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OPPORTUNITIES AND CHALLENGES TO RURAL ENTREPRENEURSHIP IN BILU ISLAND, MON STATE, MYANMAR*

Myint Myint Kyi¹

Abstract

This paper intends to explore opportunities and challenges to do business in Bilu Island, Mon State, Myanmar. There are 78 villages on this island. This paper focuses on three villages where entrepreneurs are doing home businesses and each village has at least 15 businesses. The observation was first conducted. By observation, the distinct contexts of three villages are found out. After observation for general review, the focus group discussion method is applied to explore opportunities and challenges to do business in these villages. Four focus group discussions (discussions of 48 entrepreneurs) are conducted. From these focus group discussions, the common factors (either opportunities and challenges) emerged. Then, the structured questionnaire is developed by focusing on findings from focus group discussions. The personal interview method is applied by using this questionnaire. The data are collected from 191 entrepreneurs from these three villages. Only 126 entrepreneurs responded to survey. From descriptive analysis, it is found that challenges are more in Ywalutt and Mudoon villages. The challenges of these two villages are financial literacy, market assess, availability of raw materials, skills needed, economies of scale, and transportation. Their opportunities are credit assess, innovation, visits of tourists and visits of local people. However, the visits of tourist have no impact on entrepreneurs of Mudoon village. Kawt Dyut village is distinct from other two villages. Its opportunities are credit assess, financial literacy, market assess, skills needed, availability of raw materials, and economies of scale. Innovation, transportation, visits of tourists, and visits of local people are not impacting on entrepreneurs in this village. Entrepreneurs are not facing challenges to run their businesses. On the Bilu Island, the eco-system (raw materials, workers, market needs, and finance) of a village should collaboratively support to major businesses of this village. Project of one village one product should be implemented in Bilu Island because villages have distinct opportunities and challenges.

KeyTerms: Opportunities, Challenges, Entrepreneurs, Villages

Introduction

Entrepreneurship and business creation are central to economic development of any region (Stathopoulou, S., Psaltopoulos, D. & Skuras, D., 2004). However, for rural areas, it seems that entrepreneurship and business creation are not too effective for economic development. In these areas, it is very difficult to convince rural people that creating business is necessary for economic development. Rural areas are inherently disadvantaged to create business in some ways such as lack of infrastructure, environment for education, market assess, credit assess and so on. Thus, in Myanmar, some rural people still believe that business creation is more difficult than doing traditional agricultural jobs; in some villages, they even believe that crossing the border to neighboring country for jobs of general work can improve their lives. On the other hand, some rural people who have entrepreneurial traits see obviously the good potential for doing businesses and for development of entrepreneurship in their native towns.

In some rural areas of Myanmar, there is a good potential to create businesses because of some developments such as development of tourism, development of physical infrastructure

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(example: roads, railways, ports), development of commercial infrastructure (example: new branches of private banks), development in providing electricity and so on. Micro-financing firms are also going to rural area for providing finance to start the businesses. Government also pay more attention to rural areas' economic development and to solving the social problems especially the problem of migration to neighboring country. If rural entrepreneurs can overcome the challenges they are facing and get the opportunities to sustain their businesses, the rural areas' problems can be removed and rural people can gain the benefits of economic development.

1.1 Rationale of the Study

In rural areas, entrepreneurship is central not only for economic development but also for solving some social problems such as school drop-out rate, migration to neighboring country by crossing the border of two countries, low household income, and so on. In Myanmar, in rural areas near to border of Myanmar and Thailand, major social problem is migration to Thailand for general worker jobs. Mon state and Kayin state are located near to the border of Myanmar and Thailand. The migration for general work to Thailand is more usual in Mon state, especially in Bilu Island. In Thailand, most of the Myanmar general workers are from Mon state. One of the causes may be language similarity between Thai language and Mon dialect. Another cause may be nearness of Mon state to Thailand border area.

Bilu island is a beautiful island directly west of Mawlamyine City. Its size is roughly the size of Singapore, and it comprises of 78 villages that are home to more than 200,000 people (n.a, 2019). Some people in Bilu Island own home businesses such as small States for students, bamboo hats, wooden pipes, and wooden walking sticks. Most of the people are working at the paddy fields and at the rubber plantation sites. The social problem of migration for general work to Thailand is higher in this island, and school drop-out problem is also high (Thike, 2018). In some villages, most of the households' heads are women because their husbands are going for working in Thailand (Kyu, 2018).

If existing entrepreneurs and government cannot create jobs for youths, the social problems of migration rate to Thailand and school drop-out rate will be going to increase. If existing entrepreneurs gain opportunities to run their businesses successfully, they can provide more jobs and youths will learn from their success stories. In some villages, there may be hidden opportunities to do businesses. Similarly, there may be hidden challenges to start and sustain the businesses. Exploring the opportunities and challenges to rural entrepreneurship in Bilu Island, Mon state, Myanmar, would be partly contribution to solving the social problems of this island.

1.2 Research Questions

- (1) What challenges are the entrepreneurs facing in Bilu Island, Mon state, Myanmar?
- (2) What opportunities are in Bilu Island for sustaining existing businesses of entrepreneurs?

1.3 Research Objectives

- (1) To investigate the challenges which rural entrepreneurs face to sustain their businesses in Bilu Island, Mon state, Myanmar.
- (2) To explore the opportunities for entrepreneurs to sustain their businesses in Bilu Island, Mon state, Myanmar.

1.4 Scope and Method of Research

This paper aims to explore the opportunities and challenges to rural entrepreneurship in Bilu Island, Mon state, Myanmar. There are 78 villages in this island. Although the home businesses are fragmented among these villages, only three villages have more than 15 businesses. This research focuses on entrepreneurs of these three villages. These three villages are Ywalutt, Mudoon, and Kawt Dyut villages. Since there is no record kept for number of businesses in these villages, the block (village) screening approach is applied to get the data about the number of businesses. At the first step, data are collected through some villagers who counted the number of businesses road by road. Then, the counter-check on their data has been done. From this approach, it is found that there are 17 businesses in Ywalutt, 23 businesses in Mudoon, and 151 businesses in Kawt Dyut.

For data collection, at the first step, focus group discussion method is applied. In Ywalutt, one focus group with 8 members (5 entrepreneurs, 1 teacher from basic education high school, and 2 heads of village) is organized. In Mudoon, one focus group with 10 members (7 entrepreneurs, 1 teacher and 2 heads of village) is organized. In Kawt Dyut, three focus groups are organized. Ten members (7 entrepreneurs, 1 teacher and 2 heads of village) involved in each of these three groups. Group members discussed about the opportunities and challenges to sustain the businesses in Bilu Island. Then, the structured questionnaire is developed by considering the findings from these focus group discussions. This questionnaire is used to collect data from entrepreneurs. Census sampling method is applied, and primary data are collected from all entrepreneurs of three villages. Thus, primary data are collected from 191 respondents of three villages. For data analysis, descriptive analysis is conducted. Observation method is also applied to uncover some hidden issues of entrepreneurs of three villages.

Literature Review

2.1 Entrepreneurship

Entrepreneurship is a term describing individuals that recognize the opportunities in order to satisfy needs and who gather resources to meet them (Jones, 1999). In simple terms “entrepreneurship” is the act of being an entrepreneur, which can be defined as “one who undertakes innovations, finance and business acumen in an effort to transform innovations into economic goods (Jayadatta, 2017). *“Entrepreneurship is the manifest ability and willingness of individuals, on their own, in teams, within and outside existing organizations, to: (1) perceive and create new economic opportunities (new products, new production methods, new organizational schemes and new product-market combinations) and to (2) introduce their ideas in the market, in the face of uncertainty and other obstacles, by making decisions on location, form and the use of resources and institutions”* (Wennekers, 1999)p.46. Although there is no universal definition of entrepreneurship, researchers agreed that entrepreneurship is performed by individuals and that it is a dynamic phenomenon (Hebert, 1989). By considering some definitions mentioned, entrepreneurship can be the work of individuals who established small-sized businesses, within the constraint of finance, with the intention to provide innovative products and services into market and to gain the whole profit and economic returns by managing him/herself.

2.2 Rural Entrepreneurship

Rural areas are disadvantaged in some ways compared to the urban areas; there is a huge difference in the economic performance between these regions (Smallbone, 2009). Rurality can be defined as a territorially specific entrepreneurial milieu with distinct physical, social and economic characteristics (Stathopolou, 2004). Rural entrepreneurship is defined as all forms of entrepreneurship that take place in areas characterized by large open spaces and small population settlements relative to the national context (Korsgaard, 2015). Rural entrepreneurship certainly implies entrepreneurship emerging in rural areas (Hebert, 1989). In other words, running businesses in rural areas is rural entrepreneurship.

(Wortman, 1990) describes rural entrepreneurship as the creation of a new organization that introduces a new product, serves or creates a new market, or utilizes a new technology in a rural environment. By referring to these definitions, rural entrepreneurship can be seen as running businesses in rural areas where there are distinct physical, social and economic characteristics.

2.3 Entrepreneurs

Entrepreneur in a company is one (or sometimes a few) person whose influence shapes the entire business (Wennekers, 1999). Thus, entrepreneurs are running the small businesses on which they can control and manage by themselves. There may be a link between entrepreneurship and size of the business. Entrepreneurs in general face financial and liquidity constraints (Blanchflower, 1998). They are more satisfied with their job than employees and have much higher autonomy (Benz, 2008). Thus, entrepreneurs establish businesses within financial constraints because they do not want to work under others' supervision and control. To own business and run it successfully within the constraints, they normally have distinct personality traits. Some entrepreneurial traits are creativity, innovativeness, achievement-orientation, risk-tolerance, openness and self-confidence (Obschonka, 2010).

The entrepreneurs with their ability to scan, identify and analyse opportunities in the environment transform them into business proposition through creation of major economic entities there by channelizing the resources from less productive to more productive use create wealth (Jayadatta, 2017). An entrepreneur can be defined as a person who fails to conform to the traditional structured role given to him in the society and finds an exit to venture on his own (Bhanshali, 1987).

2.4 Empirical Studies on Opportunities and Challenges to Rural Entrepreneurship

Some researchers explored the opportunities and challenges to rural entrepreneurship.

2.4.1 Challenges

Challenges explored by (Sopiko Imedashvili, 2013) are logistics (to get the product out of this area to customers); low productivity to compete larger firms located in urban areas; workforce with lack of higher-education; social problem that local inhabitants associate the entrepreneur with business so that they talk to entrepreneur about his or her job, which is not enjoyable in spare time; close social relation which presents a disadvantage, as people know too much about each other (good individuals with poor family background can be unreasonably

rejected); lack of government assistance to rural infrastructure; lack of population; lack of better competitors (benchmarking as stimuli); low potential to get high market share; and limited local demand so that entrepreneur must find market outside their area.

The challenges explored by (Jayadatta, 2017) are paucity of funds due to absence of tangible security and credit; low level of purchasing power of rural people; lack of education to maintain financial statements which can support to get loans; lack of infrastructural facilities; less risk bearing capacity; less capabilities to face competition from larger sized urban businesses; cannot afford to send for sales promotion and advertising; lower literacy rate of rural people; urban buyers will not be familiar with local dialects; need to depend heavily on middlemen due to lack of warehouse and transportation facilities; lack of market assess; lack of grading and standardization (low quality products); lack of knowledge with information technology; lack of legal formalities; lack of training facilities; low skill level of workers; negative attitude of rural people to take up entrepreneurship as career; and lack of getting high quality raw materials.

2.4.2 Opportunities

Opportunities explored by (Sopiko Imedashvili, 2013) are availability of buildings with lower rental costs; cheaper property; lower costs of introducing products to market; easy to cooperate and communicate among businesses within rural area; pleasant firm surroundings; can provide lower price due to lower operating costs; cooperation between entrepreneur and inhabitants; and availability of workforce (local people can work at businesses). The challenges explored by (Jayadatta, 2017) are employment opportunities for labour intensive firms; and encouragement and promotion from government and other associations like NGOs for artistic activities in rural areas.

Findings from Observation

The three villages (Ywalutt, Mudoon, and Kawt Dyut) are observed from 7th to 14th July 2018 to overview on the nature and context of these villages.

3.1 Business Context of Ywalutt Village

Ywalutt is famous with its innovative products such as wooden walking sticks and wooden smoking pipes. There were about 100 (nearly 100) home businesses in Ywalutt. At present, only 17 home businesses left in this village. Their major products are wooden walking sticks, wooden smoking pipes and they are also producing peripheral products such as wooden tea sets, wooden clocks, wooden pens, and other wood-based small pieces of products. Most of the entrepreneurs are innovative in designing their products (See Appendix). However, the utility of their major products has been falling down due to the changes of life styles and health attitude of people. Moreover, the source of major raw material (wood) has been depleting. In Bilu Island, there is less of choice for wood because the soil type can support less to hardwood trees, most of the trees there are Yin-Gutt trees. The natural growth of this type of tree cannot replenish to usage of entrepreneurs. Thus, some entrepreneurs moved to other areas, especially to Bago region where there is better availability of raw materials to do such kind of business. In Bago region, there are various types of trees such as Ka-Nyin, In, and also other hardwood trees. The opportunity to access market is also better in Bago region due to better transportation infrastructure, and it can be seen as transportation hub directly connecting to Yangon, Mandalay,

and Naypyitaw.

3.2 Business Context of Mudoon Village

Mudoon is famous with the product of small black boards or states for students, and these are made with sheets of slate (black-stone). However, recently, entrepreneurs are now innovating black boards with various sizes for different use. They produce black boards targeted to restaurants for use of order taking board, writing or sticking the printed menu on it and for the use as plates. They also produce black boards to be used as sign boards of businesses or other organizations. Although almost all entrepreneurs are producing the products for such usages, it is found that one innovative entrepreneur has been using new ways: producing product and service for hotels' swimming pools decorated with slate, tables made with slate and also for roofs of houses (See Appendix). This entrepreneur can find the market. For other entrepreneurs, the problem is high cost to produce slate by comparing with the price of finished products. Most of the entrepreneurs said that they do not have the capacity and knowledge to do other kinds of businesses. Moreover, they also do not have the ideas to find new markets for existing products. They are making black boards with willingness to show their heritage.

3.3 Business Context of Kawt Dyut Village

Kawt Dyut village is not famous as other two villages with entrepreneurship. However, this village has high potential to be economically developed. Most of the households are doing home business by hand-make bamboo hats which are usable for workers at the rubber plantation sites, and also for farmers and workers at the paddy fields (See Appendix). These hats are also made for students because most of the students in Bilu Island are going to schools by bike and in the raining season these hats are useful for them. In this village, most of the women are working at the hat-making businesses. It is easy for them to learn making hats with bamboo leaves. The entrepreneurs can hire workers easily and cheaply. Major material to make these hats is bamboo leaves. It is also easy for entrepreneurs to get bamboo leaves because the bamboo trees can grow naturally throughout the year. Entrepreneurs can sustain the market demand because users or customers frequently need to buy bamboo hats due to the short life time use of bamboo hats. One micro-financing firm has been providing the finance to entrepreneurs, and entrepreneurs can easily pay back the loan and interest to micro-financing firm. They have basic financial literacy to get and pay back regularly the loan. They get just required amount of loan, they do not get loan unnecessarily. They use loan in buying and storing bamboo leaves. Although bamboo trees grow throughout the year, in some seasons, the price is lower. Thus, they are gaining advantage on getting loan from micro-financing firm. Thus, in this village, the eco-system of doing business of bamboo hats is quite sound.

Findings from Focus Group Discussion

4.1 Predetermined Questions

According to findings of previous researchers on opportunities and challenges to rural entrepreneurship, the following questions are predetermined:

- (1) What factors of physical environment are opportunities to do business in Bilu Island?
- (2) What factors of social environment are opportunities to do business in Bilu Island?

- (3) What factors of economic environment are opportunities to do business in Bilu Island?
- (4) What factors of physical environment are challenges to do business in Bilu Island?
- (5) What factors of social environment are challenges to do business in Bilu Island?
- (6) What factors of economic environment are challenges to do business in Bilu Island?

4.2 Selecting Group Members

The number of group members is between 8 and 10. Each group consists of 1 teacher from basic education high school and 2 heads of village, and 5 or 7 entrepreneurs. To get the ideas and information from educated person and to get the general view from village administration, teacher and heads of village are recruited. One moderator is also recruited. This moderator has the experience of teaching business management subjects and also is a MBA degree holder. The focus group discussion takes time about 1 and ½ hours. Their discussion points are recorded by written notes which are taken by three note takers. These focus group discussions are conducted during 15 to 17 December, 2018.

4.2 Common Factors Resulted from Focus Group Discussions

According to the discussions of focus group members, the common factors are explored. These factors can be seen as opportunities by some entrepreneurs while as challenges by others. These common factors are:

- (1) Financial Literacy of Entrepreneurs
- (2) Innovation
- (3) Market Access
- (4) Credit Access
- (5) Availability of Raw Materials
- (6) Skills Needed
- (7) Economies of Scale
- (8) Transportation
- (9) Visits of Tourists
- (10) Visits of Local Travelers

Findings from Survey

The structured questionnaire is developed basing on the common factors explored from focus group discussions. The question items are with five-point Likert scale (1 for major challenge, 2 for minor challenge, 3 for no impact, 4 for minor opportunity, and 5 for major opportunity). Personal interview method is applied to collect data from all entrepreneurs of three villages. There are a total of 191 entrepreneurs in these three villages. However, data are received from only 126 entrepreneurs. Descriptive analysis is conducted. Since one factor can be seen as opportunity in a village while this factor is a challenge in another other village, the data are analysed by village. In this analysis, factors are identified as opportunities or challenges

based on the major responses of surveyed entrepreneurs. Findings are shown in the following Table. Detailed figures can be seen in Appendix.

Opportunities and Challenges of Entrepreneurs in Bilu Island

Sr. No.	Factors	Ywalutt	Mudoon	Kawt Dyut
1	Financial Literacy	Minor Challenge	Minor Challenge	Major Opportunity
2	Innovation	Major Opportunity	Minor Opportunity	No Impact
3	Market Assess	Major Challenge	Minor Challenge	Major Opportunity
4	Credit Assess	Major Opportunity	Major Opportunity	Major Opportunity
5	Availability of Raw Materials	Major Challenge	Minor Challenge	Major Opportunity
6	Skills Needed	Major Challenge	Minor Challenge	Major Opportunity
7	Economies of Scale	Major Challenge	Major Challenge	Major Opportunity
8	Transportation	Major Challenge	Minor Challenge	No Impact
9	Visits of Tourists	Minor Opportunity	No Impact	No Impact
10	Visits of Local Travelers	Major Opportunity	Major Opportunity	No Impact

Source: Survey Data, 2018

As shown in the above Table, financial literacy (knowledge to manage finance for doing business) is only a minor challenge at Ywalutt and Mudoon villages although it is the major opportunity in Kawt Dyut village. Although it is the knowledge and ability of entrepreneurs, it should be seen as challenge/opportunity instead of weakness/strength because this knowledge come out from eco-system of the village. In Kawt Dyut village, the micro-financing firm has been trying to provide knowledge of getting loan and taking advantage on this loan. Thus, this factor is seen as opportunity in Kawt Dyut village. Villagers from other two villages did not accept the accept of micro-financing firm into their villages although they are not getting good return on investment. Innovation factor is major opportunity at Ywalutt village, and minor opportunity at Mudoon village. Ywalutt has the history of innovation, and some entrepreneurs are still innovative in designing the products. Mudoon entrepreneurs are also trying to produce black boards with various designs. However, innovation is not necessary for businesses of Kawt Dyut village.

Market access is a challenge at Ywalutt and Mudoon villages. The products with innovative designs may be attractive to urban customers. However, it is difficult to assess market due to large distance and transportation cost to reach urban markets. For Kawt Dyut village, market assess is an opportunity because the major market is just in the island. Most of the villagers of Bilu Island are buying the bamboo hats made at Kawt Dyut village. Credit assess is opportunity for all three villages because micro-financing firm will provide finance to all entrepreneurs. Availability of raw materials is challenge for Ywalutt and Mudoon villages. For Ywalutt entrepreneurs, the trees cannot be sustained for many years. For Mudoon village, although the slate mountains still there the producing cost is high. For Kawt Dyut village, there are plenty of bamboo trees. Thus, entrepreneurs can get raw materials (bamboo leaves) easily.

Skills needed is the challenge at Ywalutt and Mudoon villages. Some buyers are buying the products not for utility value, they are buying the innovative design. The skills needed is opportunity at Kawt Dyut village. The bamboo hats can be made easily, skills needed is low to make bamboo hats. Economies of scale is a challenge at Ywalutt and Mudoon villages because the entrepreneurs cannot penetrate into large market. The innovative design of products can attract only very few customers. Utility value of products has also been decreasing. Thus, the production cost per unit is high. It is opportunity at Kawt Dyut village because entrepreneurs have a large and sustain able market. The production cost is originally low due to low cost of raw material and low cost of production.

Transportation is a challenged at Ywalutt and Mudoon villages. The products can not provide the utility value to villagers. Thus, entrepreneurs need to overcome the transportation barrier to acces the urban markets. However, it is difficult for them to compete with entrepreneurs of bago region. The entrepreneurs of Bago region can assess markets more easily. Visits of tourists is minor opportunity for Ywalutt although it has no impact on entrepreneurs in Mudoon and Kawt Dyut villages. Although innovative design of wooden walking sticks and wooden pipes can attract some tourists, the black boards from Mudoon cannot attract to tourists. The bamboo hats from Kawt Dyut village cannot provide utility value to tourists as well as cannot attract to them with design. However, local visitors like to buy products from Ywalutt and Mudoon. The bamboo hats from Kawt Dyut village cannot attract to local visitors.

Suggestions

Since the eco-system of village can generate the high economic returns for villagers and entrepreneurs, the eco-system should be systematically developed. If raw material, market needs, production facilities and skills, and finance support are harmonized in a village, the sustainability of small businesses will be high in this village. In Bilu Island, the eco-system of a village may not be the same as the eco-system of other village. Thus, there is potential for one village one product project. However, some necessary support to relevant eco-system will be needed, and it will be village specific.

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Apendixes



Results from Descriptive Analysis

Factors	Ywalutt % of Respondents					Mudoon % of Respondents					Kawt Dyut % of Respondents				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Financial Literacy	22	43	17	10	8	10	40	32	8	10	5	12	3	22	41
Innovation	10	14	8	30	38	11	12	3	49	25	12	18	53	10	7
Market Assess	42	31	3	7	8	40	45	0	10	5	2	6	0	32	60
Credit Assess	4	6	10	30	50	8	17	1	28	46	2	7	2	7	82
Availability of Raw Materials	39	31	7	13	10	21	53	2	14	10	0	0	0	11	89
Skills Needed	61	12	2	17	8	34	55	1	5	5	0	0	2	8	91
Economies of Scale	48	26	16	6	4	34	44	1	11	10	2	6	12	19	61
Transportation	82	10	8	0	0	22	52	6	12	8	8	12	73	2	5
Visits of Tourists	10	14	30	34	12	2	6	82	5	5	0	1	89	10	0
Visits of Local Travelers	0	0	15	13	72	2	3	5	39	51	0	0	94	5	1

Source: Survey Data, 2018

JOB SATISFACTION AND ORGANIZATIONAL COMMITMENT OF ACADEMIC STAFF OF PUBLIC UNIVERSITIES IN YANGON

Sanda Win *

Abstract

The main objective of the study is to analyze the job satisfaction and organizational commitment of academic staff of public universities in Yangon. The descriptive and analytical research methods are used to meet the objectives of the study. A total of 365 academic staff from three selected public universities in Yangon is surveyed by using two-stage random sampling method. The academic staff perceptions on selected workplace characteristics, and job characteristics are explored in this study. According to the results, two demographics variable (position, and working experience), and four workplace characteristics variables (relationship with co-workers and supervisors, adequacy of facilities and resources, training opportunities, and promotion), and five job characteristics variables (skill variety, task identity, task significance, autonomy, and feedback) have positive significant relationship with job satisfaction, and one workplace characteristic variable (workload) has a negative significant relationship with job satisfaction. Two demographics variables (position, and working experience), and three workplace characteristics variables (relationship with co-workers and supervisors, adequacy of facilities and resources, training opportunities), and four job characteristics variables (skill variety, task identity, task significance, and autonomy) have a positive significant relationship with organizational commitment. From the analysis, job satisfaction also has a positive significant relationship with organizational commitment. Accordingly, job satisfaction and organizational commitment have a positive significant impact on intention to stay. Therefore the study highlights a more comprehensive understanding of academic staff job satisfaction and organizational commitment based on demographic characteristics, workplace characteristics, and job characteristics of public universities in Yangon. The results of this study are encouraging for policy makers in higher education, and management of public universities as it suggests opportunities for increasing job satisfaction, and organizational commitment of public universities.

Keywords: Job Satisfaction, Organizational Commitment, Intention to Stay, Academic Staff, Public Universities

Introduction

For the development of any nation, education plays a significant role. The involvement, effort and the professional expertise of the teachers can create the success of the education system. Universities play an important role in the development of human society and for the purpose of delivering knowledge and fulfilling the intellectual needs of society. Universities are also responsible for preparing the best human capital to meet the need of the public, private and social sector. Academic staff is the key source of learning at the university level, and university's objective cannot be completely fulfilled without fully satisfied academic staff. By fulfilling university level physical resources, enough salaries, and equipped with modern method of teaching, the academic staff can enjoy at workplace. Academic staff's job satisfaction and their commitment are predictors of their retention. It has an effect on effectiveness of universities, and influences job performance, motivation, morale and students' performance. The input of human resource in higher education hugely contributes to the overall performance of the universities, students and the community. Therefore, for the universities to achieve their goals, the job satisfaction and organizational commitment of the academic staff must be given special attention.

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Selected public universities in Yangon are offering undergraduate and graduate degrees, master degrees, doctoral degrees, post-graduate diplomas, and certificates and diploma programs and also offering multidisciplinary courses. These universities aim to train and equip the new generations to play a different role in governing firms and institutions. To achieve this aim, maintaining experienced and qualified academic staff plays an important role, and job satisfaction and organizational commitment of academic staff are also essential for the achievement of the universities' objectives. There is no research concerning with job satisfaction and organizational commitment of academic staff of public universities in Myanmar. Therefore, the purpose of this study is to find out the factors affecting job satisfaction and organizational commitment among academic staff of public universities in Yangon. After that, it intends to analyze the relationship of these factors with job satisfaction, and organizational commitment. The study also aims to find the effect of job satisfaction on organizational commitment. Finally, the effect of job satisfaction and organizational commitment on the intention to stay is explored.

Objectives of the Study

The main objective of this study is to evaluate job satisfaction and organizational commitment among academic staff of public universities in Yangon. The specific objectives are:

1. To identify the levels of job satisfaction and organizational commitment of academic staff of public universities.
2. To analyze the relationship between factors (demographic characteristics, workplace characteristics, and job characteristics) and job satisfaction among academic staff.
3. To analyze the relationship between factors (demographic characteristics, workplace characteristics, and job characteristics) and organizational commitment among academic staff.
4. To evaluate the relationship between job satisfaction and organizational commitment of academic staff.
5. To assess the effect of job satisfaction and organizational commitment on intention to stay.

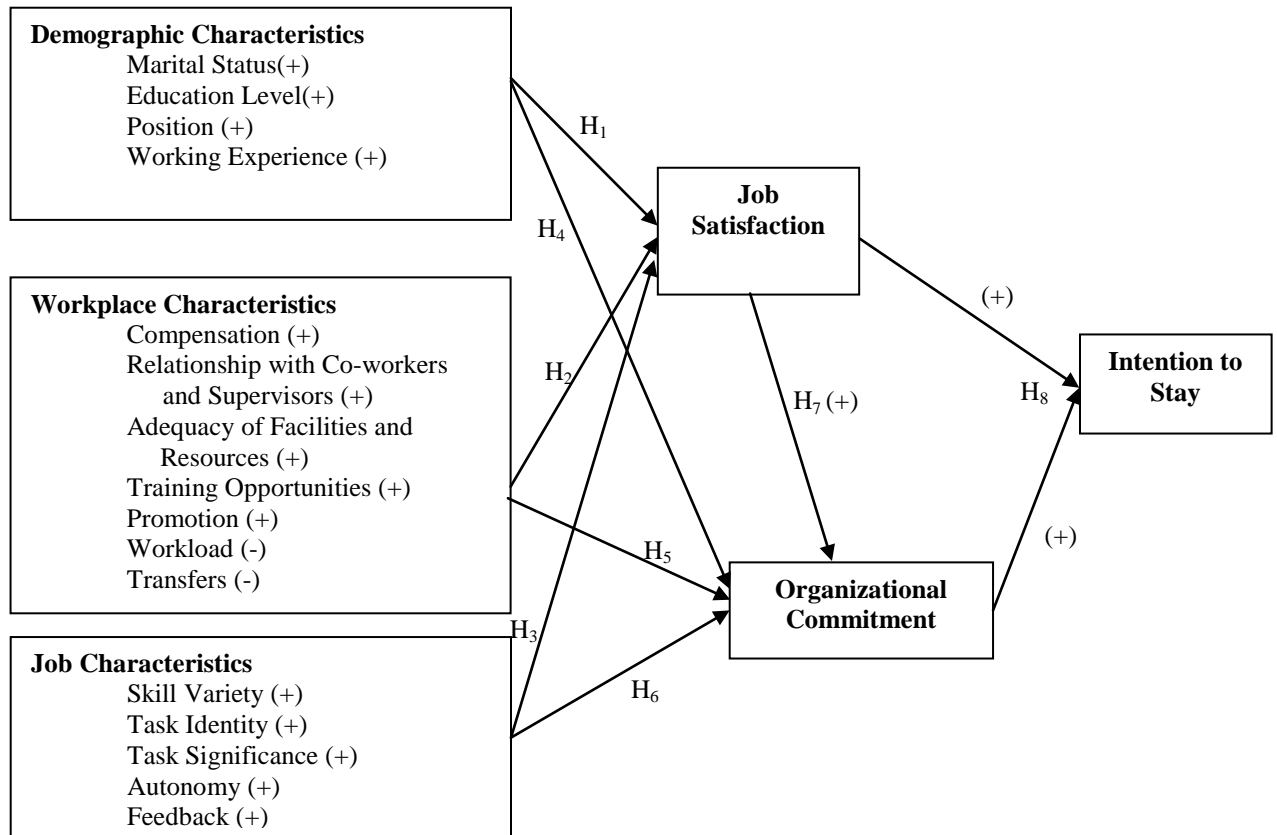
Method of the Study

Quantitative research techniques are used, and this study is analytical in nature. In this research, both primary and secondary sources of data are used. Primary data are collected through questionnaire while secondary data are taken from the various sources such as management text books, published reports, conducted research papers concerning with job satisfaction and organizational commitment from various fields, and internet.

Two-stage random sampling method is used in this study. At the first stage, three out of eight universities in Yangon are selected. Target population of this study is the academic staff from selected public universities in Yangon. Among them, academic staff from each position (Professors, Associate Professor, Lecturers, Assistant Lecturers, and Tutors) are selected as sample by using stratified random sampling method at the second stage. Survey method is used through questionnaire to collect the data needed to analyze the objectives of this study. Data are collected by using structured questionnaire for the academic staff. Data are analyzed through frequency distribution tables, percentages, and, some statistical analysis such as multiple linear regressions.

Conceptual Framework of the Study

The main focus of this study is the impact of three main aspects: demographic characteristics, workplace characteristics, and job characteristics, based on the theory, previous research paper, and frameworks. The conceptual framework which is illustrated in Figure (1) describes the independent variables and dependent variables used in the empirical analysis of this study.



Source: Own Compilation, 2017

Figure 1 Conceptual Framework of the Study

Results/Findings

For the purpose, 365 academic staff from universities are selected and given the structured questionnaires. Based on data, the demographic characteristics of respondents, validity and reliability test for workplace characteristics, job characteristics, job satisfaction, organizational commitment, and intention to stay, the descriptive statistics, and data analysis by using the multiple linear regression models are performed.

Demographic Characteristics of Academic Staff

The demographic data are based on some variables such as marital status, educational level, position, and working experience of academic staff. Each characteristic has been analyzed in terms of absolute value and percentage, and the summary table of demographic characteristics is used to display these data more clearly. Table (1) shows the summary table of demographic characteristics of academic staff.

Table 1 Demographic Characteristics of Academic Staff

Marital Status	Number of Respondents	Percent
Single	272	74.5
Married	93	25.5
Education Level	Number of Respondents	Percent
Bachelors (Hons)/ (Q)	3	0.8
Masters	237	64.9
PhD (Ongoing studies)	52	14.2
PhD	73	20.0
Position	Number of Respondents	Percent
Tutor	120	32.9
Assistant Lecturer	59	16.2
Lecturer	138	37.8
Associate Professor	28	7.7
Professor	20	5.5
Working Experience (Years)	Number of Respondents	Percent
1-5	146	40.0
6-10	28	7.7
11-15	73	20.0
16-20	56	15.3
21-25	33	9.0
26-30	25	6.8
31 and above	4	1.1
Total	365	100.0

Source: Survey Data, 2017

Workplace Characteristics, Job Characteristics, Job Satisfaction, Organizational Commitment, and Intention to Stay of Academic Staff

This part firstly provides academic staff perception on job characteristics, organizational characteristics. And then, academic staff job satisfaction, organizational characteristics, and their intention to stay are explored.

Workplace Characteristics

In this study, the workplace characteristics are compensation, relationship with co-workers and supervisors, adequacy of facilities and resources, training opportunities, promotion, workload, and transfers. The respondents' perception on workplace characteristics are summarized in Table (2), and details of each are shown in Appendix (1).

Table 2 Perception on Workplace Characteristics

Sr. No.	Description	Mean Values
1	Compensation	2.418
2	Relationship with Co-workers and Supervisors	3.783
3	Adequacy of Facilities and Resources	3.389
4	Training opportunities	3.625
5	Promotion	3.165
6	Workload	3.157
7	Transfers	3.372

Source: Survey Data, 2017

According to the average mean value of compensation (2.418), it can be concluded that academic staff feel that their compensation are not attractive and not satisfactory. The perception on the relationship with co-workers and supervisors score is fairly high (greater than 3.5), which indicated a good agreement level regarding relationship with co-workers and supervisors, and the respondents have good relationship with co-workers and supervisors at their universities. The average mean value of perception on adequacy of facilities and resources is 3.389. The academic staff feel that their university provides moderate facilities and resources for their staff. According to the average mean value perception on training opportunities (3.625), it can be concluded that academic staff feel that their university provides good training opportunities for their staff. According to the average mean value (3.165), it is observed that that academic staff feel that their university provides moderate promotional opportunities for their staff. The average mean value of the respondents’ perception on workload is 3.157. It is observed that the academic staff have moderate workload at their university. It is also observed that the academic staff feel that transfer makes moderate difficulty for academic staff.

Job Characteristics

In this study, skill variety, task identity, task significance, autonomy, and feedback are used as job characteristics. The respondents’ perception on job characteristics are summarized in Table (3), and details of each are shown in Appendix (1).

Table 3 Perception on Job Characteristics

Sr. No.	Description	Mean Values
1	Skill Variety	3.748
2	Task Identity	3.836
3	Task Significance	3.835
4	Autonomy	3.413
5	Feedback	3.491

Source: Survey Data, 2017

Generally, according to the average mean value of skill variety (3.748), it is observed that there is a positive attitude towards the questions and it can be concluded that academic staff feel that they have good opportunities to use their talent and skill at their job. As shown in table, the perception on task identity score is fairly high (greater than 3.5), which indicated a good agreement level regarding task identity. It can be concluded that academic staff feel that they have clear job instruction and know thoroughly about purpose of their job. According to the average mean value (3.835), it is observed that there is a positive attitude towards the questions, and it can be concluded that academic staff feel that their job plays as significant role in universities and in society. The perception on autonomy score is 3.413. It is observed that there is a moderately positive attitude towards the questions, and it can be concluded that academic staff feel that they have moderate autonomy for doing their job. According to the average mean value (3.491), it is observed that there is a positive attitude towards the questions, and can be concluded that academic staff feel that they can get good chance for getting feedback for how well there are performing their job.

Job Satisfaction, Organizational Commitment and Intention to Stay

The respondents' job satisfaction, organizational commitment and their intention to stay are shown in detail at appendix. The job satisfaction, organizational commitment, and their intention to stay score are fairly high (greater than 3.5). In general, it can be concluded that the academic staff are satisfied in their jobs, have organizational commitment to a good extent, and academic staff feel that they have intention to stay at their university.

Multiple Regression Analysis

Multiple regression analysis was performed to observe the relationship between the independent variables and dependent variable. The result of multiple linear regression analysis for model 1, model 2, and model 3, and model 4 are shown in Table (4) to Table (11).

Analysis Results for Model (1)

Model 1a shows the relationship between demographic factors and job satisfaction. The summary results of model 1a are presented in the following Table (4).

Table 4 Summary Results of Model 1a

	Model 1a (Job Satisfaction)				VIF
	Coefficient	Beta	t	Sig.	
(Constant)	3.399		76.591	.000	
Marital Status	-.024	-.020	-.439	.661	1.006
Education Level	-.060	-.055	-.954	.341	1.650
Position	.483***	.315	5.347	.000	1.699
Working Experience	.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 1%, 5%, 10% level respectively.					

Source: Survey Data, 2017

For the regression coefficient and significant level of each independent variable, it can be seen that the two variables, including position, and working experience, have a positive relationship with job satisfaction. Model 1b shows the relationship between workplace characteristics and job satisfaction. The summary results of model 1b are presented in the following Table (5).

Table 5 Summary Results of Model 1b

	Model 1b (Job Satisfaction)				VIF
	Coefficient	Beta	T	Sig.	
(Constant)	.981		3.366	.001	
Compensation	.013	.013	.299	.765	1.017
Relationship with co-workers and supervisors	.289***	.271	5.599	.000	1.342
Adequacy of facilities and resources	.211***	.198	4.172	.000	1.295
Training opportunities	.171***	.231	4.146	.000	1.775
Promotion	.092**	.115	2.223	.027	1.522
Workload	-.058*	-.072	-1.663	.097	1.072
Transfer	.033	.033	.763	.446	1.062
R	.613				
R ²	.376				
Adjusted R ²	.364				
F statistics	30.747***			.000	
Durbin-Watson	1.761				

***, **, * Statistically significant at 1%, 5%, 10% level respectively.

Source: Survey Data, 2017

For the regression coefficient and significant level of each independent variable, it can be seen that four variables, including relationship with co-workers and supervisors, adequacy of facilities and resources, training opportunities, and promotion have positive relationship with job satisfaction. On the other hand, workload has a negative relationship with job satisfaction.

Table 6 Summary Results of Model 1c

	Model 1c (Job Satisfaction)				VIF
	Coefficient	Beta	t	Sig.	
(Constant)	.263		1.160	.247	
Skill Variety	.198***	.179	3.459	.001	1.623
Task Identity	.254***	.243	5.107	.000	1.367
Task Significance	.191***	.180	4.097	.000	1.172
Autonomy	.166***	.185	3.706	.000	1.509
Feedback	.108**	.117	2.348	.019	1.515
R	.638				
R ²	.408				
Adjusted R ²	.399				
F statistics	49.389***			.000	
Durbin-Watson	1.750				

***, **, * Statistically significant at 1%, 5%, 10% level respectively.

Source: Survey Data, 2017

Model 1c shows the relationship between job characteristics and job satisfaction. The summary results of model 1c are presented in the above Table (6). For the regression coefficient and significant level of each independent variable, it can be seen that the five variables, including

skill variety, task identity, task significance, autonomy, and feedback, have a positive relationship with job satisfaction.

Analysis Results for Model (2)

Model 2a shows the relationship between demographic characteristics and organizational commitment. The summary results of model 2a are presented in the following Table (7).

Table 7 Summary Results of Model 2a

	Model 2a (Organizational Commitment)				VIF
	Coefficient	Beta	t	Sig.	
(Constant)	3.431		89.740	.000	
Marital Status	-.018	-.018	-.383	.702	1.006
Education Level	.074	.083	1.364	.173	1.650
Position	.365***	.290	4.693	.000	1.699
Working Experience	.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 1%, 5%, 10% level respectively.

Source: Survey Data, 2017

For the regression coefficient and significant level of each independent variable, it can be seen that two variables, position and working experience has a positive relationship with organizational commitment.

Table 8 Summary Results of Model 2b

	Model 2b (Organizational Commitment)				VIF
	Coefficient	Beta	T	Sig.	
(Constant)	1.749		6.566	.000	
Compensation	-.014	-.017	-.364	.716	1.017
Relationship with co-workers and supervisors	.168***	.192	3.561	.000	1.342
Adequacy of facilities and resources	.161***	.184	3.483	.001	1.295
Training opportunities	.119***	.196	3.153	.002	1.775
Promotion	.040	.061	1.063	.288	1.522
Workload	.013	.020	.422	.673	1.072
Transfer	.025	.030	.632	.528	1.062
R	.476				
R ²	.226				
Adjusted R ²	.211				
F statistics	14.928***			.000	
Durbin-Watson	1.759				

***, **, * Statistically significant at 1%, 5%, 10% level respectively.

Source: Survey Data, 2017

The summary results of model 2b (the relationship between workplace characteristics and organizational characteristics) are presented in the above Table (8). It can be seen that three variables, including relationship with co-workers and supervisors, adequacy of facilities and resources, training opportunities, have a positive relationship with organizational commitment. Model 2c shows the relationship between job characteristics and organizational commitment. The summary results of model 2c are presented in the following Table (9).

Table 9 Summary Results of Model 2c

	Model 2c (Organizational Commitment)				VIF
	Coefficient	Beta	T	Sig.	
(Constant)	1.182		5.766	.000	
Skill Variety	.180***	.198	3.482	.001	1.623
Task Identity	.156***	.181	3.467	.001	1.367
Task Significance	.199***	.229	4.722	.000	1.172
Autonomy	.073*	.099	1.807	.072	1.509
Feedback	.031	.042	.759	.448	1.515
R	.531				
R ²	.282				
Adjusted R ²	.272				
F statistics	28.165***			.000	
Durbin-Watson	1.734				

***, **, * Statistically significant at 1%, 5%, 10% level respectively.

Source: Survey Data, 2017

For the regression coefficient and significant level of each independent variable, it can be seen that four variables, skill variety, task identity, task significant, and autonomy have a positive relationship with job satisfaction.

Analysis Results for Model (3)

Model 3 shows the relationship between job satisfaction and organizational commitment. The summary results of model 3 are presented in the following Table (10).

Table 10 Summary Results of Model 3

	Model 3 (Organizational Commitment)				VIF
	Coefficient	Beta	T	Sig.	
(Constant)	1.355		12.686	.000	
Job Satisfaction	.608***	.741	21.008	.000	1.000
R	.741				
R ²	.549				
Adjusted R ²	.547				
F statistics	441.327***			.000	
Durbin-Watson	1.783				

***, **, * Statistically significant at 1%, 5%, 10% level respectively.

Source: Survey Data, 2017

For the regression coefficient and significant level of independent variable, it can be seen that job satisfaction has a positive relationship with organization commitment.

