - Confined Inter-Korean Relations and North Korean Closure - Control of information to maintain the system - Lack of understanding of capitalism including North Korea's foreign investment law - Restrictions on export of strategic goods to North Korea - Difficulty in exchanging information and communication industry due to North Korean military confidentiality issue

References

- Kang In-soo, Present Situation and Tasks of Inter-Korean Information and Communication Exchanges, Broadcast Research, Winter Winter Issue, 135 ~ 168
- Woo Yeon-Kyu, North Korea's Regional Infrastructure Construction and Telecommunication Service Provision, 2018.
- Korea Broadcasting and Communications Agency, Mid-to-long term policy plan for revitalizing inter-Korean ICT exchanges, 2015.
- ITU, www.itu.int
- KISA, Vietnam Information Protection, 2018.
- KISA, Vietnam Broadcasting Policy Report, 2012.
- KIEF, Vietnam's ICT sector development cooperation plan, 2015.
- KISDI, North Korea ICT Policy Trends and Implications,.
- KISDI, North Korean Wired and Wireless Communication Service Status and Implications, 2017
- KISDI, North Korea Mobile Communications Market Trends - Focusing on Mobile Phones and Tablet PCs, 2013.
- KISDI, A Study on Promotion of Inter-Korean Broadcast Exchange-Cooperation Center for Unification, 2015
- KISDI, Strategic Research for Promoting Exchange and Cooperation between Information and Communication Industry in South and North Korea, 2010.
- KISDI, North Korea Broadcasting Communication Sector and Inter - Korean Broadcasting Communication Exchange Cooperation Status Report,.
- KISDI, German Telecommunication Integration Case Analysis and Implications,.
- NIPA, Information and Communication Broadcasting Status by Country, 2017.
- NIPA, GIP Global ICT Portal, Vietnam <https://www.globalict.kr>
- NIPA, VIETNAM Market Report Information and Communication Broadcasting by Country 2018, 2018.
- <https://www.globalict.kr/>
- NIPA, Vietnam IT market entry opportunity, 2019.3.
- OECD, www.oecd.org
- Vietnam Economic Indicators, <https://www.theglobaleconomy.com/Vietnam/>
- WTO, <https://www.wto.org/>

The Myanmar JOURNAL

– Volume 6 Number 1 August 2019

28 February 2019

Yangon University of Economics (Myanmar)
Korea Myanmar Research Association (Korea)
2014~, Semiannual
ISSN : 2383-6563(Online)

Co-published with **Yangon University of Economics (YUE)** and
Korea Myanmar Research Association (KOMYRA)
<http://www.komyra.com/doc/submission.php>