Analysis Results for Model (4)

Model 4 shows the effect of job satisfaction and organizational commitment on intention to stay. The summary results of model 4 are presented in the following Table (11).

Table 11 Summary Results of Model 4

	Model 4 (Intention to Stay)				VIF
	Coefficient	Beta	T	Sig.	
(Constant)	1.572		8.053	.000	
Job Satisfaction	.248***	.256	3.781	.000	2.216
Organizational Commitment	.329***	.279	4.119	.000	2.216
R	.500				
R ²	.250				
Adjusted R ²	.245				
F statistics	60.197***			.000	
Durbin-Watson	1.723				

***, **, * Statistically significant at 1%, 5%, 10% level respectively.

Source: Survey Data, 2017

For the regression coefficient and significant level of each independent variable, it can be seen that all variables, job satisfaction and organizational commitment, have a positive impact on intention to stay.

The summary results that are derived from the analysis on job satisfaction and organizational commitment of academic staff of public universities in Yangon is shown in Appendix (3).

Discussion

In relationship with compensation, the academic staff feel the unfairness of salary with responsibilities and workload, unattractive salary to others, inadequacy of research grants, and inadequate benefits to academic staff (i.e health benefit, housing arrangement, transportation, etc.). Regarding with relationship with co-workers and supervisors, the academic staff have good relationship with co-workers and supervisors at their universities. Therefore, raising academic staff satisfaction and their organizational commitment with their co-worker relation and with supervisor relation means improving their overall job satisfaction and organizational commitment, and it also contributes a lot for the success of the universities by improving their work related behaviors. Concerning with adequacy of facilities and resources, the academic staff pointed out especially the need for internet connection. Although there are internet accesses at the universities, most of academic staff face weak internet connection. Regarding with training opportunities, academic staff feel that their university provides good training opportunities for their staff. By ensuring academic staff have the necessary knowledge and communication skills required for their basic tasks of teaching, research, and service, the university should ensure that their programmes are well-planned and well designed. Regarding with promotion, the academic staff perceived moderate level on promotional opportunities. Although promotion policy of

academic staff is transparent and known to all academic staff, academic staff have different opinion upon promotion policy and promotion criteria such as same performance evaluation criteria that are used for different nature of universities, performance appraisal only made by department head etc. Some assistant lecturers pointed out upon unstable promotion policy due to change of management of Ministry of Education. For example, as a promotion criterion for tutor, 7 years of experience are needed to become assistant lecturer before the policy change. According to new policy, only 3 years of experience are required. Academic staff with 7 years of experience feel that it is unfair for them because all tutors having minimum 3 years are promoted as assistant lectures at the same time. Relating to workload, the academic staff perceived moderate level of workload. Academic staff in the universities reported their feelings upon workload. Some reported they have not only teaching duty but also departmental clerical work to do because of there are no clerk at department. Most of academic staff of the respective departments that have CHRD program needs to take morning, evening and weekend classes for CHRD program. Apart from teaching at universities, academic staff also need to take matriculation correction duty, teaching for intensive course for distance university students, and correction of distance education exam papers. Academic staff also take part in universities activities such as job fair, taking football and basketball duty, and supervising the plant trip etc. Therefore, the management of universities should set out academic workload policies and guidelines for their academic staff to support academic staff and enhance quality in teaching, supervision, research, and effective and efficient academic that results in equitable, fair, transparent and safe workloads for staff. Regarding with transfer, the academic staff perceived moderate difficulty on transfer. Although transfer policy of academic staff is transparent and known to all academic staff, academic staff have different opinion upon transfer rule and policy. There is debate among academic staff for criteria upon remote area and Yangon Mandalay region. Some academic staff pointed out that they want to get enough support for housing arrangement, welfare and health care for transferred academic staff.

According to the analysis on the perception of job characteristics, academic staff perceived fairly high level on skill variety, task identity, task significant, feedback, and moderate level on autonomy. Academic staff reported that they have good opportunities to use their talent and skill at their job, their job required continuous learning on new ideas and concepts, they have clear job instruction and know thoroughly about purpose of their job, their job plays as significant role in universities and in society. Although their jobs allow them to try new things with creativity, there is not much opportunity to make their own decision. Concerning with their job performance, they can get good chance for getting feedback for performing their job. Academic staff show very positive attitudes toward the sense of pride in their job. Such an attitude truly reflects the optimism of university academics that they still consider teaching is a noble profession.

Then, the level of job satisfaction, organizational commitment, and intention to stay of academic staff is measured. It is found that the fairly high level of job satisfaction, organizational commitment, and intention to stay. The results showed that most of the academic staff at universities have job satisfaction and organizational commitment, and they also have intention to stay.

Suggestions

According to the results, two demographic variables, including position and working experience, have a positive relationship with job satisfaction and organizational commitment. To become professional and experienced academic staff, it takes time. The management of public universities should retain them by providing appropriate level facilities, authority, training opportunities, and appropriate job design for them. Management of public universities should also consider necessary strategies for improving job satisfaction and organizational commitment of lower rank and less experienced academic staff. In doing so, it can make sure succession plan of academic staff at universities.

Additionally, four workplace characteristics variables including relationship with co-workers and supervisors, adequacy of facilities and resources, training opportunities, and promotion have positive significant relationship with job satisfaction. On the other hand, workload has a negative significant relationship with job satisfaction. In addition, three workplace characteristics variables including relationship with co-workers and supervisors, adequacy of facilities and resources, training opportunities have positive significant relationship with organizational commitment. Therefore, the management of universities can provide these workplace characteristics should take into account when planning for academic staff job satisfaction and organizational commitment. This means that these workplace characteristics variables are important source of consideration for maintaining and improving academic staff job satisfaction and organizational commitment. Therefore, management of universities needs to uphold the factors that influence the job satisfaction. These include bolstering positive interpersonal relationships with co-workers and supervisors, providing required facilities and resources for teaching and research work, providing training opportunities for improving academics' skill, providing promotional opportunities, and equitable workload.

Moreover, the findings of this study imply that all job characteristics variables (skill variety, task identity, task significant, autonomy, feedback) have positive significant effects on academic staff job satisfaction, and four job characteristics variables (skill variety, task identity, task significant, autonomy) have positive significant effects on academic staff on organizational commitment. In other words, these job characteristic variables should be taken into account in designing academic job when planning for academic staff job satisfaction and organizational commitment. This means that these job characteristics variables are important source of consideration for maintaining and improving academic staff job satisfaction and organizational commitment.

Based on findings, the academic staff have job satisfaction and organizational commitment of their universities. Moreover, job satisfaction has positive significant relationship with organizational commitment. Thus, management of public universities should take into consideration on the factors that can increase the job satisfaction to increase organizational commitment of academic staff.

The results showed that academic staff at universities have intention to stay. According to the research finding, job satisfaction and organizational commitment have positive significant effect on academic staff intention to stay. Management of public universities should pay attention on the factors that influence the job satisfaction and organizational commitment are equally

important and take them into consideration to meet academic staff expectations and to maintain academic staff at public universities.

Summary

The current study contributes to the existing research knowledge by introducing novel data and findings from different researchers, as well as improving the management of academic staff job satisfaction and organizational commitment through the process of highlighting the factors that increase job satisfaction and organizational commitment. It also proposes ideas about how academic staff job satisfaction and organizational commitment in the universities can be improved.

In addition, public universities in Yangon will benefit directly from this research, because they will become aware of the factors that affect the job satisfaction and organizational commitment of academic staff. Invariably, this study will improve different educational organizations' understanding of the impact of the demographic characteristics, workplace characteristics, and job characteristics on the academic staffs' work life, organizational commitment, as well as their intention to stay.

Furthermore, the academic staff who do not have job satisfaction and organizational commitment do not intend to stay at their university, and they expend a great effort on searching for a new job and adjusting to new situations. Thus, the issue is obviously relevant to universities' administration, managers, researchers, and individuals, while the prevention can be perceived as better than the cure. Hence, it is more advantageous to manage cases of subsequent employee turnover or to control staff intention to leave instead of spending money and time on solving its detrimental effects.

It can be stated that this current study contributes methodologically to understanding of the nature of the chosen sample, which is represented by academic staff at universities in Yangon. There is no research concerning with job satisfaction and organizational commitment of academic staff of public universities in Myanmar. Thus, by attempting to understand the phenomenon of the job satisfaction and organizational commitment of academic staff, and the factors that influence on the academic staffs' job satisfaction and organizational commitment to their universities, the findings of the present study will act as a bridge, filling a gap in the job satisfaction and organization commitment literature for public universities in Myanmar.

Limitation and Need for Further Study

Firstly, this study only focuses on job satisfaction and organizational commitment of public universities in Yangon. Thus, job satisfaction and organizational commitment of private educational institutions in Myanmar should be explored as further studies in order to compare and contrast in two sectors. In addition, the total number of academic staff in this study is thirty percent of three selected public universities in Yangon. Therefore, further study with the rest of public universities in Yangon should be conducted and consider a larger number of academic staff. Furthermore, public universities of different geographic locations in Myanmar also should be conducted to know job satisfaction and organizational commitment of academic staff of different areas in Myanmar. Furthermore, a study on the relationship between job satisfaction and organizational commitment of non-academic staff in both public and private higher education institutions can be done for further study. This paper in further study should focus job satisfaction

and organizational commitment of other governmental service organizations such as hospital, hotel and tourism etc.

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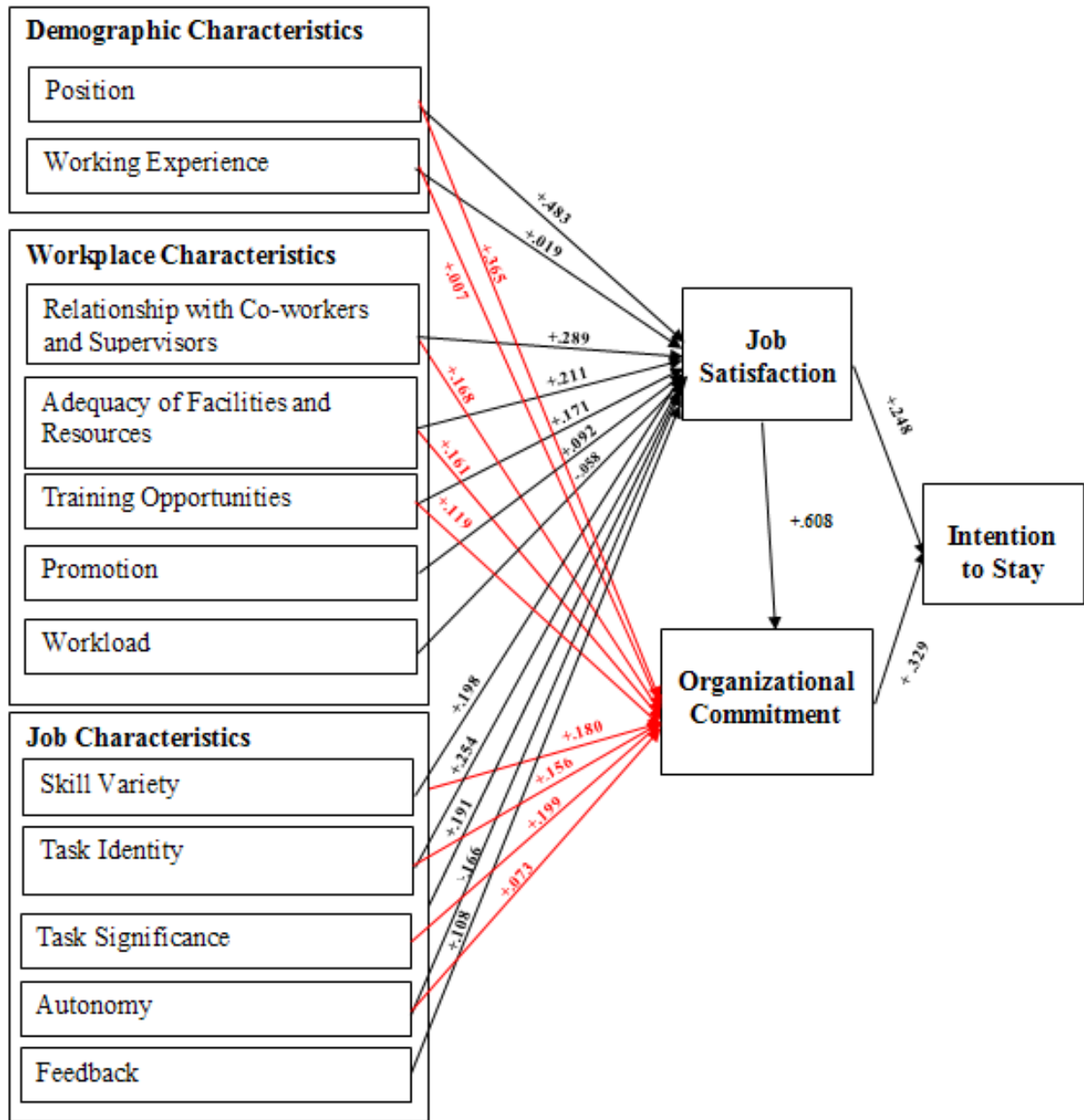
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APPENDIX

SUMMARY OF THE RESULTS



ENTREPRENEURIAL COMPETENCIES OF GARMENT MANUFACTURERS IN WUNDWIN TOWNSHIP

Kyi Kyi Thant*

Abstract

This study emphasizes on identifying entrepreneurial competencies of garment manufacturers located in Thaphan Village, Wundwin Township and analyzing the effects of entrepreneurial competencies on firm performance. Entrepreneurial competencies are of vital importance for sustaining, maintaining, and improving firm performance in an intensely competitive market because garment manufacturing firms are solely owned businesses. In March 2019, primary data was collected from forty garment manufacturers selected by using stratified random sampling method and the sample represents forty percent of each firm group. Structured questionnaires based on strategic, commitment, technical, conceptual, opportunity, communication, learning, and personal competencies, and firm performance were constructed by using five-point Likert scale. Secondary data concerning with the number and types of garment manufacturing firms was collected from Administration Office in Thaphan Village. Multiple regression analysis is applied as the major analysis method and SPSS 22 is used as the main analytical tool. According to the findings, commitment, technical, and communication competencies have significant and positive effects on performance of garment manufacturing firms. On the contrary, strategic and personal competencies have significant and negative effects on firm performance. Among eight entrepreneurial competencies included in this study, it is found that the communication competence has the largest effect on performance of garment manufacturing firms in Thaphan Village, Wundwin Township.

Keywords: entrepreneurial competencies, firm performance, garment manufacturers

Introduction

Entrepreneurial competencies are crucial for owners who manage their businesses in making effort to increase organizational performance. Businesses can achieve success and growth through utilizing owners' or managers' entrepreneurial competencies. Previous studies proved the positive effect of entrepreneurial competencies on organizational performance, business success, and growth. In Myanmar, there are two types of garment manufacturing businesses: the one which is operated locally and distributes finished products to local consumers, and another one which is operated as foreign company and target international market. The formers are widely operated in Thaphan Village, Wundwin Township and such businesses are spread to the villages nearby.

Different sizes of garment manufacturing businesses are situated in Thaphan Village and they are operating cutting, making, packing, printing, and making embroidery. Some garment firms do the whole production line while others specialize on one process. The formers make procurement, transportation, warehousing, producing, inventory management, sales and distribution. Such firm owners take many roles performed to improve their business performance and need a variety of entrepreneurial competencies. However, the latters connect with other garment manufacturers who would like to outsource and emphasize their specialized activities carefully to be efficient.

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Owner takes managerial role of business even in large garment manufacturing firm because it is family owned and is operated with the large involvement of family members. Owners play an important role in deciding all activities concerned with business functions because they have to search for the niche market, network with business partners, learn new technology, persuade customers, and allocate resources. In a highly competing and dynamic environment, owners are required to have entrepreneurial competencies in order to survive and sustain business performance for the long run. It is required to explore the importance of entrepreneurial competencies of owners and prove their effect on business performance so that the findings contribute to the literature and highlight the implications for garment manufacturers.

Objectives of the Study

This study aims

- (1) to identify entrepreneurial competencies of garment manufacturers and
- (2) to analyze the effects of entrepreneurial competencies of garment manufacturers on firm performance.

Scope of the Study

The study emphasizes identifying entrepreneurial competencies and analyzing the effects of entrepreneurial competencies on firm performance. The primary data was collected from forty garment manufacturers in Thaphan Village, Wundwin Township with structured questionnaire by asking with five point Likert scale during March 2019 and the secondary data was collected from Administration Office in Thaphan Village.

Methods of the Study

In collecting the primary data administering garment manufacturers, forty percent from each group of firm size was selected by using stratified random sampling method. Descriptive statistics was used to calculate the mean values of variables and multiple regression analysis was applied to analyze the effects of entrepreneurial competencies on business performance.

Literature Review

Assuming that entrepreneurial competencies were vital for business growth and success, Mitchelmore and Rowley (2010) discussed literature which compiles entrepreneurial competencies analyzing different countries, industries, and different period and recommended for further research. "Entrepreneurial competencies are defined as underlying characteristics such as generic and specific knowledge, motives, traits, self-images, social roles, and skills which result in venture birth, survival, and/or growth" (Bird, 2019, p.115). Business owners play a strategic role, thus, the importance and requirement of entrepreneurial competencies was accelerated (Aliyu, 2017).

There are different literatures on entrepreneurial competencies analyzing the impact of entrepreneurial competencies on firm performance (Man and Lau, 2000; Mitchelmore and Rowley, 2013; Inyang and Enuoh, 2009; Man and Snape (2008), firm growth (Mitchelmore and Rowley, 2013), and business success (Rahman, et al., 2015; Ahmad, 2007; Tehseen and Ramayah, 2015). As entrepreneurial skills and competencies are required to generate revenue for

a firm, Phelan and Sharpley (2012) pinpointed the requirements of entrepreneurial competencies to be improved.

Many studies targeted owners' entrepreneurial competencies (Mitchelmore and Rowley, 2010; 2013) although some studies emphasize it with managers' entrepreneurial competencies (Man and Lau, 2000; Li, 2009). Ahmad (2007) figured out the positive effect of entrepreneurial competencies of business owners on business success. The study divided entrepreneurial competencies into strategy, commitment, conceptual, opportunity, organizing and leading, relationship, learning, personal, technical, ethical, social responsibility, and familism; and the results pinpointed that entrepreneurial competencies are required for business success.

Mitchelmore and Rowley (2013) classified competencies of women entrepreneurs into personal and relationship, business management, entrepreneurial, and human relations competencies and proved that entrepreneurial competencies have an impact on firm performance and growth. Related knowledge, attitudes, and skills are entrepreneurial competencies to be acquired by an entrepreneur to create excellent performance and profit maximization of their businesses. Likewise, Barazandeh, et al. (2015) confirmed that entrepreneurial competencies showed positive and significant effect on business performance which was measured with growth and innovation. Risk-taking propensity, need for achievement, self-efficacy, and experience in business were assumed as entrepreneurial competencies and verified their effect on firm performance. It was concluded that risk-taking propensity and self-efficacy showed positive effect on firm performance (Mamum, et al., 2016).

Man and Snape (2008) differently conceptualized both direct and indirect relationship between entrepreneurial competencies and firm performance. The study highlighted the important role of competitiveness and organizational capabilities which mediates between entrepreneur's opportunity, relationship, innovative, human, strategic competencies and long-term performance of businesses.

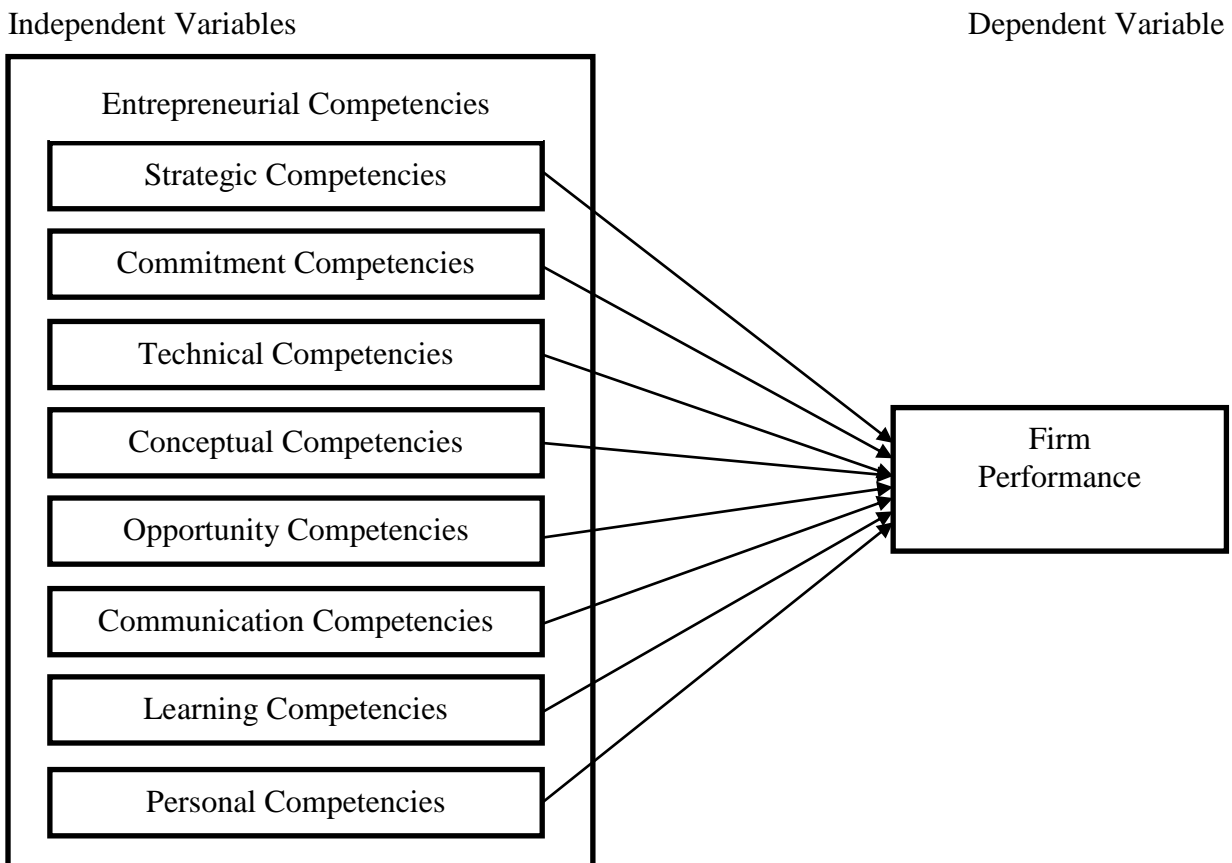
Tehseen and Ramayah (2015) analyzed differently through the combination of the resource based view and the resource dependence theory and found the moderating effect of external integration on the relationship between entrepreneurial competencies and business success. The study highlighted that the combination of supplier and customer relationship with entrepreneurial competencies fostered the business survival and success. Ahmad, et al. (2010) also examined the moderating effect of external environment on the relationship between entrepreneurial competencies and business success. The results revealed that entrepreneurial competencies positively contribute to business success in the changing environment compared to stable environment. Sajilan and Tehseen (2015) also focused the moderating effects of environmental turbulence and network competence on the relationship between entrepreneurial competencies and business success; and found the results as the authors expected. Ng and Kee (2013) proved the positive relationship between entrepreneurial competencies and firm performance with the partial moderating effect of organizational culture.

Risk assumption, initiative, leadership, teamwork, responsibility, autonomy/self-determination, self-confidence, integrity, negotiation, dynamism, communication, troubleshooting, innovation, information search and analysis, social networks/generation of support networks, results-orientation, self-control, change management, quality of work, and social mobility are found as key entrepreneurial competencies (Robles and Zárraga-Rodríguez, 2015). Similarly, strategic, commitment, conceptual, opportunity, organizing and leading,

relationship, personal, and technical are considered as entrepreneurial competency domain, such competencies, however, are grouped according to the role of entrepreneurs. Strategic, commitment and conceptual were put into one group, organizing and relationship were into another group, technical and personal were into separate groups; and both financial and non-financial dimensions were used to measure business success. The results recommended that relevant entrepreneurial competencies enhance business success (Ahmad, et al., 2010).

Likewise, strategic, conceptual, opportunity, personal, learning, ethical, and familism were used as each entrepreneurial competence in the conceptual model (Tehseen, et al., 2015). With the use of resource based view, the principal founder’s management know-how and specific industry know-how were human capital of a business to expand its market (Westhead, et al., 2001).

According to the previous literature, entrepreneurial competencies have direct and indirect effects on business survival, business performance, business growth, and business success. Some studies discussed the mediating effect but some proved moderating effect on the relationship between entrepreneurial competencies and firm performance. A variety of entrepreneurial competencies such as strategy, commitment, conceptual, opportunity, organizing and leading, relationship, learning, personal, technical, ethical, social responsibility, familism, business management are used as independent variables. Financial, non-financial, and growth are used as the measurements of business performance in many studies.



Source: Own Compilation Based on Previous Studies

Figure 1 Conceptual Framework of the Study

As shown in the conceptual framework, strategic, commitment, technical, conceptual, opportunity, communication, learning, and personal competencies are used as independent variables and firm performance is used as dependent variable in this study.

Findings

To identify entrepreneurial competencies of garment manufacturers, the mean values of each competence is initially revealed with standard deviation. The mean values describe the average perception of garment manufacturers, the standard deviation explains how much deviates from the mean values, and the alpha values depict the internal consistency among variables. As shown in the followings, the alpha values are above 0.70, the minimum acceptance level. The standard deviation for each variable is below one which explains that it does not deviate from the mean value.

Table 1 Descriptive Statistics of Entrepreneurial Competencies

Sr.	Variables	Mean	SD	Items	Alpha
1	Strategic competencies	4.88	0.394	5	0.854
2	Commitment competencies	4.82	0.299	5	0.866
3	Technical competencies	4.79	0.259	5	0.884
4	Conceptual competencies	4.76	0.287	5	0.858
5	Opportunity competencies	4.71	0.310	5	0.850
6	Communication competencies	4.84	0.390	5	0.845
7	Learning competencies	4.72	0.364	5	0.883
8	Personal competencies	4.75	0.521	5	0.843

Source: Survey Data (March 2019)

According to Table (1), entrepreneurial competencies are at the strongly agree level and thus it can be concluded that garment manufacturers have high competencies. Among eight entrepreneurial competencies included in this study, strategic competencies show the maximum mean value explaining garment manufacturers have long-run orientation for their whole organization. On the other hand, opportunity competencies show the minimum mean value but it reveals the strongly agree level. Thus, it can be inferred that garment manufacturers are able to create new product ideas and search for market opportunity.

Table 2 Multiple Regression Analysis of Entrepreneurial Competences

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	-8.456	1.157			
Strategic competencies	-2.212**	0.311	-1.037	-7.108	0.000
Commitment competencies	0.883**	0.217	0.315	4.062	0.000
Technical competencies	0.608*	0.251	0.188	2.425	0.021
Conceptual competencies	0.350	0.310	0.119	1.130	0.267
Opportunity competencies	-0.600	0.326	-0.221	-1.838	0.076
Communication competencies	4.714**	0.351	2.189	13.438	0.000
Learning competencies	-0.113	0.177	-0.049	-0.640	0.527
Personal competencies	-0.937**	0.181	-0.581	-5.187	0.000
R-square				0.955	
Adjusted R ²				0.943	
F				81.782**	

Note: ** and * show statistical significant at 1% and 5% levels respectively.

Dependent Variable: Firm Performance

Source: Survey Data (March 2019)

As shown in Table (2), the R-square is 0.955 and the predictors have explained 95.5% of the variance in the dependent variable of firm performance. The value of F-test, the overall significance of the model, shows significant at 1 percent level. According to the multiple regression results, firm performance will decrease 8.456 if garment manufacturers own no entrepreneurial competence. It is then found that strategic competencies have negative and significant effects on firm performance at 1 percent level. Thus, the higher the manufacturers' strategic competencies are, the lower their firm performances are. One unit increase in strategic competence of garment manufacturers leads to 2.212 decrease in firm performance.

Commitment competencies show positive and significant effects on firm performance at 1 percent level and hence it can be concluded that the higher the garment manufacturers' commitment competence, the higher their firm performance. One unit increase in commitment competence of garment manufacturers leads to 0.883 increase in firm performance.

Similarly, technical competencies have positive and significant effects on firm performance at 5 percent level and thus it can be inferred the higher the garment manufacturers' technical competence, the higher their firm performance. One unit increase in technical competence of garment manufacturers leads to 0.608 increase in firm performance.

Although conceptual competencies show positive effects on firm performance, it is not significant. Opportunity competencies and learning competencies show negative effects on firm performance but their effects are not significant as well.

Communication competencies have positive and significant effects on firm performance at 1 percent level and thus it can be concluded that the higher the garment manufacturers' communication competence, the higher their firm performance. One unit increase in communication competence of garment manufacturers leads to 4.714 increase in firm

performance. It is also found that communication competence reveals the most significant effects on firm performance.

However, personal competencies show negative and significant effects on firm performance at 1 percent level and thus it can be inferred the higher the garment manufacturers' personal competence, the higher their firm performance. One unit increase in personal competence of garment manufacturers leads to 0.937 decrease in firm performance.

Discussion

It is found that commitment, technical, and communication competencies show positive and significant effects but strategic and personal competencies show negative and significant effects on firm performance. However, the effects of conceptual, opportunity, and learning competencies on firm performance show insignificant. As garment manufacturers in Thaphan Village, Wundwin Township take management position in their organizations, the extent of their commitment affects their firm performances. They need to be involved in managing daily operations, solving customer complaints, and employee conflicts. Their long presence at work is crucial for operating their businesses effectively. Thus, commitment competencies reveal positive and significant effects on firm performance.

Besides, garment manufacturers need to be proficient in the work activities to be done in their businesses. When they understand job-related activities, they can assign employees well and give the better suggestions for work improvement. When they comprehend the sources of deficiency, they can protect the potential problems in their businesses. Thus, technical competencies describe positive and significant effects on firm performance.

In addition, garment manufacturers have to build linkage with both internal and external parties to maintain good relationship with them. By improving interrelationship with employees, businesses can make recruitment through referrals. External stakeholders including suppliers, lenders, and customers are continuously contacted for attaining valuable information for operating and changing businesses. Thus, communication competencies show positive and significant effects on firm performance.

Currently, most of the garment businesses are competing directly with their competitors by reducing their costs or producing differently. In the external business environment, competitors are always changing their strategies according to the changes in customer preferences in the market. In this case, short-term focus might be beneficial comparatively for the survival of garment businesses. Thus, strategic competencies depict negative and significant effects on firm performance.

An entrepreneur has personal competencies comprising self-confidence, self-awareness, self-motivation, persistence, self-management, and positive mindedness. However, decision might be wrong and consequently firm performance will decline if an entrepreneur has high self-confidence. Again, the negative sides will be ignored in evaluating a situation if a person has high positive mindedness. In this study, garment manufacturers who might have high self-confidence and positive mindedness and consequently the results show that personal competencies have negative and significant effects on firm performance.

Conclusion

The study reveals that entrepreneurial competencies are at the strongly agree level, thus it can be concluded that garment manufacturers have high entrepreneurial competencies namely strategic, commitment, technical, conceptual, opportunity, communication, learning, and personal competencies. Among these competencies, commitment, technical, and communication competencies positively contribute to firm performance. Thus, garment manufacturers should devote their time and effort into their businesses such as expansion of markets, extension of product lines, and improvement of internal efficiency. The manufacturers should learn technical knowledge while they operate current functions of businesses. Moreover, garment manufacturers need to construct the network with their business partners such as suppliers' suppliers, customers, and financiers and maintain business relationship with them.

Limitations and Needs for Further Research

The study proves the direct effects of entrepreneurial competencies on firm performance, however, the indirect effects might occur because of the effects of changing business environment and cultural differences. Firm performance is measured with owner perception, thus further studies can use both financial and non-financial measures. Instead of studying firm performance, business success can be used as an effect of entrepreneurial competencies. This study focuses only on garment firms and hence further studies can extend to other firms situated in different industries.

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BUDGETING HABIT BEHAVIOR OF UNDERGRADUATE STUDENTS IN YANGON UNIVERSITY OF ECONOMICS

Nwe Ni Aung¹ and Hla Hla Mon²

Abstract

Budgeting habits are important for every person. By the time students are in universities, at least they are in charge of their own finances. How well they manage their personal budget may indicate how well they will manage their company's budget on the job. This study intends to analyze budgeting habits of undergraduate students in Yangon University of Economics. The study used descriptive and analytical methods and conducted a questionnaire survey on a sample of 375 undergraduate students. It was found that the budgeting habits of students are different based on gender. The study also showed that the significant portions of their budget are used to spend on shopping, eating out, mobile phone expenditures, attending training for their career progress, travelling on short trip with their friends and transportation. It can be seen that the majority of students lack proper budgeting habits. The study suggested that the students should know how much they can spend and how they can improve their budgeting habits.

Keywords: Budgeting habit behavior, Family influence, Peer group influence, Financial literacy, Self-control

Introduction

A person's ability to manage money is essential for being successful in life. Effective financial management strategies are important for all members of society, including university students. University students are always in a deep dilemma, since they have constrained allowances to cover high monthly expenses like hostel fee, tuition fee, food and other consumptions. Therefore, it is vital for them to properly manage their money.

Having good budgeting habit represents one of the most predictable determinants of successful personal and economic development. If a person does not have good budgeting habit behavior, one does not have extra money and cannot save. Therefore, only the persons who have extra can save the money. Having good budgeting habit behavior is not an easy task. There are many people who wish to save some portion of their income and they also believe that saving is very helpful for their future. But they cannot save and they always postpone their saving and budgeting plan. It happens not only to the normal people but also to the people in higher earning jobs.

On the other hand, having good budgeting habit and saving provides the economic security of a safety net. Saving can be defined as transferring resources from the present to the future. By doing like this, people can be ready to face with unexpected and irregular situations including financial circumstances. From the saving and good budgeting behavior point of view, the saving amount is not an important issue because even a person saving a lot of money for only one time is worse than the person who saves regularly. Saving and having good budgeting habit behavior lead to accumulation of wealth and individuals are able to improve their living standard and to respond to new opportunities.

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Generally, having financial knowledge is one way of increasing savings and asset accumulation. Financial knowledge can help to promote financial budgeting and then help people to be more aware of financial opportunities, choices and possible consequences. Due to saving, people can create better life and then saving and having good budgeting habit behavior can do smooth consumption and meet social, religious and other obligations. Therefore, the young adults should practice to save their money and have a better future. Solving any financial problems during the early stage of students' life could bring positive impact on their future life, family and career.

University students need to prepare good budgeting habits before they are faced with financial difficulties in their life. There are many researches that have been conducted globally to measure the budgeting habit behavior among university students. This study focuses on the budgeting habit behavior among undergraduate students in Yangon University of Economics and factors influencing this budgeting habit behavior.

Problem Statement

Budget is to be in control. A person's capability to administer individual finance has become an important matter in today's world. Naturally, different people would set different emphasis and value on their money. Budgeting habit behavior is still considered less for many people. If the students manage their personal budget well in university, they will manage the company's budget on the job well. Therefore, the students need to improve budgeting habits at university level and they can know how to control their budget before they enter their work. This positive attitude will help them to practice proper budgeting habit behavior concerning with financial management as working adults.

Research Objectives

The main objectives of the study are as follow:

- (a) To explore influencing factors on budgeting habit behavior of undergraduate students in Yangon University of Economics;
- (b) To analyze the effect of influencing factors on budgeting habit behavior of undergraduate students in Yangon University of Economics.

Scope and Method of the Study

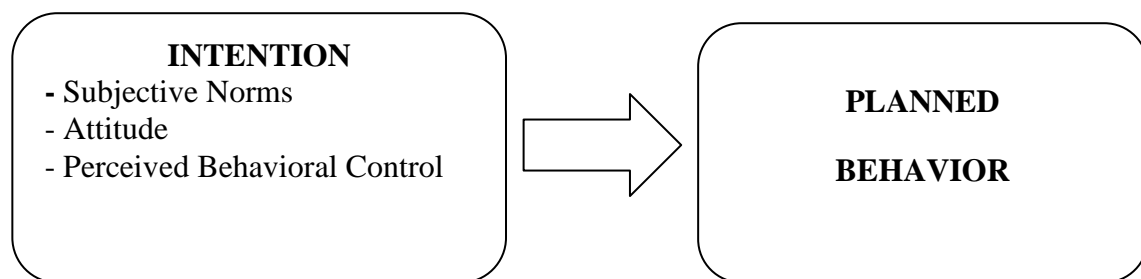
This study mainly focuses on the budgeting habit behavior of undergraduate students in Yangon University of Economics, Yarthargyi Campus at (2017 – 2018) Academic year. Simple random sampling method and multi linear regression analysis are used in this study. Out of 4980 students of Yangon University of Economics in (2017 - 2018) Academic Year, 375 students are selected for this study by using Taro Yamane Formula.

Literature Review

The underlying theory of the model developed in this research is based on Theory of Planned Behavior initiated by Ajzen (1991) where Ajzen argued that people perform several behaviors because they intend to do so. The intention can be determined by three important

factors, which are subjective norms, attitude, and perceived behavioral control. For this study, subjective norms on the other hand refer to how social pressures affect the students’ intention to prepare the budget plan and it is used to explain how the influence from family and peer group will give an impact towards their budgeting habit behavior or behavior.

Attitude means the evaluation made by the individuals towards certain behavior while perceived behavior control refers to individuals believe on their ability to perform such behaviors. Attitude is used to evaluate how financial literacy could predict the students’ budgeting habit behavior or behavior. While perceived behavioral control is used to explain self-control, as students with high level of self-control will perceive the ease of budget plan because they have the ability to regulate their desires, self-discipline and delay gratification.



Source: Theory of Planned Behavior by Ajzen (1991)

Figure 1 Theory of Planned Behavior

Though there are several factors that influence the student budgeting behavior, but as mentioned above, researchers have selected four factors after reading literature in the field on student’s attitude towards budgeting habit behavior.

According to Otto (2009), there was empirical evidence that parents can promote the development of skills to their children that are important for saving. The purpose of the research is to investigate the role of parents in developing their children’s saving ability and competence in adolescence. The research was conducted in Netherland with 690 Dutch participants who are 191 husbands, 191 wives, and 308 children aged from 16 to 21. The results showed that parental behavior and parental orientation have a weak but clear impact on the economic behavior of their children and in their adulthood. The conception aspect of parents’ behavior was influencing the economic behavior of their children.

A study was done by Erskine, Kier, Leung, and Sproule (2005) to examine further predictors for the budgeting habit behavior of young people. The study was conducted in Toronto, Canada and a total number of 1806 young Canadians aged 12 to 24 participated in this research. According to the economic theory of time preference and psychological theories about adolescent crowds, they predicted that the groups would be more patient and more likely to save money if they are placed high on the adult or academic-oriented dimension while the groups that are placed high on the peer group-oriented dimension were expected to be less patient and less likely to save money. Thus, the result indicated that peer group influence has an impact on individuals’ budgeting habit behavior.

Financial literacy is defined as sufficient knowledge of personal finance facts and terms for successful personal financial management (Thomas Garman, 1997). Meanwhile, Anthes

(2004) defined financial literacy as the ability to read, analyze, manage and communicate about the personal financial conditions that affect the material well-being.

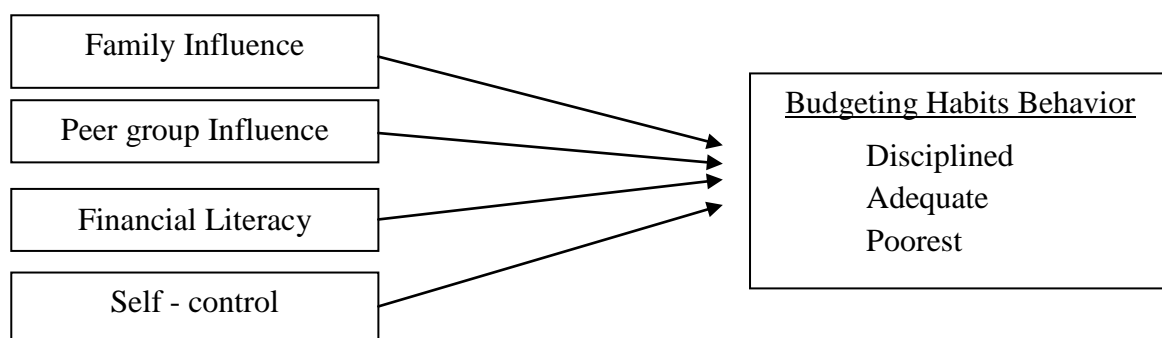
Delafrooz and Laily (2011) had conducted a study to examine the degree to which financial literacy influenced the budgeting habit behavior. This research had been conducted via quantitative methodology by distributing self-administered questionnaires to 2,246 employees in the public and private sectors. The finding showed that budgeting habit behavior is significantly influenced by the financial literacy whereby individuals with low level of financial literacy do not intend to save and eventually encounter financial problems in future.

Self-control is the ability to identify and regulate one's emotions and desires. It is characterized by the exertion of will, self-discipline, and ability to delay gratification (Baumeister, 2002). The research of Esenvalde (2010) has provided empirical evidence that self-control was positively associated with budgeting habit behavior. The author claimed that self-control is a very solidly and uniformly factor used to explain budgeting habit behavior.

According to Mahdzan and Tabiani (2013, as cited in Hinga, 2012), a positive attitude in an individual budgeting habit behavior is shown by the people who save more frequently, as opposed to those who do not save. The probability of having a positive saving attitude is significantly related to the saving regularity. Moreover, the act of setting aside a portion of the income as saving would most likely to lead to higher probability of having positive saving attitude. In sum, many past studies have examined the relationship between financial intention (family influence and peer group influence), attitude (financial literacy), behavioral perceived control (self-control) and budgeting habit behavior in university students. As Greene (2014) and Baker, Bettinger, Jacob, and Marinescu (2018) examined the relationship between financial intention (family influence, peer group influence, financial literacy) and budgeting habit behavior and found that an increase in financial awareness which engage in a positive budgeting habit behavior of an individual.

Conceptual Framework of the Study

The research model shown in Figure (2) is constructed on the basis of the number of researches done in the area of student attitude towards budgeting and spending behavior specifically and broadly on student behavior.



Source: Own Compilation based on Ajzen's (1991) Planned Behavior Theory and Daft (2014) Budgeting Habits

Figure 2 Conceptual Framework of the Study

The above framework is based from the theory of Planned Behavior developed by Ajzen's (1991) and serve as the foundation of this study. The diagram shown in Figure (2) depicts the relationship between dependent variable and independent variables. Budgeting habit behavior of students such as disciplined budgeting habits, adequate budgeting habits, and poorest budgeting habits are perceived as dependent variables whereas family influence, peer group influence, financial literacy and self-control are the independent variables as factors influencing the student's budgeting habit behavior.

Demographic Profile of Respondents

This demographic profile of selected students is shown in Table (1) and (2).

Table 1 Demographic Profile of Selected Students

No.	Demographic Factor	Descriptions	Number	Percentage
		Total	375	100.00
1	Gender	Male	95	25.33
		Female	280	74.67
2	Age level (year)	<18	73	19.47
		19 – 21	297	79.20
		22 – 24	4	1.07
		>25	1	0.26
3	Academic Year	1 st Year	71	18.93
		2 nd Year	97	25.87
		3 rd Year	98	26.13
		4 th Year	105	28.00
		Qualify	4	1.07
4	Number of Family	Only one	62	16.53
		2 – 4	297	79.20
		5 – 7	16	4.27
5	Average Monthly Received Allowance (Kyats)	< 200,000	93	24.80
		200,001 – 300,000	197	52.53
		300,001 – 400,000	53	14.13
		>400,000	32	8.54
6	Average Monthly Saving (Kyats)	<10,000	293	78.13
		10,001 -50,000	74	19.74
		50,001 – 100,000	6	1.60
		>100,000	2	0.53

Source: Survey Data (July,2018)

The descriptive analysis results derived from the demographic profile of the selected students show that majority respondents fall into the age group between 19 – 21 years old because respondents are undergraduate students. Besides, most of the students have number of family between two and four, and they receive monthly allowance between MMK 200,001 – MMK 300,000. They use their monthly allowance for living, meal, transportation allowance and pocket money.

Table 2 Reasons for Spending and Saving

No.	Reasons	Descriptions	Male	Female	Total	Percentage
					375	100.00
7	Reasons for Spending	Shopping	25	32	57	15.20
		Fast food	91	7	98	26.13
		Mobile Phone	55	48	103	27.47
		Training for career progress	16	18	34	9.07
		Beauty	0	31	31	8.27
		Health Care	1	4	5	1.33
		Movies	6	1	7	1.87
8	Reasons for Saving	Short trip	28	12	40	10.66
		Increasing of saving money	15	39	54	14.40
		Use for unexpected events	32	196	228	60.80
		Investment	8	85	93	24.80

Source: Survey Data (July, 2018)

According to Table (2), the result shows that reasons for spending and saving are different between male students and female students. Male students are more likely to spend having fast food and usage of mobile phone. These are not surprise result because of the nature of male students. Habits of most male students are going out to eat and watching football games and movies with their friends. Most female students save their money for use of unexpected events.

A survey on the budgeting habit behavior of undergraduate students in Yangon University of Economics found that most of the students use their pocket money to spend on mobile usage, having fast food, shopping, attending training for their career progress, travelling on short trip with their friends and transportation. Moreover, the reasons of saving are increasing saving money, spending for unexpected events and investment. Among them, most students save for their money to spend for unexpected events such as treatment of illness and birthday present for friends.

Influencing Factors on Budegeting Habits Behavior of Undergraduate Students in YUE

The first objective of the study is to explore the influencing factors on budgeting habit behavior. According to theory of Planned Behavior developed by Ajzen (1991), influencing factors on budgeting habit behavior of undergraduate students passed through four factors. They are family influence, peer group influence, financial literacy, and self-control.

Table 3 Influencing Factors on Budgeting habit behavior

No.	Description	Overall Mean
1	Family Influence	3.70
2	Peer Group Influence	3.33
3	Financial Literacy	3.33
4	Self-Control	3.67

Source: Survey Data (July, 2108)

According to the overall mean value of 3.70, it indicates that most of the parents influence on spending of their children about money management, spending. Moreover, they help their children to save money, and to behave good budgeting habit behavior. Therefore, it can be

concluded that parents are the primary community for their children, and parents are the key educator of their children. Poor income management of parent is related to budgeting habit behavior of their children. The results also show that students watch and see their parent’s budgeting habits and they emulate their parent’s habits.

However, it is found that peer group does not influence on budgeting habit behavior of the undergraduate students in Yangon University of Economics, Yarthargyi Campus according to mean value of 3.33. It can be said that most of the students become less dependent on their peer group concern with their budgeting behavior because they manage and control their budget plans without helping others.

According to the data analysis, overall mean value of financial literacy has 3.33. Therefore, it can be said that majority of students do not practice proper money management skills. Moreover, students have a lack of knowledge relating with financial literacy. They are not receiving the financial knowledge necessary to be successful in today’s fast paced economy. According to the results, some students face with the difficulty to manage their money. Due to their personal finances and the economy, undergraduate students need greater knowledge about their personal finances and the economy.

Based on the results, overall mean value of 3.67 shows that most of the students do not want to control their money and they want to spend their money as soon as they receive because of their age and desire to do a lot of things like eating with friends, shopping the necessary things, and visiting the park. Moreover, self-control constitutes saving and spending habits including consumption now or future and plans for saving and the self-control ability to manage their money for future. If the students cannot control use of their money themselves, they will not have money when they need it.

Budgeting Habit Behavior of Undergraduate Students in YUE

This section aims to explore the budgeting habit behavior of undergraduate students in Yangon University of Economics. Then, budgeting habit behavior is divided into three groups in this study. They are disciplined budgeting habit behavior, adequate budgeting habit behavior, and poorest budgeting habit behaviors.

Table 4 Budgeting Habit Behavior

No.	Description	Mean
1	Disciplined Budgeting Habit Behavior	3.26
2	Adequate Budgeting Habit Behavior	3.58
3	Poorest Budgeting Habit Behavior	3.66

Source: Survey Data (July, 2018)

According to overall mean value of disciplined budgeting habit behavior 3.26, it can be shown that most of the undergraduate students have a lack of budgeting plan and financial discipline. They cannot arrange their spending properly and they do not burden borrowing from their friends. If the students have a lack of financial discipline, they will always struggle with money. Learning discipline with money is not always easy, but it will be necessary if the student want to arrange saving in the future.

Based on finding results, some of the undergraduate students have an adequate budgeting habit behavior. Adequate budgeting habits allow creating a spending plan for money. The most important advantage of adequate budgeting habit behavior is conducting business in the most efficient manner because students know that budgets are prepared to get the effective utilization of resources and the realization of objectives as efficiently as possible. Moreover, university student life is a good time to establish and practice good financial habits for the future. As a university student struggling to make ends meet, establishing a budget gives insight to personal spending habits. It helps people recognize what expenses are essential and what things are unnecessary. Learning to effectively manage money in university level is an essential skill and it can help the students throughout their lives.

According to the overall mean value of poorest budgeting habit behavior 3.66, it shows that most of the students have poorest budgeting habit behavior. Many students attending first year in university find themselves overspending. In university, young adults are given the freedom to manage their own time and money. Without parents to patrol their spending, they may find themselves spending more money than they should. Thus, it can be concluded that the undergraduate students cannot control their spending because of their age level and lack of knowledge relating with financial literacy.

The Effect of Influencing Factors on Budgeting Habit Behavior of Undergraduate Students in YUE

This section aims to analyze the effect of influencing factors on budgeting habit behavior of undergraduate students in Yangon University of Economics, Yarthargyi Campus. Dependent variable is budgeting habit behavior (most disciplined budgeting habit behavior, adequate budgeting habit behavior, and poorest budgeting habit behavior) and independent variables are family influence, peer group influence, financial literacy, and self-control.

The Effect of Influencing Factors on Disciplined Budgeting habit behavior

To determine whether influencing factors on disciplined budgeting habit behavior of undergraduate students in Yangon University of Economics, multiple linear regression model is used.

Table 5 Effect of Influencing Factors on Disciplined Budgeting habit behavior

Model	Unstandardized Coefficients		t value	Sig
	B	Std. Error		
(Constant)	.796***	.257	3.103	.003
Family Influence	.652***	.056	11.727	.000
Peer group Influence	.210**	.093	2.258	.029
Financial Literacy	.189**	.086	2.195	.033
Self-Control	.702***	.063	11.156	.000
R ²	0.865			
Adjusted R ²	0.856			
F value	102.448***			

Source: Survey Data (July, 2018)

***Coefficient is significant at 0.01 Level, **Coefficient is significant at 0.05 Level

According to stepwise method, the results shown in Table (5), only two of the independent variables are strongest statistically significant according to the model among the four variables that reflect most disciplined budgeting habit behavior. From the results, family influence, peer group influence, financial literacy and self-control influence on disciplined budgeting habit behavior of undergraduate students in Yangon University of Economics, Yarthargyi Campus.

Regarding with family influence, parents are the primary teacher for their children, they teach their children to be serious in mind. In this research, parents' management about budget plan is considered as one aspect which influences student's most disciplined budgeting habit behavior. Perhaps more management from parents can make their children to do saving or not. Moreover, parents with high educational background are supposedly tended to teach the children about the importance of budget plan, or at least remember that their parents have given the advice. With more knowledge about budgeting habit behavior, parents ought to have more experiences and knowledge about financial problems and the pressure about it that can be shared to their children.

Concerning with peer group influence, there has a fact that point out that students spend more time with their peers compared with others. A study conducted involving 375 students claimed that peer group influence has relationship with budgeting habit behavior. In that study, it shows that peer group influence has weak relationship and it indicated that student budgeting habit behavior is poorly influence by their peers.

Financial literacy is used as one of the factors that determine student's most disciplined budgeting habit behavior in this study. It is provided that there is positive relationship between financial literacy and budgeting habit behavior. However, it does not give the most influence factor in this study. Therefore, it can be concluded that if the students with higher knowledge of disciplined budgeting habit behavior are more likely to engage in saving habits.

Relating to self-control, which is an ability to alter dominant response tendencies and to regulate behavior, thoughts and emotions, people with more self-control are more likely to attain their goals and be more successful in various life domains. At the same time, students who present better self-control on budgeting habit behavior achieve greater success in an adult life. Therefore, the finding shows that students are more likely to save if they are able to control themselves via implementing sound budgeting and economic cost assessment.

The Effect of Influencing Factors on Adequate Budgeting habit behavior

To determine whether influencing factors on most disciplined budgeting habit behavior of undergraduate students in Yangon University of Economics, multiple linear regression model is used. According to stepwise method, variables are step by step eliminated from the model and the results are shown in Table (6).

Table 6 Effect of Influencing Factors on Adequate Budgeting habit behavior

Model	Unstandardized Coefficients		t value	Sig
	B	Std. Error		
(Constant)	.295	.310	.949	.344
Family Influence	.369***	.050	7.397	.000
Financial Literacy	.131**	.064	2.045	.046
Self-Control	.211***	.053	3.985	.000
R ²	0.782			
Adjusted R ²	0.773			
F value	81.835***			

Source: Survey Data (July, 2018)

***Coefficient is significant at 0.01 Level, **Coefficient is significant at 0.05 Level

According to the study, family influence, financial literacy and self-control influence on adequate budgeting habit behavior of undergraduate students in Yangon University of Economics, Yarthargyi Campus. It is can be found that influencing factors on budgeting habit behavior. There was a strongly significant correlation between influencing factors and budgeting habit behavior. Adequate budgeting habit behavior of undergraduate students is not influenced by peer group because they are same age level and desire for spending is very similar with each other. At this age level, they want to spend like their friends.

The Effect of Influencing Factors on Poorest Habits Behavior

To determine whether influencing factors on poorest budgeting habit behavior of undergraduate students in Yangon University of Economics, multiple linear regression model is used.

Table 7 Effect of Influencing Factors on Poorest Habits Behavior

Model	Unstandardized Coefficients		t value	Sig
	B	Std. Error		
(Constant)	.700	.382	1.835	.072
Self-Control	.863***	.104	8.285	.000
R ²	0.579			
Adjusted R ²	0.570			
F value	68.635***			

Source: Survey Data (July, 2018), ***Coefficient is significant at 0.01 Level

According to stepwise method, variables are step by step eliminated from the model and the results are shown in Table (7). Only one of the independent variable made a statistically significant contribution in the model among four variables that reflect poorest budgeting habit behavior. There was a strongly significant correlation between influencing self-control and poorest budgeting habit behavior.

Based on the results, only self-control factor influences on poorest budgeting habit behavior of undergraduate students in Yangon University of Economics, Yarthargyi Campus. It can be said most of the students want to spend more than they receive. If the students cannot control themselves, they will have poorest budgeting habit behavior. They can spend their monthly expenditure within limited budget because they depend on their parents or relatives.

Conclusion

The descriptive analysis results derived from the demographic profile of the sampled students show that majority respondents are female and fall into the age group between 19 – 21 years old. Besides, most of the students have number of family between two and four, and they receive monthly allowance between MMK 200,001 – MMK 300,000. Moreover, they save the money under MMK 10,000 to spend for emergencies and most spending is in mobile phone usage.

This research has provided the findings on how each factor can influence the students' budgeting habit behavior. Meanwhile, if budgeting habit behavior is not practiced by the students, they may eventually encounter financial problems such as inability to repay the loans and poor financial management. Thus, the researchers believe that this study can provide practical implications to good budgeting habits by identifying the factors affecting student's budgeting habit behavior.

Based on the results, there is sufficient evidence to conclude that influencing factors and budgeting habit behavior are positively related ($p < 0.05$). The result concluded showed that family influence have a clear impact on the budgeting habit behavior of students. Therefore, family influence is inevitable in guiding and encouraging their children to save. This study also enlightens that peer influence is a significant factor to stride forward to a high saving generation. For instance, students who are surrounded by peers who do practice saving are more likely to save as they believed that by doing so ensure them to fit into the group easily. As a result, the students are more likely to spread the relevant information among their peers.

The findings of study are also important for future life of students. Having identified that financial literacy is important for university students to maintain an effective budgeting habit behavior; it becomes clear that better of financial literacy will enable the students to manage their money effectively. As most research has emphasized, having financial literacy is the best way to enhance university students' financial knowledge and skills. Furthermore, this study shows that self-control of an individual plays an important role towards the budgeting habit behavior and also the students to save more by having high self-control. To avoid desirability bias arise in self-report measure, future research may find it helpful to verify participants' perception by using additional measures (Erskine et al, 2005).

This study will help banks to gain better understanding of budgeting habit behavior among university students in Myanmar. Therefore, the findings enlighten the banks to discover new opportunities for acquiring this group of university students as their valuable customers. Understanding about the fact that parents could play an important role in facilitating their children budgeting habit behavior is important for retail banks to design their marketing strategies in targeting the young savers. Instead of directly communicating the financial products to the young savers, retail banks can offer more attractive saving schemes to encourage saving among parents since their attitude and behavior are highly adhered by their children. Therefore, banks can attract the young savers indirectly through their parents' behavior.

Hence, behavioral intention is suggested to be included as a mediating variable in future study as it can explain a person's readiness to perform a given behavior (Ajzen, 1991). For instance, perhaps a student with high level of financial literacy and self-control may not likely to foster a budgeting habit behavior because he or she does not have the intention to save. In the

analytical point of view, given in the study is insufficient to explain all the systematic variance, hence future research are recommended to comprise mediating factors to better explain the relationship between independent variables and dependent variable. Rather than using the self-administered questionnaire to collect data solely, researchers are suggested to use alternative data collection method such as field observations.

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CORPORATE SOCIAL RESPONSIBILITY PRACTICES AND PERFORMANCE OF LARGE MANUFACTURING FIRMS

Moe Moe Khaing*

Abstract

This study aims to analyze the internal and external CSR practices of large manufacturing firms at Mandalay Industrial Zone and to explore the effects of CSR practices on performance of the firms. Descriptive and exploratory research methods were used and 35 owners or managers, 175 employees, 175 customers and 175 residents were selected randomly from the scope of 35 large manufacturing firms. The results demonstrate that large manufacturing firms at Mandalay Industrial Zone are familiar with the CSR concept. They conduct the internal CSR practices medium to large scale in which working condition and safety factors are the largest measure undertaken. External CSR practices conducted also ranging from medium to large scale except for environmental practices which are exercised only to the medium level. Findings from this study point out that current practices of large manufacturing firms in the Mandalay Industrial Zone are more related to economic and legal responsibilities than ethical and philanthropic matters. Regarding the effect of CSR practices on the performance, internal CSR practices have larger effect on the non-financial performance than external CSR practices. Internal CSR practices largely effect employee satisfaction. External CSR practices largely effect on customer satisfaction and resident perception. Total CSR practices have no effect on financial performance. External CSR practices have larger effect than internal CSR practices on sales growth. Besides, internal and external CSR practices effect inversely on net profit growth. The findings of this study provide important contributions for business owners for focusing on the CSR practices to improve performance of the firm and for getting the best interests of stakeholders and society.

Keywords: CSR, Internal CSR, External CSR, Financial Performance, Non-financial Performance.

Introduction

Success of businesses in the new and changing environment depends on the collaboration across functions and hierarchical levels within the firm as well as with customers and other stakeholders. Objectives of firms have changed from shareholders' value maximization to maximization of stakeholders' value. Each stakeholder has a different interest in the organization and responds differently. Firms have been demanded to produce better both financial and non-financial performance to maximize stakeholders' value.

CSR has emerged as the popular concept for business issue of the 21st century (Rahman, 2011). Ghillyer (2012) defined CSR that it is also called corporate conscience, corporate citizenship or sustainable responsible business, is a form of corporate self-regulation integrated into a business model. Many researchers proposed the relationship between CSR and business performance. Becchetti (2011) and Tilakasiri (2012) suggested that the relationship between CSR and business performance is significant.

According to Myanmar Business Survey (2015), manufacturing sector accounts for the highest percentage of value added and gross operating surplus in the economy in Myanmar. Unlike other firms, manufacturing firms involve themselves in the supply chain and interact with its supply chain partners, such as, customers, suppliers and community etc. Thus, the

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manufacturing firms relate to various types of stakeholders and need to be more aware the CSR practices to fulfill the interest of these stakeholders.

Moreover, there is much of the pressure to be socially responsible in the supply chain of large manufacturing firms by various pressure groups. Some large manufacturing firms use a large number of labor force in their production processes and workplace safety, health-care, equal opportunities and training and development are increasingly important. Besides, the increase of consumerism and environmental conservation laws force businesses to exercise more socially responsible behaviors. Thus, CSR practices are restricted mostly to large firms to conduct in their operation.

In Myanmar, majority of firms conduct donation to community for health, education and religion and philanthropic activities according to the traditional Myanmar culture. Today, large firms increasingly conduct CSR practices beyond the philanthropy.

Firms have also increased in engaging in the communities supporting program to reduce the harmful affect and to improve the benefits of residents and community. Besides, firms have introduced environmentally friendly practices such as energy conservation, emission control and reduction in pollution. Moreover, stakeholders increasingly perceive and demand the good practices of firms. Stakeholders want to obtain both the financial results and the non-financial results simultaneously. Thus, practices of CSR are important for businesses and the effects of CSR practices on performance of large manufacturing firms in Mandalay Industrial Zone are studied in this research.

Method of the Study

Corporate social responsibility (CSR) concept is evolving increasingly due to the internal and external influences. It contains the openness or transparency of company activities as well as taking into consideration the willingness and expectations of their stakeholders. According to Archie B. Carroll (1991), a great developer of CSR concept, CSR involves the conduct of a business so that it is economically profitable, law abiding, ethical and socially supportive to be socially responsible. It means that profitability and compliance to the law are foremost conditions followed by the firm's ethics and the extent to which it supports the society with contributions of money, time and talent.

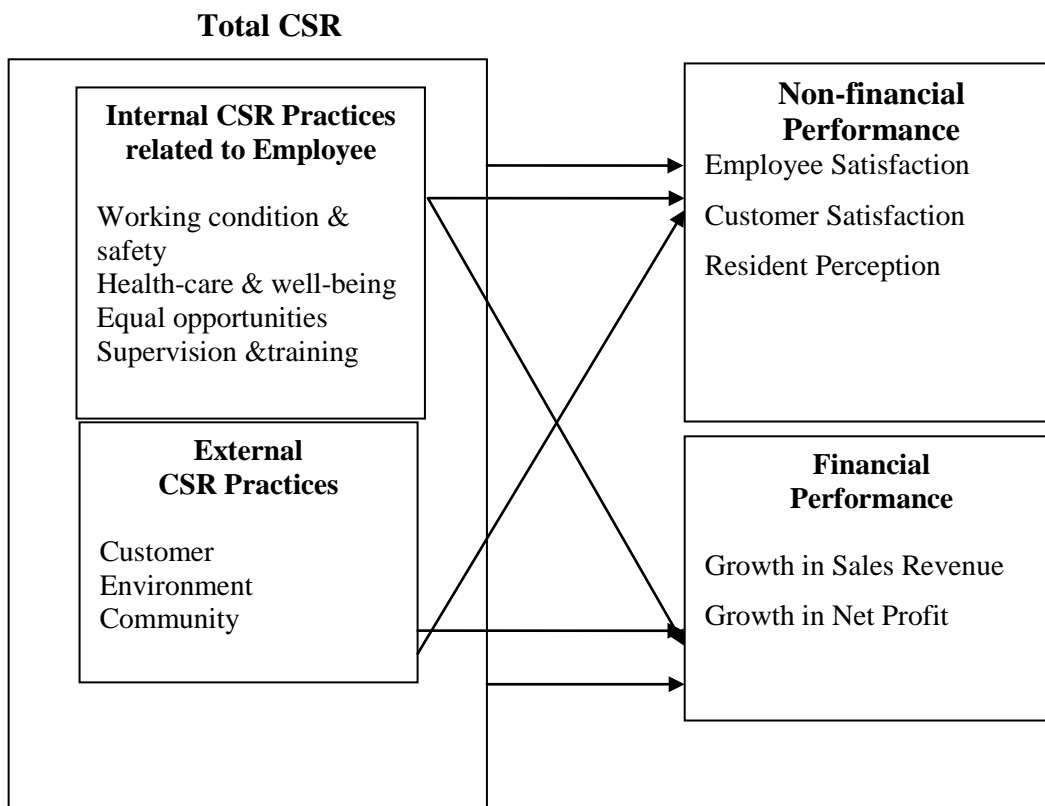
Verdeyen et al., (2004) classified CSR practices into internal and external in nature. Internal CSR practices relate to owners, managers and employees. At present, the most popular internal CSR practices include providing security, fair wages, working hours, workplace safety, health-care, equal opportunities and training etc. External CSR practices concerns with external stakeholders: customers, suppliers, businesses partners, residents and community. External CSR practices contain the providing information and quality products to customers, supplier selection and evaluation, maintaining a clean environment, and honoring community commitments etc.

The companies may enjoy several benefits from CSR practices like improved financial performance, lower operating costs, enhanced brand image and reputation, increased sales, customer loyalty, product safety, material recyclability, and greater use of renewable resources etc. It can add to the financial performance and non-financial performance and to maximize long-term financial returns.

Manufacturing firms are primary source of value added practices. In Myanmar, manufacturing firms employ and focus on labour force whether they are labour intensive or capital intensive firms. Thus, practices used by firms are important to obtain the employee satisfaction and motivation. Moreover, they have to comply with laws and regulations in the environmental concerns. They have to conduct ethical standards in the production of good quality products and providing after-sales service to obtain the customer satisfaction, retention and loyalty. The activities and practices of firms affect directly and indirectly other stakeholders especially residents and community. This leads to the research questions to be explored in this study. Therefore, the objectives of this study are as follows:

- (1) To identify the extent of internal and external corporate social responsibility practices of large manufacturing firms in the Mandalay Industrial Zone
- (2) To analyze the effects of internal and/or external CSR practices on non-financial performance of large manufacturing firms in the Mandalay Industrial Zone
- (3) To analyze the effects of internal and/or external CSR practices on financial performance of large manufacturing firms in the Mandalay Industrial Zone

From the above discussions, the study has developed the conceptual framework as shown in Figure 1.



Source: Own Compilation, 2016

Figure 1 Conceptual Framework of the Study

This study mainly explores two parts concerning the extent of internal and external CSR practices of large manufacturing firms and the effects of internal and external CSR practices on performance of these studied firms in the Mandalay Industrial Zone. Extents of conducting internal and external CSR practices are firstly measured. And then the effects of internal CSR practices on employee satisfaction, customer satisfaction and resident perception are measured. Similarly, the effect of external CSR practices on employee satisfaction, customer satisfaction and resident perception are also measured. Besides, the effect of total CSR practices (the combination of internal and external) on non-financial performance (the combination of employee satisfaction, customer satisfaction and resident perception) is also analyzed. Finally, the effects of total CSR practices on financial performance are measured.

Independent variables are internal CSR practices related to employees and external CSR practices related to customers, community and environment. Internal CSR practices include working condition and safety, health-care and well-being, equal opportunities and supervision and training. Dependent variables are non-financial performance and financial performance. Non-financial performance includes employee satisfaction, customer satisfaction and resident perception on the image of studied firms. Financial performance contains growth of sales revenue and growth of net profit.

Financial performance is measured by quantitative measurement questions. The dependent variable and independent variables are determined by using Likert scale questionnaires and other qualitative measurement questions. The data analysis is applied with Pearson correlation and simple and multiple regression analysis.

Methods

Regarding the study design and methodology, descriptive and exploratory research methods are used in this study. Descriptive method is used to describe the extent of conducting CSR practices of large manufacturing firms in the Mandalay Industrial Zone.

In Mandalay, there are three industrial zones: zone 1, 2 and 3. According to the Directorate of Industrial Supervision and Inspection Department (Mandalay Region), there are 387 large manufacturing firms at these three zones in 2016. In this thesis, 35 large manufacturing firms are selected by using number of employee criterion of the Private Industrial Enterprises Law (1990). Owner or responsible manager, five employees, five customers and five residents are selected from each studied firm.

Primary as well as secondary data were applied in this study. Primary data was collected by using structured questionnaires with five-point Likert scales, ranging from 1= 'strongly disagree' to 5= 'strongly agree'. Primary data is collected from four main types of respondents: owners or responsible managers, employees, customers and residents of selected large manufacturing firms. Secondary data were collected from published reports, documents, newspapers, journals, magazines and internet sources.

Owners or responsible managers are asked by conducting face to face personal interview with structured questionnaires to obtain the extent of CSR practices conducted in their firms and financial and non-financial performance data. Employees, customers and residents are also studied with structured questionnaires to obtain the satisfaction and perception on CSR practices of firms. Data collected were analyzed using descriptive statistics such as mean, frequencies and

percentage to identify the extent of conducting CSR practices and employee satisfaction, customer satisfaction and resident perception.

CSR practices are divided into internal practices and external practices. Internal CSR practices are subdivided into working condition and safety, health-care and well-being, equal opportunities and supervision and training. External CSR practices include practices related to customers, environment and community. Non-financial performance consists of employee satisfaction, customer satisfaction and residents perception. Financial performance includes growth of sales revenue and net profit. In order to identify the effects of internal and external CSR practices on financial and non-financial performance, simple and multiple linear regression analysis are applied in this phase.

Results/ Finding

Owners or responsible managers of studied firms are studied to obtain the awareness of CSR and the activities conducted in their firms. It can be concluded that because size of firms are larger, term of CSR is more familiar with them. The largest factors for exercising CSR practices are to improve employee motivation and to improve the reputation of the company. Moreover, senior management involves in practicing and implementing CSR with the highest extent and follows by middle level management and lower level management.

Majority of firms have a small extent of barrier in the use of time for conducting CSR practices. However, some firms have constraints to a small extent and a few has to a great extent in spending of money to conduct CSR practices. Majority of firms agree that CSR is related to the activities of their firms and they are interested in CSR practices.

Extent of CSR Practices Conducted by Studied Firms

Mean score of each internal and external CSR practices and overall mean scores are summarized in the Table 1.

Table 1 Extent of CSR Practices Conducted by Studied Firms

CSR Practices	Mean	Standard Deviation
Internal CSR practices		
Working condition & Safety	3.91	0.268
Health-care & Well-being	3.40	0.330
Equal Opportunities	3.58	0.382
Supervision & Training	3.54	0.454
Internal CSR practices	3.61	0.273
External CSR Practices		
Practices related to customer	3.74	0.367
Practices related to environment	2.97	0.493
Practices related to community	3.49	0.490
External CSR practices	3.36	0.350
Overall CSR practices	3.49	0.160

Source: Survey Data, 2017

According to the Table 1, working condition and safety is the largest exercising factor. Health-care and well-being is the lowest exercising factor. According to total mean score, studied firms conduct internal CSR practices between medium and large extent.

Among the external CSR practices, CSR practices related to customer are the largest exercising factor and CSR practices related to environment is the lowest exercising factor. According to total mean score, studied firms conduct external CSR practices between medium and large extent. In comparing the two main factors, internal CSR practices are conducted to a larger extent than external CSR practices.

According to the layer of CSR pyramid developed by Carroll (1991) is analyzed, all studied firms aim to get economic profit for owners or stockholders except one firm which aims to use the whole profit in its educational foundation and philanthropy. Among the internal CSR practices, almost of all practices related to working condition and safety, health-care and well-being, equal opportunities and supervision and training are enforced in the laws, regulations and guidelines. Majority of studied firms exercise CSR practices related to laws and regulations to a large extent except some practices.

Studied firms conduct internal CSR practices related to ethical concern to a large extent. In the external CSR practices, studied firms exercise ethical behavior to a large and medium extent. Majority of practices related to environment are required to be enforced by Laws and majority of firms exercise these practices to a large extent. Some are ethical concerns. Majority of studied firms exercise these ethical practices to a small and medium extent only.

CSR practices related to community mainly relate to the philanthropy. Majority of studied firms exercise these practices to a medium extent only.

Non-financial Performance of Studied Firms

Employee satisfaction, customer satisfaction and resident perception are summarized as non-financial performance of studied firms in the following Table 2.

Table 2 Non-financial Performance of Studied Firms

Satisfaction and Perception of Respondents	Mean	Standard Deviation
Employee Satisfaction	3.54	0.409
Customer Satisfaction	3.81	0.118
Resident Perception	3.63	0.144
Non-financial Performance	3.68	0.135

Source: Survey Data, 2017

According to the Table 2, customer satisfaction is the largest and employee satisfaction is the lowest in the non-financial performance. According to total mean score, employees and customers are moderately satisfied with and residents moderately agree upon CSR practices of studied firms.

Financial Performance of Studied Firms

Table 3 Growth of Sales

Sales Growth %	No. of Firms					
	2013		2014		2015	
	No.	%	No.	%	No.	%
<5	5	14.3	3	8.6	-	-
5-10	7	20.0	3	8.6	3	8.6
10-15	8	22.9	5	14.3	3	8.6
15-20	6	17.1	8	22.8	6	17.1
20-25	1	2.8	3	8.6	6	17.1
25-30	3	8.6	5	14.3	3	8.6
≥30	5	14.3	8	22.8	14	40.0
Total	35	100.0	35	100.0	35	100.0

Source: Survey Data, 2017

Sales revenue of studied firms in 2013, 2014 and 2015 are higher e than base year 2012. Besides, sales revenue of firms increased year by year.

Growth of Net Profit

Growth of net profit in 2013, 2014 and 2015 based on 2012 are presented in Table 4.10.

Table 4 Growth of Net Profit

Net Profit Growth (%)	No. of Firms					
	2013		2014		2015	
	No.	%	No.	%	No.	%
<5	24	68.6	7	20.0	4	11.4
5-10	8	22.9	21	60.0	15	42.9
10-15	-	-	4	11.4	10	28.6
15-20	2	5.7	1	2.8	3	8.6
20-25	-	-	-	-	1	2.8
25-30	1	2.8	1	2.8	-	-
≥30	-	-	1	2.8	2	5.7
Total	35	100.0	35	100.0	35	100.0

Source: Survey Data, 2017

Net profit of firms slightly increased in 2013, 2014 and 2015 than base year 2012.

Relationship between CSR Practices and Non-financial Performance of Studied Firms

Table 5 Results of Simple Linear Regression Analysis between Total CSR Practices and Non-financial Performance

CSR Practices	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	1.093	.322		3.393	.002
Total CSR	.686	.645	.814	8.041	.000
F Value	64.651				.000 ^b
R Square	.662				

Dependent Variable: NFP(Non-financial Performance)

Source: Survey Data, 2017

According to the Table 5, total CSR practices have large effect on non-financial performance of large manufacturing firms at Mandalay Industrial Zone. If the exercising total CSR practices are increased, non-financial performance would be largely improved.

Table 6 Results of Multiple Linear Regression Analysis between Internal and External CSR Practices and Non-financial Performance

CSR Practices	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	1.507	.344		4.388	.000
Internal CSR	.400	.047	.811	8.566	.000
External CSR	.185	.076	.231	2.440	.020
F Value	39.736				.000 ^b
Adjusted R Square	.695				

Dependent Variable: NFP (Non-financial performance)

Source: Survey Data, 2017

According to the Table 6, internal CSR practices have greater effect than external CSR practices on non-financial performance of large manufacturing firms at Mandalay Industrial Zone.

Table 7 Results of Multiple Linear Regression Analysis between Internal and External CSR Practices and Employee Satisfaction

CSR Practices	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	1.192	.945		1.261	.217
Internal CSR	1.268	.129	.845	9.864	.000
External CSR	-.563	.209	-.231	-2.693	.011
F Value	52.183				.000 ^b
Adjusted R Square	.751				

Dependent variable: ES (Employee satisfaction)

Source: Survey Data, 2017

According to the Table 7, increase the exercising of internal CSR practices, employee satisfaction would be largely improved. If the exercising of external CSR practices is increased, employee satisfaction would be decreased.

Table 8 Results of Multiple Linear Regression Analysis between Internal and External CSR Practices and Customer Satisfaction

CSR Practices	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	1.954	.396		4.935	.000
Internal CSR	-.019	.054	-.044	-.350	.728
External CSR	.498	.088	.708	5.686	.000
F Value	16.223				.000 ^b
Adjusted R Square	.472				

Dependent Variable: COS (Customer satisfaction)

Source: Survey Data, 2017

According to the Table 8, increase in the exercising external CSR practices, customer satisfaction would be largely improved. If the internal CSR practices are increased, it is likely to decrease the customer satisfaction.

Table 9 Results of Multiple Linear Regression Analysis between Internal and External CSR Practices and Resident Perception

CSR Practices	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	1.356	.463		2.926	.006
Internal CSR	-.047	.063	-.089	-.739	.465
External CSR	.625	.102	.730	6.098	.000
F Value	18.853				.000 ^b
Adjusted R Square	.512				

Dependent Variable: RES (Resident Perception)

Source: Survey Data, 2017

According to the Table 9, the external CSR practices have positively significant effect on resident perception, internal CSR practices have negative effect on resident perception. The results demonstrate that increase in the exercising external CSR practices, the resident perception would be largely improved. If the internal CSR practices are increased, it is likely to decrease the resident perception.

Table 10 Summarized Results between CSR Practices and Non-financial Performance of Studied Firms

Sr. No	Relationship	Independent Variable(s)	Dependent Variable	Results
1	Total CSR practices & non-financial performance	Total CSR practices	Non-financial performance	Significant positive effect of total CSR practices
2	Internal and external CSR practices & non-financial performance	Internal and external CSR practices	Non-financial performance	Larger effect of internal CSR practices than external CSR practices
3	Internal and external CSR practices & employee satisfaction	Internal and external CSR practices	Employee satisfaction	Significant positive effect of internal CSR practices Negative effect of external CSR practices
4	Internal and external CSR practices & customer satisfaction	Internal and external CSR practices	Customer satisfaction	Negative effect of internal CSR practices Significant positive effect of external CSR practices
5	Internal and external CSR practices & resident perception	Internal and external CSR practices	Resident perception	Negative effect of internal CSR practices Significant positive effect of external CSR practices

Source: Survey Data, 2017

According to the findings, total CSR practices have significant positive effect on non-financial performance of large manufacturing firms at Mandalay Industrial Zone. Although, both of internal CSR practice and external CSR practices have positive effects on non-financial performance, internal CSR practices have larger affect on the non-financial performance than external CSR practices. Internal CSR practices are significant positive effect but external CSR practices have negative effect on employee satisfaction. However, external CSR practices have significant positive effect but internal CSR practices have negative effect on customer satisfaction. Similarly, external CSR practices have significant positive effect but internal CSR practices have negative effect on resident perception. It can be concluded that internal CSR practices have significant effect on employee satisfaction and external CSR practices have significant effect on customer satisfaction and resident perception.

Relationship between CSR Practices and Financial Performance

Effects of internal and external CSR practices on financial performance of studied firms are analyzed. Financial performance includes growth of sales and growth of net profit.

Table 11 Results of Simple Linear Regression Analysis between Total CSR Practices and Financial Performance

CSR Practices	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	26.439	31.312		.844	.405
Total CSR	.827	8.291	.017	.100	.921
F Value	.010				.921 ^b
R Square	.000				

Dependent Variable: FP (Financial Performance)

Source: Survey Data, 2017

According to the Table 11, total CSR practices have no effect on financial performance of large manufacturing firms at Mandalay Industrial Zone.

Table 12 Results of Multiple Linear Regression Analysis between Internal and External CSR Practices and Financial Performance

CSR Practices	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	23.000	36.213		.635	.530
Internal CSR	-.071	4.925	-.003	-.015	.989
External CSR	1.728	8.010	.038	.216	.831
F Value	.023				.977 ^b
Adjusted R Square	-.061				

Dependent Variable: FP (Financial Performance)

Source: Survey Data, 2017

According to the Table 12, the external CSR practices have no significant effect on financial performance and the internal CSR practices have negative effect on financial performance.

Table 13 Results of Multiple Linear Regression Analysis between Internal and External CSR Practices and Sales Growth

CSR Practices	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	7.395	2.549		2.901	.007
Internal CSR	.709	.347	.276	2.045	.049
External CSR	2.441	.564	.584	4.330	.000
F Value	11.495				.000 ^b
Adjusted R Square	.382				

Dependent Variable: SG (Sales Growth)

Source: Survey Data, 2017

According to the Table 13, internal CSR practices and external CSR practices have significant positive effect on sales growth. External CSR practices have larger effect than internal CSR practices on sales growth of large manufacturing firms at Mandalay Industrial Zone.

Table 14 Results of Multiple Linear Regression Analysis between Internal and External CSR Practices and Net Profit Growth

CSR Practices	Unstandardized Coefficients		Standardized Coefficients	t	p-value
	B	Std. Error	Beta		
(Constant)	15.605	36.373		.429	.671
Internal CSR	-.780	4.949	-.028	-.158	.876
External CSR	-.713	8.045	-.016	-.089	.930
F Value	.016				.984 ^b
Adjusted R Square	-.061				

Dependent Variable: NP (Net Profit Growth)

Source: Survey Data, 2017

According to the Table 14, the internal CSR practices and external CSR practices have negative effect on net profit growth.

Table 15 Summarized Results between CSR Practices and Financial Performance of Studied Firms

Relationship	Independent Variable(s)	Dependent Variable	Results
Total CSR practices & financial performance	Total CSR practices	Financial performance	No significant effect of Total CSR practices
Internal and external CSR practices & financial performance	Internal and external CSR practices	Financial performance	Negative effect of Internal CSR practices No significant effect of external CSR practices
Internal and external CSR practices & sales growth	Internal and external CSR practices	Sales growth	Larger effect of external CSR practices than internal CSR practices on sales growth
Internal and external CSR practices & net profit growth	Internal and external CSR practices	Net profit growth	Negative effect of Internal CSR practices and external CSR practices on net profit growth

Source: Survey Data, 2017

According to the Table 15, the effects of CSR practices on financial performance of manufacturing firms in the Mandalay Industrial Zone are measured. According to the findings, total CSR practices have no effect on financial performance of studied firms. Besides, there is negative effect of internal CSR practices on financial performance and no effect of external CSR practices on financial performance of studied firms. Internal CSR practices may effect in the long term and these practices cause increase cash outlay at present. When the elements of financial performance are analyzed, both internal and external CSR practices effect sales growth. External

CSR practices have larger effect on sales growth than internal CSR practices. Internal CSR practices moderately effect sales growth.

Both of internal and external CSR practices effect inversely on net profit growth. Implementing both of internal CSR practices and external CSR practices cause increase costs of firms. It can be said that since costs of practices are high, net profit is lower. Moreover, the positive effects of CSR practices on firms and stakeholders would be in the long-term rather than short-term.

Discussion

The following suggestions are proposed to improve and survive large manufacturing firms at Mandalay Industrial Zone. All studied firms conduct proactively CSR practices rather than conduct reactively.

(a) Need for Improving Internal CSR Practices

Manufacturing firms should provide enough safety awareness programs for their employees within their organizations because these programs are important not only for current safety but also for the whole life. All large manufacturing firms should exercise systematically and carefully both the use of restricted chemicals and inflammable materials. All large manufacturing firms should provide seminars for health-care knowledge both within and outside their organizations. Firms should hold their own seminar by inviting health-care specialists within organization. Quality of accommodation should be improve and ferry should be provided all for types of employees who have not been provided accommodations. Moreover, separate recreation center with enough space and facilities should be arranged. All large manufacturing firms should apply the systematic performance appraisal system to a large extent for all types and levels of employees because use of these programs lead to improve the employee performance. All large manufacturing firms should adjust with other firms within industry as well as they have to follow the minimum wage standards. All large manufacturing firms should identify the current and future skills requirement of employees and should provide the necessary off-the-job trainings. Similarly, suitable on-the-job trainings should be provided to be consistent with the skill requirement. Moreover, participation of employees in decision making should be provided for the success of firms and increased employee motivation. All large manufacturing firms should invest in the human capital for long-term survival and development of employees.

(b) Need for Improving External CSR Practices

All large manufacturing firms should try to fulfill customer orders timely. All large manufacturing firms should provide reliable services after making sales and commitment to customers. Large manufacturing firms should try to reduce the use of packing material and water consumption, recycle product and packaging, improve energy conservation, plant trees for green environment and use the environmental friendly packaging material. Reduction of water consumption, reduction in packing, reduction of energy consumption, pollution and recyclability in new product development and use of environmental friendly packaging material should be adopted in the future so that the green environment can be obtained for the people and society as a whole. Although planting tree is set as the guideline for wood-based products manufacturing firms, all large manufacturing firms should conduct planting trees as much as possible in the compound of their factories for absorbing the carbon dioxide. Large manufacturing firms should

increase in conducting the involvement of staff members in charity volunteer work on behalf of the firm, involvement in local health-care projects and local community supporting projects so that firms can improve the reputation in the society and this may turn to obtain long-term survival.

It can be summarized that both of internal and external CSR practices relating to employees, customers, environment and community need to be conducted and improved simultaneously for sales and net profit growth as well as to improve non-financial performance. All large manufacturing firms in the Mandalay Industrial Zone should join as the member of the UNGC and conduct CSR practices in accordance with the international standard of CSR.

Summary/Conclusion

To achieve the sustainable competitive advantage, it is very important for the manufacturing firms to adopt the internal and external CSR practices. The study highlighted that some CSR practices are needed to improve in the future to obtain the better perception of stakeholders. These are health-care and well-being of employees among the internal CSR practices and practices related to environment in the external CSR practices.

With regard to the non-financial performance of firms, customer satisfaction is the largest and employee satisfaction is the lowest. In addition, residents moderately agree upon CSR practices of studied firms. In the financial performance of firms, sales revenue of studied firms in three years are more than the base year. Besides, sales revenue of firms increased year by year. Net profit of firms slightly increased in three years of study than base year. Growth of net profit is less than that of growth of sales.

When the effects of CSR practices on non-financial performance are analyzed, internal CSR practices have significant effect on employee satisfaction and external CSR practices have significant effect on customer satisfaction and resident perception. When the effects of CSR practices on financial performance are analyzed, both of internal and external CSR practices positively effect sales growth. External CSR practices have larger effect sales growth than internal CSR practices. However, both internal and external CSR practices effect inversely on net profit growth because the effects of CSR practices on firms and stakeholders are more long-term rather than short-term.

It can be concluded that current situation of using internal and external CSR practices at large manufacturing firms in Mandalay Industrial Zone is ranging from medium to large scale except environmental practices. CSR practices effect significantly on non-financial performance and effect inversely on financial performance of firms. Effects of CSR practices are long term in nature and financial performance of firms can be impacted by other factors such as, economic and market conditions, competition and technological innovation. Thus, it may be more beneficial of effects of CSR practices on the financial performance in the longer future.

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INTER-FIRM COOPERATION OF LACQUERWARE FIRMS IN NYAUNG-U TOWNSHIP

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Abstract

Inter-firm cooperation among industrial organizations shows an impressive landscape for the development of manufacturing firms in the industrialized nations. Inter-firm cooperation takes the forms of informal linkages in many industrial districts such as market linkages, forming joint ventures, membership of professional and trade associations and movement of skilled staff from one firm to others. Interfirm cooperation among lacquerware firms comprises the forms of cooperation with suppliers, cooperation with customers, cooperation with other firms, and cooperation with institutions. This study attempts to explore the forms of inter-firm cooperation of lacquerware firms, and to analyse the relationship between the inter-firm cooperation and the growth of lacquerware firms in Nyaung-U township. This study utilizes primary data from 55 owners of lacquerware firms from Nyaung-U township in 2018. Multiple regression analysis is applied to analyze the variables from this empirical study. In exploring the relationship between inter-firm cooperation and the growth of lacquerware firms in Nyaung-U township, it is found that cooperation with customers is an effective linkage to grow lacquerware firms in this region. However, cooperation with other firms leads to slow down the growth of lacquerware firms in the study area. Based on the findings of the study, recommendations and implications for lacquerware firms are presented.

Keywords: inter-firm cooperation, industrial organizations, linkages

Introduction

Industrial clustering is an important topic for discussing the development patterns of many industries. A large number of academic papers investigate the empirical evidence for clusters, their definition, and their implications for economic policy. The geographic clustering of manufacturing activity has long been recognized as an important mechanism for facilitating industrial growth in both developed and developing countries (Krugman, 1991). The idea that “cluster type agglomeration of companies is favorable for entrepreneurship development by establishing of new spillover”, stimulate a lot of researchers to investigate the empirical evidence for clusters, and their implications in various economic areas (Porter, 1990). Industrial clusters can be seen as “social communities” (Morosini, 2004). One of the central hypotheses of this study is that industrial clusters facilitate market transactions by reducing transaction costs. Clusters are groups of inter-related industries that drive wealth creation in a region, primarily through export of goods and services (Komolavanij, 2008). The use of clusters as a descriptive tool for regional economic relationships provides a richer, more meaningful representation of local industry drivers and regional dynamics than do traditional methods.

Three different types of transport costs – the costs of moving goods, people, and ideas – could be reduced by industrial agglomeration (Marshall, 1920). First, the researcher argued that firms would locate near suppliers or customers to save shipping costs. Second, those researchers developed a theory of labor market pooling to explain clustering that takes advantage of scale economies associated with a larger pool of workers and firms. Finally, the researcher introduced the theory of intellectual spillovers by arguing that in agglomerations, “the mysteries of the trade

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become no mystery, but are, as it were, in the air". Firms in Silicon Valley, locate near one another to learn and to speed their rate of innovation (Saxenian, 1994). However, these agglomerations representing linkages among firms may provide gains to smaller regions, as well as large urban areas. Proximity advantages apply also to forward linkages. With proximity, transaction or delivery costs can be lower inside an agglomeration than they are when the product is delivered to buyers outside the region.

The fundamental effect of industrial concentration of manufacturing enterprises within a specific industrial district is cooperating with each other to develop and exploit marketing opportunities in the region. Interfirm cooperation can be stronger within specific industrial region which lead to improving firm performance in the region, and stronger bonding within enterprises come from the concentration of enterprise within industrial region (Xayphone & Takahashi, 2008). Inter-firm cooperation is an important benefit of industrial agglomeration of manufacturing firms in developing countries. Cooperation with subcontractors, cooperation with other supporting firms, cooperation among similar manufacturing firms and key suppliers need to be effective for the benefit of industrial concentration. Inter-firm cooperation in an industry comprises informal linkages such as market for supplies linkages, forming joint ventures, associations with the regional institutes and movement of skilled staff from one firm to others. Interfirm cooperation takes the form of cooperation with suppliers, cooperation with subcontractors, cooperation with customers, cooperation with other firms, and cooperation with institutions.

Nyaung-U township is a township of Nyaung-U District in the Mandalay Division of Myanmar. In this township, the Bagan Lacquerware cluster is prominent sector which supports and promotes the development and growth of the traditional Myanmar lacquerware crafts sector, and this condition supports the concentration of lacquerware firms in the region. The majority of raw materials and supplies required for production are acquired in the near region. It is observed that the agglomeration of Nyaung-U lacquerware industry is resulted from factor endowment and locational advantage which enhance the growth of lacquerware firms, supporting firms, and related suppliers in this township. The effective use of skillful workforce to produce cultural product, and the development of supplier network in the region are beneficial for the lacquerware firms to sustain the generation of business which is crucial for the regional development.

Objectives of the Study

The overall objective of the study is to examine inter-firm cooperation of lacquerware firms in Nyaung-U township. The specific objectives of this study are:

- (1) To explore the forms of inter-firm cooperation of lacquerware firms, and
- (2) To analyse the relationship between the inter-firm cooperation and the growth of lacquerware firms in Nyaung-U township.

Scope and Method of the Study

The required data is collected by conducting personal interview with managers in Nyaung-U township by using structured questionnaires. This study focuses on 55 owners out of 180 firms in the Nyaung-U township in 2018 to analyze the industrial agglomeration of lacquerware firms in this region. Therefore, the sample represents approximately 30% of employers in lacquerware manufacturing firms in the Nyaung-U township.

In order to comprehend the inter-firm cooperation of lacquerware firms, this study uses structured Likert-type questionnaires. Multiple regression is used to predict the value of a variable based on the value of two or more other variables. Program SPSS Statistics for Windows, version 23 is the main analytical tool used in this research. It provides comprehensive information such as the coefficient of each independent variable, intercept, R-squared and Adjusted R², and Root MSE, which in turn are used to interpret the findings. This statistic program also allows investigation of the descriptive analysis.

Literature Review

Location theory predicts where businesses will or should be located. Typically, firms are more productive and achieve superior technology development when near other firms because they can obtain to a large variety of key resources to their activities. It is also often argued that proximity to other similar firms increases the chance of acquiring new knowledge and of building connections and networks which support or increase productivity. The free flow of goods and ideas and internal scale economies of manufacturing enterprises have contributed to geographical concentration in many developing countries. Information spillovers, the development of the division and specialization of labor among enterprises, and the development of skilled labor markets, play critical roles in industrial development. The interrelationships between technology, innovation and industrial location behavior have come to be seen as essential features of regional development.

The concentration of firms in the region enhances specialization and helps overcome the disadvantages of being small. Developing clusters, business associations, and value chains are key ways for industries to foster business linkages and increase market access. Specialization in the main industrial operations and related supporting transactions are the basic reason to agglomerate within a specific region which has natural advantage for production, distribution to the market and outsourcing required tangible resources for production process.

Industrial development in some garment industries in many emerging economies was led by marketers who had excellent marketing expertise and effective and efficient distribution network. Thus, a spatial development strategy is needed to improve the spatial linkages of small enterprises and lastly to increase their economic performance, and, hence, their role in the socio-economic development of the region. Subcontracting linkages are an appropriate alternative for small enterprise development during the early stage of industrial development and such kinds of backward linkages can be explained as the viable strategy for the implementation of business strategies of the individual enterprises. This initial phase of the promotion of a subcontracting system is likely to encounter many problems and critics.

Clusters are “groups of interconnected firms, suppliers, related industries and specialized institutions in particular fields that are present in particular locations” (Porter, 1990). The geographical agglomeration of economic activity (which is related to urbanization) fosters subsequent economic growth (Castells & Royuela, 2011). Agglomeration is said to raise local endogenous innovation and productivity growth as it allows firm to benefit from forms of market and non-market spillovers (Martin, & Sunley, 1998). Agglomeration is measured alternatively through urbanization shares and through indices of spatial concentration based on data for sub-national regions (Brühlhart. & Sbergami, 2008).

Industrial clustering in a region enhances specialization and helps overcome the disadvantages of being small. Developing clusters, business associations, and value chains are key ways for industries to foster business linkages and increase market access. Specialization in the main industrial operations and related supporting transactions are the basic reason to agglomerate within a specific region which has natural advantage for production, distribution to the market and outsourcing required tangible resources for production process.

The impact on firms' productivity of innovative activities and agglomeration effects among firms belonging to Marshallian industrial districts have been analyzed and the possible joint effect of these two forces. The study revealed that belonging to an industrial district and making product innovations are key factors in the productivity growth of firms. Thus, innovation can be seen in many industrial areas for improving individual organizational performance, and for the development of the industry as a whole for the long-run (Antonietti, & Cainelli, 2008).

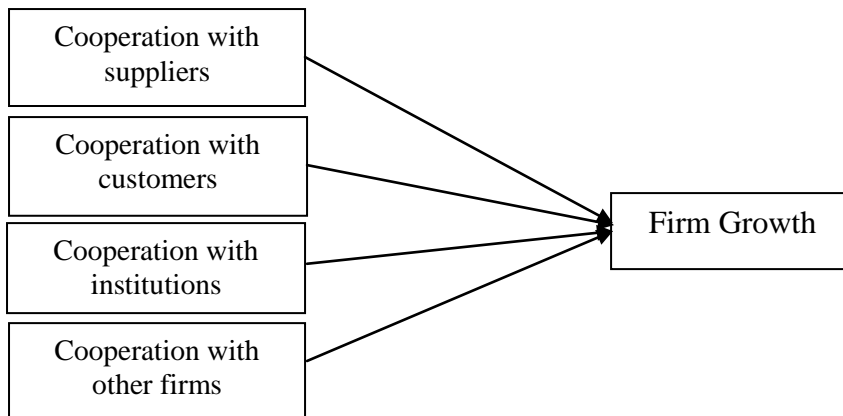
A survey on industrial agglomeration in the Philippines found that there is a positive result in terms of the nature of industrial agglomerations in the country (Macasaquit, 2008). A study on inter-firm cooperation and firm performance by doing an empirical study on the Lao garment industry cluster highlighted that cooperation with subcontractors, business associations and distant buyers influences firm performance (Xayphone & Takahashi, 2008). The empirical study of the agglomeration and networks in spatial economies discovered that the complementarities between the productivity benefits of agglomeration and those of network linkages (Johansson & Quigley, 2004).

An analysis using annual surveys of manufacturing firms from 1998 to 2005 in China documented that a positive correlation between industrial agglomeration and firm size, which was previously found in developed economies (Li, Lu & Wu, 2011). Next, by using the instrumental variable estimations, it is found that industrial agglomeration has a positive and statistically significant causal impact on firm size. Finally, as an agglomeration effect firms are more likely to become larger by locating with a number of larger firms than with a larger number of firms.

A study on the factors behind the dynamic development of motorcycle industry in China concluded that the success of the motorcycle industry in Chongqing is attributable to a combination of positive features from the Wenzhou model in the 1990s, in which industrial development is based on clustering of private enterprises, and the Sunan model in the 1980s, in which industrial development is based on the effective use of human resources recruited from existing state-owned enterprises (SOEs) (Otsuka, 2006). Learning by collective enterprises from SOEs in Chongqing coupled with the growth of the private enterprise sector fostered cluster-based industrial development.

Analytical Framework

The analytical framework in Figure (1) describes the dependent variables and four independent variables in the empirical analysis of this study. The independent variables are cooperation with suppliers, cooperation with customers, cooperation with institutions, and cooperation with other firms. After that, the dependent variables of firm's growth are measured output growth, productivity growth, machine growth, employment growth in this study.



Source: Adapted from Previous Studies

Figure 1 Analytical Framework

Analytical Results on Antecedents of Industrial Agglomeration

Inter-firm cooperation and the growth of lacquerware firms is measured on a continuous scale and multiple regression analysis is used in this study. The relationship between major forms of inter-firm cooperation of lacquerware firms and growth is analyzed as described in Table (1).

Table 1 Relationship between Inter-Firm Cooperation and Firm Growth

Independent Variables	Coefficients	Std. Error	Sig.
Constant	1.859***	0.423	0.000
Cooperation with suppliers	-0.067	0.072	0.359
Cooperation with customers	0.689***	0.100	0.000
Cooperation with institutions	0.024	0.082	0.744
Cooperation with other firms	-0.244**	0.101	0.020
R ²	0.539		
Adj R-squared	0.502		
F	14.632		
Prob > F	0.000		

Note: *** and ** are statistically significant at 1%, and 5% levels respectively.

Source: Survey Data, 2018

According to the results in Table (1), the model explains that the variation in overall level of industrial agglomeration exists as R² value is 53.90 percent. This indicates that independent variable can explain 53.90 percent of the variations in dependent variable. Thus, the variability of the residual values around the regression line relative to the overall variability is small, and the predictions from the regression equation are good. The value F of 14.632 with a p-value of 0.000 indicates that the model as a whole is statistically significant at 1 percent level.

Cooperation with customers has effect on the growth of lacquerware firms with the regression coefficient of 0.689 at a significant level of 1 percent and it implies that the growth of lacquerware firms will increase 0.689 if the cooperation with institutions increases by one unit. Customers have inputs in the design and features of lacquerware products, and the cooperation between customers in the development of new product, the ordering of customized product can enhance the growth of lacquerware firms in the study region.

Cooperation with other firms has effect on the growth of lacquerware firms with the regression coefficient of -0.244 at a significant level of 1 percent and it implies that the growth of lacquerware firms will reduce 0.244 if the cooperation with same firms increases by one unit. Information spillovers and imitation is the fundamental nature in the early stage of industrial development in the region, and this situation leads to lessen the cooperation between same firms as those firms try to achieve competitive situation for own business. Thus, less cooperation between other firms leads to decrease the growth of lacquerware firms as a whole.

The other factors such as cooperation with suppliers has no significant relationship with the growth of lacquerware firms in the region. It was found that the traditional heritage firms possess the major portion of the region and the major raw materials and supplies are acquired near and around the region. Raw materials acquisition from suppliers is not so effective which is obvious in the area as a whole even though the management of supplier relationship is important for every firm.

Cooperation with institutions has no significant relationship with the growth of lacquerware firms in the region. The development of lacquerware industry in Nyaung-U township is the advantage of locational condition and the heritage of manufacturers in the area, the owners of lacquerware firms lack the interest to cooperate with the government institutions for the growth of the industry. This situation leads to weaken relationship to increase the growth of lacquerware firms.

Conclusion

This study analyses the inter-firm cooperation of lacquerware firms in Nyaung-U township. lacquerware firms were operated as the traditional business in Nyaung-U most of the firms are stand-alone firms, and many firms are operated as cooperating with other firms. Such kind of system is the fundamental characters of lacquerware firms in Nyaung-U township, and effective establishment of such system enhance productivity improvement and ensure long-run success in the lacquerware industry.

In this study, cooperation with customers contributes to growth of lacquerware firms, this mean that the formulating and implementation of industrial development policy, training participation and sharing information can enhance the growth of lacquerware firms in this township. Cooperation with other firms leads to slow down the growth of lacquerware firms in the region.

In order to advance the growth of lacquerware firms, it is necessary to utilize the spillover advantages to be compatible with the organizational resources by monitoring the nature and the dynamism of industrial organization and changing nature of the market. Moreover, lacquerware firm's owners should attempt to have entrepreneurial spirit, and retain effective skilled labor to grasp the opportunities concerning the spillover effects in the industry. The manufacturers of lacquerware industry are required to forecast and implement ways to develop subcontracting network which can provide the fruitful effects of industrial concentration in this region.

The study of inter-firm cooperation in this study is based on primary data of survey from lacquerware firms, and most points presented are mainly based on perception of lacquerware firm's owners to reflect the current situations of lacquerware industry. Information concerning the industrial data of lacquerware firms represents for a limited period from secondary data, and further study could be undertaken with specific time series data of lacquerware industry. A

further study regarding the whole supply chain of lacquerware firms could be done to analyze firm growth and other performance indicators of lacquerware industry.

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ANALYSIS ON RELATIONSHIP BETWEEN MARKETING MIX AND PERFORMANCE OF PURIFIED DRINKING WATER MANUFACTURING BUSINESSES IN YANGON

Yan Yan Myo Naing^{*}

Abstract

This study aims to analyse the effect of marketing mix on performance of purified drinking water manufacturing businesses in Yangon. The specific objectives are to investigate the marketing mix practices dominating in those businesses, to examine the relationship between characteristics of businesses and their marketing mix practices, and to analyse the effect of their marketing mix on performance. Business characteristics considered in this study are age, size and ownership form of businesses. Only four elements of marketing mix (product, price, place, and promotion) are accounted for this study. Performance is measured with four criteria such as sales revenue, sales volume, profit and number of employees. In this research, the simple random sampling method is applied by doing survey on 84 businesses which are located in Yangon. To collect primary data from those businesses, personal interview method is applied by using structured questionnaire. Data are collected during 2016 and 2017. To reach research objectives, the hypotheses are tested by applying multiple linear regression analysis. From the analysis, it is found that the firms' marketing-mix practices are related to characteristics of businesses such as age and size. Large and old businesses are emphasizing more on product quality and promotion tools while small and young manufacturers are more committed in practicing delivery function tactfully. However, the large and old businesses invested more in building distribution networks and for delivery human resources. The study found that performance measures in terms of sales revenue, sales volume, profit and number of employees is largely related to distribution practices, and performance measured by sales revenue is also related to pricing practices. Thus, for market share and for staying only at the above survival level in market, purified drinking water manufacturing businesses should compete with the use of pricing strategy. However, for long-term success with good sales revenue, profit and business growth by recruiting more employees, they should pay attention to establishment of effective and efficient distribution structure.

Keywords: Business Characteristics, Marketing Mix, Performance

Introduction

Purified drinking water manufacturing started in Myanmar during 1970s. However, Myanmar consumers were not aware of this product and the product had not developed at that time. The market for this product has developed only after the introduction of Market Oriented Economy in 1988.

Purified Drinking Water Manufacturing businesses (PDWM) are controlled by Yangon City Development Committee, (YCDC) supervised by Directorate of Industrial Supervision and Inspection (DISI), Myanmar Industrial Development Committee (MIDC) and Food and Drug Administration (FDA) for quality product. However, some were not registered legally (Myawaddy News, July 22, 2016). Recently, FDA has shut down 13 unregistered drinking water brands in Yangon.

Purified drinking water market is growing significantly in the local market; however, some existing brands disappeared without knowing because they cannot survive in the world of rapidly changing customer's attitude and behavior. It is not sure that the most important factors

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of consumer's satisfaction are not only prices and taste of water but also the cleanliness of bottles and right time delivery services.

The success of a PDWM business, in a chaotic environment, depends much on the proper marketing mix. In Myanmar, although some customers have health awareness on drinking water, many people are not yet well aware on effect of drinking water on health. Some people may pay more attention to price and convenience while others emphasize on product quality and promotion messages when making buying decision on drinking water. Thus, in this market, it is not obvious that which marketing mix will lead to success and sustainable competitive advantage. Many authors also argue that understanding the customer's attitude toward 4Ps marketing mix is important (Purnomo, Ende, Vanapalli, & Mugele, 2008) in marketing products for which customer needs are continually growing; loyalty is lacking, and changes in intensive competitive environment occur. Therefore, firms should sense and respond to these changes much more quickly than competitors to create competitive advantage. To achieve competitive advantage, proper marketing mix is important. In purified drinking water market in Myanmar, the hidden issue is that which marketing mix element is influence on the performance by the growth of sales, profit and number of employees. In this study, the effect of marketing mix on performance of PDWM businesses is analyzed for some beneficiaries such as potential PDWM businesses and other interesting parties to purified drinking water market in Myanmar.

Objectives of the Study

The main purpose of this study is to examine whether the marketing mix practices of PDWM businesses can support business firms to increase their performance. The specific objectives of the study are:

1. To investigate the marketing mix practices which are dominating in PDWM businesses in Yangon.
2. To analyze the effect of characteristics of businesses on the marketing mix practices of PDWM businesses in Yangon.
3. To analyze the effect of marketing mix practices on performance of PDWM businesses in Yangon.

Method of the Study

In this study, descriptive research and empirical research are employed. Descriptive research is utilized in order to explore the current status of marketing mix practices and the business characteristics. Empirical research is appropriate when proof is sought for the effect of marketing mix elements on performance in some way.

In this study, both primary and secondary sources of data are used to collect the required information. The primary data are collected from manufacturers or marketing managers of PDWM businesses in Yangon by conducting interviews with structured questionnaires. Secondary data are obtained from profile and reports of selected PDWM businesses, relevant text books, theses and previous research papers and journals from internet websites.

The research design is mainly quantitative with some qualitative data to support and expand upon the research findings. The total number of PDWM businesses in Myanmar is about "974". "344" out of "974" (35%) are located in Yangon (FDA, 2016). In this study, by using the

formula developed by Yamane (1973) with 90% level of precision, the sample size is “78”. Thus, it may not be representative of Myanmar as a whole or even of Yangon city as a whole.

In this study, sample random sampling method is applied. Although sample size is “78”, “84” businesses are randomly selected in this study. The analysis is conducted by groups of businesses such as small, medium, and large. The firm’s size is classified based on the number of employees employing in the businesses according to the revised private industrial enterprise law (2011).

Conceptual Framework of the Study

This study’s conceptual model is adapted to three previous researchers’ models which are closely related to basic assumptions of this study. The first model is not limited to a specific industry; its focus is on Chinese owned businesses running in Jordan. The second model is about the environment, marketing strategies including marketing mix strategies, and performance in property (real estate) industry. The third model emphasized on influencing factors, marketing mix and performance of clothes exporting businesses.

The first model adapted by this study is developed by Lilin, Muhammad, & Younes, (2013), and this model presents the factors influencing marketing mix, and the effect of marketing mix on performance of Chinese owned businesses running in Jordan.

The second model considered in this study is the model developed by Chih (2003). This previous model is shown pointed out those marketing strategies can be seen with two approaches: product-market strategy approach and marketing programme approach. Product-market approach is based on the product-market matrix developed by Ansoff (1957).

The third model adapted in this study is model developed by Erdil and Ozdemir (2016). In this research; firm characteristics, environmental characteristics, international commitment and international experience are considered as factors influencing marketing mix and export performance of cloths exporting businesses in Turkey. It also analysed the relationship between marketing mix and export performance.

Conceptual Model of the Study

The conceptual model of this study is developed by concerning the factors mentioned above with theoretical aspects, and previous researchers’ findings. The conceptual model of this study is depicted as shown in Figure (1).



Figure 1 Conceptual Model of the Study

In this study, the two major assumptions are developed: the firm's characteristics such as firm's age, ownership form and firm's size are relating to marketing mix; and there is an effect of marketing mix on firm's performance in PDWM businesses in Yangon. The concept adapted is that the marketing mix is a set of controllable practices (product, price, place and promotion) that businesses use to produce the response they want from their target market (Raiz, 2011).

Analysis and Results

The main purpose of the study is to analyze the relationship between marketing mix and performance of PDWM. To explore this relationship, the study also intends to identify the business characteristics, and marketing mix practices that influence the perform of PDWM businesses in Yangon. The descriptive statistics and the dummy variable regression analysis were conducted to analyze the relationship between business characteristics and marketing mix. Then, analysis on the relationship between marketing mix and performance is performed by multiple regression analysis.

Profile of PDWM Businesses

The profile of PDWM businesses consists of ownership form of businesses, firm's age and number of employees. In the analysis of ownership form of business, (83%) are sole proprietorships, (12%) are partnerships and (5%) are private companies.

In the analysis of firms' age, 45 % of all the businesses have less than five years of firms' age, 26% of all the businesses have five to ten years of firms' age and 29% of all the businesses have more than ten years of firm's age.

In the analysis of performance, the highest per cent of businesses have increase in performance concerning sales revenues, sales volume and number of employees. However, the highest per cent of businesses are unchanged in profit.

In this study, the small business is the highest percentage. This situation is concerned with the situation in which 83 % of the businesses are sole proprietorship. Almost all of these businesses have only 10-50 employees because most of the businesses are only family businesses. Table (1) prescribed the profile of the PDWM businesses in Yangon in terms of the ownership form of businesses, firm's age, size of businesses, and performance of businesses.

Table 1 Profile of PDWM Businesses

Sr. No.	Demographic Factors	Number of Businesses	Percent (%)
1	Total Number of Businesses	84	10
2	Ownership Form of Business		
	Sole Proprietorship	70	83.33
	Partnership	10	11.91
	Private Company	4	4.76
3	Firm's Age (Year)		
	< 5	38	45.24
	5-10	22	26.19
	>10	24	28.57
4	Size of Business by No. of Employees (Revised Private Industrial Enterprise Law,2011)		
	Small (10-50)	68	81.00
	Medium (50-100)	8	9.50
	Large (>100)	8	9.50
5	Performance of Business S		
	Sales Revenue (Increase)	51	60.72
	Sales Revenue (Unchanged)	26	30.95
	Sale Revenue (Decrease)	7	8.33
	Sale Volume (Increase)	51	60.72
	Sales Volume (Unchanged)	26	30.95
	Sales Volume (Decreased)	7	8.33
	No. of Employees (Increase)	77	91.67
	No. of Employees (Unchanged)	5	5.95
	No. of Employees (Decrease)	2	2.38
	Profit (Increase)	28	33.33
	Profit (Unchanged)	48	57.14
	Profit (Decrease)	8	9.53

Source: Survey Data (2017-2018)

Marketing Mix of PDWM Businesses

The analysis on marketing mix of PDWM businesses is conducted by using survey data. In this study, marketing mix is approached with four elements such as product, price, place, and promotion. The practices of surveyed businesses for their products can be seen with the mean value data shown in Table (2).

Table 2 Practices on Product

Sr. No.	Items	Mean
1	Offers a broad product line. (0.3, 0.6, 1, 20 litres)	3.29
2	Introduces new product development	2.95
3	Provides service for the company's product	3.24
4	Provides unique and attractive product packaging	2.89
5	Provides package sizes which focus on customers' needs and wants based on R&D data.	2.95
6	Labels product in concern with open dating, purifying technology, source of water.	3.30
7	Develops long-term relationships with key customers.	3.26
	Overall Mean	3.13

Source: Survey Data (2017-2018)

As shown in Table (2), the product variable mean score of respondents is fairly high (greater than 3). It can be concluded that they show strength in performing product activities. However, according to the results of each item, it is found that they indicate weakness in introducing new product development as a strategic tool, being unique and attractive product packaging and focusing on customers' needs and wants based on R & D data for product package size. The reason for this is that most of the PDWM businesses do not introduce new product as a strategic tool in their growth and continuation. This relates to the fact that the nature of product quality is standardized. Moreover, most of the PDWM businesses do not take interest in product packaging. Almost all of the businesses are the same in package size. In addition, the types and the shapes of most products are also similar.

At the second step, the analysis on marketing mix focuses on practices of businesses on prices of their products. The pricing practices of surveyed businesses can be assessed with the mean values shown in Table (3).

Table 3 Pricing Practices

Sr. No.	Items	Mean
1	Sets prices based on the offering something different	2.86
2	Sets price based on different customer groups	2.81
3	Sets price based on customization.	2.52
4	Sets price based on customers' ability to pay.	3.00
5	Sets a price based on competitors' price	3.11
6	Sets a price based on the customer's perceived value	3.07
7	Uses price promotions and discounts.	2.93
8	Communicates pricing changes	2.96
	Overall Mean	2.91

Source: Survey Data (2017-2018)

As shown in Table (3), the price variable mean score of respondents is not high (about 3). It can be concluded that the businesses indicate weakness in performing pricing activities. In pricing their products, they mainly based on competitors' price, customer's perceived value compared to the competitors' products and also based on customers' ability to pay. According to the results of each item, it is found that they usually do not practice setting prices based on

offering something different, based on different customer groups or different target market segments and based on customization.

The third part of analysis on marketing mix is analysis on practices of businesses for distribution (place). The level of commitment of businesses to place practices can be seen with mean values shown in Table (4).

Table 4 Practices for Place

Sr. No.	Items	Mean
1	Uses multi-distribution channels	3.43
2	Build Channel members relationships	3.51
3	Carefully recruits and trains all marketing and sales personnel.	3.17
4	Retains qualified salespersons	3.08
5	Uses telemarketing to deliver our product	3.48
6	Uses electronic distribution channels such as the internet to deliver our product.	2.41
7	Chooses effective and efficient transportation modes	3.36
8	Provides delivery routes which are properly planned and executed.	3.32
9	Arranges for delivery drivers to maintain contact with the main office during the day.	3.23
	Overall Mean	3.22

Source: Survey Data (2017-2018)

As shown in Table (4), the place variable mean score of respondents is fairly high (greater than 3). It can be concluded that they show strength in performing place activities. However, according to the results of each item, it is found that they indicate weaknesses in using electronic distribution channels such as the internet to deliver their product. This is because most of the PDWM businesses rarely use the Internet in business functions.

The final part of analysis on marketing mix elements is the part of analysing the practices on using promotion tools. The practices for promotion of PDWM businesses can be examined with mean values shown in Table (5).

Table 5 Promotion Practices

Sr. No.	Items	Mean
1	Advertises depending on situation	2.77
2	Advertises through mass media marketing	2.68
3	Uses Web/Internet advertising.	2.37
4	Building long term relationships with influencing organizations	2.77
5	Uses direct marketing methods	2.74
6	Uses sales force as the main source of promotion	3.16
7	Offers price discounts	2.61
8	Offers free sample (give away)	2.45
9	Supplies purified water at no charge	2.41
10	Pays competitive commissions	2.92
	Overall Mean	2.69

Source: Survey Data (2017-2018)

As shown in Table (5), the promotion variable score of respondents is at moderate level with mean score 2.69. It can be concluded that the businesses indicate weakness in performing promotion activities. According to the results of each item, it is found that they show strength in using sales force as the main source of promotion and paying competitive commissions to retailers, wholesalers, dealers and business partners who are willing to commit taking delivery of large volumes on a continuing, long-term basis. However, they indicate weakness in performing all of the rest items. This is because most of the businesses believe that practicing promotion functions especially advertising is related to low quality of water.

Table (6) shows the practices of surveyed businesses for reach of the marketing mix elements with the overall mean values of each variable.

Table 6 Marketing Mix

Sr. No	Items	Mean
1	Product	3.13
2	Pricing	2.91
3	Place	3.22
4	Promotion	2.69

Source: Survey Data (2017-2018)

According to table (6), overall mean value for place variable is more than the other three marketing mix variables such as product, price and promotion. It seems that businesses give more favour in practicing place activities.

Analysis on Effect of Firm's Characteristics on Marketing Mix

In this study, the effect of characteristics of businesses on marketing mix is analyzed. The data type for variables of characteristics of businesses is nominal type. For this case, linear regression analysis is not appropriate. Thus, dummy variable regression is applied. Marketing mix practices are dependent variables and the characteristics of businesses are independent variables. Since the four elements of marketing mix are approached, the effect of characteristics of businesses on each of these four is analyzed.

Analysis on Effect of Firm's Size on Marketing Mix

In this analysis, two approaches are used: approach of using mean value data and approach of using ratio data to measure marketing mix variables (dependent variables). This analysis intends to test the effect of firm's size on marketing mix.

The result from analysis on the effect of size of business on product variable by mean values is:

$$\begin{aligned} \text{Product} &= 3.007 + 0.814 (\text{large}) + 0.439 (\text{medium}) \\ \text{SE} &: (0.039) \quad (0.120) \quad (0.120) \\ t &: (77.161)^{***} \quad (6.780)^{***} \quad (3.658)^{***} \end{aligned}$$

*, **, ***: Indicate statistical significance at the 10% level, 5% level and 1% level

As these regression results show that product mean value of small businesses is 3.007, the coefficient of large businesses is significant at 1% level and it can be said that there is effect of size of being large on the product variable. The mean value of product variable of large

businesses is 0.814 higher than small businesses. The coefficient of medium businesses is significant at 1% level and it can be said that there is effect of size of medium on the product variable. The mean value of product variable of medium businesses is 0.439 higher than small businesses. Therefore, the overall conclusion is that statistically the product mean values of small, medium and large businesses are not about the same. Thus, there is significant effect of sizes of businesses on firm's product variable.

In this analysis, the effect of sizes of businesses on price variable is also examined. The result from analysis on the effect of size of business on price approached with mean value is:

$$\begin{aligned} \text{Price} &= 2.817 + 0.747 (\text{large}) + 0.231 (\text{medium}) \\ \text{SE} &: (0.048) \quad (0.149) \quad (0.149) \\ t &: (58.449)^{***} \quad (5.029)^{***} \quad (1.553) \end{aligned}$$

In this analysis, the effect of size of business on place variable is also examined. The result from analysis on effect of size of business on place practices which are approached with mean value is:

$$\begin{aligned} \text{Place} &= 3.162 + 0.575 (\text{large}) + 0.031 (\text{medium}) \\ \text{SE} &: (0.062) \quad (0.192) \quad (0.192) \\ t &: (50.896)^{***} \quad (3.003)^{***} \quad (0.164) \end{aligned}$$

In this analysis, the effect of sizes of businesses on promotion variable is also examined. The result from analysis on the effect of size of business on promotion evaluated with mean value is:

$$\begin{aligned} \text{Promotion} &= 2.513 + 1.137 (\text{large}) + 0.687 (\text{medium}) \\ \text{SE} &: (0.044) \quad (0.136) \quad (0.136) \\ t &: (57.133)^{***} \quad (8.384)^{***} \quad (5.065)^{***} \end{aligned}$$

Analysis on Effect of Ownership Form of Business on Marketing Mix

In this test, each element of marketing mix is the dependent variable and the ownership forms of businesses are independent variables. Since the four elements of marketing mix are approached, the effects of ownership form of businesses on each of these four elements are analyzed. The three ownership forms of businesses such as company, partnership and sole proprietorship are accounted for this analysis. Result from analysis on effect of ownership form of businesses on product practices measured with mean value is:

$$\begin{aligned} \text{Product} &= 3.086 + 0.591 (\text{company}) + 0.100 (\text{partnership}) \\ \text{SE} &: (0.047) \quad (0.203) \quad (0.134) \\ t &: (65.332)^{***} \quad (2.910)^{***} \quad (0.746) \end{aligned}$$

The coefficient of company businesses is significant at 1% level and it can be said that there is effect of type of company on the product variable. The product mean value of sole proprietorship is 3.086. Since the product mean values of sole proprietorship, partnership and company businesses are not the same. Thus, there is significant effect of ownership forms of businesses on firm's product practices.

In this analysis, the effect of ownership form of businesses on price variable is also examined. The result from analysis on the effect of for the effect of ownership form of business on price variable approached with mean value is:

$$\begin{aligned} \text{Price} &= 2.895 & + & 0.325 \text{ (company)} & - & 0.005 \text{ (partnership)} \\ \text{SE} &: (0.054) & & (0.232) & & (0.153) \\ t &: (53.585)^{***} & & (1.399) & & (-0.033) \end{aligned}$$

In this analysis, the effect of ownership form of businesses on place variable is also examined. Result from analysis on effect of ownership form of businesses on place variable approached with mean value is:

$$\begin{aligned} \text{Place} &= 3.221 & + & 0.194 \text{ (company)} & - & 0.087 \text{ (partnership)} \\ \text{SE} &: (0.064) & & (0.276) & & (0.182) \\ t &: (50.131)^{***} & & (0.701) & & (-0.480) \end{aligned}$$

In this analysis, the effect of ownership form of businesses on promotion variable is also examined. The result for the effect of ownership form of businesses on promotion variable approached with mean value is:

$$\begin{aligned} \text{Promotion} &= 2.626 & + & 0.649 \text{ (company)} & + & 0.254 \text{ (partnership)} \\ \text{SE} &: (0.060) & & (0.257) & & (0.169) \\ t &: (43.972)^{***} & & (2.528)^{**} & & (1.506) \end{aligned}$$

Consequently, the ownership form of PDWM businesses in Yangon is relating to their marketing mix practices is **partially accepted**.

Analysis on Effect of Firm's Age on Marketing Mix

In this study, the effect of firm's age on marketing mix is also examined. Each element of marketing mix is the dependent variable and the firm's age is independent variables. Since the four elements of marketing mix are approached, the effects of firm's age on each of these four elements are analyzed. At first, the effect of firm's age on product variable is analyzed.

The effect of firm's age on the product variable of PDWM businesses in Yangon by using approach of measuring their practices with mean values can be seen as:

$$\begin{aligned} \text{Product} &= 3.038 & + & 0.154 \text{ (long term)} & + & 0.170 \text{ (medium term)} \\ \text{SE} &: (0.066) & & (0.106) & & (0.109) \\ t &: (45.921)^{***} & & (1.446) & & (1.555) \end{aligned}$$

Depending on these regression results shown, the product mean value of businesses (less than five operating years) is 3.038. It is found that statistically the product mean value of businesses which have long term and medium term firm's age are nearly the same.

In this analysis, the effect of firm's age on price variable is also examined. The results for the effect of firm's age on price variable approached with mean value are:

$$\begin{aligned} \text{Price} &= 2.844 & + & 0.069 \text{ (long term)} & + & 0.175 \text{ (medium term)} \\ \text{SE} &: (0.073) & & (0.118) & & (0.121) \\ t &: (38.817)^{***} & & (0.585) & & (1.443) \end{aligned}$$

In this analysis, the effect of firm’s age on place variable is also examined. The results for the effect of firm’s age on place variable approached with mean value are:

$$\begin{aligned} \text{Place} &= 3.147 + 0.122 (\text{long term}) + 0.145 (\text{medium term}) \\ \text{SE} &: (0.087) \quad (0.140) \quad (0.144) \\ \text{t} &: (36.201)^{***} \quad (0.877) \quad (1.011) \end{aligned}$$

In this analysis, the effect of firm’s age on promotion variable is also examined. The results for the effect of firm’s age on promotion variable approached with mean value is:

$$\begin{aligned} \text{Promotion} &= 2.553 + 0.243 (\text{long term}) + 0.247 (\text{medium term}) \\ \text{SE} &: (0.083) \quad (0.133) \quad (0.136) \\ \text{t} &: (30.915)^{***} \quad (1.833)^* \quad (1.814)^* \end{aligned}$$

Consequently, there is a relationship between firm’s age and marketing mix practices in PDWM businesses in Yangon is fractionally accepted.

Analysis on Effect of Marketing Mix on Firm’s Performance

This analysis intends to test the relationship between marketing mix and firm performance. Firm performance is measured with four criteria such as changes in sales revenue, sales volume, profit and firm’s growth by number of employees during recent one year. In this study, multiple linear regression analysis is conducted to test the relationship between marketing mix and the difference in performance of this year and of last year. The results for the effect of marketing mix on sales revenue are shown in Table (11).

Table 11 Effect of Marketing Mix on Sales Revenue

Independent Variables	Beta	Sig.	t	tolerance	VIF
Product	-.343	.920	-.100	.488	2.049
Price	5.356*	.088	1.725	.489	2.043
Place	15.284***	.000	6.383	.590	1.695
Promotion	1.590	.557	.589	.494	2.024
R					.740
R Square					.548
Adjusted R Square					.525
Durbin-Watson					2.033
F (P<0.05)					23.965

Source: Survey Data (2017-2018)

*, **, ***: Indicate statistical significance at the 10% level, 5% level and 1% level

As shown in Table (11), R (the correlation between the observed value and the predicted value of dependent variable) is 0.740. Thus the growth levels of sales revenue reported by respondents and the levels predicted for them by independent variables are correlated. R² (proportion of the variance in the dependent variable accounted by model) is 0.548 and adjusted R² is 0.525. Thus the model has accounted for 52.5% of the variance in the dependent variable.

It is also found that the relationship between place variable and sales revenue is positively significant at 95% confidence interval. Moreover, price variable is also marginally correlated

with $p = 0.088$. The data finding analyzed also shows that taking all other independent variables at zero, a unit increase in place activities will lead to a 15.284 units increase in effect on sales revenue growth. In addition, a unit increase in price activities will lead to a 5.356 units increase in effect on sales revenue growth while taking all other independent variables at zero. However, the relationship between product and promotion variables and sales revenue is not significant. This is because the health awareness concerned with purified drinking water is not very high among the public of Myanmar and product quality is standardized in the eyes of average customers. Moreover, the historical effect is still strong on minds of Myanmar people when they make buying decision on drinking water. They usually choose a few pioneer brands and they are normally low brand loyalty concerning new coming brands.

There is no autocorrelation in sample because the Durbin Watson value is 2.033 (nearly 2). All VIFs (variance inflation factor) of independent variables are less than 10. Thus there is no problem of multicollinearity (correlation between independent variables). According to the results from the survey, it can be concluded that there is an effect of place and price variable on sales revenue of PDWM businesses.

To increase sales revenue, place and price variable should be emphasized. All the other marketing mix variables such as product and promotion variables are not too supportive to the growth of sales revenue. Thus, in PDWM businesses in Yangon, effective and efficient distribution practices and manipulating pricing decision will lead to increasing the growth of sales revenue. Consequently, there is an effect of marketing mix practices on performance by sales revenue” can be **partially accepted**.

In any type of businesses, performance should not be assessed only with sales revenue because businesses would practice increasing price due to various reasons, and if so, growth in sales revenue is not the result from increasing demand of customers or increasing the number of customers. Thus, in this analysis, performance is also measured with sales volume. The results are shown in Table (12).

Table 12 Effect of Marketing Mix on Sales Volume

Independent Variables	Beta	Sig.	t	tolerance	VIF
Product	-.620	.877	-.156	.488	2.049
Price	5.332	.145	1.472	.489	2.043
Place	13.724***	.000	4.912	.590	1.695
Promotion	-1.137	.719	-.361	.494	2.024
R					.638
R Square					.407
Adjusted R Square					.377
Durbin-Watson					2.120
F (P<0.05)					13.552

Source: Survey Data (2017-2018)

*, **, ***: Indicate statistical significance at the 10% level, 5% level and 1% level

As shown in Table (12), R (the correlation between the observed value and the predicted value of dependent variable) is 0.638. Thus the growth levels of sales volume reported by respondents and the levels predicted for them by independent variables are correlated. R2

(proportion of the variance in the dependent variable accounted by model) is 0.407 and adjusted R² is 0.377. Thus the model has accounted for 37.7% of the variance in the dependent variable.

It is also found that the relationship between place variable and sales volume is positively significant at 95% confidence interval. The data finding analyzed also shows 15 that taking all other independent variables at zero, a unit increase in place activities will lead to a 13.724 units increase in effect on sales volume growth. However, the relationship between product, price and promotion variables and sales volume is not significant. This is concerned with customers' ability to pay, willingness to pay and perceived value compared to competitors' product. In addition, there is no handy measurable machine for the public to test the sanitation of the water; the consumers bought only cheap drinking water due to the thought of the same quality with cheaper price compared to the branded drinking water.

There is no autocorrelation in sample because the Durbin Watson value is 2.120 (nearly 2). All VIFs (variance inflation factor) of independent variables are less than 10. Thus there is no problem of multicollinearity (correlation between independent variables). According to the results from the survey, it can be concluded that there is an effect of place variable on sales volume of PDWM businesses.

To increase the growth rate of sales volume, place variable is necessary. All other marketing mix variables such as product, price and promotion variables are not too supportive to the growth of sales revenue. Thus, in PDWM businesses in Yangon, effective and efficient distribution practices will lead to increasing the growth of sales revenue. Consequently, there is an effect of marketing mix practices on performance by sales volume is **partly accepted**.

PDWM businesses become largely rely on strength of workforce when they gained success in market. If a brand is highly accepted in market, manufacturers must be conscious on product availability, market coverage, and reliable delivery service. Thus, in this industry, firm performance should be measured also with growth in number of employees. The results for the effect of marketing mix on number of employees are shown in Table (13).

Table 13 Effect of Marketing Mix on Number of employees

Independent Variables	Beta	Sig.	t	tolerance	VIF
Product	2.983	.464	.737	.488	2.049
Price	5.794	.119	1.576	.489	2.043
Place	13.635***	.000	4.807	.590	1.695
Promotion	-3.948	.220	-1.235	.494	2.024
R					.664
R Square					.441
Adjusted R Square					.412
Durbin-Watson					1.496
F (P<0.05)					15.559

Source: Survey Data (2017-2018)

*, **, ***: Indicate statistical significance at the 10% level, 5% level and 1% level

As shown in Table (13), R (the correlation between the observed value and the predicted value of dependent variable) is 0.664. Thus the growth levels of number of employees reported by respondents and the levels predicted for them by independent variables are correlated. R² (proportion of the variance in the dependent variable accounted by model) is 0.441 and adjusted R² is 0.412. Thus the model has accounted for 41.2% of the variance in the dependent variable.

It is also found that the relationship between place variable and growth of number of employees is positively significant at 95% confidence interval. The data finding analyzed also

shows that taking all other independent variables at zero, a unit increase in place activities will lead to a 13.635 units increase in effect on number of employees' growth. However, the relationship between product, price and promotion variables and number of employees' growth is not significant. The reasons relate with the nature of product. Although PDWM businesses are not service producing businesses, this type of businesses must also provide accompanying service to customers such as door to door service. To achieve competitive advantage, most of these businesses are more emphasis on customer service. So, employees are much more needed than ever before.

There is no autocorrelation in sample because the Durbin Watson value is 1.496 (nearly 2). All VIFs (variance inflation factor) of independent variables are less than 10. Hence, there is no problem of multicollinearity (correlation between independent variables). According to the results from the survey, it can be concluded that there is an effect of place variable on growth of number of employees of PDWM businesses.

To increase the growth rate of number of employees, place variable is a necessarily. All other marketing mix variables such as product price and promotion variables are not too supportive to the growth of number of employees. Thus, in PDWM businesses in Yangon, effective and efficient distribution practices will lead to increase the growth of number of employees. **Consequently**, performance measured with growth by number of employees is relating to marketing mix practices **is fractionally accepted**.

Although the type of product focused in this study is commodity type or consumable product type, profit should not be neglected to evaluate the performance of business. There are businesses that are gaining profit by emphasizing on narrow market scope and price competition, and snot emphasizing on product quality and facilities and human resources for distribution. At the other side, other businesses are gaining profit by emphasizing on product quality, distribution network, and promotion. Thus, to analyse the effect of marketing mix on performance of PDWM businesses, the firm performance should be measured with changes in profit during recent one year. The results for the effect of marketing mix on profit are shown in Table (14).

Table 14 Effect of Marketing Mix on Profit

Independent Variables	Beta	Sig.	t	tolerance	VIF
Product	-4.942	.225	-1.222	.488	2.049
Price	2.337	.526	.636	.489	2.043
Place	16.556***	.000	5.846	.590	1.695
Promotion	.461	.885	.145	.494	2.024
R					.634
R Square					.402
Adjusted R Square					.372
Durbin-Watson					2.008
F (P<0.05)					13.282

Source: Survey Data (2017-2018)

*, **, ***: Indicate statistical significance at the 10% level, 5% level and 1% level

As shown in Table (14), R (the correlation between the observed value and the predicted value of dependent variable) is 0.634. Thus the growth levels of profitability reported by respondents and the levels predicted for them by independent variables are correlated. R^2 (proportion of the variance in the dependent variable accounted by model) is 0.402 and adjusted R^2 is 0.372. Thus the model has accounted for 37.2% of the variance in the dependent variable.

It is also found that the relationship between place variable and profitability is positively significant at 95% confidence interval. The data finding analyzed also shows that taking all other independent variables at zero, a unit increase in place activities will lead to a 16.556 units increase in effect on profit growth. However, the relationship between product, price and promotion variables and profit growth is not significant. This is because inherent reason of buying purified drinking water may be convenience. Thus, the place factor or availability at place where the buyers want the product to use may be important for growing profit of businesses.

There is no autocorrelation in sample because the Durbin Watson value is 2.008 (nearly 2). All VIFs (variance inflation factor) of independent variables are less than 10. Thus there is no problem of multicollinearity (correlation between independent variables). According to the results from the survey, it can be concluded that there is an effect of place variable on profit of PDWM businesses.

To increase the growth rate of profit, place variable is necessary. All other marketing mix variables such as product, price and promotion variables are not too supportive to the growth of profit. Thus, in PDWM businesses in Yangon, effective and efficient distribution practices will lead to increasing the growth of profit. Thus, performance measured with profit is relating to marketing mix practices is **partially accepted**.

Conclusion

The study extracted significant research findings that have emerged from the analysis of research data on businesses' characteristics, marketing mix and performance of PDWM businesses in Yangon. Based on the results of findings from regression analysis, place activity is important to increase the performance. High performance businesses are establishing channel member relationship, telemarketing, distributing through multi-channel, careful recruit and training sale persons, choosing efficient transportation mode and managing optimum delivery systems. All other marketing mix variables such as product, price and promotion variables of not too support the performance of PDWM businesses in Yangon. Moreover, businesses that pay high attention to promotion have the lowest performance improvement while the improvement of the performance of businesses that committed in place activities is the highest.

Suggestions and Recommendations

Based on the findings of the analysis, PDWM businesses should try to introduce new product based on taste, smell, nutritious ingredient, purifying technology, etc, to increase their performance. In acquiring outsource, businesses should follow the systematic procedure to do contract/agreement with outsource suppliers in an ethical manner. This means that outsource suppliers must possess the FDA permission.

To broaden the interest and commitment of public in purified drinking water, businesses should redesign their packaging based on color, size, pattern and recycle materials. To maintain

and improve their current existence, they should pay attention to these activities in designing price. For business to business marketers, customization should be emphasized because today businesses give more favour to expressing their identity. In addition, the changes of business environment should also be considered in setting price and maintaining quality standards and this fact is very important. In this competitive era, the businesses are running in the dynamic environment that adaptation to the external environment plays a key role for the sustainable success of the businesses. As these businesses can adapt to the external environment, they can maintain their success for a long time. If the FDA's intervention becomes strong enough to move out all sub-standard quality manufacturers, and citizens' health awareness and their per capita income increased, well-established and quality oriented manufacturers can gain sustainable sales growth as well as sustainable profitability.

In addition, businesses should carefully recruit and train sale persons and retain talented sale persons and incentive program should be added to their pay. They should take the advantages of information technology to expand new geographic markets and trying to enter into large local market by using internet technology such as email, web site, and social media – Facebook. Internet based distribution can reduce numerous intermediaries and can contact directly with consumers. Moreover, businesses in Yangon should detect their transportation approach to overcome the traffic jam in an effective and efficient manner.

Based on the results of the finding, the purified drinking water businesses should put the place as their first priority, the price as the second priority and they should play the promotion and product strategies by looking after the changes of business environment and changes in needs of customers. However, PDWM businesses require different unique marketing mix proportion based on their size and experience because findings from results show that size and age are influencing factors on marketing mix practices.

In conclusion, PDWM businesses can generally be grouped into two: group of businesses with core values of brand prestige, quality position in market, and targeting not only to consumer market but also to business market (businesses such as hotels, travelling, restaurants, gasoline stations, and so on) and group of businesses with objectives to penetrate niche markets, to practice cost-focus strategy, and just to get return on investment at satisfactory level, and with no intentions to upgrade production capacity and to expand market. Since their mission, strategies, core values, and objectives are quite different from each other, they need to choose relevant marketing mix tactics, especially place and price tactics, to be supportive to their mission and objectives.

Needs for Further Studies

This study only analyzes the effects of firm size, ownership form and age on marketing mix and excludes the effects of other characteristics. Thus, further researchers can extend this research by counting the other firm's characteristics such as the capital structure, innovativeness, research and development facilities as influencing factors on marketing mix in PDWM businesses not only in Yangon. This study is limited to focus only on Yangon area. Since the need of purified water is increasing in other areas including the rural areas and number of establishment of small-scale facilities in such areas, further research can be done to include the situations of such areas. To provide more new knowledge, effect on other performance areas such as competitive performance and strategic performance should also be considered.

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HOW CAN EVALUATE THE MYANMAR'S CURRENT TRADE STRUCTURE AND FLOW?*

Khin Mar Thet¹

Abstract

The improvement of bilateral trade between countries is useful for economic growth and to fulfil people's needs at the same time. Bilateral trade raises income levels and benefits for both countries. This paper examines the trade structure between Myanmar and some trade partner countries by applying the standard gravity model using panel data. Using the gravity model of international trade theory intends to explain the bilateral trade flows and patterns between two economies. The gravity model can explain Myanmar's trade structure and flow completely with the outcomes in the model. GDP is active factor in evaluating Myanmar's trade structure. The positive and significant coefficient of the TCI implies that a Heckscher–Ohlin presumption could be appropriate in explaining trade patterns. Trade flows are significantly dependent on the inter-industry trade that comes from factor endowment difference. Foreign exchange rate instability might be serious effects on trade sector development and the nation's trade value. In the past, bilateral trade between Myanmar and Western countries was quite weak, although neighboring countries are the most important trade partners for Myanmar. ASEAN countries trade far less with Myanmar and ASEAN dummy shows that Myanmar still needs to tie itself closer to ASEAN for trade improvement. The random effects model (REM) and Hausman test results show the verification of the empirical model.

Keywords: trade structure, standard gravity model, bilateral trade, GDP, TCI

Introduction

In developing countries, trade can be seen as the backbone of their economies and can expand markets from local to global. Growing bilateral trade raises income levels and benefits both countries financially. Furthermore, trade allows businesses in developing countries to access the technologies essential for improving their productivity and competitiveness. Today's world trade is wider and stronger than ever before.

Myanmar is located on mainland Southeast Asia and its geographical location makes Myanmar as a vast potential market and a sub-regional economic nodal link between regions. Myanmar can try to strengthen its economy through ASEAN and utilizing its singular geographic position as a link between South and Southeast Asia, a position which favours taking on new opportunities. As ASEAN becomes one of the fastest-growing economies in the world, the integration between ASEAN member countries grows stronger, and it continues to out-perform the rest of the global economy. Stronger ties with other ASEAN member countries may be needed. Moreover, the establishment of the ASEAN Economic Community (AEC) in 2015 was a major high point in the regional economic incorporation agenda. To harmonize with the principles of transparency, simplicity, efficiency and consistency of integration with the ASEAN Single Window (ASW), Myanmar has been implementing its own National Single Window (NSW). In the future, Myanmar's trade potential may improve not only with ASEAN partners, but also globally, thereby enhancing Myanmar's role as a trading partner.

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Thailand is still the primary trading partner for Myanmar, alongside China and India. For a long time, the US and Western trade sanctions weakened the ability of the Myanmar economy to be competitive in the global market. One important fact is that Myanmar has always imported more than it exports. The intent was not only to make Myanmar's exports more competitive on world markets, but also to reduce the tax component in export prices. The Myanmar government strived to promote trade by making major policy changes in the trade sector, and all exports, besides a few specific goods, became free from commercial tax (Myanmar Investment Guide, 2014).

It investigates Myanmar's trade structure and trade flow by comparing the 15 trading partner countries, including 11 Asian countries and 3 Western countries and Brazil. The objectives of the study are to understand Myanmar's trade potential and complementary trade in future. This can be done by testing its trade flows empirically and comparing them with twenty other trade partners during the period of 2000 to 2018 – nineteen years in all – and considering the following questions: How can evaluate the Myanmar's trade pattern be solved using the trade conformity index (TCI)? And find out ASEAN's role in Myanmar's trade sector development. Myanmar's trade structure and flow estimates can be analysed by applying the standard gravity model to panel data. There are four sections to consider: the theoretical framework and perspectives of some previous literature, a look at empirical methodology, a description of the data, and finally a discussion of empirical results, leading to this study's main findings and remarks.

Theoretical Framework and Previous Literature Perspectives

The use of the gravity model of international trade theory intends to explain the bilateral trade flows and patterns between two economies. The basic concept of the gravity model developed by using Tinbergen (1962) examining the bilateral trade patterns means that exports and import from one country to another can be explained by their economic size (GDP or GNP) and the geographical distance between the countries.

Deardorff (1998), and Evenett and Keller (1998) found the Heckscher–Ohlin model perspective to be consistent with the gravity equations and pointed out that the standard gravity equation can be obtained from the Heckscher–Ohlin model with both perfect and imperfect product specializations. Sohn (2001, 2005) identified that South Korea's trade flows could follow a Heckscher–Ohlin model. Although international trade theories attempt to explain a country's trade flow, an empirical analysis of focused models may generate different results.

The distance between partners is inversely related to the degree of bilateral trade. To test this hypothesis, researchers Nguyen (2009), Nuroglu and Dreca (2011), and Walsh (2008) use the Hausman test, while other researchers like Keying Keum (2008) use the Linder hypothesis. Nuroglu and Dreca (2011) analysed the total trade flow by applying a modified gravity model. Hout & Kakinaka (2007) analysed trade structure and trade flow by focusing on the basic gravity model of GDP, per capita GDP, and distance, as well as a standard gravity model of trade conformity index, exchange rate volatility and the ASEAN dummy.

Hout & Kakinaka (2007) and Arabi and Ibrahim (2012) findings show that the positive and significant coefficient on the TCI implies that a Heckscher–Ohlin approach could be useful

in explaining trade patterns. Trade flows are significantly dependent on inter-industry trade, which comes from differences in factor endowment and monopolistic competition.

Aung (2009) analysed the structure of Myanmar's exports and the implications for economic development, incorporating the gravity model of trade. The author divided his study into two parts; the regional integration and bilateral trade flow of ASEAN members plus China, India, Korea and Japan and Myanmar's trade structure based on the core gravity model variables plus three dummy variables: neighbouring nations, domestic crisis, and regional financial crisis. The empirical results showed that Myanmar mainly trades with neighbouring countries, and that political unrest has a strong effect on Myanmar's trade structure.

Lwin (2009) points out that the trade patterns of Cambodia, Laos and Myanmar (CLM), and this analysis mainly intends to identify the determining factors of each country's bilateral trade flows and policy implication for promoting trade. When analyzing bilateral trade in Myanmar, one important dummy variable, sanction is used as an extra variable in the model to examine the impact of trade sanctions. Myanmar's actual trade volume is lower than its trade potential with many Asian trading partner countries.

Kubo (2014) applied the gravity model to Myanmar's non-natural resources export potential after the lifting of economic sanctions. The analysis of the effect of economic sanctions on bilateral trade flows, using a dummy variable shows that Myanmar's actual export of non-resource goods during 2005-2010 was one-fifth of its potential, implying that exporting to neighbouring countries failed to compensate for export losses to Western sanctions.

In this study, the main focus was on the standard gravity model as applied to Myanmar and its partner countries' real GDP, and the bilateral trade flow between them. TCI was calculated based on one year's import/export market share between Myanmar and its partner countries. Like Nguyen (2009), Nuroglu and Dreca (2011) and Walsh (2008), the Hausman-Taylor test was used. However, the precedent of Keying Keum (2010) was followed and the Linder hypothesis was incorporated. However, some researchers neglect hypothesis testing in their gravity model of trade analysis.

Empirical Methodology

Many empirical studies and analyses of international trade have accepted that the gravity equation is linked to a number of models, including the Ricardian, the Heckscher–Ohlin, and the monopolistic competition models. It is at the heart of any model of trade (Kimura & Lee, 2006). There is a related data set consisting of the total trade flow among Myanmar and 15 of its trade partner countries. Export and import values act as dependent variables, while independent variables consist of Myanmar's GDP, its partner countries' GDP, Myanmar GDP times with partner country's GDP and the distance between Myanmar and its partner countries. These variables serve as an approximation for economic size and purchasing power of the two economies, and bilateral trade volume will rise when a country's GDP and per capita GDP increase. Moreover, the distance between Myanmar and its partner countries is taken as a proxy for the cost of trade, which reflects various trade resistance factors like market access barriers, transportation costs, and delivery time.

To analyse the peculiarities of Myanmar's trade patterns, three new variables are the ASEAN trade network, exchange rate volatility, and the trade complementarity index (TCI). TCI

can measure the degree of complementary trade between two countries and reflect different factor endowments, which is in line with the Heckscher-Olin model. In previous studies about Myanmar's trade structure, TCI was not used as a single variable. Concerning exchange rate volatility, every economy is still influenced by the exchange rate between local currency and the US dollar. VOL is an explanatory variable and calculate the exchange rate volatility between the US dollar and the partner country's currency. Exchange rate fluctuation between countries is an essential monitor for trade as it allows trade, discourages risk, and covers the risk of profit uncertainty related to international transactions. Since regional trade cooperation is important in determining Myanmar's trade flows, including ASEAN as a dummy variable sets a standard which will be set to unity if the country is a member of ASEAN, and zero otherwise. The empirical gravity equation used combines the basic gravity model with the standard gravity model, plus three new variables. The standard gravity model could be analysed with

$$\ln T_{ij} = \beta_0 + \beta_1 \ln Y_i + \beta_2 \ln Y_j + \beta_3 \ln D_{ij} + \beta_4 TCI_{ij} + \beta_5 VOL_j + \beta_6 ASEAN_{ij} \varepsilon_{it}$$

In these equations, T_{ijt} denote total trade value, between Myanmar and Country J, Y_i and Y_j indicate the GDP of Myanmar and Country J, respectively. D_{ij} refers to the distance between Myanmar and Country J. $ASEAN_{ij}$ is a dummy variable; it will be set to unity if Country J belongs to ASEAN, and zero otherwise. VOL_j indicates the volatility of the nominal exchange rate between the US dollar and Country J's currency. TCI_{ij} is the trade conformity index, or measure of trade complementarities between bilateral trade. ε_{it} is an error term, while β_1 , β_2 , β_3 , β_4 , β_5 , and β_6 are coefficients.

With reliable empirical methodology, a random effects model is appropriate, though many researchers only use two methods for estimating unobserved effects from panel data models. The fixed effects estimator uses a transformation to remove the unobserved effect α_i before estimation. The random effects estimator is attractive when the unobserved effect is uncorrelated with all the explanatory variables. (Wooldridge, 2013, p. 466).

Data Description

The pooled OLS estimation uses panel data to test the empirical gravity equation and covers a period from 2000 to 2018, totaling 19 years. It investigates Myanmar's trade structure and trade flow by comparing the fifteen trading partner countries, including eleven Asian countries (Australia, China, Hongkong, India, Indonesia, Japan, Korea, Malaysia, The Philippines, Singapore, Thailand) and three Western countries (Canada, United Kingdom, and United States) and Brazil. Data related to Myanmar was gathered from international organizations such as the International Monetary Fund (IMF), which issued data called International Financial Statistics (IFS) and Direction of Trade Statistics (DOTS) in the IMF World Economic Outlook Database (2019, April). Other data sources were the International Trade Statistics of International Trade Center (UNCTAD), The International Trade Centre of Trade Statistics for International Business Development (Trade Map), and distances were found from <https://www.distancefromto.net/>.

Distance measured in kilometers (km). The distance between countries measured is from Myanmar's capital city, Naypyidaw, to each partner country's capital city. Trade data is computed as total trade value, with export value and import value shown separately by dollar millions. GDP show the current price term calculated by Purchasing Power Parity (PPP) measured by international dollar (billions). Exchange rate volatility is calculated from the partner

countries' exchange rate volatility by computing the standard deviation for each country based on US dollar per domestic currency and 2010 used as base year. ASEAN dummy variable is used in this study as a measure of unity if the partner country is also an ASEAN member, and otherwise it is considered to be zero. TCI measures the degree of trade complementarity or competitiveness between two countries. The higher the degree of trade complementarity, the larger the differences in factor endowment and trade flow increase, The TCI ranged from zero to one; one means in which Myanmar's export share is related to its partner countries' import share, and Myanmar has an equal trade share against its partner countries. Where TCI equals zero, Myanmar's export share is smaller than its partner country's import share, and Myanmar does not have a perfectly fair-trade share against its partner country. Myanmar and its partner countries' bilateral trade in 2018 is a uniform commodity group of 85 electrical and electronic equipment products. (Trade Map). Sohn (2005) explains that the estimate of the coefficient becomes positive when trade volume increases with the rising trade complementarities; this is precisely what is represented by the Heckscher–Ohlin trade model of inter-industry trade. On the other hand, the coefficient becomes negative when the trade volume increases with the falling trade complementarities.

Table 4.1 Data description

Variables	Unit	N	Mean	Max	Min	Std. Dev.
Total Trade Value	USD (mil)	285	950.48	12681	0.02	1784.58
Export Value	USD (mil)	285	460.14	5456	0.01	929.72
Import Value	USD (mil)	285	490.34	7225	0.00	992.05
Myanmar GDP	USD (bil)	285	182.21	344	55.81	89.2
Partner Countries' GDP	USD (bil)	285	5945.36	30859	165.86	6339.5
Distance	km	285	5757.31	16196	820	4727.96
ASEAN Dummy		285	0.33	1	0	0.47
Trade Conformity Index		285	0.07	0.59	0	0.17
Exchange Rate Volatility		285	0.06	1	0	0.16

Sources: International Monetary Fund: Direction of Trade Statistics, World Economic Outlook Database 2019 April, International Trade Statistics of International Trade Center, <https://www.distancefromto.net>.

Empirical Results, Discussion, and Hypothesis Testing

This study solves the basic gravity model and the standard gravity model. Panel data analysis allows more variability and reduces the multicollinearity between variables and some time-invariant factors characterized by trading partners affecting Myanmar's trade structure and trade flow. Three empirical equations are used to prove the model's accuracy: total trade, export value, and import value. OLS estimation and random effect estimation are shown separately. The Hausman test is the best statistical test to decide whether the fixed or random effect model is appropriate for all empirical models of gravity analysis. The results indicate that the random effect model is appropriate.

Table 5.1 Basic Gravity Model (Random Effect)

Dependent variables: total trade value, export value and import value

Variables	Total Trade Ln (Tot)	Export Ln (Ex)	Import Ln (Im)
Constant	11.93*** (2.97)	12.9*** (2.82)	9.76* (1.92)
Distance	-1.66*** (-3.87)	-1.88*** (-3.9)	-1.58*** (-2.87)
Myanmar GDP	0.86*** (5.4)	0.8*** (4.22)	1.12*** (6.41)
Partner countries' GDP	0.36 (1.48)	0.36 (1.3)	0.28 (0.99)
F-Statistics	47.52***	29.1***	73.13***
Adjusted R-Squared	0.33	0.23	0.43
No. Of Observations	285	285	283

Note: *, **, and *** denote statistical significance within 10%, 5%, and 1% respectively. Numbers in parentheses are t-statistics.

Table 5.1 points out the random effect result for three explained variables as basic gravity model. The coefficient of Myanmar's GDP and distance between partner count can explained Myanmar trade structure but partner countries' GDP directly related but insignificant in all estimations. Distance is inversely related and statistically significant with 1% and follows the previous researchers' outcome. Myanmar's GDP displays the robust evidence of GDP to describe Myanmar trade structure with basic gravity as well match with other previous studies.

Table 5.2 Standard Gravity Model (OLS Estimation)

Variables	Total Trade Ln (Tot)	Export Ln (Ex)	Import Ln (Im)
Constant	18.12*** (12.64)	22.69*** (14.63)	11.4*** (6.53)
Distance	-2.17 *** (-15.62)	-2.72*** (-18.08)	-1.76*** (-10.31)
Myanmar GDP	0.98*** (6.36)	0.96*** (5.75)	1.13*** (5.94)
Partner countries' GDP	0.1 (1.44)	0.009 (0.13)	0.27*** (3.28)
Trade Conformity Index (TCI)	1.62** (2.45)	-2.38*** (-3.33)	1.31 (1.63)
E.R. Volatility	-0.62 (-0.92)	-1.05 (-1.44)	0.09 (0.11)
ASEAN Dummy	-1.5*** (-6.36)	-2.44*** (-9.64)	-0.7** (-2.46)
F-Statistics	70.07***	83.7***	42.33***
Adjusted R-Squared	0.59	0.64	0.47
No. of Observations	285	285	283

Note: *, **, and *** denote statistical significance within 10%, 5%, and 1% respectively. Numbers in parentheses are t-statistics.

Table 5.2 and 5.3 show that the OLS estimation result and random effect result of standard gravity model. The larger the distance between the countries, the lesser the trade value between those two countries and this finding harmonizes with the previous gravity model concept of trade. The coefficient of Myanmar's GDP positive related to both two types of estimations; OLS estimation and random effect. The greater the GDP of Myanmar increases, the total trade value will also increase. Partner countries' GDP directly related to import meaning that the greater the size of their GDP, the larger their import.

The trade conformity index (TCI) is one core variable for this analysis and insignificant in estimation of the impact on total trade and export even though the signs of coefficient are different. Sohn (2005) showed that if the estimate of the coefficient is positive and greater than zero, trade volume increases with the rising trade complementarities. The coefficient becomes negative when the trade volume increases with the falling trade complementarities. The TCI shows Myanmar's inter-industry trade following the Heckscher–Ohlin model of comparative advantages of factor endowment differences between nations. However, the outcomes are insignificant in random effect estimation. The exchange rate volatility variable is inversely related and can explain the impact on total trade value and import.

Table 5.3 Standard Gravity Model (Random Effect)

Variables	Total Trade Ln (Tot)	Export Ln (Ex)	Import Ln (Im)
Constant	16.57*** (3.16)	21.36*** (4.43)	10.63 (1.42)
Distance	-2.22*** (-3.8)	-2.8*** (-5.22)	-1.73** (-2.06)
Myanmar GDP	0.76*** (4.5)	0.78*** (4.32)	0.99*** (5.13)
Partner countries' GDP	0.5* (1.97)	0.37 (1.51)	0.44 (1.41)
Trade Conformity Index (TCI)	1.14 (0.51)	-0.5 (-0.81)	1.79 (0.56)
E.R. Volatility	-0.81* (-1.67)	1.5 (0.73)	-1.11** (2.43)
ASEAN Dummy	-1.83* (-1.84)	-2.74*** (-3)	-0.87 (-0.61)
F-Statistics	25***	17.6***	38.08***
Adjusted R-Squared	0.34	0.26	0.44
No. of Observations	285	285	283

Note: *, **, and *** denote statistical significance within 10%, 5%, and 1% respectively. Numbers in parentheses are t-statistics.

The exchange volatility of partner countries is based solely on those countries' exchange rates with the US dollar only. Although Myanmar is active participation in ASEAN, ASEAN dummy is inversely related to trade structure. The reason might be only ASEAN five countries included in this analysis and only Thailand and Singapore are top trading partner for Myanmar in this region.

Conclusion and Finding

Based on this study's empirical result, the basic gravity model can explain Myanmar's trade structure and flow completely with the outcomes in the model. Like Sohn (2005), Hout & Kakinaka (2007), and Arabi, K. & Ibrahim (2012), the positive and significant coefficient of the TCI implies that a Heckscher–Ohlin presumption could be appropriate in explaining trade patterns. Trade flows are significantly dependent on the inter-industry trade that comes from factor endowment difference. As Myanmar's economy is mainly based on natural resource exports, that means that Myanmar needs to promote trade competitiveness on the world market. Foreign exchange rate instability has had serious effects on trade sector development and the nation's trade value. In the past, bilateral trade between Myanmar and Western countries was quite weak, although neighboring countries are the most important trade partners for Myanmar. For a long time, the United States of America's sanctions on Myanmar affected the economy and likely prevented trade sector development and trade flow. Previous researchers didn't use the trade conformity index (TCI) when analyzing Myanmar's trade structure. ASEAN countries trade far less with Myanmar and ASEAN dummy shows that Myanmar still needs to tie itself closer to ASEAN for trade improvement. Partner countries' exchange rate volatility has a negative effect on total trade and imports, but does not affect exports. Myanmar's level of trade performance is still lower than other ASEAN member countries and neighboring countries. FEM does not allow for estimating time-invariant variables. However, REM has the advantage of handling these kinds of explanatory variables and matches with this analysis and the Hausman test matches with this analysis. Although some results were shown as statistically insignificant, the standard gravity model can completely explain the trade structure and flow of Myanmar.

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THE EFFECTS OF RURAL, URBAN POPULATION AND HIGHER EDUCATION ON EMPLOYMENT BY GENDER IN MYANMAR

Pwint Phyu Aung*

Abstract

This study investigates the effects of rural population, urban population, and higher education on employment by gender in Myanmar. It draws upon a panel database of 20 observations collected from CSO, Myanmar and World Bank Indicators (1996 to 2015). The study offers findings on employment by gender in Myanmar. Whenever increase in rural population by one million leads to increase both male and female employments to population ratios. An increase in a thousand number of total enrollments in higher education reduces both male and female employments to population ratios. There is also positive and significant effect of total number of graduates in higher education on both male and female employments to population ratios in Myanmar. However, the total number of graduates in higher education is inversely related to both male and female self-employed in Myanmar. Total number of graduates in higher education is much less than that of enrollments in higher education therefore the percentage share of graduates should be increased to the desire level. There is not too much high gender disparity with respect to employment to population ratio and self-employed in Myanmar. If women are university graduates and post-graduate qualifications, opportunities for women to obtain employment in line with their high qualifications must be ensured.

Keywords: Employment by Gender, Higher Education, Rural Population, Urban Population, Total Enrollment

Introduction

According to the National Census 2014 conducted by the Government of Myanmar, 36 million people out of the country's 51 million people or 70% of total population live in rural areas and the overwhelming majority of whom are engaged in agriculture. Agriculture plays a large part in Myanmar's economy, accounting for 25% of exports, 40% of imports, and approximately 70% of employment. Rural population in Myanmar refers to people living in rural areas as defined by national statistical offices. It is calculated as the difference between total population and urban population. Although Myanmar is trying to escape from low income country status defined by the World Bank clarification, substantial disparities in housing and living conditions exist between rural and urban areas and between different parts of the country. The country has a relatively low unemployment rate of 4.02 percent and gross domestic product (GDP) growth rate is 7.7%, with strong expansion in construction, manufacturing, and services. According to UNDP 2015 Human Resource Development Report, global gender inequality index of Myanmar ranks as 85th of 187 countries and gender inequality index value is 0.413. The female labor participation rate is 50.6% and that of males is 85.6%. Globally life expectancy for women is 73.6 and men is 69.4. The Union level sex ratio is 93 males to 100 females. Men have a life expectancy of 60 years and women have 69 years.

Currently, Myanmar has the advantage of the demographic advantage afforded by the relatively large proportion of prime working age adults though preparing for the effects of population ageing is needed. There are 4.5 million people aged 60 and over that represents 8.9% of total population in Myanmar. According to 2014 Myanmar Population and Housing Census

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Report on Migration and Urbanization, only (10.4%) of recent migration within Myanmar is rural-to-urban and the largest movements are instead urban-to-urban (47.2%). Therefore urbanization is gradually increasing along with remaining a predominantly rural society in Myanmar. Many people want to migrate internally as they want to improve their income, employment gaps, educational opportunities, social network, personal values, exposure, and better living standards and to avoid poor socio-economic conditions.

The general education system in Myanmar is 5 years of primary schooling, 4 years of secondary schooling and 2 years of high schooling (i.e., 11 years of schooling) plus higher education. The main supporter of education and training for higher education is the Ministry of Education (MOE) in Myanmar. Higher education consists of bachelor, masters and PhD levels. Depending upon the stream and subject, the bachelor level may be of three to five years' duration. The duration of the master level is generally of two years. Some universities also offer programs like master programs and post-graduate diploma. Male literacy rate is 92.6% and female 86.9% (persons aged 15 years and over). Therefore, investing in and strengthening a country's education sector is important to the development of country and its people to be skilled labor force. In this paper, simple definition of the formal sector employment involves all people who job with normal hours and regular wages, and are recognized as income sources on which income taxes must be paid and earnings are taxed as well as counted in GDP. On the other hand, the informal sector employment refers to those workers who are self-employed, or who are contractor with other people or enterprise or temporary workers or paid family workers.

Research Questions

This paper provides answers to the following questions.

- (i) Do the factors (rural & urban populations, total number of enrolments & graduates in higher education) affect the employment equalities between male employment to population ratio and female employment to population ratio in Myanmar?
- (ii) Do these factors affect the employment equalities between male self-employed and female self-employed in Myanmar?

Objective of the Study

The objective of the study is to investigate the effects of rural population, urban population, and higher education on employment by gender in Myanmar.

Method of Study

The main tools used in this study are tabulations, graphs, pie charts and regression analysis. Methodology is the regression analysis with panel data based on quantitative approaches by using STATA that is a syllabic abbreviation of the words statistics and data. To address the research objectives, four models are developed to estimate the effects of rural and urban populations, total number of enrollments and total number of graduates in higher education on gender employment in Myanmar from 1996 to 2015. The source of data used in this study comes from Myanmar Statistical Year Book, CSO and World Development Indicators (WDI) from 1996 to 2015.

Descriptions of models are:

$$\text{METPR} = \alpha + \beta_1 (\text{RP}) + \beta_2 (\text{UP}) + \beta_3 (\text{TNE}) + \beta_4 (\text{TNG}) + \varepsilon \quad (\text{Model 1})$$

$$\text{FETPR} = \gamma + \delta_1 (\text{RP}) + \delta_2 (\text{UP}) + \delta_3 (\text{TNE}) + \delta_4 (\text{TNG}) + \varepsilon \quad (\text{Model 2})$$

$$\text{MSE} = \eta + \theta_1 (\text{RP}) + \theta_2 (\text{UP}) + \theta_3 (\text{TNE}) + \theta_4 (\text{TNG}) + \varepsilon \quad (\text{Model 3})$$

$$\text{FSE} = \lambda + \gamma_1 (\text{RP}) + \gamma_2 (\text{UP}) + \gamma_3 (\text{TNE}) + \gamma_4 (\text{TNG}) + \varepsilon \quad (\text{Model 4})$$

where,

METPR = Male employment to population ratio

FETPR = Female employment to population ratio

MSE = Male self-employed

FSE = Female self-employed

RP = Rural population (millions)

UP = Urban population (millions)

TNE = Total number of enrollments in higher education (thousand numbers)

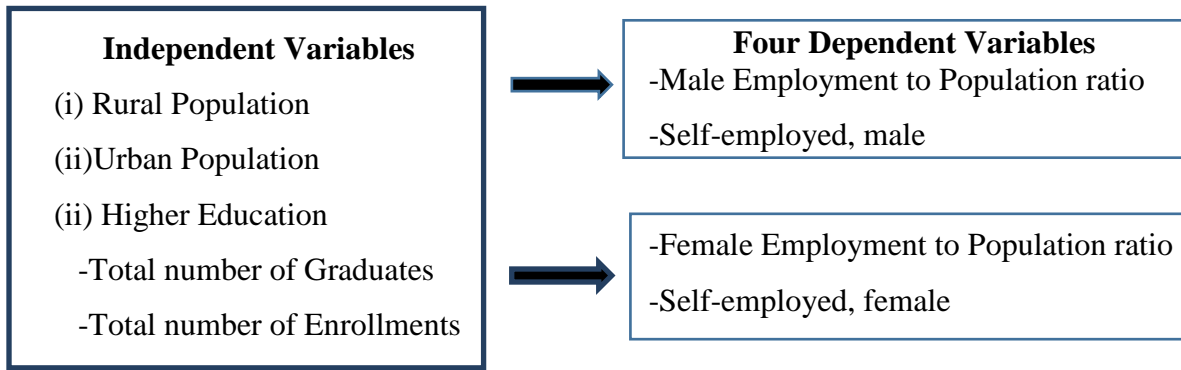
TNG = Total number of graduates in higher education (thousand numbers)

ε = Error term

Conceptual Framework

According to Sjaastad 1962, Todaro and Maruszko 1987, microeconomic models of migration consider migration as an investment in human capital. Traveling costs, costs of job search and training, and also psychological costs are included on the cost side. On the benefit side, the expected wage differential as well as nonmarket benefits of migration such as better access to health are considered. According to Lucas (2004), thinking of rural–urban migration is in terms of life learning because urban areas are places where migrants can accumulate the skills required by modern production technologies. On the other hand, there may be income inequality as a result of economic growth of poor countries according to Kuznets (1955) because industrialization and urbanization change the distribution of income in a developing economy and productivity in urban areas grows faster than in rural areas. Spitz-Oener (2006) found that the more workers held a college degree from 8% in 1979 to 16% in 1999, whereas there is a significant decline in the proportion of employees without formal diploma in Germany and more and more enterprises require employee who should have higher education attainments. Moreover, large numbers of university graduates or new entrants entering labor market have been unemployed or underemployed for many years in Germany. Similarly, the problem of unemployed university graduates has been exacerbated in China since the expansion of the higher education system in 1999. Then again, most fresh graduates would like to pursue high wage jobs with a desirable working environment.

But Cali and Menon (2009) found that the growth of urban areas in India has had a systematic and significant poverty-reducing impact on surrounding rural areas due to increase in rural non-farm employment, urban-rural remittances, increase in rural land prices and decrease in consumer prices. Teal (2011) found that there was significant evidence of increasing returns to education in Africa, the most educated people often challenge a mismatch between their training and available jobs. Roubaud and Torelli (2013) pointed out that this gap might be why Africa's urban youth often seek to jobs in the informal rather than formal sector.



Source: Own Compilation

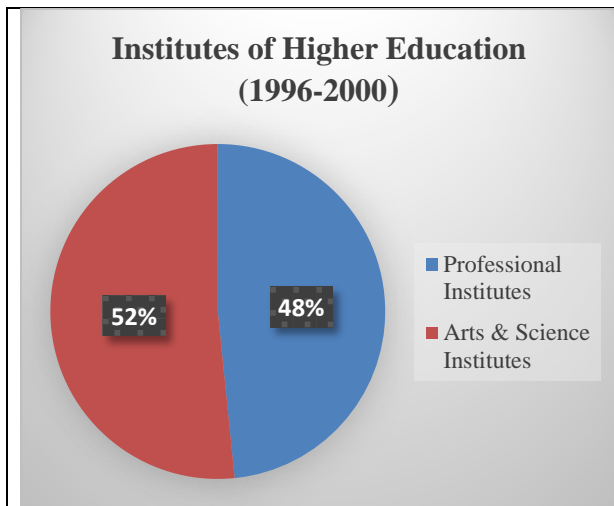
Figure 1 Conceptual Framework of the Study

Therefore the conceptual framework is based on the above illustration. Myanmar has a wealth of natural resources, a young and inexpensive workforce with strong expansion in construction, manufacturing, and services. Like other developing countries, the rapid growth of rural-urban migration has been a common feature of Myanmar. In addition, education enables girls and women to reach their full potential – in parity with boys and men – at their homes, communities, institutions of influence and workplaces. Even the overwhelming majority of who are engaged in agriculture, there is increased work available in manufacturing in urban centers to draw the young women away from the rural areas.

Results and Discussion by Tabulation, Graphs, and Pie Charts

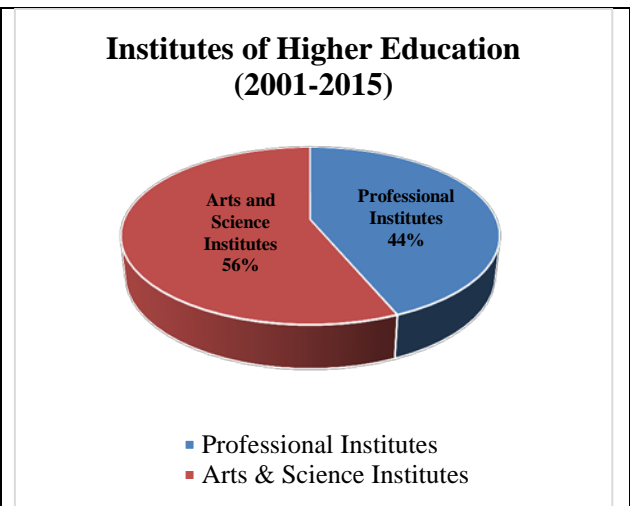
Figure (2) panel (a) presents the results for percentage shares of Professional Institutes (48%) and Arts and Science Institutes (52%) on average from 1996 to 2010. Panel (b) shows that there is increasing in the number of institutes in both institutes but the percentage shares of Arts and Science Institutes (56%) is higher than that of Professional Institutes (44%) from 2001 to 2015. In panel (c) and (d), the number of Professional Institutes and Arts and Science Institutes are shown from 1996 to 2000 and from 2001 to 2015. According to the results of figure (2) panel (e), 234,430 has been graduated (i.e., 24% of total enrollments in higher education) out of 730,060 enrollments per year in higher education on average from 1996 to 2015. Panel (f) presents percentage shares of rural and urban population in which 34.09 million people are living in rural areas (i.e., 70% of total population) and only 14.41 million people are in urban area (i.e., 30% of total population) on average from 1996 to 2015. According to the results of figure (2) panel (g), we can see that there is not too much difference in employment to population ratio by gender (52% for male and 48% for female). Likewise, figure (2) panel (h) shows that there is almost the same in percentage shares of self-employed by gender on average from 1996 to 2015.

Panel (a)



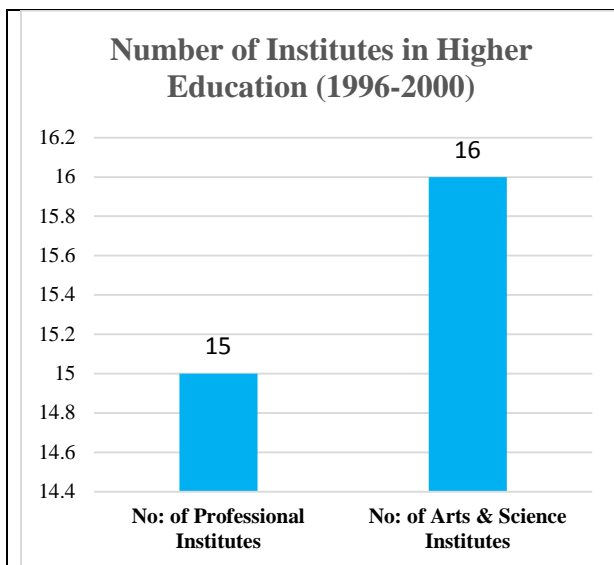
Source: Myanmar Statistical Year Book, CSO (2000-2015)

Panel (b)



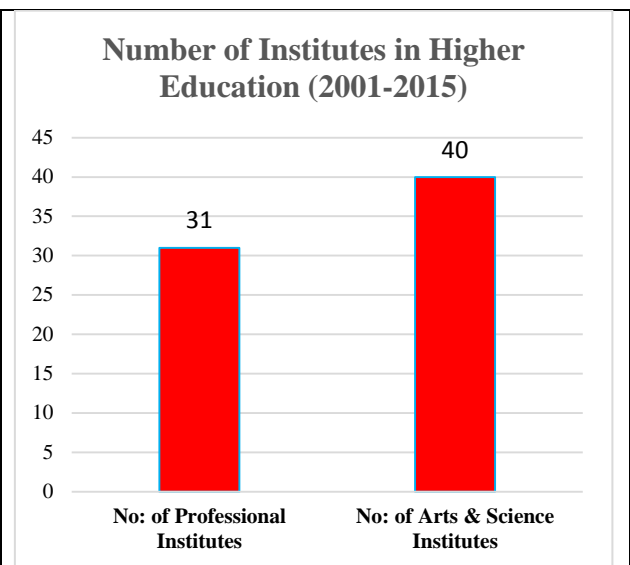
Source: Myanmar Statistical Year Book, CSO (2000-2015)

Panel (c)



Source: Myanmar Statistical Year Book, CSO (2000-2015)

Panel (d)



Source: Myanmar Statistical Year Book, CSO (2000-2015)

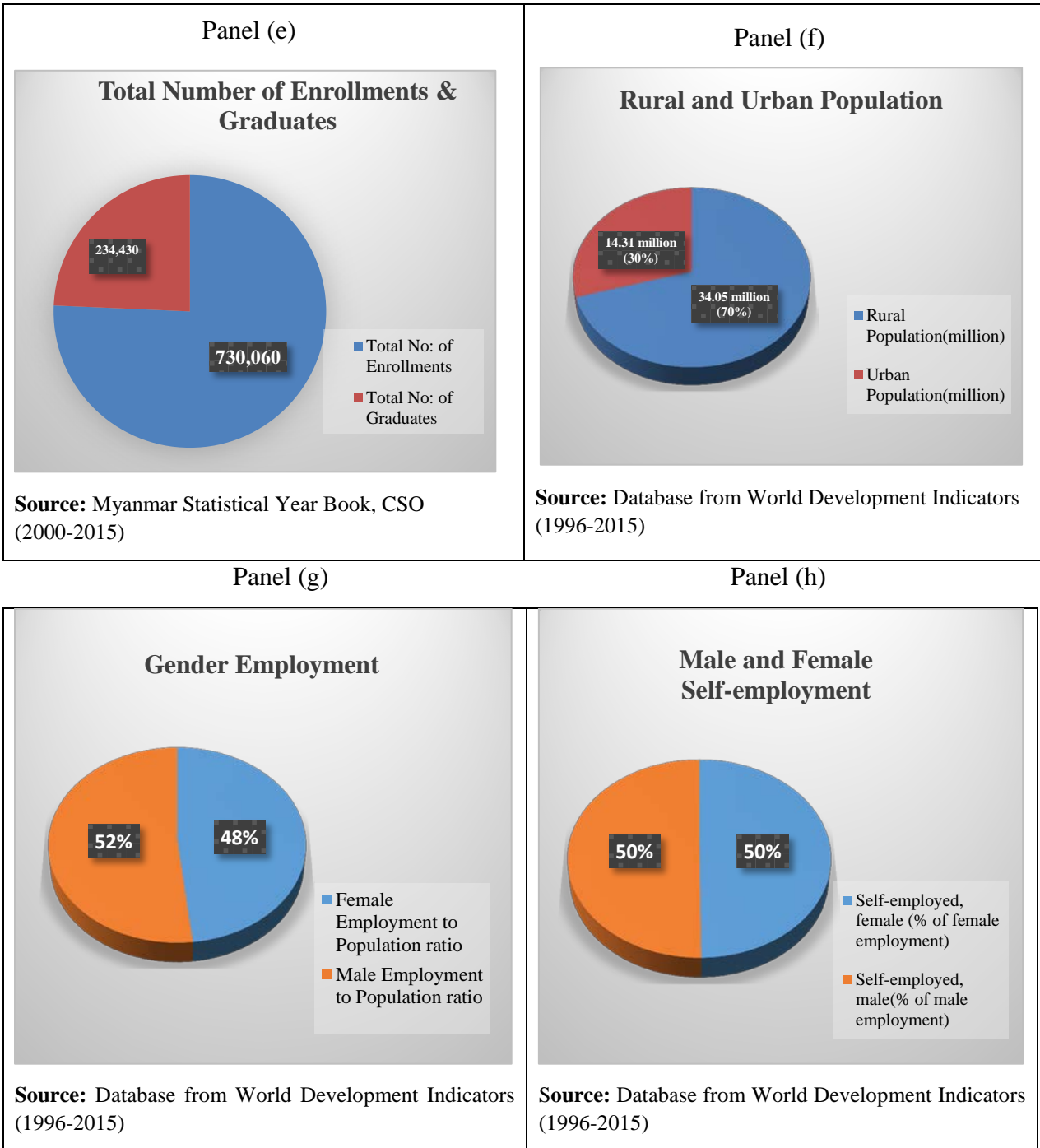


Figure 2 Pie Charts and Tabulation Results

The number of higher education institutions has been expanded since 1988. The following table indicates the number of higher education institutions in the 2014-2015 Academic Year.

Table 1 Higher Education Institutions

PROFESSIONAL INSTITUTES			
1	Yangon Medicine I	17	Myanmar Aerospace and Engineering
2	Yangon Medicine II	18	Yangon Institute of Economics
3	Mandalay Medicine	19	Monywa Institute of Economics
4	Magway Medicine	20	Meiktila Institute of Economics
5	Yangon Dental Medicine	21	Education, Yangon
6	Mandalay Dental Medicine	22	Education, Sagaing
7	Yangon Medical Technology	23	Agriculture
8	Mandalay Medical Technology	24	Forestry
9	Yangon Institute of Nursing	25	Veterinary Science
10	Mandalay Institute of Nursing	26	Computer
11	Yangon Institute of Pharmacy	27	Arts and Culture, Yangon
12	Mandalay Institute of Pharmacy	28	Arts and Culture, Mandalay
13	Magway Institute of Community Health	29	Myanmar Maritime
14	Public Health, Yangon	30	Myanmar Mercantile
15	Traditional Medicine	31	Marine College
16	Technological University/ Colleges/Institutes		
ARTS AND SCIENCE INSTITUTES			
1	Yangon University	21	National Management College
2	Mawlamyine University	22	Hinthada University
3	Patheingyi University	23	Yangon University of Foreign Languages
4	Mandalay University	24	Mandalay University of Foreign Languages
5	Magway University	25	Mandalay Evening Classes
6	Taunggyi University	26	Hpa-an University
7	Myittha University	27	Lashio University
8	Sittoung University	28	Kalay University
9	Monywa University	29	Bamaw University
10	University of Distance	30	Panglong University
11	Dagon University	31	Maubin University
12	Pyaw University	32	Myeik University
13	Meiktila University	33	Loikaw University
14	University of East Yangon	34	Kyaing Tong
15	Taungtha University	35	Bago University
16	Dawei University	36	Shwebo University
17	Yadanabon University	37	Sagaing University
18	Pakokku University	38	Degree Colleges
19	Kyaukse University	39	(Yenanyaung, Myingyan, Moehnyin,
20	University of West Yangon		Taung Goke, Mandalay, International
			Theravada)
		40	Buddhist Missionary University

Source: Myanmar Statistical Year Book, CSO (2015)

Regression Results and Discussion

For Model (1),

$$\text{METPR}^{\wedge} = 47.226 + 0.928 (\text{RP}) + 0.121 (\text{UP}) - 0.002 (\text{TNE}) + 0.003 (\text{TNG})$$

$$(0.000)^{***} \quad (0.000)^{***} \quad (0.015)^{**} \quad (0.008)^{***} \quad (0.005)^{***}$$

$$F(4,15) = 56.61 \quad \text{Prob} > F = 0.0000 \quad R^2 = 0.9379$$

From the Model (1) regression analysis, this is clear that there is a strong correlation between the dependent and independent variables. The value of R^2 shows that there is an around 93% variation in male employment to population ratio (METPR) due to all independent variables. The value of F is high with 0.0000 level of significance. It means that the variable used is fit for the model. It further explains that if there is a 1 million rise in rural population, METPR will be increased by 0.928% at 1% level of significant. In addition, if there is a 1 million rise in urban population, METPR will be increased by 0.121% at 5% level of significant. However, if there is an increase in a thousand numbers of total enrollments in higher education, METPR will be decreased by 0.002% at 1% level of significant. If there is an increase in a thousand numbers of total graduates in higher education, METPR will be increased by 0.003% at 1% level of significant.

Note that p value is significant at 10% (*), at 5% (**), and at 1% (***). The variance inflation factors (VIF) test is also exercised to fit the model specification and eliminate the multicollinearity problem. Hypothesis testing has been done for each model and Breusch-Pagan/Cook-Weisberg test for heteroskedasticity is also described to make sure the constant variance. All of the testing results for four models are shown in Appendix.

For Model (2),

$$\text{FETPR}^{\wedge} = 34.104 + 1.195 (\text{RP}) + 0.009 (\text{UP}) - 0.002 (\text{TNE}) + 0.003 (\text{TNG})$$

$$(0.000)^{***} \quad (0.000)^{***} \quad (0.873) \quad (0.027)^{**} \quad (0.019)^{**}$$

$$F(4,15) = 34.01 \quad \text{Prob} > F = 0.0000 \quad R^2 = 0.9007$$

According to model (2) result, R^2 and the value of F are high with 0.0000 level of significance. If there is a 1 million increase in rural population, female employment to employment ratio (FETPR) will be increased by 1.195 % at 1% level of significant. But there is no significant effect of urban population on FETPR even they are positively related. In addition, if there is an increase in a thousand number of total enrollments in higher education, FETPR will be decreased by 0.002% at 5% level of significant. If there is an increase in a thousand numbers of total graduates in higher education, FETPR will be increased by 0.003% at 5% level of significant.

For Model (3),

$$\text{MSE}^{\wedge} = 0.341 + 5.671 (\text{RP}) - 7.923 (\text{UP}) + 0.011 (\text{TNE}) - 0.019 (\text{TNG})$$

$$(0.988) \quad (0.000)^{***} \quad (0.000)^{***} \quad (0.002)^{***} \quad (0.001)^{***}$$

$$F(4, 15) = 772.34 \quad \text{Prob} > F = 0.0000 \quad R^2 = 0.9952$$

Similarly, R^2 and the value of F in model (3) are high with 0.0000 level of significance. If there is a 1 million increase in rural population, male self-employed (MSE) will be increased by 5.671 % at 1% level of significant. But if there is a 1 million increase in urban population, MSE

will be decreased by 7.923 % at 1% level of significant. If there is an increase in a thousand numbers of total enrollments in higher education, MSE will be increased by 0.011 % at 1% level of significant. If there is an increase in a thousand number of total graduates in higher education, MSE will be decreased by 0.019 % at 1% level of significant.

For Model (4),

$$\begin{aligned}
 FSE \wedge &= 49.967 + 3.758 (RP) - 6.904 (UP) + 0.011 (TNE) - 0.019 (TNG) \\
 &(0.051)^* \quad (0.000)^{***} \quad (0.000)^{***} \quad (0.002)^{***} \quad (0.001)^{***} \\
 F(4, 15) &= 614.68 \quad \text{Prob} > F = 0.0000 \quad R^2 = 0.9939
 \end{aligned}$$

Model (4) results show that R^2 and the value of F are high with 0.000 level of significance. It can be seen that the effects of higher education on female self-employed (FSE) in model (4) are nearly the same as shown in model (3). If there is a 1 million increase in rural population, FSE will be increased by 3.758 % at 1% level of significant. But if there is a 1 million increase in urban population, FSE will be decreased by 6.904 % at 1% level of significant.

Conclusion and Suggestions

This study only focuses on the effects of rural population, urban population, total number of enrollments and graduates in higher education on employment by gender in Myanmar from 1996 to 2015. There is a significant impact of rural population on four dependent variables in all models. Therefore whenever increase in rural population by one million leads to increase both male and female employments to population ratios by 0.928 % and 1.195 % as well as increase in both male and female self-employed by 5.671% and 3.758%, respectively. Except in model (2), an increase in rural population by one million leads to increase male employments to population ratios by 0.121 % and decrease in both male and female self-employed by 7.923 % and 6.904 %, respectively. Whenever increase in a thousand numbers of total enrollments in higher education reduces both male and female employments to population ratios by 0.002%. But there is a positively and significantly relationships between total number of enrollments and both male and female self-employed. Thus higher the number increases in total number of enrollments, greater the male self-employed and female self-employed by 0.011%.

There is also positive and significant effect of total number of graduates in higher education on both male and female employments to population ratios in Myanmar. When a thousand number of graduates in higher education increases, male employment to population ratio and female employment to population ratio also increase by 0.003%. However, total number of graduates in higher education is inversely related to both male and female self-employed in Myanmar. Therefore an increase in a thousand number of graduates in higher education leads to decrease male self-employed and female self-employed by 0.019%. This is because there is a gap between the total number of graduates 234,430 and total number of enrollments 730,060 (i.e., only 24% is graduates on average per year from 1996 to 2015) and this can be concluded that total number of graduates in higher education is much less than that of enrollments in higher education. So the percentage share of graduates should be increased to the desire level.

Indeed, urban population represents only 30% of total population in Myanmar and it cannot well define on female employment to population ratio (See in model 2). The female labor force participating rate at 50.6% has already lagged behind that of males at (85.6%) and gender inequality index for Myanmar (0.413) is far from a value of 1 signifies extreme inequality. In

general, the good point in this study indicates that there is not too much high gender disparity with respect to employment to population ratio and self-employed in Myanmar. Nevertheless, creation of better workplaces and communities need to reduce the cultural barriers to women staying in the labor force after marriage and childbirth in some work places. In addition, strategic policy should encourage young women especially in both rural and urban areas to improve the better access to education and working opportunities because increasing the labor force participation of women lead to a higher economic growth and development. If women are university graduates and post-graduate qualifications, opportunities for women to obtain employment in line with their high qualifications must be ensured. Moreover, the smaller number of total graduates relative to the total number of enrollments in higher education should be considered by finding the ways and policy instruments for creating better education together with skilled labor force for both male and female.

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Appendix

For Male

```
. reg metpr rp up tne tng
```

Source	SS	df	MS			
Model	9.72522911	4	2.43130728	Number of obs =	20	
Residual	.644280974	15	.042952085	F(4, 15) =	58.61	
Total	10.3695101	19	.545763689	Prob > F =	0.0000	
				R-squared =	0.9379	
				Adj R-squared =	0.9213	
				Root MSE =	.20725	

metpr	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
rp	.9287048	.1521959	6.10	0.000	.6043069 1.253103
up	.1210806	.0442815	2.73	0.015	.0286769 .2154443
tne	-.001782	.000584	-3.05	0.008	-.0030268 -.0005372
tng	.0030508	.0009404	3.24	0.005	.0010463 .0050553
_cons	47.22684	4.657244	10.14	0.000	37.30016 57.15352

```
. estat vif
```

Variable	VIF	1/VIF
tne	5.78	0.173662
rp	3.97	0.251702
tng	3.97	0.251806
up	3.57	0.279916
Mean VIF	4.32	

```
. test rp= up= tne= tng=0
```

(1) **rp - up = 0**
 (2) **rp - tne = 0**
 (3) **rp - tng = 0**
 (4) **rp = 0**

F(4, 15) = **58.61**
 Prob > F = **0.0000**

```
. estat hettest
```

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
 Ho: Constant variance
 Variables: fitted values of metpr

chi2(1) = **0.42**
 Prob > chi2 = **0.5165**

For Female

```
. reg fetpr rp up tne tng
```

Source	SS	df	MS			
Model	8.75974442	4	2.18993611	Number of obs =	20	
Residual	.965747018	15	.064383135	F(4, 15) =	34.01	
Total	9.72549144	19	.511867971	Prob > F =	0.0000	
				R-squared =	0.9007	
				Adj R-squared =	0.8742	
				Root MSE =	.25374	

fetpr	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
rp	1.195002	.1863361	6.41	0.000	.7978356 1.592168
up	.0088092	.0542146	0.16	0.873	-.1067464 .1243649
tne	-.0017483	.000715	-2.45	0.027	-.0032723 -.0002243
tng	.0030312	.0011514	2.63	0.019	.0005771 .0054854
_cons	34.10381	5.701945	5.98	0.000	21.9504 46.25722

```
. estat vif
```

Variable	VIF	1/VIF
tne	5.78	0.173662
rp	3.97	0.251702
tng	3.97	0.251806
up	3.57	0.279916
Mean VIF	4.32	

```
. test rp= tne= tng=0
```

(1) **rp - tne = 0**
 (2) **rp - tng = 0**
 (3) **rp = 0**

F(3, 15) = **14.43**
 Prob > F = **0.0001**

```
. estat hettest
```

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
 Ho: Constant variance
 Variables: fitted values of fetpr

chi2(1) = **1.26**
 Prob > chi2 = **0.2611**

For Male

```
. reg mse rp up tne tng
```

Source	SS	df	MS	
Model	3302.03425	4	825.658563	Number of obs = 20
Residual	16.0354854	15	1.06903236	F(4, 15) = 772.34
Total	3318.06974	19	174.666828	Prob > F = 0.0000
				R-squared = 0.9952
				Adj R-squared = 0.9939
				Root MSE = 1.0339

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
rp	5.670829	.7592877	7.47	0.000	4.052445 7.289212
up	-7.923665	.2209151	-35.87	0.000	-8.394534 -7.452795
tne	.0109567	.0029135	3.76	0.002	.0047467 .0171667
tng	-.0187856	.0046917	-4.00	0.001	-.0287858 -.0087853
_cons	.3406394	23.23445	0.01	0.988	-49.18242 49.8637

```
. estat vif
```

Variable	VIF	1/VIF
tne	5.76	0.173662
rp	3.97	0.251702
tng	3.97	0.251806
up	3.57	0.279916
Mean VIF	4.32	

```
. test rp= up= tne= tng=0
```

(1) rp - up = 0
(2) rp - tne = 0
(3) rp - tng = 0
(4) rp = 0

F(4, 15) = 772.34
Prob > F = 0.0000

```
. estat hettest
```

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of mse

chi2(1) = 0.55
Prob > chi2 = 0.4583

For Female

```
. reg fse rp up tne tng
```

Source	SS	df	MS	
Model	2694.24846	4	673.562115	Number of obs = 20
Residual	16.4369034	15	1.09579356	F(4, 15) = 614.68
Total	2710.68536	19	142.667651	Prob > F = 0.0000
				R-squared = 0.9939
				Adj R-squared = 0.9923
				Root MSE = 1.0468

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
rp	3.757674	.7687326	4.89	0.000	2.119159 5.396188
up	-6.904196	.2236631	-30.87	0.000	-7.380923 -6.42747
tne	.0112905	.0029498	3.83	0.002	.0050033 .0175778
tng	-.0185414	.0047501	-3.90	0.001	-.028666 -.0084167
_cons	49.96688	23.52347	2.12	0.051	-.1722029 100.106

```
. estat vif
```

Variable	VIF	1/VIF
tne	5.76	0.173662
rp	3.97	0.251702
tng	3.97	0.251806
up	3.57	0.279916
Mean VIF	4.32	

```
. test rp= up= tne= tng=0
```

(1) rp - up = 0
(2) rp - tne = 0
(3) rp - tng = 0
(4) rp = 0

F(4, 15) = 614.68
Prob > F = 0.0000

```
. estat hettest
```

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of fse

chi2(1) = 0.13
Prob > chi2 = 0.7194

INCOME INEQUALITY AMONG URBAN HOUSEHOLDS IN MANDALAY, MYANMAR

Su Su Myat¹, Aye Thu Htun²

Abstract

This paper studies income inequality among urban households in Mandalay which is the largest city in upper Myanmar. From the development perspective, poverty and inequality is one of the socioeconomic issues in Myanmar. In case of Myanmar, although only 30 percent of the population lives in urban areas, inequality levels in urban areas are higher than those in rural areas. Therefore, this study attempts to measure income inequality among urban households in Mandalay. The study is based on primary data obtained by surveying sample households in Mandalay. In measuring inequality, the study uses Gini coefficient and also it analyzes expenditure pattern of households, and debt burden of low-income households. The study found that in measuring income inequality in Mandalay, Gini coefficient is moderately low but households in bottom quintile are spending more than or almost all of their income on consumption expenditure and vulnerable to be in debt. One-fourth of households are in debt, having burden at shark rates.

Keywords: urban inequality, poverty, Gini coefficient, expenditure pattern

Introduction

Both theory and recent evidence have shown that income distribution have a significant impact on the growth process. Classical viewpoint underlined the positive effects of inequality for the growth process whereas the modern perspective has highlighted the potential negative effects of inequality on the growth process (Galor, 2009). Higher inequality is associated with worsening economic, social and environmental outcomes, as it hampers economic growth, fosters unrest, crime and social instability and undermines sustainable environmental governance. There has been growing recognition that inequality is an impediment to inclusive growth, social development and environmental sustainability.

Although poverty has been on a declining trend, reducing poverty and inequality is still challenging for Myanmar in tackling its development issues. Mandalay is the largest city in upper Myanmar and an increasingly growing commercial hub. In this context, it is worthwhile to study income inequality among urban households and their consumption expenditure pattern since income or consumption is closely linked with welfare and living standard of households.

Objective of the Study

The objectives of the study are to measure income inequality among urban households in Mandalay and to explore the consumption expenditure pattern among urban households in different levels of income.

Method of Study

The study is mainly based on descriptive method by using primary data obtained by surveying sample households in urban areas of Mandalay. In this study, structured questionnaire is used for survey and two-stage sampling was used for choosing sample households.

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Profile of Poverty and Inequality in Myanmar

In 2011, a group of international technical experts and advisors, working with the Government of Myanmar and international organization, estimated absolute poverty in Myanmar to have stood at 25.6 percent in 2009/10. In 2014, the World Bank estimated the poverty rate in 2010 at 37.5 percent. Therefore, absolute poverty in Myanmar is estimated to have been between 25.6 and 37.5 percent in 2010, with at least 70 percent of the poor living in rural areas and depending primarily on agriculture. The higher estimate is based on a broader welfare aggregate that includes spending on health care and the use value of asset, and on alternative assumptions on adult equivalence scales and spatial price deflators. Poverty rates vary across geographical areas, with poverty highest in many areas affected by conflict and the coastal areas (53.1 percent) and hill zones (40.9 percent) and lowest in the dry zones (29.5) percent. This is consistent with global findings of the impact of conflict on poverty. However, due to the population density, the incidence of poverty is concentrated also in the Delta and in the Dry Zone. Delta and Dry Zones are home to 64 percent of the poor of the country (World Bank Group, 2015).

Poverty in Myanmar's farms and villages (rural areas) is substantially higher than that in its towns and cities (urban areas): 38.8 percent of the rural population are estimated to be poor compared to 14.5 percent of those in its towns and cities while national poverty is (32.1) percent in 2015. According to the Systematic Country Diagnostic (SCD), many households live just above the poverty line and are vulnerable to falling back into poverty. SCD categorizes the poor into three groups: traditional, transitional and excluded poor. The traditional poor are heavily concentrated in rural areas, have very low levels of education and depend on agriculture for the livelihood. The transitional poor typically live in urban and peri-urban areas; have transitioned out of traditional rural livelihoods but still work as low-skill casual laborers. The "excluded" poor do not have access to opportunities for productive economic activity.

Despite higher poverty in rural area, higher inequality can be clearly seen in urban areas of Myanmar. Living standards have improved and poverty has declined between 2004/05, 2009/10 and 2015 (MOPF and World Bank, 2017a). The updated poverty analysis confirms the decline in poverty between 2004/05 and 2015. Poverty is estimated to be 32.1 percent in 2015, down from 48.2 percent in 2004/05. There are some households at the top of end of the distribution who show markedly different consumption patterns, in particular in their ownership of higher value durables. The majority of these households lives in cities, which contributed to increase the Gini coefficient in urban areas and cause an urban-rural gap in the level of inequality (Ministry of Planning & Finance and World Bank, 2017b). In 2015, Gini coefficient is 35 at national level, 38.6 for urban and 28.3 for rural areas.

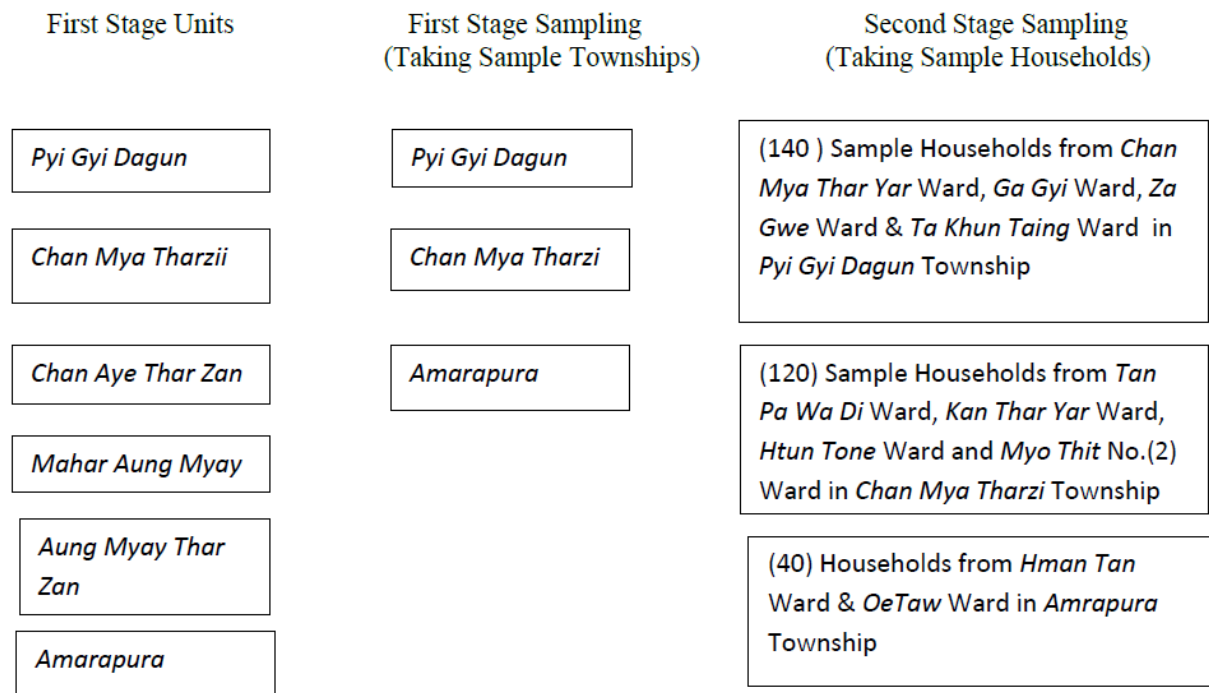
Results and Discussion

Urban Income Inequality in Mandalay

Mandalay District constitutes Mandalay City. Mandalay District consists of seven townships: *Pyigy Tagun*, *Mahar Aung Myay*, *Aung Myay Thar San*, *Chan Mya Thar Si*, *Chan Aye Thar San*, *Amarapura* and *Pathein Gyi*. However, Mandalay City covers only six urban townships because *Pathein Gyi* township is a rural area.

In this study, three urban townships in Mandalay District – *Pyigy Dagun*, *Chan Mya Tharzi* and *Amarapura* were selected for the survey. In these townships, selected wards are same

with the wards selected for Myanmar Living Conditions Survey (2017). The following figure depicts the survey framework.



Source: Author

Figure 1 Two-stage Sampling Frame

The figure mentioned above is the frame of two- stage sampling used for the study. In the first stage, (3) townships: *Pyi Gyi Dagun*, *Chan Mya Tharzi* and *Amarapura*¹ were selected out of (6) urban townships in Mandalay District. These are first stage sampling. For this study, sample wards from selected townships are the same wards which included in Myanmar Living Condition Survey (MLCS) 2017. Therefore, after the first stage sampling, sample households were selected from the selected wards. These wards include (4) wards from *Pyi Gyi Dagun* townships, (4) wards from *Chan Mya Tharzi* township, and (2) wards from *Amarapura* township. In the second stage of sampling, total (300) sample households² were selected. However, the number of respondent households is (280) because (20) households refused to answer the survey questionnaires and did not participate in the survey. Households³ which gave refusals were not filled by other households.

¹ See Township Profile in Appendix (A).

² Sample size is determined by using Cochran Sample Size Determination Formula for large population. For this study, required sample is 246 with the proportion of an attribute that is present in population is 0.2, 95 % confidence level, and 5% precision level.

³ Almost all of households which refused to answer survey questionnaire are the rich.

Demographic Factors of Survey Households

There is a close link between the demographic characteristics of a population and the distribution of income among its members. Table (1) presents the demographic factors of the sample households¹ of this study.

Table 1 Demographic Factors of Sample Households

<i>Age group</i>	Number	%
0-14	231	19.2
15-64	875	72.7
65 and above	97	8.1
Total Number of People in Sample Households	1203	100
<i>Sex</i>		
Male	539	44.8
Female	664	55.2
Total	1203	100
<i>Number of working People</i>		
Agriculture	-	-
Manufacture	236	38.2
Service	381	61.8
Total	617	100
<i>Education level of Household Heads</i>		
Monastic	41	14.6
Primary	32	11.4
Secondary	51	18.2
High School	47	16.8
University	25	8.9
Graduate	72	25.7
Post Graduate	12	4.4
Total	280	100
<i>Occupation of Household Heads</i>		
Casual workers	64	22.9
Pensioners	10	3.6
Employees in Government Sector	36	12.8
Employees in Private Sector	88	31.4
Owners of the retail business	37	13.2
Sellers/Vendors	45	16.1
Total	280	100

Source: Calculation based on Survey Data, 2018

¹ Household includes a person living alone or a group of people who live together as a single unit in the sense that they have common housekeeping arrangement- they share or are supported by a common budget.

According to Table (1), 19.2 percent of people in the sample households are at the age between 0 and 14 years, 72.7 percent of the people in the sample households are in working age group aged between 15 to 64 years, and the remaining 8.1 percent of people is at the age of 64 and above in this study. Regarding the sex of the population, 55.2 percent of people in sample households are female and 44.8 percent of people are male in this study. With respects to distribution of types of industry, 61.8 percent of working people in the sample households are working in service industry, the remaining 38.2 percent are working at manufacturing industry.

With respects to education level of household heads, most of households are graduates and represented by 25.7% of the heads in this study. The second largest group of heads is at secondary education level which represents 18.2% of the total heads and this group is followed by high school, monastic education, primary education, university level, and post graduate with 16.8%, 14.6%, 11.4%, 8.9%, and 4.4% respectively. With regards to the occupation of heads in his study, 31.5% of heads are working in private sector as the largest group, and 22.9% of heads are casual workers as the second largest group. These groups are followed by 16.1% of heads who are vendors/ sellers, and the smallest group, 3.6% of heads who are pensioners in this study.

According to the table mentioned above, among sample households, the number of people in the age group (0-14) is 231, the number of people in the working age group is 875 and the number of people aged 65 and above is 97. Therefore, child dependency ratio¹ is 26.4 and elderly dependency ratio² is 9.8. Both dependency ratios are lower than urban child dependency ratio 32.7 and urban elderly dependency ratio 11 of Myanmar estimated by Myanmar Living Condition Survey, 2017. Among sample households, total dependency ratio³ is 37.5 which is also lower than Myanmar's urban total dependency ratio 44.5.

Table 2 Number of Working People

	Number	%
Working People	617	51.3
Dependent (Actual) ⁴	586	48.7
Total	1203	100

Source: Calculation based on Survey Data, 2018

How many people are working and sharing their income within household and supporting the dependents in household is also the critical factor which can affect magnitude of inequality among households. It is found that total number of working people in sample households is (617) and accounts 51.3 percent of total number of people (2103) in sample households. It reflects the fact that roughly speaking, each working people is supporting one dependent of sample households in Mandalay City.

¹ The total number of children aged 0-14 divided by the working age population aged 15-64.

² The total number of the elder aged 65 and above divided by the working age population aged 15-64.

³ The total dependency ratio is the total number of dependents (0 to 14 plus 65 and older) divided by the working age population.

⁴ Dependent (Acutal) are those without job and actually dependent in household, not categorized by age.

Measuring Income Inequality

Income inequality in Mandalay City is measured in terms of the distribution of household income. While individual income is the simplest unit of analysis, a better alternative is to consider household, since the household is the locus of decisions on income getting and income spending of individual members. In measuring income inequality among households, household income is "equivalized" or adjusted for household size with the square root scale.

Common measures of inequality are the Gini coefficient – a measure of inequality that ranges from 0 in the case of “perfect equality” (where income is distributed evenly across the population) to 1 in the case of “perfect inequality” (where all income is earned by a single person) – and the S80/S20 income share ratio which refers to the ratio of average income of the top 20% to the average income of the bottom 20% of the income distribution.

The Gini coefficient is the most common and the single most important indicator of inequality because it does not just focus attention on the top share (decile or quintile) of incomes. Rather it considers the entire distribution of income. In that sense, the study uses Gini through quintile share approach to measuring inequality. This approach ranks every household's income from highest to lowest, and then separates the total number of households into five equal groups. In this study, household income includes all of the sources of income flowing into a household. To facilitate comparisons across households, household income is "quivalised" or adjusted for household size with the square root scale of household size. Household income is divided by the square root of household size to get the adjusted income for that household. This allows households of different sizes to be reasonably compared with each other.

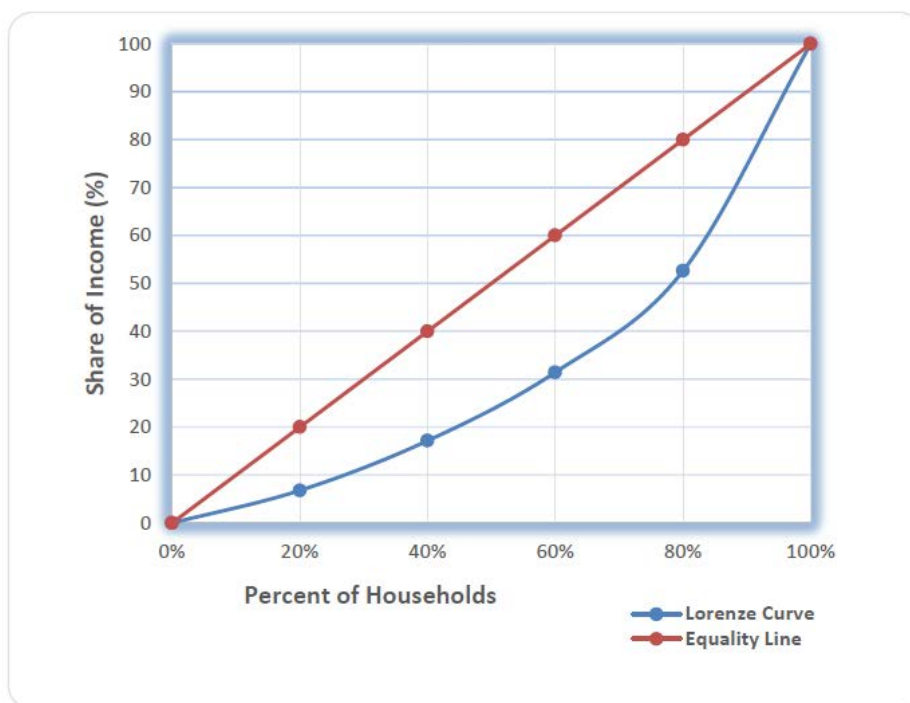
Table 3 Fraction of Income by Households

Fraction of Income	Fraction of Households	% of Households that is richer	Score ¹
0.07	0.2	0.8	0.12
0.10	0.2	0.6	0.15
0.14	0.2	0.4	0.14
0.21	0.2	0.2	0.13
0.47	0.2	0.0	0.09
Total Score			0.63

Source: Calculation based on survey data, 2018

Since Gini coefficient is (1- total score) , income inequality among urban households in Mandalay City is estimated to be 0.37 or 37 percent that is not much different from Gini coefficient of 38.6 percent in 2015 estimated by Ministry of Planning and Finance and World Bank. Income inequality in Mandalay is represented by Lorenz curve as shown in Figure (2).

¹ Score = Fraction of Income * (Fraction of Population + 2 * % of Population Richer)



Source: Graph is drawn by using calculated data shown in Table (3)

Figure 2 Lorenz Curve

As shown in Table (3) and Figure (2), the bottom 20 percent of households hold about 7 percent of total household income, the lower 40 percent of households hold 17 percent, the 60 percent of households holds 31 percent and the 80 percent of households hold 52 percent of total household income. Therefore, it can be concluded that the top 20 percent of households hold approximately 47 percent of household income. It can be seen that about half of total household income are in the hands of top 20 percent households.

Decomposition of Consumption Expenditure

The composition of consumption expenditures is different among households and varies depending on income level, numbers of students in households, number of people working paidjob or earning income. In this study, household consumption expenditures are separated into spending on food items and non-food items including education, health, housing and durables use like clothing and footwear. The following table shows the share of food spending and share of on-food spending in total consumption expenditure.

Table 4 Consumption Expenditure Share of Food and Non-food

Percent of Households	Share of Expenditure (%)	
	Food	Non-food
Top 20 % of Households	41.2	58.8
Fourth Quintile of Households	48.4	51.6
Third Quintile of Households	55.4	44.6
Second Quntile of Households	55.8	44.2
Bottom 20 % of Households	64.5	35.5

Source: Calculation based on Survey Data, 2018

According to Table (4), among households in the top quintile, the share of spending in total consumption expenditures is 41.2 percent on food and 58.8 percent on non-food items. Among households in the bottom quintile, out of consumption expenditure, the share of spending on food is 64.5 percent and the share of spending on non-food is 35.5 percent. The share of food expenditures is getting higher and share of non-food spending is getting lower in the lower quintiles whereas the share of food expenditures is lower and share of non-food spending is higher in the higher quintiles.

Table 5 Ratio of Consumption Expenditure to Household Income

Percent of Households	Consumption Expenditure to Household Income Ratio (%)
Top 20 % of Households	47.3
Fourth Quintile of Households	70.8
Third Quintile of Households	74.6
Second Quintile of Households	93.8
Bottom 20 % of Households	100.1

Source: Calculation based on Survey Data, 2018

As shown in the above table, among households in top quintile, consumption expenditure to household income is only 47.3 percent and this ratio is getting higher through lower quintiles and at the bottom, the ratio is 100.1 percent. Therefore, among households in bottom quintile, households spend more than income or almost all income on consumption expenditure. This reflects that these households difficult to stand on household income and might have been in debt or vulnerable to fall into the debt.

According to the survey, the consumption pattern varies between high income and low income households. High and middle income households usually have breakfast outside and sometimes have lunch and dinner at restaurant. Food baskets of low income households rarely include notorious food, fruits, snacks and beverages like soft drinks and the food baskets of high income households are full of such items. Moreover, education expense is also much different between high income and low income households. Students from high income households have higher private tuition fees than those from low income households¹. Most low income households have outstanding debt and it is found that their reasons for taking loans are to pay education and health expenditure. Low income households with students, especially studying at high school level and/or with catastrophic health expenditure are most likely to have debt burden. It is also found that some households take loans for consumption.

Debt Burden on Low-income Households

As mentioned above, some household inevitably have to use lesser share of expenditure on food because of debt burden, paying interest and repaying the loan. Although the survey did not investigate their loan amount, the study attempts to highlight on socioeconomic issues of

¹ Taking private tuition has entrenched in learning environment of Myanmar students. Studying at private hostels and private schools are costly and an average household cannot afford to send their children to study at private education hostels and private schools.

low-income households with debt burden. According to the survey, 26 percent of sample households are in debt (73 household out of 280 sample households).

Lack of access to formal financial services is a root cause of socioeconomic issues putting on low-income households. Since these households do not have access to formal financial sector, they rely on informal money lenders. They take loans at high interest rate ranging from 2 percent to 20 percent per month. They do not need to give collateral for getting loan from loan sharks. Some lenders usually deduct the interest for first month from the principal (the original sum of borrowed money) when loan is lent out. Repaying in installment is not allowed and the borrower must pay interest until the loan is fully repaid. These households can take loan at 2.5 percent per month of lower interest rate from microfinance institutions. However, the loans are lent to a group of borrowers, not to individuals, and the borrowers in the group must guarantee each other. Such a system makes the borrowers difficult to find group partner borrowers.

The study found that some share of household income drain into money lenders, and households in debt have lesser share of income for consuming other food and non-food items. Some people who were heavily in debt and insolvency inevitably fled. In such case, socioeconomic effect of debt burden is costly.

Conclusion

The study could not emphasize on analyzing poverty and inequality trend over time because of the lack of historical data on poverty and inequality for Mandalay City and Mandalay Region. However, the snapshot of income inequality could be developed with a view to exploring to what extent income distribution is uneven among urban households in Mandalay.

Among urban households in Mandalay, income inequality is moderately low Gini coefficient standing at 0.37 or 37 percent. It can be seen that about half of total household income are in the hands of top 20 percent households. Moreover, low-income in the lower and bottom quintiles have extremely high consumption expenditure to household income ratio; and one-fourth of households are in debt, reflecting the fact that these households might have been in the vicious cycles of debt burden and vulnerable to be in debt.

In summing, it should be noted that Gini is an overall measurement and the study of inequality should be much more focused on the real life of households in depth. In the policy perspective, deeper understanding of why the poor are poor and how much is the severity of poverty will lead to better solution towards reducing poverty and inequality in the society.

Acknowledgements

First of all, we would like to express our sincere thanks to our colleagues from Department of Economics, Mandalay University and colleagues from Department of Economics, Mandalay University of Distance Education for their participation in conducting survey in Mandalay. Without their support and help, our study will not be accomplished. We are deeply grateful to U Than Zaw, Deputy Director General, Central Statistical Organization for his support which facilitates our survey framework.

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Appendix (A)

Township Profile

Township	Population	No. of Households	No. of Wards	No. of Village Tracts
<i>Pyi Gyi Dagun</i>	Total (237,698)	48,875	16	-
	Male (120,794)			
	Female (116,904)			
<i>Chan Mya Thar Zi</i>	Total (283,781)	53,047	14	-
	Male (137,528)			
	Female (146,253)			
<i>Amarapura</i>	Total (237,618)	49,626	9	42
	Male (114,481)			
	Female (123,137)			

Source: The 2014 Myanmar Population and Housing Census, Pyigyidagun Township Report, Chan Mya Tharzi Township Report and Amarapura Township Report (October, 2017) Department of Population, Ministry of Labor, Immigration and Population.

Appendix (B)

Questionnaire for Household Survey

1. Members of Household

Sr.	M/F	Age	Occupation/ Student	Education	Salary/Wages/ Income	Remark
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

Notes: Domestic Helper will be included in the above table (But please take a note in remark column)

2. Housing

- (Own / Rental)
- Single Family Home (- storeyed)
- Apartment (- storeyed Building) / Live at () Floor

Roof (Bamboo/ Clay/ Zinc)

Wall (Wood/ Concrete/ Others)

Floor (Wood/ Brick/ Others)

3. Expenditure (Monthly) (Just Average)

Food	Expense	Non-food	Expense
Rice		Fuel for cooking	
Meat/Fish		Clothing & Footwear	
Vegetable		School/Education	
Oil		Training (Computer, Language)	
		Donation/Offer	
Eat out (Breakfast/ Lunch/Dinner)		Interest Payment	
Confectionary (Biscuit, Bread, Chocolate)		Transportation (Fuel, Rent, ..)	
Packaged Food (Breakfast Cereals, Instant Noodles, Canned food)		Telecommunications (Fixed Phone Bill Mobile Phone Bill, Internet Fees (i.e., ADSL)	
		Rent (Housing)	
		Utilities (Electricity, Water & Sanitation)	
Beverages (Non- alcoholic) (Juice, soft drinks, ready-to- drink coffee/tea)		Personal Hygiene (Bath and Shower Products, Laundry products , Mouthwash, Toothbrushes Toothpaste)	
Beverages (alcoholic) (Beer, Whisky, Wine)		Salary of Domestic Helper	
Tobacco (Cigarettes, Cigars, Tobacco)		Healthcare and Fitness	
		Entertainment & Holidays	

4. Saving

Saving (Monthly? / Sometimes?)

Group Savings..... Informal

Cooperative Microfinance

Savings and Loans Association (At work)

Savings at Bank (Bank deposit)

Buying Stocks/ T-Bonds/T-Bills

Others

Interest Received per month

Interest Rate

5. Borrowing/ Debt

- Purpose: For Business (Start-up/ Expansion)
- For Health / Medical Treatment / Hospitalization
- For school expense
- For repaying old debt
- For consumption
- For others / social

Source of Loan : Friends / Relatives/ Parents

- Business partner
- Money Lender (Informal)
- Daily Refund (*Nay-pyan-toe*)
- Cooperative
- Saving & Loan Association
- Pawn shop (Licensed)
- Microfinance / Microcredit
- Bank
- Others

Interest Payment per month

Interest Rate

Repayment Period

ANALYSIS ON THE EFFECTS OF ECONOMIC AND SOCIAL EXPENDITURE ON ECONOMIC GROWTH IN MYANMAR (1980-2014)*

Naw Htee Mue Loe Htoo¹

Abstract

This study analyzes the effects of economic and social expenditure on economic growth in Myanmar and formulates an appropriate policy implication for improving the limited financial resources in order to achieve economic growth in Myanmar. Using secondary data covering the period 1980 to 2014, the study applies the Economic Analysis of Time Series and the Dynamic Model of ARDL (Auto Regressive Distributed Lag Model) as the main analytical tools to investigate the effect of public expenditure on economic growth. Several notable findings are obtained from this study. Firstly, the result reveals that all expenditure components and economic growth are co-integrated and they establish a long run equilibrium relationship. Secondly, this study finds that, the economic expenditure such as spending on agriculture, infrastructure, and spending on processing and manufacturing sectors properly achieved the outcomes of economic growth in the short run thereby boosting the larger impact on the long run economic growth. In the third, this study discovers that social spending such as spending on health sector significantly contributes to promoting on economic growth not only in the short run but also in the long- run. On the other hand, spending on education does not capable to generate the direct effect on improving productivity and more than that, it does not contribute to the long run effect on economic growth. Based on these findings, the study provides for the policy implications that spending allocation should be more concentrated on the direct productive activities than indirect productive activities. Besides, spending allocation should be based on efficiency and effectiveness in allocation process. Moreover, a well-defined expenditure policy that pursued effective management of resources in the development process is needed to consider. Finally, it should be ensured budgeting in term of the coordination between the development plan objectives and the budgetary process.

Keywords: Public Spending; Economic and Social Expenditure; Economic Growth; Budget, Fiscal Policy, Auto Regressive Distributed Lag Model; Time Series Analysis.

Introduction

There is no doubt that the fiscal instruments became an essential tool to create opportunity for widening the base at which developing countries could grow with a sense of urgency. Among fiscal instruments, government spending is very important instrument for developing countries to achieve accelerated economic growth and sustainable development. In this regard, studying empirically the impact of government spending on economic growth has paramount importance to draw important policy implications among developing countries.

Myanmar is one of the developing countries and it is also ASEAN member countries. Currently, Myanmar is undergoing macroeconomic adjustment and struggling for its economic development with a new transition to abreast with other countries. To achieve development, it is realized that without the supportive factor of the public spending, the policy for development cannot be achieved. In fact, theory related to public spending described that the relationship between government and economic growth has not been without controversy.

By examining the past economic history of Myanmar, at one time before 1988, Myanmar exercised a planned economy where the size of government expenditure had increased with a

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* Best Paper Award Winning Paper in Economics (2019)

slow process during the years of the planned economy. After abandoning of the central planning economy, Myanmar started to adopt the market-oriented economy in 1989 with the efforts of the government SLORC; later it was known as SPDC after 1997 up to 2011. Then USDC government took place and moved the economy toward the transition to parliamentary democracy. Presently, with the new government NLD, Myanmar is now moving to parliamentary democracy.

The fact here is that to introduce the market oriented economy, there were many reforms in every sectors are badly needs for Myanmar to drive the economy to be line with the new market economy in that period. This fact leads to the role of government to become prominent in implementing and establishing of the market economy. The government had undertaken a serious of comprehensive reforms to achieve smooth transition and large functions of and then growing government has to place on better economic performance. However, how much public spending that had been used effect on growth and then to support development; it is important to analyze the using of public expenditure. It is also needed to monitor the linkage between trends in the levels and composition of government expenditures, and to assess the causes of this change over time. Moreover, it is even more important to investigate the effect of relative contributions of various expenditures to economic growth. In this way, the outcomes will provide us an important information for more efficient targeting of using limited resource and even often declining financial resources in the future of Myanmar. For this reason, this study addresses those issues and tries to analyze the impact of public spending on economic growth by using the national data.

Objectives of the Study

The objectives of the study are to investigate whether the economic and social expenditures contribute to economic growth in Myanmar and then to formulate an appropriate policy implication for improving the limited financial resources to achieve economic growth of Myanmar.

Scope and limitation of the Study

This study emphasizes mainly on economic spending and social spending. The economic spending includes spending on agricultural sector, infrastructure and processing and manufacturing sector. The social spending consists of spending on education and health sectors. The classification of the types of spending is based on not only theories but also based on the definition of the World Bank and IMF. Due to data biased, the analysis of this study covers only the period from 1980 to 2014.

Method of Study

This study explores two main empirical analyses. The first analysis tries to investigate the impact of economic spending on economic growth and the second analysis examines the effect of social spending on economic growth. With respect to the methodology, this study employs (i) the econometric model of Time Series Analysis, (ii) Bound Test to Cointegration of ARDL Approach, (iii) Error Correction Method of Auto Regressive Distributed Lag model (ECM of ARDL) and (iv) the Diagnostic Tests.

(i) Time series analysis

Firstly, this study employs the econometric model of time series analysis because before proceed to the analysis by using ARDL model, it is necessary to check whether the series are stationary or non-stationary since the non-stationary of time series data causes an enduring problem in empirical analysis. To avoid estimating and getting spurious results, the study intends to conduct the test for stationary. All variables in this study are tested for stationary using Augmented Dicky- Fuller (ADF) test, look out for stationarity, and establish the order of integration.

(ii) Bound Test to Co-integration of ARDL Approach

In order to determine whether there is a long run equilibrium relationship among the unit root variables in a given model, the bound testing of the ARDL approach is used. The estimators for the bound test are expressed as follow.

$$\Delta Y_t = \beta_0 + \sum \beta_i \Delta y_{t-i} + \sum \gamma_j \Delta x_{1t-j} + \sum \delta_k \Delta x_{2t-k} + \theta_0 y_{t-1} + \theta_1 x_{1t-1} + \theta_2 x_{2t-1} + e_t$$

The null hypothesis (H_0): $\theta_0 = \theta_1 = \theta_2 = \theta_3 = 0$ which implies that there is no co-integration

The alternative hypothesis (H_1): $\theta_0 = \theta_1 = \theta_2 = \theta_3 \neq 0$ which indicates there is co-integration. The rule for the bound test is that if the computed F-value is greater than the upper critical value, the null hypothesis is rejected and the conclusion is that there is a co-integrating relationship between the variables.

(iii) ARDL Model: Auto Regressive Distributed Lag Model

Then, in order to empirically analyze the impact of government spending on economic growth for the two analyses, the dynamic econometric model of ARDL (ECM of Auto Regressive Distributed lag Model) is applied for each analysis in this study. The general form of equation of ARDL (p,q) model followed by this study is as follows.

$$y_t = \beta_0 + \beta_1 y_{t-1} + \dots + \beta_p y_{t-p} + \alpha_0 x_t + \alpha_1 x_{t-1} + \alpha_2 x_{t-2} + \dots + \alpha_q x_{t-q} + \varepsilon_t$$

The basic form of ARDL model is characterized by having lags of the dependent variable as well as lags of other variables, as the regressors. A dependent variable, y, and the explanatory variables are x_1 and x_2 .

(iv) Diagnostic Tests

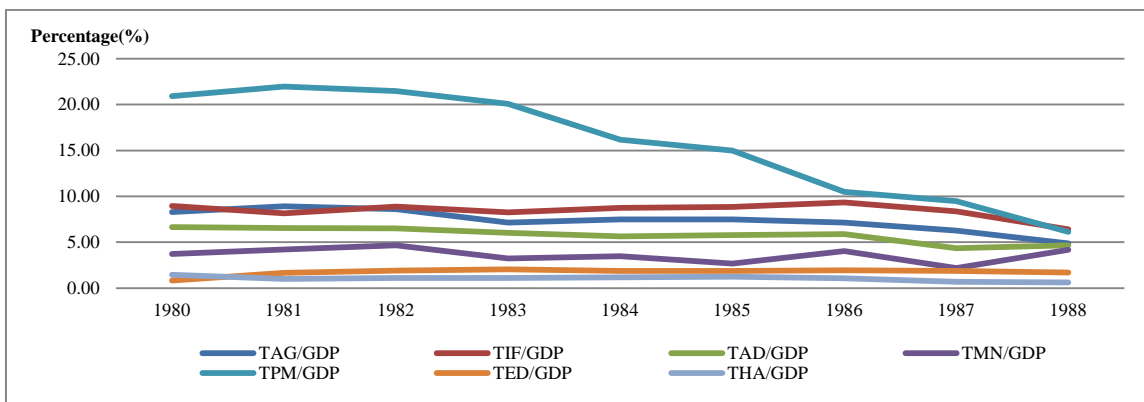
After the estimation of the model, the Residual Diagnostic Tests are needed to determine whether the model has the goodness of fit, stability and efficiency. Therefore, the diagnostic tests namely LM- test, Heteroskedasticity test, Ramsey RESET test, Normality Test and Stability Test are utilized to examine the results of the estimated model.

Source of Data

This study uses secondary data and they are collected from the annual reports of Financial, Economic and Social Conditions released from the Ministry of National Planning and Economic Development (*MNPED*). Moreover, the related theories and the empirical studies relevant to this study are obtained from various sources such as libraries, reference books, and internet websites.

The Size and the Patterns of Public Spending in Various Components of the Economy (1980-1988)

The period 1980 to 1988 was followed by the end of the Fourth Four-year Plan (1982/83 - 1985/86) and the Fifth Four Year Plan (1986/87-1989/90). During the Socialist era, the government wished to define the long-term objectives of the plan and to establish priorities, ideology, economic strategy and techniques, and to adopt appropriate economic policies. The plan intended to increase in output of agriculture, livestock and fishery with two times, forestry and mining with one half times, transport and communication with four times, manufacturing and processing and power six times. The main expectation was that the economic structure of the country would be transformed from an agricultural country to an agriculture-based industrial country. This fact led to the role of government to become a conspicuous in uplifting the economy and the share of spending had distributed based on the relative importance of each economic sector in the economy. Figure (1) shows the size, trends and patterns of government spending in various component of the economy during the last fourth and fifth four years plan of socialist era from 1980 to 1988.



Source: Calculation based on the secondary data from Annual Reports of Financial, Economic and Social Conditions (MNPED)

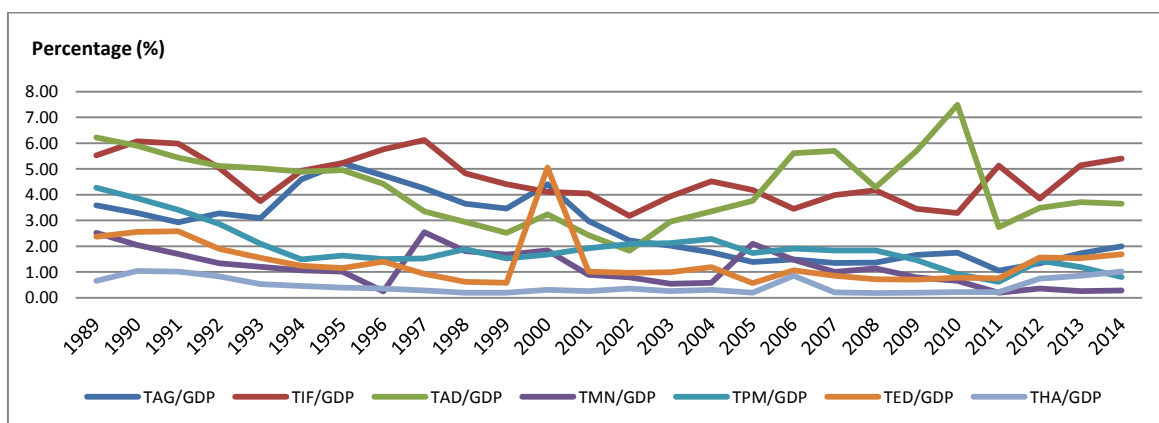
Figure 1 The Size of Public Spending in Various Component of the Economy (1980-1988)
(Spending as a percentage of Real GDP)

Among the sectors, manufacturing and processing sector received the lion share of spending then followed by agricultural sector and infrastructure. The share of public spending on manufacturing and processing sector was over 20% of GDP which was the highest share from 1980 to 1983. After that, the share of spending had been decreasing over the years. On the other hand, the share of spending on infrastructure and agriculture received at around at 9 % of GDP while the share of spending on education and health was relatively low as compare to the share of other sectors.

The Size, Trends and Patterns of Public Spending in Various Components of the Economy (1989-2014)

The period after 1989 was known as the SLORC (the State Law and Order Restoration Council) and later it was named as SPDC (State Peace and Development Council) in 1997. The government laid down economic, political and objectives and tried to build a nation as all round development of the nation under a market oriented system in order to establish a modern

developed nation. A long with these objectives, the government laid down the annual plan again and put an effort to upgrade the development of each economic sector of the economy. Correspondingly, the share of spending on each economic sector has been increasing substantially in those periods. Figure (2) elaborates the changes of the sizes and trends of public spending on various components of the economy over years, from 1989 to 2014.



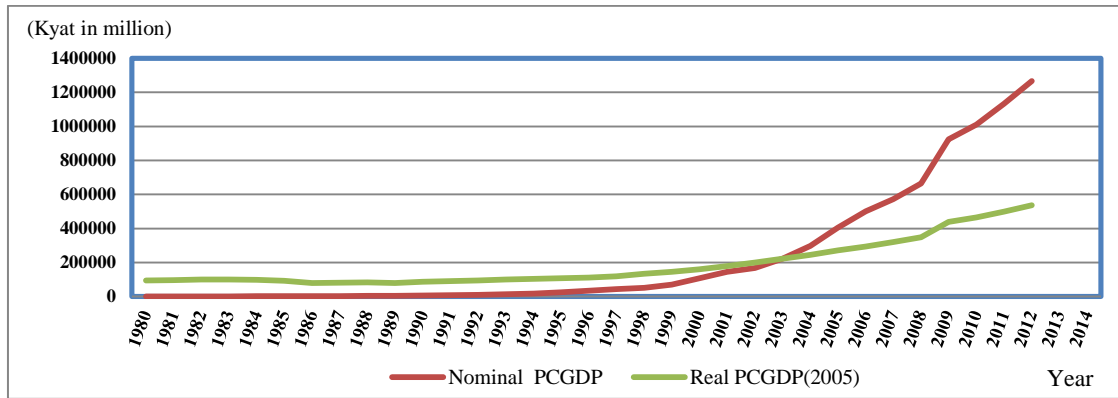
Source: Calculation based on the secondary data from Annual Reports of Financial, Economic and Social Conditions (MNPED)

Figure 2 The Size of Spending in Various Components of the Economy (1989-2014) (Government spending as a percentage of Real GDP)

The figure demonstrates that the emphasis given by the government on the development of agriculture was not only a move in the right direction but was also in line with a market-oriented policy. Moreover, to build a modern developed nation, to achieve balanced regional development for all state, to promote the peace and tranquility in the country and to stabilize and revitalize of the economy; the massive development had been made immensely under SPDC period with increasing used of spending and investment in each sector. However, since the level of available government revenues was too low to support the spending needed, this fact became key challenges to finance for economic development. Thus, the patterns of spending allocation from 1989 to 2014 obviously shows that the allocation patterns are mostly based on government’s priorities and objectives. The top two sectors receiving expenditures were administrative sector and infrastructure sector. Both sectors received the lion’s share of spending allocation overtime. On the other hand, the share of public spending received by agricultural sector has been increasing gradually in those periods as well. The size of spending in term of ratio of spending to GDP was relatively high in sectors such as agriculture, infrastructure and administration. However, as compared to the other sectors, the ratio of spending to GDP was relatively low in the social sectors such as education and health. Similarly, the spending share of mining, and processing and manufacturing was smaller than the share of other sectors.

Overview of Economic Performance: GDP and Annual Growth Rate of GDP (1980-2014)

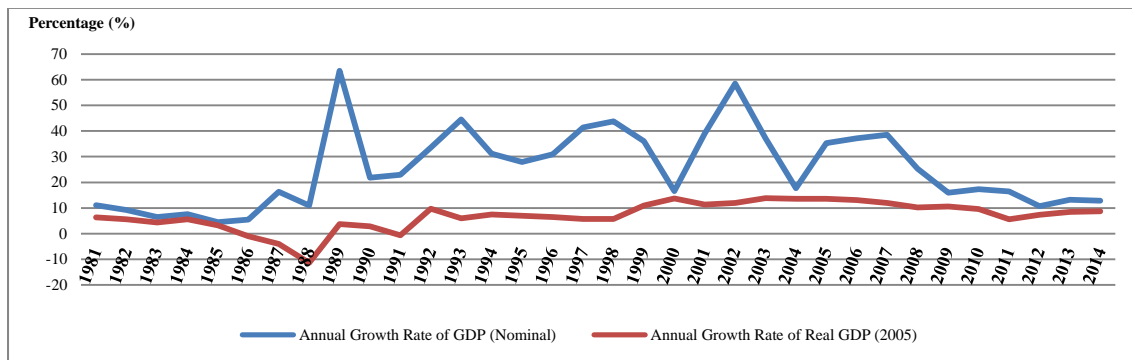
Figure (3) reflects the economic performance of Myanmar in term of per capita GDP from 1980 to 2014. This seems impressive, however, in real term; the real per capita GDP was lower than nominal per capita GDP. Real per capita GDP did not increase substantially as much as its nominal value despite it had increasing trend.



Source: Calculation based on the secondary data from Annual Reports of Financial, Economic and Social Conditions (MNPED)

Figure 3 The Trends of Economic Performance in Term of Nominal and Real Per Capita GDP (1980-2014)

Figure (4) describes annual growth rate of GDP in terms of nominal and real GDP from 1980 to 2014. An annual growth rate of real GDP has negative growth rate in some years during the near end of socialist periods in 1986 at -1.06%, in 1987 at -4% and in 1988 at -11% respectively. Those periods reflected at the near end of the socialist era and those negative growth rates corresponded to the severe political and economic instability. Since the economy was extremely in a bad shape, which pulled down the GDP to negative growth rate. Further, an annual Growth Rate of real GDP has negative growth again in 1991 at -0.6% percent. Because of the low saving and investment, inflation and resource gap from the period after 1989, the negative growth rate appeared again in 1991. Overall, annual growth rate in term of real GDP had not risen substantially.



Source: Calculation based on the secondary data from Annual Reports of Financial, Economic and Social Conditions (MNPED)

Note (1):The annual series of nominal GDP is converted to the real GDP by using 2005 as a base year.

Figure 4 Annual Growth Rate of GDP in Terms of Nominal and Real GDP (1980-2014)

Related Theories and Theoretical Framework for Analysis

In order to assess the impact of public spending on economic growth in Myanmar from 1980 to 2014, this research follows the theoretical framework of the Keynesian Model. The model implies that an expansion of government expenditures accelerate economic growth. The Keynesian Theoretical Framework is expressed as:

$$\text{Aggregate Demand: (AD): } \text{GDP} = C + I + G + (X - M)$$

C denotes total consumption expenditure. I denotes total investment expenditure. G stands for the total government expenditure. X-M refers to total value of Net export and import. Among the Keynesian expenditure components, one of the components of government expenditure (G) is the key interested variable in this study and the dynamic effect of G on GDP will be observed and explored in this study. Thus, the main part of Theoretical Framework for analysis generally can be expressed as;

$$GDP_t = f (GEXP_t)$$

Where: GDP_t= Gross Domestic Product

GEXP_t = Government Expenditure in each sector and t= year

Conceptual Framework for the Analysis

Based on the theoretical framework, this study constructs the conceptual framework for examining the impact of economic and social expenditures on economic growth as follow.

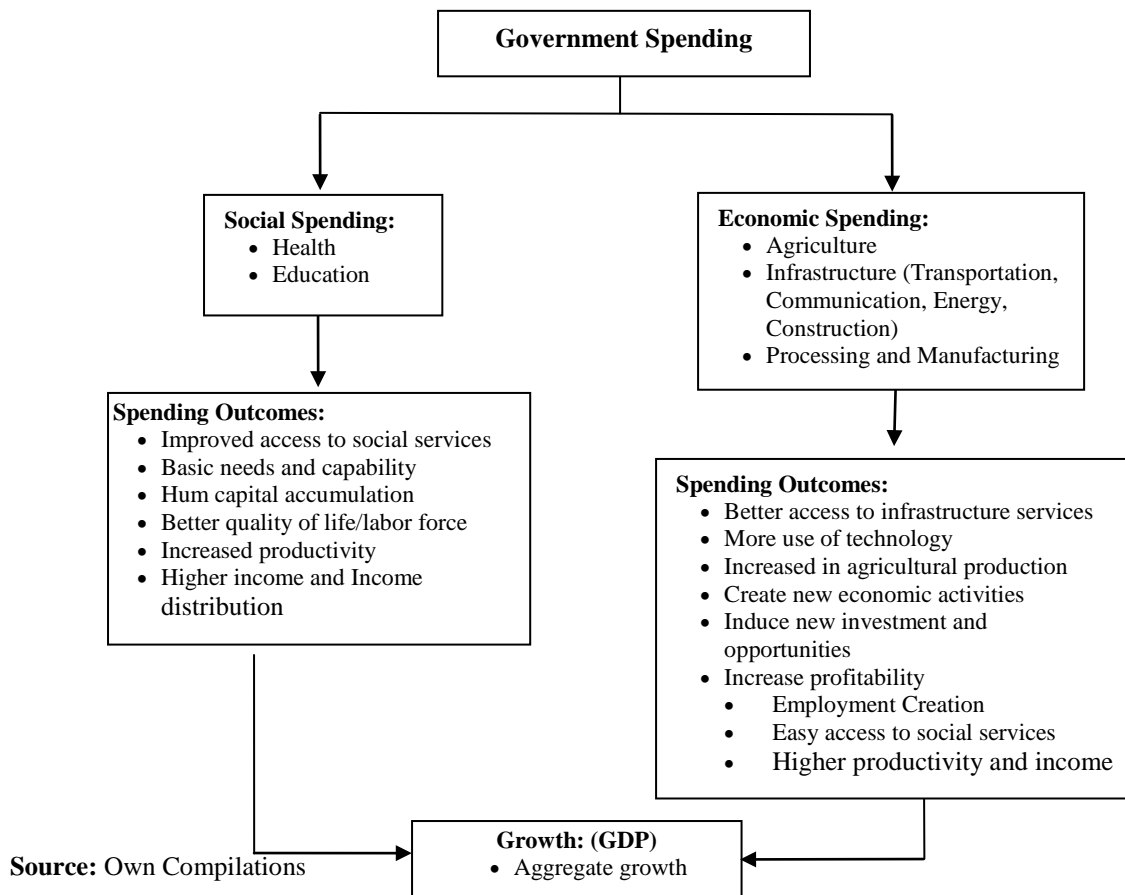


Figure 5 Framework for the Analysis of the Impact of Public Expenditures on Economic Growth

According to the analytical framework, public spending namely economic expenditure and social expenditure effects a country’s economic growth through many different channels. The framework implies that the outcomes of the total expenditures of government that are allocated by each sector play very important role for economic development.

The Empirical Analysis

I. The First Analysis on the Estimation of the Impact of Economic Spending on Economic Growth (1980-2014)

The first analysis is to investigate the impact of economic spending namely spending on agricultural sector, infrastructure, processing and manufacturing sector on economic growth. In order to analyze the impact economic spending on growth, the study designates the dependent variable as real per capita GDP ($LNRPCGDP_t$), which is a proxy of economic growth, and the independent variables are the spending on agricultural sector ($LNTAG_t$), spending on infrastructure ($LNTIF_t$), and spending on processing and manufacturing sector ($LNTPM_t$). In this analysis, the two dummies D_{Stru} and D_{2000} are included. One dummy is D_{Stru} , which figures out the effect of structural change after 1989. The reason for including this dummy is that to see whether there is the effect of market-oriented economy contributed to the economic growth via spending allocation. Another dummy is D_{2000} and it generally denotes the economic spending that has been increasing after the year 2000, and the effect of this dummy is taken into account in this model. Moreover, government total consumption expenditure (LNC_t) is used as a control variable in this model because which can also indirectly effect on economic growth through spending allocation.

Moreover, in order to observe the changes of slope of the trend of GDP due to the change in spending in some significant year, the interaction term between spending and the year that has significant feature is also tested by using slope dummy. However, the effect of the interaction term causes the residual serial correlation among the series. Therefore, this variable is dropped so that which can improve the relationship between the dependent and the dynamic regressors. After fitting all the variables, unit root testing, lag-structure determination and bound testing are done for the first analysis. Then, the ARDL model is employed in the estimation for the first analysis. The results of short run and long run effect of the first analysis is presented in table (1).

Table 1 The Results of the ARDL Long Run and ARDL-ECM Short Run Dynamic Adjustment between Economic Spending and Economic Growth (1980-2014)

The Short Run Effect of Economic Spending on Economic Growth				
Dependent Variables: LNRPCGDPt				
Independent Variables	Coefficient	Std error	T Statistics	Prob.
$\Delta LNPCGDP_{t-1}$	0.664483***	0.082067	8.096800	0.0000
$\Delta LNTAG_t$	0.112287***	0.027967	4.014957	0.0009
$\Delta LNTAG_{t-1}$	0.062845**	0.024832	2.530793	0.0215
$\Delta LNTIF_t$	0.065004**	0.024637	2.638415	0.0173
$\Delta LNTIF_{t-1}$	-0.107993***	0.028891	-3.737976	0.0016
$\Delta LNTPM_t$	0.031630	0.020294	1.558623	0.1375
ΔLNC_t	0.078876**	0.029715	2.654460	0.0167
ΔLNC_{t-1}	-0.320810***	0.041469	-7.736043	0.0000
ΔD_{Stru}	0.159748***	0.024149	6.615201	0.0000
D_{2000}	0.036808	0.021744	1.692788	0.1087
$D_{2000t-1}$	-0.097890***	0.028285	-3.460867	0.0030
ECT_{t-1}	-0.359448***	0.048450	-7.419018	0.0000
(Cointeq = $LNPCGDP(0.1955*LNTAG+0.4007*LNTIF+ 0.1141*LNTPM +0.1636*LNC +0.4297*D_{Stru}+0.3732 D_{2000}^*)$)				

The Long Run Effect of Economic Spending on Economic Growth				
Independent Variables	Coefficient	Std error	T Statistics	Prob.
<i>LNTAGt</i>	0.195458**	0.069811	2.799812	0.0123
<i>LNTIFt</i>	0.400732***	0.115193	3.478769	0.0029
<i>LNTPMt</i>	0.114080**	0.050661	2.251829	0.0378
<i>LNCt</i>	0.163622**	0.071707	2.281813	0.0357
<i>DStru</i>	0.429727***	0.099595	4.314750	0.0005
<i>D2000</i>	0.373246***	0.078917	4.729597	0.0002

Source: Author calculation

Note: (1) ***, **, * represent the p-values are significant at 1%, 5% and 10% level, respectively

Note (2): Unit root testing, Bound test and ARDL model for the first analysis is presented in Appendix (ii), (iii) (A) & (iv) (A), respectively.

The main variable the error correction term (ECT_{t-1}) in table indicates the speed of adjustment which restores the equilibrium in the dynamic model. The coefficient of ECM- (λ) shows how quickly or slowly variables return to equilibrium, and it should have a statistically significant coefficient with a negative sign. The result in table reported that the p-value of (ECT_{t-1}) is highly significant at 1% and the estimated coefficient of the error correction term (ECT_{t-1}) has expected negative sign. Moreover, the magnitude of estimated coefficient of (ECT_{t-1}) is equal to (-0.359448), which suggests that the deviation from the long-term path is corrected by 36% after one period shock over time. This implies that any disequilibrium between the economic spending and real per capita GDP can be corrected and thus the adjustment process restores back the real per capita GDP to its initial position. This indication strongly shows the expected result.

Among the variables, firstly, the last year value of real per capita GDP supports to the current year value of real per capita GDP since its p-value is significant at 1% (0.0000) and it has positive sign. Hence, a one percent increases in the last year real per capita GDP causes the current year of real per capita GDP to increase at 0.7%.

With regard to spending on agriculture, both p-value of estimated short run parameter and p-value of long run coefficient of spending on agriculture are strongly significant at 1% and 5% level respectively with positive influence on economic growth. More specifically, in the short run, a one percent increase in the current-year expenditure on agricultural sector leads to a 0.11% increases in economic growth and a one percent increase the previous year expenditure on agriculture causes the 0.06% increase in economic growth. While the long run effect shows that a one percent increase in expenditure on agriculture contributes to a 0.20% increase in economic growth in the long run. The result strongly shows that there is a positive significant relationship between the government expenditure on agriculture and economic growth not only in the short run but also in the long-run. In this case, the result shows that the effect of long run agricultural spending is larger than the short run effect. This fact implies that the performance of the agricultural sector as a whole from 1980 to 2014 including both periods of a part of socialist-era and market-oriented economy had been touched upon in connection with the overall performance of the economy.

With respect to spending on infrastructure, both p-values of estimated short run parameter of current year expenditure and p-value of long run coefficient are strongly significant at 5% and 1% level respectively. More specifically, in the short term, a one percent increase in current year expenditure of infrastructure leads to a 0.07% increase in economic growth while the long run

effect shows that a one percent increase in expenditure on infrastructure contributes to a 0.40 % increase in economic growth in the long term. This result shows that there is no small achievement of infrastructure sector in economic growth and it implies that government expenditure on infrastructure properly achieved the outcomes of infrastructure development in the short run thereby boosting the larger impact on the long run economic growth. This finding is similar to some studies such as Ashauer 1989; Devarajan and Vinay 1993; Sutherland et al. 2009. Their studies described that increased expenditure on the main infrastructure such as transport and communication had a powerful explanatory role in economic growth and generated modest economic growth.

However, one surprising results has shown that an increase in the previous year expenditure of both infrastructure and consumption have negative significant relationship to the economic growth in the short run. The possibility is that one year after an increase in infrastructure and consumption spending may cause a temporary inflation only a short period, and in turn, due to the effect of inflation, which may cause a negative influence to the real per capita GDP. Because the portion of spending allocation to infrastructure and household spending on consumption are relatively large as compare to other spending. On the other hands, an increase in spending on these components may cause inflation and this effect possibly crowds out the private investment and in turn leads to a lower GDP in a short period.

With respect to spending on processing and manufacturing sector, the result reported that the p-value of estimated short run parameter of current year expenditure is not significant while the p-value of the estimated long run coefficient is significant at 5% level. By this mean, the spending on processing and manufacturing sector could not generate the short run effect on economic growth. Indeed, the government had been made a number of attempts to improve the processing and manufacturing sector, however, the success were hampered by poor management, low capacity utilization and the shortage of foreign exchange which may be the fact that there is no the short run effect . However, the public investment in this sector contributed to the long run effect on economic growth. The result described that a one percent increase in spending on processing and manufacturing contributed to an increase in GDP at 0.11% in the long-run. Thus, the development of the processing and manufacturing sector can contributed to the long run economic growth.

A dummy (D_{Stru}) that portrays the effect of market oriented economy after 1988/89 contributes to the economic growth. It implies that the effect of market oriented economy contribute to economic growth not only in the short run but also in the long run with a positive relationship. This fact shows that in the long-run the market-oriented economic system contributed indirectly rather than directly to economic growth through the overall effect of changes in the economic spending policy. Moreover, an increase in expenditure after 2000 supports the economic growth to increase in the long run.

To sum up, the result of the first analysis illustrated that the bound test result confirms that all variables such as economic spending and economic growth are co-integrated, they move together in the long –run, and they established equilibrium relationship. Moreover, the highly significant of the error correction term (ECT_{t-1}) is further proofs that the deviation from the long run path can be corrected strongly, and which moves the equilibrium back to the initial equilibrium, and there is an existence of a stable long-term relationship among economic spending and economic growth. Further, the result reported that government-spending allocation

to agriculture, infrastructure and processing and manufacturing sector strongly contributed to both short run and long run positive effect promoting on economic growth.

Table 2 Diagnostic Tests Results of the First Analysis

Sr No.	Tests	F- Statistics	Probability
i.	LM test for Serial Correlation (Breusch-Godfrey Serial Correlation LM Test)	1.581443	0.2381
ii.	Heteroskedasticity Test (Breusch-Pagan-Godfrey)	0.734230	0.7281
iii.	Ramsey RESET Test	0.842986	0.3722
iv.	Normality Test (Jacque-Bera statistics)	0.752603	0.686395
v.	Stability Test (Cumulative Sum of Recursive Residuals)	The plot of CUSUM statistics stays within the critical bounds of 5% significance level	

Source: Author calculation

Note (1) ***, **, * represent the p-values are significant at 1%, 5% and 10% level, respectively.

Since the p-value of LM test is 23.81% which is greater than 5% significant level. It is accepted the null hypothesis that there is no serial correlation among the residual series in the estimated model. The results of Breusch-Pagan-Godfrey of heteroskedasticity test described that no heteroskedasticity since the probability of Chi-Square are greater than 5% significant level, which means that the variances of the error terms are constant. Thus, null hypothesis of no heteroskedasticity is accepted. The Ramsey RESET test shows no omitted variables in the model and there is a functional form are generating among the variables since p-value of 37.22 % is greater than 0.05 significant levels. Regarding the normality test, Jacque-Bera statistics with value of 0.752603 and its probability value of 68.6% are greater than 5% significant level. As the plot of CUSUM remains within the critical value-line, this reflects the presence of stability of the estimated parameters between economic spending and economic growth. As the estimated model passed all test, this means that the model has goodness of fit and well equipped with its efficiency and stability.

II. The Second Analysis on the Estimation of the Impact of Social Spending on Economic Growth (1980-2014)

The Second analysis is to examine the effect of social spending such as spending on education (LNEDU_t) and health (LNTHA_t) on economic growth (LNRPCGDP_t). Accordingly, the independent variables are spending on education-sector (LNEDU_t) and spending on health-sector (LNTHA_t) and the dependent variable is real per capita GDP (LNRPCGDP_t). Three dummies such as D₂₀₀₀, D₂₀₀₆ and D_{Stru} are considered in this analysis in order to observe their significant feature in the model. The dummy variable D₂₀₀₀ is denoted as spending on education that was significantly high in the year 2000. D₂₀₀₆ represents health expenditure that was very high in the year 2006. Finally, D_{Stru} stands for structural change after 1989, which reflects the economy with market oriented economic system. Moreover, the total consumption expenditure (LNC_t) is used as a control variable since this expenditure directly influence on the economic

growth. After determining the variables, then, required procedures have done for the ARDL estimation. The detail results for the second analysis is presented in table (3).

Table 3 The ARDL Long Run and ARDL-ECM Short Run Dynamic Adjustment between Social Spending and Economic Growth (1980-2014)

The Result of the Short Run Effect of Social Spending on Economic Growth				
Dependent Variables: LNRPCGDpt				
Independent Variables	Coefficient	Std error	T Statistics	Prob.
Δ LNPCGDpt	0.301322*	0.163270	1.845548	0.0848
Δ LNTEDt	-0.154897***	0.036070	-4.294352	0.0006
Δ LNTEDt-1	0.042602**	0.015825	2.692136	0.0167
Δ LNTHA _t	0.121578***	0.028917	4.204327	0.0008
Δ LNTHA _{t-1}	-0.026554*	0.013408	-1.980518	0.0663
Δ LNC _t	0.099137**	0.041894	2.366359	0.0318
Δ LNC _{t-1}	-0.296841***	0.043879	-6.764961	0.0000
Δ DStru	0.131336***	0.040132	3.272583	0.0051
Δ D2000	0.306980***	0.075578	4.061777	0.0010
Δ D2000 _{t-1}	0.114804	0.075215	1.526338	0.1477
Δ D2006	-0.158229**	0.051180	-3.091592	0.0074
C	0.253687***	0.038465	6.595348	0.0000
ECT_{t-1}	-0.165953***	0.025157	-6.596818	0.0000
(Cointeq=LNPCGDp- (-1.8373*LNTED+1.2587*LNTHA+ 1.1155*LNC+0.7372 *DStru + 0.8948*D2000 - 0.2759*D2006)				
The Result of the Long Run Effect of Social Spending on Economic Growth				
Independent Variables	Coefficient	Std error	T Statistics	Prob.
LNTED _t	-1.837370*	0.923076	-1.988547	0.0653
LNTHA _t	1.258667**	0.560276	2.246511	0.0402
LNTC _t	1.115508**	0.381559	2.923551	0.0105
DStru	0.737264*	0.362412	2.034325	0.0600
D2000	0.894860	0.532097	1.681759	0.1133
D2006	-0.275983	0.395183	-0.698368	0.4956

Source: Author calculation

Note (1) ***, **, * represent the p-values are significant at 1%, 5% and 10% level, respectively.

Note (2) Unit root testing, Bound test and ARDL model for the second analysis is illustrated in Appendix (ii), (iii) (B) & (v) (B), respectively.

The upper part of table elaborates the result of the short run effect of social spending on economic growth while lower part of the table shows the result of the long run effect of social spending on economic growth. Beginning with the results of error correction term (ECT_{t-1}), the coefficient of the lagged error-correction term is significant at the 1% level with the expected negative sign. This implies that the speed of adjustment moves back the economic growth to its initial equilibrium position. As the magnitude of the coefficient of error term is (-0.165953), the speed of adjustment corrects the disequilibrium which is occurred owing to the external factors at 16.6% in each period and it moves back the equilibrium toward the original position. This

implies that any change in the social spending due to a shock causes the occurring of the disequilibrium but this can be corrected by the adjustment of 17% in each period and then, which restores back the real GDP growth to its initial equilibrium. This evidence strongly shows the expected result.

Regarding the real per capita GDP, the result shows that the previous year value of real per capita GDP supports to the current year value of real per capita GDP since its p-value of estimated coefficient of real per capita GDP is significant at 10% (0.0848) and it has positive sign. This means that a one percent increases in the last year real per capita GDP causes the current year of real per capita GDP to increase at 3%.

With regard to education expenditure, in the short term, although the current year of education expenditure has a negative relationship to the real per capita GDP, the last year investment in education has a positive relationship to real per capita GDP. More specifically, a one percent increase in the current year of education expenditure causes economic growth to decline by 0.15% but a one percent increase in the previous year of education expenditure causes economic growth to increase by 0.04%. This implies that even the current year expenditure on education contributes to the negative influence on economic growth; the previous year of investment on education can generate positive effect on economic growth. However, the long run effect describes that education expenditure does not capture a positive contributing to economic growth, instead; it has negative relationship to the real per capita GDP. The result reported that, in the long-run; a one percent increase in spending on education leads to a decrease in 1.84 percent in real per capita GDP.

Regarding education, the government has done much for the promotion of education in both periods not only in the basic education level but also in higher education level. In order to make sure for the quality of education, the government efforts have been made to enhance education in all possible ways. Amongst, by establishing the new universities, institutes, degree colleges, and colleges, by encouraging university teachers to obtain doctorate degrees, and by increasing the number of faculty member had increased were remarkably performance. However, the negative relations between the education expenditure and economic growth has shown that government expenditure in this sector possibly concentrated more on unproductive activities rather than productive activities thus education expenditure could not contribute to the long run economic growth. To some extent, that the quality of education is related to budgetary expenditure, but education expenditure in Myanmar had been declining since 1996/97 over the year except 2000, which was less than 1% of GDP. Within the limited budgetary expenditure, it is necessary to focus on the effective and efficient use of expenditure in the development of education sector so that it can ensure a positive contribution to economic growth.

On the other hand, surprisingly it has found that there is a strong relationship between health expenditure and economic growth both in the short run and in the long-run. Even though the health sector received the smallest portion of the budgetary expenditure at less than 1% of GDP over the years, it contributed to the positive promoting effect on growth. The results describes that a one percent increase in the current year of health expenditure causes economic growth to increase by 0.12% but a one percent increase in the previous year of health expenditure leads economic growth to decrease by 0.03%. This implies that although the current year expenditure on health contributed to the positive influence on economic growth; the previous year of investment on health can generate a negative effect on economic growth. However, in

the long-run, the results reported that government spending on health contributed to economic growth since the p values for the long run coefficient is significant at 5%. The long run result reveals that a one percent increases in health expenditure leads to an increase in 1.26% on economic growth.

Among the dummy variables, the variables such as D_{2000} , which is significantly increased in education expenditure in the year 2000, generates only the short-run effect on economic growth since the p-values is significant at 1% level but it does not contribute to the long run economic growth. Likewise, D_{2006} , which is a sharply increase in the government expenditure on health in 2006, does not contribute to a promoting effect on economic growth instead it generates a negative relations to economic growth not only in short run but also in the long run.

Finally, the dummy variable (D_{Stru}) which describes the effect of market-oriented economy after 1989 has both the short-run and long run effect on the economic growth since p value is significant at 5% and 10% level respectively. Thus, a change in economic structure provides a positive impact on economic growth through the allocation of spending on health and education both short run and long-run.

To sum up, in the second analysis, with regard to social spending, the literatures such as Shenggen Fan et al 2003; Fan, Zhang, and Rao 2004; Adeniyi and Bashir 2011 found out that health and education expenditure enhance economic growth. Whereas Biletska and Rajaram 2007 found that insufficient allocation towards education and health has been critical constraint on growth rates. Fundamentally, health and education are the basic objectives of economic development and both generate indirect effect on economic development. Greater health capital may improve the return to investments in education in part and on one hand greater education capital may improve the return to investments in health. Thus, it is necessary to reconsider the allocation of the government budget to the social sectors based on the perspective of less priority to more priority in order to achieve the long impact and to improve the social development in Myanmar.

Table 4 Diagnostic Tests Results of Second Analysis

Sr No	Tests	F- Statistics	Probability
i	LM test for Serial Correlation (Breusch-Godfrey Serial Correlation LM Test)	0.052800	0.9488
ii	Heteroskedasticity Test (Breusch-Pagan-Godfrey)	0.908965	0.5786
iii	Normality Test (Jacque-Bera statistics)	0.053986	0.973366
iv	Ramsey RESET Test	2.939673	0.1085
iv	Stability Test (Cumulative Sum of Recursive Residuals)	The plot of CUSUM statistics stays within the critical bounds of 5% significance level	

Source: Author calculation

Note (1) ***, **, * represent the p-values are significant at 1%, 5% and 10% level, respectively

Since the p-value of LM test is 94.88%, which is greater than 5% significant level, it is accepted that there is no serial correlation among the residual series in the estimated model. The

results of Breusch-Pagan-Godfrey of heteroskedasticity test described that there is no heteroscedasticity. In this estimated model, the Ramsey RESET test shows that there is no omitted variable and there is a functional form are generating among the variables. Jacque-Bera statistics with value of 0.053986 and probability value of 97.3%, which is greater than 0.05 significant levels. Thus, this implies that the null hypothesis is accepted and the residual is normally distributed. In addition, the stability test shows that the plot of CUSUM and CUSUM square of residuals remain within the critical value-line within the critical bounds of 5% significance level which is represented by a pair of straight lines drawn at the 5% level of significance. All the remaining statistics reflects the presence of stability of the estimated parameters between social spending and economic growth. This is the indication of the stability and there is non- existence of uncertainty in this model.

Conclusion

Based on those findings the following possible policy implications are drawn by this study.

- ***With respect to infrastructure***, the study reveals that government expenditure on infrastructure properly has achieved the outcomes of infrastructure development in the short run thereby boosting the larger impact on the long run economic growth. However, to precede further development, the government should strengthen the ongoing allocation spending to infrastructure in order to grip further achievement of infrastructure development. As the quality of infrastructure is one of the challenges included in infrastructure needs in Myanmar; In long run, however, both the funding for maintenance and new investment for infrastructure are further needed thus huge financing requirement may cause a challenge for the country. Hence, it is necessary to consider this fact because limited fiscal resources of a country restrict the ability to allocate adequate operations and maintenance budgets for infrastructure assets.
- ***Regarding agricultural sector***, it is no doubt that agricultural sector is still a significant contributor to the economic output, export earnings and employment in Myanmar not only in the past, and in the present but also in the future. Currently, it contributes to the share of GDP nearly at 32%, and 20% of export earnings. It shares of employment at (60) % but it is much higher. Nevertheless, in term of the budgetary allocation, this sector received a less share less than 2% of GDP of spending over 35 years within the limited accessibility of the share of spending. However, the result of this study strongly confirms that spending on agricultural sector eventually generates a positive relation to economic growth not only in the short run but also in the long-run. This fact implies that the performance of the agricultural sector as a whole from 1980 to 2014 including both periods of socialist and market-oriented economy had been touched upon in connection with the overall performance of the economy.
- Thus, this study suggests that that the focused of government expenditure on the agricultural sector should not be overlooked, instead, the government should direct its spending efforts in productive means, through increase, improve and encourage the output of the agricultural sector and it should improve the spending allocation in the agricultural sector geared towards further economic growth. More than that, the upgrading and enhancing this sector can ensure better avenues for job creation, overall growth and higher GDP level.

- **Processing and Manufacturing Sector:** There are many constraints and issues still confronting in the manufacturing sector such as access to financing, access to markets, labor, supplies and technologies, regulations and taxation, infrastructure and utilities and conditions for international business. Indeed the nature of manufacturing and processing sector is included in capital intensive as well, which need a large amount of capital to upgrade manufacturing sector. However, the state investment was not sufficient for nurturing this sector because the spending allocation to this sector was relatively low at less than 2% of GDP. These constraints may cause a weak stimulation on the short run effect on economic growth as the result has found.
- However, the result of this study surprisingly found that public investment in this sector nevertheless contributed to the long run effect on economic growth. This result highlights a good channel to fulfill what the needs in this sector to pursue further economic development. Currently, the manufacturing sector has shown some positive signs of development, following various development strategies such as fostering the growth of private sector, coupled with second phase and the third phase reforms since 2011. Given the importance role of SMEs and Foreign Direct Investment in the manufacturing sector, policy measures which help to foster the growth of the SMEs and FDI will be crucial in the development of the manufacturing sector in the near future.
- **Health and education:** The study proves that the long run effect of education expenditure generates a negative relationship to the economic growth while the long run effect of health expenditure provides a positive impact on economic growth even both produce a short run positive significant impact on economic growth. Thus, to achieve social development, it should be needed to raise the overall level of spending on health and education and other social needs and their share in total government spending.
- **Moreover, with regard to education,** the study discovers that the negative relationship between education expenditure and economic growth. This possibly implies that the spending on this sector had more concentrated on unproductive activities rather than the productive activities. Thus, to obtain adequate resources for improving education outcomes and creating a better-educated workforce, education needs to be given a much higher priority in national policy discussions and in the budget allocation process.
- In analyzing the size, trend and compositions of public expenditure from 1980 to 2014, the study discovered that there was overall growth in the total government expenditures; however, within the limited availability of budget, the shares of public spending allocated to and received in each sector varied over the years. In addition, the allocation pattern is much more depended on the interests and the priorities of the government rather than based on the relative important contribution of the sector. Therefore, to sum up, in order to achieve both the short run and long run equilibrium and to boost economic growth:
 - Government should address the factors causing the negative impact on economic growth based on insufficient and ineffective use of the spending.
 - Government should concentrate more on the *unproductive activities* than *productive activities especially* to agricultural sector in spending allocation.

- Government should encourage and should be given much emphasizing on reallocation of expenditure on health and education to formulate for promoting human capital formation as well as ensuring that the resources are properly managed and used for the development of education and health services.
- Government should have a well-defined expenditure policy which pursued and effective management of resources in the development process since poor government's fiscal and monetary policies of the country may also impede economic growth.
- Government should ensure fiscal policy that contributes to economic growth in term of coordination between the development plan objectives and budget process.

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AN ANALYSIS ON NATURAL RUBBER PRODUCTION AND EXPORT IN MYANMAR

Ei Ei Phyoe*

Abstract

Aims of this study are to find out the status of production and export of natural rubber in Myanmar and to explore the factors which influence on its export and production. To analyze the factors affecting on the production and export, multiple regression model (OLS) has employed and two models were constructed to examine. Status of Myanmar's rubber export and production and influencing determinants were analyzed for 35 years ranging from 1983 to 2018. The production and export of natural rubber grew significantly after the adoption of market-oriented economic policy in late 1988. Major locations of natural rubber resources are from Mon state and Taninthayi division, Karen and Rakhine state accounting for 17%, 19.5%, 27% and 19.7% of rubber supplied respectively. Determining the variables affecting natural rubber production and export in Myanmar, the overall results revealed that production of natural rubber is significantly influenced by the export, import and land acres of rubber with the significant level of probability value 5%, 1% and 0% respectively. Moreover, findings showed that natural rubber export is positively influenced by control variable such as exchange rate while the import is negatively associated with the export.

Keywords– Myanmar, Production, Export, Ordinary Least Squares (OLS)

JEL Classification – E23, F14, C30, C32

Introduction

Natural rubber has been called “White Gold”, also known as India rubber is precious and profitable as gold and economically important in the world wide. The use of rubber has been increasing with the rising world population and higher demand for automobiles demanding natural rubber. The global demand for natural rubber is estimated to increase at an average annual growth rate between 3.4% and 3.7 from the year 2018 to 2024 (Yai 2019).

Natural rubber shows as an important role in the Indonesian economy with 86.9 percent of productions exported to foreign nations and providing the main livelihood for above one million of its citizens. Indonesian government is trying to promote expanding the rubber planted area alliance with tire industry with the aim of increasing the rubber production (Mirawati Yanita M.Yazid 2016). (Joe Gigy George 2014) mentioned that India is the fourth world's largest producer of natural rubber with the contribution of 0.19 percent in its national income. Natural rubber is the back bone of the India and has a profound influence on the socio-economic conditions of the people.

Natural rubber is an economically important crop and source for employment in Thailand. Moreover, as being the world's largest producer and exporter, it influences world market price. Through out of the nation, rubber growing area has been developed and expanded. Government of Thailand has launched various policies and provides various measurements such as research in high-yielding varieties, good-practice harvesting systems and tree maintenance and teaching new technology, and aided farmers for higher rubber production in its nation (Soontaranurak 2011).

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Table-1 shows the leading exporting countries of natural rubber in worldwide based on export value in 2018. Thailand is top exporter of natural rubber with the amount of 4,600 million U.S. dollars and Indonesia, Vietnam, Malaysia and Cote d'Ivoire are following and taking a place as 2nd, 3rd, 4th, and 5th top exporters with the value of 4,000 million U.S. dollars, 987.3 million U.S. dollars, 936.5 million U.S. dollars, and 752.6 million U.S. dollars respectively. Myanmar exports with the small value of 260 million U.S. dollars compared to Thailand, Indonesia and Malaysia, however, it is ranking at 6th in the world exports of natural rubber market. Thailand command 34.5% share of total exported natural rubber in world market while the Indonesia influences almost 30% of the global rubber market. In terms of rubber producing, ASEAN member countries such as Indonesia, Malaysia, Vietnam and Thailand are leading rubber producers in Asia Pacific and holding the largest share of rubber exports accounting for around 84 percent of exports market share. Besides, these top 15 countries are major supplier of natural rubber resource contribution with 95.5 % of the global market.

Table1 Top Rubber Exporting Countries (2018)

Country	Million \$	Market Share %
Thailand	4600	34.5
Indonesia	4000	29.9
Vietnam	987.3	7.5
Malaysia	936.5	7.1
Cote d'Ivoire	752.6	5.7
Myanmar	260	2.0
Belgium	202	1.5
Laos	168.3	1.3
Guatemala	152.7	1.2
Liberia	127.2	1.0
Germany	115	0.9
United States	101.1	0.8
France	96.1	0.7
Luxembourg	94.8	0.7
Netherlands	94.2	0.7

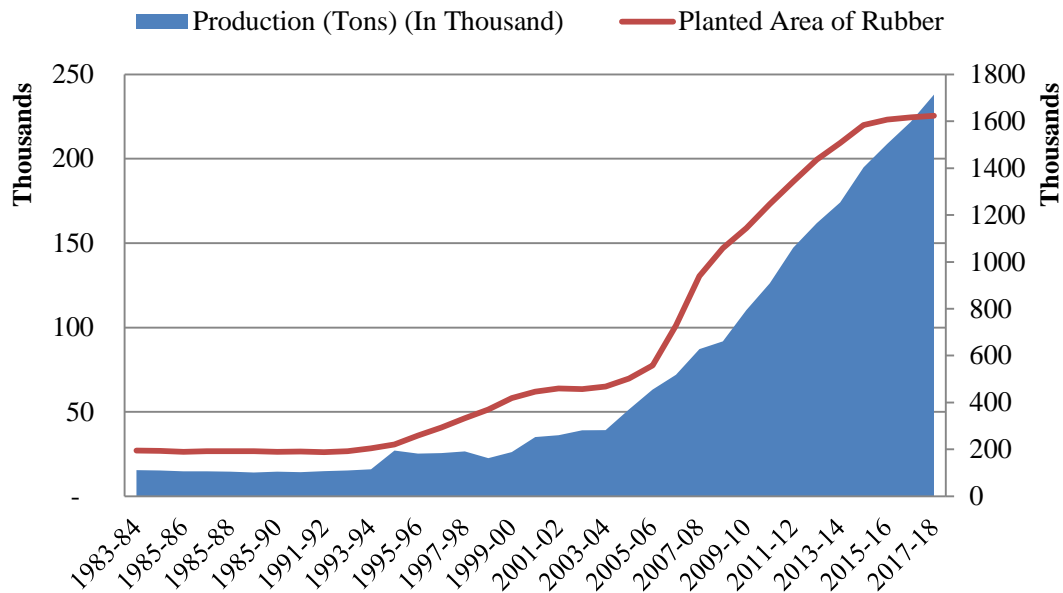
Source: Statista Research Department, 2019

Moreover, according to the previous studies and findings, some of these leading countries earn foreign currencies exporting natural rubber, which creates more job opportunities for its households, smallholders and hence largely influence on their economic and social status. The importance of natural rubber and its contribution to country's national income brought the great interest to study this research paper. Main intention of this paper is to answers these specific research questions: what is the status of rubber production and export of natural rubber in Myanmar, and what factors are influencing on its production and export.

Status of Myanmar's Rubber Production and Export

Agriculture sector plays mainly in the economy of Myanmar with the contribution of 37.8 percent of its Gross Domestic Product (GDP) in year 2018. Many cash crops grow in Myanmar especially major exporting commodities, such as rice, a variety of pulses, cereal crops,

and including natural rubber. Variety of agricultural crops including natural rubber was able to plant and produce freely, after the adoption of market-oriented economic policy in late 1988. It was only partially liberalization from state control. However, for exports of rubber were still under the control of government, while local producers were allowed to sell to domestic buyers after they fulfilled 45% of their production to the government(Woods 2012). Rubber production in Myanmar liberalized fully in 2004 and hence, rubber planted areas and production tons have increased continuously and significantly shown in Figure-1. As the growing acreage of rubber is expanding year after year, tons of rubber production followed the same direction and increasing simultaneously.



Source: CSO, Statistical Year Book

Figure 1 Myanmar Sown Acreage and Production of Natural Rubber (1983-84 to 2017-18)

Natural rubber can grow especially in the tropical countries. Therefore, rubber grows throughout of all of the regions of Myanmar. Table-2 shows the land size of states and regions of rubber where natural rubber is grown. As of 2017-2018, 1,623,260 acreage in aggregate rubber planted area, 551,729 acres in harvested area and 204,676 tons in total production. Southern part of Myanmar, Mon state, Taninthayi division, and Karen state are major locations of rubber resources in Myanmar. Mon state has highest sown acres of rubber plantation (494,840 acres) and secondly (347,487 acres) in Taninthayi and thirdly (269,055 acres) in Karen state. But, its production tons in Mon state were only 17% while Karen (27%) and Taninthayi (19%). These three main rubber suppliers' states and division accounted for 68% of sown acres, 76% of harvested areas, and 63% of rubber production. Moreover, Bago, Rakhine, and Shan state accounted for 21% of planted area, 20% of harvested acres and 34% of production respectively (Table-2).

Myanmar exports natural rubber mainly, while imports value added rubber products from neighboring countries China and Thailand. Around 90% of rubber exported products includes raw natural rubber named Ribbed Smoked Sheets (RSS) and Technically Specified Rubber (TSR), which are mainly traded to the markets of China and Malaysia accounted for 61% and

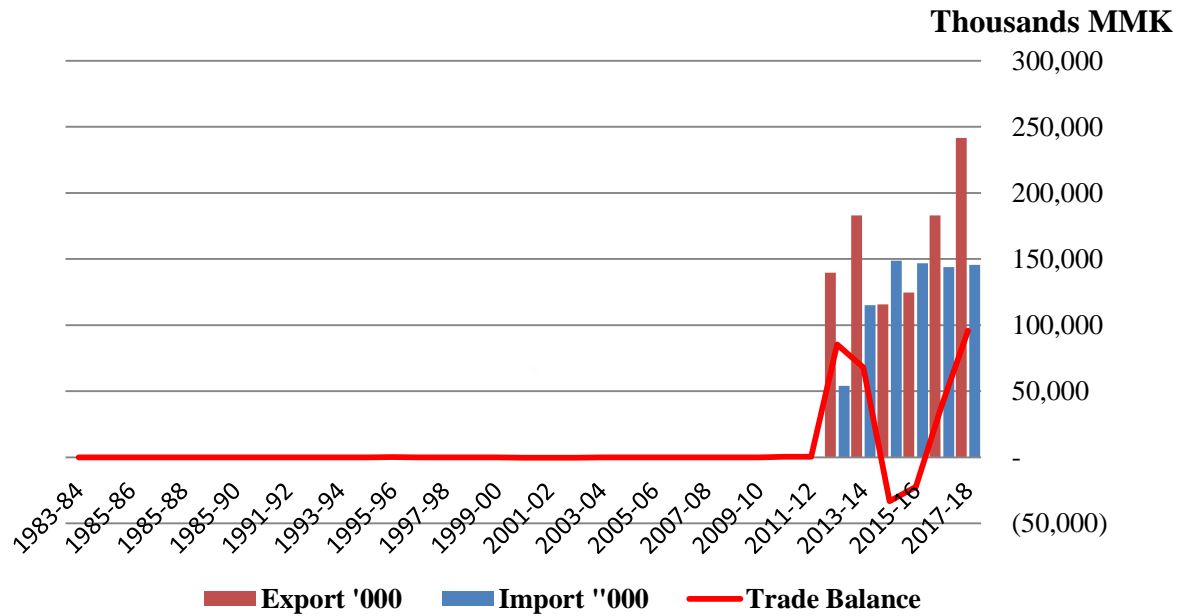
32% respectively. At the processing level of RSS and TSR , imported production integrands from foreign countries mainly includes of chemicals and machinery and complex inputs such as synthetic rubber, testing equipment, rubber chemicals, and machinery for working rubber are imported for the industrial level (The Department of Trade Promotion 2019).

Positive trade balance shown for four consecutive years from 2010-11 to 2013-14, but deficit of (33,335) Kyat millions and (22,230) kyat millions showed between 2014 and 2016 continuously. Trade imbalances have been severely impacted and influenced by the recent drop of world's natural rubber prices. However, trade surplus happened after 2016 due to higher exporting value relative to imports of value-added products (Figure-2).

Table 2 Regional Locations of Rubber Sown Acres, Harvested Acres, and Production Ton (2017-2018), absolute values

Regional Location	Production (Ton)	Harvested Acreage	Sown Acreage	Production%	Sown Acres %	Harvested acres %
Kachin	1928	7251	80530	0.94	4.96	1.31
Kayah	-	0	66	0.00	0.00	0.00
Karen	54307	168028	269055	26.53	16.57	30.45
Chin	-	0	9		0.00	0.00
Sagaing	113	603	12491	0.06	0.77	0.11
Taninthayi	39853	144147	347487	19.47	21.41	26.13
Bago	15972	50928	118096	7.80	7.28	9.23
Magwe	-	0	0	0.00	0.00	0.00
Mandalay	-	0	114	0.00	0.01	0.00
Mon	35400	108352	494840	17.30	30.48	19.64
Rakhine	40293	2476	35592	19.69	2.19	0.45
Yangon	2074	8552	43105	1.01	2.66	1.55
Shan	13600	58009	185121	6.64	11.40	10.51
Irrawaddy	1136	3383	36754	0.56	2.26	0.61
Naypyitaw	-	-	-	0.00	0.00	0.00
Total	204676	551729	1623260	100	100	100

Source: CSO, Statistical Year Book, 2018 and Author's Calculation



Source: Statistical Year Book (CSO)

Figure 2 Myanmar Imports and Exports for Rubber Products (1983-84 to 2017-18)

(Ministry of Commerce 2015-2019) Major problem for Myanmar’s rubber in the international market is quality. With its inferior quality without any guarantee and certification system, necessities to build its image, and accordingly is not receiving prevailing international market prices. Moreover, other issues remain unsolved to penetrate western international markets. However, Myanmar’s rubber mainly exported to the markets of China, Malaysia and Republic of Korea. (Joanna van Asselt 2016) the challenges of Myanmar faces are poor process of production in farming, techniques and management led to lower quality and yielding. Besides, the lack of institutional support and quality standard and certification for farmers and hence processors received lower price rather than the market price.

Review of Previous Studies

Natural rubber production and export and its related research papers were studied and analyzed using the various approach from different perspectives by many scholars. In the analysis of natural rubber production and export in India using the Ordinary Least Squares (OLS) technique, natural rubber stock, world market price and domestic price, and world population are significantly influence on its natural rubber export of India. Moreover, the production of natural rubber is positively related with the export quantity, stock and domestic price while it has negative relation with the import (M. Kannan, 2013). From another perspective, (Joe Gigy George 2014) have mentioned that Kerala is the largest producer of rubber in India with the 78 percent of planted area and 90 percent of rubber production.

The export markets for India natural rubber are Indonesia, China, Malaysia, Turkey, Spain, Srilanka and Nepal. An econometric analysis of Natural Rubber Market in Malaysia by (Nur Hazirah, Shri Dei, Hussin, 2016) using the 2SLS model, have shown that plantation area, time trend, production with lagged 1 year are vital for natural rubber producing. Natural’s rubber

price in domestic and global are directly related that if the world price rises, the domestic price will go the same direction.

(Mirawati Yanita M.Yazid 2016) examined the determinant for rubber export in Indonesia and found out that exports of crumb rubber has significant relationship between quantity of export in the lag time, exchange rate, and rubber production level. Moreover, from crumb rubber exports, Indonesia earned substantial foreign exchange.

Another study discovered that outside of U.S and U.S markets, Indonesia's natural rubber demand was perfectly price inelastic. In addition, level of production is largely depends on the maturity tree area and yield, which determines the export supply of rubber. Besides, domestic and world price of natural rubber has an influence on the yield(Soependi 1993). (Chawananon 2014) analyzed factors on the Thai's natural rubber market equilibrium and resulted shows that the production of natural rubber in Thailand had been effected by the GDP per capita, the estimated price, price of rice and rainfall significantly.

Materials and Method

This research paper conducted using OLS model and secondary time series data has been applied during the period from 1983 to 2018. For the analysis, to meet the objective of the study, two models were constructed factors affection export and production, the annual data of endogenous variables: export earnings and productions and exogenous variables: natural rubber planted area, production, export earnings, import, exchange rate, and world rubber price and world population were included in respective two models. In reality, the other variables may effect on the production and export of natural rubber, therefore, those indicators will be described in the error term of this study. Majority of data resources were collected from CSO, Statistical Year Book, World Bank, Singapore Commodity Exchange (SITCOM) and further figures and facts were obtained from previous studies and relevant web sites.

The Method of Ordinary Least Squares (OLS)

Ordinary least-squares (OLS) regression or linear least square is a method that may be applied to model a single response variable which has been recorded on at least an interval scale (Hutcheson 2011). Moreover, it is usable for estimating the unknown parameters. The OLS technique may be used to single or multiple explanatory variables.

Simple Regression Model

Simple regression model is also called two-variable linear regression or bivariate regression model due to it relates the two-variable. It can be illustrated with a single explanatory variable as follow,

$$y_i = \partial_0 + \partial_1 x_i + \varepsilon_i$$

Where, y is called dependent variable or explained variable, response variable can be used interchangeably, while x is called independent variable or explanatory variable or the control variable. The variable ε can be called error term or disturbance.

Multiple Linear Regression Model

Multiple regression analysis can be applied to find out problems that cannot be solved by simple regression model. It can accommodate many explanatory variables that may be correlated. Thus, for estimation of dependent variable building better models, multiple regressions can also be used. It allowed many observed factors to affect dependent variable (Wooldridge 2013).

The following general equation with two independent variables can be set up:

$$y_i = c_0 + \partial_1x_1 + \partial_2x_2 + +\partial_3x_3 + \dots + \partial_kx_k + \varepsilon_i$$

Where, ∂_0 is the intercept, $\partial_1, \partial_2, \partial_3$ are parameters associated with x_1, x_2, x_3 respectively.

In order to find out the determinants affecting on the production and export on natural rubber in Myanmar, multiple regression model has been used. Annual data were collected for 35 years ranging from 1983 to 2018. Two simple equations were set up as stated below.

For the analysis of natural rubber production, simple equations can be constructed as follows:

$$R_{pro(t)} = \sigma_0 + \sigma_1R_{acre(t)} + \sigma_3R_{imp(t)} + \sigma_3R_{Exp(t)} + \sigma_4D_{Pop(t)} + \mu(t)$$

Response Variable

$R_{pro(t)}$

Control Variable

$R_{acre(t)}, R_{exp(t)}, R_{imp(t)}, D_{pop(t)}$

Where,

σ_0 = intercept

$R_{pro(t)}$ = Production of natural rubber (tons) at time t

$R_{acre(t)}$ = Acreage of natural rubber at time t

$R_{imp(t)}$ = Import of rubber products at time t

$R_{exp(t)}$ = Exports of raw rubber at time t

$D_{pop(t)}$ = Domestic Population of Myanmar at time t

$\mu(t)$ = Error term

$\sigma_1, \sigma_2, \sigma_3, \sigma_4$ = Regression Coefficient

For the analysis of factors influencing the exports of natural rubber, simple equation can be written as stated below:

$$R_{Exp(t)} = \sigma_0 + \sigma_1R_{imp(t)} + \sigma_2R_{Wp(t)} + \sigma_3W_{Pop(t)} + \sigma_4EX_{rate(t)} + \varepsilon(t)$$

Response Variable

$R_{exp(t)}$

Control Variable

$R_{Wp(t)}, W_{pop(t)}, EX_{rate}, R_{imp(t)}$

Where,

σ_0 = intercept

$R_{exp(t)}$ = Exports of raw rubber at time t

$R_{imp(t)}$ = Import of rubber products at time t

$R_{Wp(t)}$ = World market price of natural rubber at time t

$W_{pop(t)}$ = World Population at time t

EX_{rate} = Exchange rate at time t

$\mu(t)$ = Error term

$\sigma_1, \sigma_2, \sigma_3, \sigma_4$ = Regression Coefficients

Results and Findings

This section presents empirical results of the analysis of factors influencing for the natural rubber production and export by using multiple linear regression model. For the production of natural rubber analysis, production is response variable and export (Exp), import (Imp), rubber growing areas (acres) and domestic population of Myanmar (Dpop) were taking into account as control variables for determining the association and contribution of various determinants for the production. For the export analysis, dependent variable is export (Exp), and independent variables are rubber price in world market (R_{wp}), world's population (W_p), exchange rate (Ex_{rate}) and import (Imp).

Factors affecting on natural rubber production

For the analysis of factors affecting on natural rubber production in Myanmar using OLS technique, consider the below the below equation,

$$R_{pro(t)} = (0.3094) + 0.1027 R_{acre(t)} + 0.00022 R_{imp(t)} + 0.00012 R_{Exp(t)} + (0.00006)D_{Pop(t)} + \mu(t)$$

Table 4 Results of determinants affecting the natural rubber production

Production	Intercept	Acres	Import	Export	Domestic Population
Coefficients	-0.3094	0.1027315	0.0002174	0.0001206	-0.000061
Standard Error	23028.47	0.0073634	0.0000803	0.0000601	23028.47
t Stat	-0.13	13.95	2.71	2.01	-0.13
P-value	0.894	0.000	0.011	0.054	0.918

$R^2 = 0.9884$

Source: Calculation, Stata

The result indicates that sown acreage, export, and import had positive relationship with the natural rubber production since p values are significant at 0% (0.000), 5% (0.054), and 1% (0.011) respectively. However, p value for the domestic population is more than 5% level, which means that it cannot be said whether production and domestic population are positively or negatively related. R-squared value of (0.9884) revealed that 99 percent of variation in the production was explained by the four variables. In other words, production and rubber acres, export, import are positively related. Thus, when the 1 percent increase of plantation area, this will lead to increase production (Tons) by 0.1027315 and 1% increase of import and export will lead to rise on the rubber production with the value of (0.0002174) and (0.0001206) correspondingly presented in Table-4.

Again, to ensure that natural rubber production in Myanmar is significantly influenced by rubber growing acreage, import of rubber products, export, the equation is written as follows without considering the domestic population.

$$R_{pro(t)} = (0.3094) + 0.1027 R_{acre(t)} + 0.00022 R_{imp(t)} + 0.00012 R_{Exp(t)} + \mu(t)$$

Table 5 Results of determinants affecting the natural rubber production excluding population

Production	Intercept	Acres	Import	Export
Coefficients	-5484.277	0.1021017	0.0002185	0.0001209
Standard Error	2425.908	0.0041516	0.0000784	0.0000591
t Stat	-2.26	24.59	2.79	2.05
P-value	0.031	0.000	0.009	0.049

R² = 0.9884

Source: Calculation, Stata

In Table-5, t Statistics values of acres, import and export have become huge 24.59, 2.79, and 2.05 respectively compared to the previous values of t stat showed in Table-4. Besides, probability value of import and export became slightly lower with 0.9% and 4% level. This highlight that rubber growing acres, import and export are positively influence the rubber production (Tons), i.e., increasing the rubber growing areas will lead to increase the production significantly and increasing export and import will also have positive impact on tons of production.

Factors influencing the exports of natural rubber

For the analysis of factors influencing the exports of natural rubber, simple equation can be written as stated below:

$$R_{Exp(t)} = 8973523 + (-1.57761)R_{imp(t)} + (4873062)R_{Wp(t)} + (-0.0028592)W_{Pop(t)} + (336760.7)Ex_{rate(t)} + \epsilon(t)$$

Table 6 Results of determinants affecting the natural rubber export

Export (Exp)	Intercept	Import (Imp)	World Rubber price (RWp)	World's Population (Wpop)	Exchange Rate (Exrate)
Coefficients	894651.9	-1.57761	4873062	-0.0028592	336760.7
Standard Error	1.4657	0.3854859	3436351	0.0049051	46035.89
t Stat	0.06	-4.09	1.42	-0.58	7.32
P-value	0.951	0.000	0.166	0.564	0.000

R² = 0.9824

Source: Calculation, Stata

The result of determinants influence on natural rubber export of Myanmar illustrated in Table-5. The value R-squared (0.9824) indicates that 98 percent in the endogenous variable (Exp) was explained by the exogenous variables import (Imp), world market price of rubber (R_{Wp}), world's population (W_{pop}) and exchange rate (Ex_{rate}) involved in the model. This says that the relationship between dependent and independent variables are strongly related. Among the control variables, import and exchange rate of the p values showed significant at the level of 0%

showed in Table-6. Nevertheless, probability value of rubber price in the international market and world's population are very large means insignificant since more than 5% or 10% level.

Regarding to the results, there is negative relation between import of rubber manufactures and export of natural rubber; 1 percent increase of import has (1.57761) negative impact on the export. However, exchange rate showed positive and significant relation with the export indicates that 1% rise of Ex rate, increases export. Thus, appreciation of currency (exchange rate falls) will lead the rubber export decreased and depreciation of currency (exchange rate rises) increases and stimulates revenue of exports. Though world's rubber price is not significant in this study, there is direct relationship found that revenues generated from the exports decreased in 2011 was the result of price depreciation of rubber price in international market (The Department of Trade Promotion 2019). Otherwise, it stated that if world rubber price rises, export revenue will increase as they are positively related.

Conclusions

Myanmar is the six largest supplier of rubber in the world market. Nevertheless, production of rubber is comparatively low than the neighboring countries Thailand, Indonesia, Vietnam and Malaysia. Moreover, Myanmar rubber has lower quality with poor planting techniques and process of production. (Joanna van Asselt 2016) Myanmar has lower yield level rather than the Thailand and Vietnam due to poor farming practices in the process of value chain and limited governance in rubber sector.

Major supplier for rubber resources are Mon state, Taninthayi division, Karen and Rakhine states producing 82 percent of natural rubber. Mon state has highest sown acres of rubber plantation (31%) followed by Taninthayi (21%) and Karen state (17%). For the export sector, natural rubber is only exported, which named Ribbed Smoked Sheets (RSS) and Technically Specified Rubber (TSR) and imported the value added rubber manufactures especially from Thailand and China. In particulars, majority of natural rubber products in the region of 93% are mainly exported to bordering countries China and Malaysia markets.

The analysis of the determinants which influence on the rubber export and production, multilinear regression method (OLS) has used. The overall results revealed that export (Exp), import (Imp) and sown acreage have profound influence on the rubber production of Myanmar. The positive relationship has found, thus increase of sown acres, import and export will have positive impact on its production of natural rubber and vice versa. (Kannan 2013) also found out that there is a positive relationship between export and production of natural rubber in India. The export revenue of raw rubber in Myanmar is directly influenced by the exchange rate; if the exchange rate goes up, export will head to the same direction as well and oppositely, if it falls, exports of natural rubber will decrease as they are positively associated. However, import and export are negatively related.

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ON SOME SOCIOECONOMIC AND DEMOGRAPHIC DETERMINANTS OF ANTENATAL CARE UTILIZATION DAGON MYOTHIT (EAST) TOWNSHIP, YANGON REGION*

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Abstract

This study aimed at determining the factors influencing the utilization of Antenatal Care (ANC) among ever-married women aged 15-49 years who were asked to give information on the utilization of ANC for their latest live birth preceding the survey. A community-based cross sectional analytical study was conducted from October to November, 2016 among 515 mothers residing in urban and rural areas of Dagon Myothit (East) township. Binary logistic regression model was used to investigate the socioeconomic and demographic characteristics on the basis of having and not having ANC. The results indicate that higher educated woman exerts a stronger positive influence on the use of ANC service. With respect to husbands' education, women with higher educated husbands were found to be significantly more likely to use antenatal care. It has been found that woman's working status plays a critical role in using ANC. It has been observed that husband's occupation group was related to the use of ANC services. Women from the first quintile and second quintile of the wealth index have negative relation to ANC utilization. Women aged 15-19 have negative effect on the ANC usage. It has been found that women who resided in urban area have more chance to use ANC service. With respect to household head, women with husbands head are more likely to use ANC service.

Keywords: Antenatal Care, Binary Logistic Regression

Introduction

Every year, approximately eight million women suffer pregnancy-related complications and over half of million die all over the world. In developing countries women death from pregnancy-related complications (one in 16 women) are much higher compared to one in 2800 in developed countries. Each death or long-term complication represents an individual tragedy for the woman, her partner, her children and her family. More tragically, most deaths are avoidable. The main causes are known, and more than 80% of maternal death could be prevented or avoided through actions that are proven to be effective and affordable, even in the poor countries of the world (WHO, 2004). Throughout the world nations are striving to fulfill their international obligations and achieving the Sustainable Development Goals (SDGs). Out of the 17SDGs, target 3.1 concerned with Maternal Mortality Ratio (MMR) is to reduce the global MMR to less than 70 per 100,000 births in 2030. There are indicators to monitor achievements and progress in achieving SDG: MMR and delivery by skilled health persons and contraceptive prevalence rate, adolescent birth rate, ANC coverage and unmet need for family planning services. Among these indicators, ANC coverage is one of the important indicators to reduce the MMR. Antenatal care is the care of pregnant women during their pregnancy period. Aim of ANC is to assist women to remain healthy, finding and correcting adverse conditions when present, and thus aid the health of the unborn. One of the strategies for reducing maternal mortality is the provision of ANC. To prevent unwanted outcomes of pregnancy, ANC is the most important method to detect the pregnancy problems in the early period. Proper ANC reduces both direct and indirect cost of

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medical care for patients and governmental health expenditure due to complications. ANC constitutes screening for health and socioeconomic conditions likely to increase the possibility of specific adverse pregnancy outcomes. Therefore, this paper attempts to study some socioeconomic and demographic effects on ANC utilization.

Data and Methods

A sample survey was conducted in Dagon Myothit (East) Township, Yangon Region in November, 2016 which had both urban and rural setting as a case study. The Stratified Random Sampling was employed to interview the ever-married women aged 15-49 years who were asked information on the last births in this township. Binary Logistic Regression analysis was applied to determine the socioeconomic and demographic effects of ANC usage. This study did not address the frequency of ANC.

Results and Discussion

Background History of Dagon Myothit (East) Township

Dagon Myothit (East) township is located in the easternmost part of Yangon, Myanmar. It shares borders with Hlegu township in the north, South Dagon township in the east, North Dagon township in the south and North Oakkalarpa township in the west. The total area is 91.03 (kilo meter square). This township composes of 29 wards, 1 village tract and 2 villages. The number of households was 33,913 and the total population is 165, 628 in this township. The urban population and rural population are 156, 244 and 9, 384. The sex ratio is 95.4 percent which indicates that there are 95 males for 100 females in this township.¹ The township has 19 primary schools, 4 middle schools and 2 high schools.

Health Facilities

The health facilities for Dagon Myothit (East) township are 1 township hospital, 3 Urban Health Centers (UHCs), 1 Rural Health Center (RHC) and 4 Sub-Rural Health Centers (Sub-RHCs) included in this township. Three UHCs are UHC (1), UHC (7), and UHC(133). One RHC is Sit pin RHC. Four Sub-RHCs are (i) Ywar Thar Gyi (ii) Ma Lit (iii) Shan Te Gyi and (iv) 155 Sub-RHC.

Health Personnel at Urban Health Centers

The number of health personnel at UHCs is presented in Table (1). According to this Table, UHC (1) lack of doctor, staff nurse, trained nurse and Public Health Supervisor (PHS) II. This UHC is deficient in number of Mid Wives (MW). UHC (7) is just deficient in PHS II. UHC (133) lacks of doctor. This UHC is deficient in PHS II.

Table 1 Number of Health Personnel at Urban Health Centers

Position	UHC (1)	UHC (7)	UHC (133)
Doctor	-	1	-
Staff Nurse	-	1	1
Trained Nurse	-	1	1
Lady Health Visitor(LHV)	2	1	1
MW	2	5	5
PHS II	-	4	2

Data Source: Township Hospital at Dagon Myothit (East)

¹ “The 2014 Myanmar Population and Housing Census”

Health Personnel at Rural Health Centers and at Sub-Rural Health Centers

The number of health personnel at RHC and at Sub-RHCs is presented in Table (2). RHC (Sit pin), is lack of LHV and PHS II. Sub-RHC (Shan Te Gyi) is lack of PHS II.

Table 2 Number of Health Personnel at Rural Health Center and at Sub-Rural Health Centers

Position	RHC (Sit pin)	Sub-RHC (Ywar Thar Gyi)	Sub-RHC (Ma Lit)	Sub-RHC (Shan Te Gyi)	Sub-RHC (155)
HA	1	-	-	-	-
LHV	-	-	-	-	-
MW	2	1	1	1	1
PHS II	-	1	1	-	1

Data Source: Township Hospital at Dagon Myothit (East)

Survey Design

To obtain the required information on ANC utilization for latest live births of ever-married women aged 15-49 years, socio-demographic and health survey was conducted in Dagon Myothit (East) township of Yangon Region. The study population is approximately 4,238 women of the reproductive age (15-49), having delivered within two years prior to data collection. The data collection method used in this survey was personal interview method.

Sampling Design

The analytical cross section study was used to collect information that aimed at addressing the objective of the study. The sampling design that has been employed for data collection was a stratified random sampling. In line with this sampling design, four health care centers in this township were taken to be the stratum. These health centers were stratified into stratum I (UHC 1), stratum II (UHC 7), stratum III (UHC 133), and stratum IV (RHC Sit pin). Then, the respondents (ever married women who have delivered within two years prior to data collection) were selected with simple random sampling (without replacement) method from each stratum. The required data were collected from selected women, using the questionnaires and through face-to face interview.

Determining the Sample Size

In this study, the proportion of women who received ANC checkup at least once during pregnancies is assumed to be 0.5. The appropriate stratified random sample is chosen with a bound on the error of estimation B of 0.05(assumed) by using the following formula:

$$n \geq \frac{\sum (N_h^2 \hat{p}_h \hat{q}_h / w_h)}{N^2 D + \sum_{h=1}^L N_h \hat{p}_h \hat{q}_h}$$

Where N_h = Number of units in stratum h (each health care center)

\hat{p}_h = proportion of women who have received ANC checkup at least once during their pregnancy for stratum h (maximum possible proportion =0.5)

$\hat{q}_h = 1 - \hat{p}_h$ = proportion of women who have not received ANC checkup at least once during their pregnancy for stratum h (each health care center)

B = Bound on the error of estimation= 0.05

$$D = \frac{B^2}{4} = \frac{(0.05)^2}{4} = 0.000625$$

$w_h = \frac{N_h \hat{p}_h \hat{q}_h}{\sum N_h \hat{p}_h \hat{q}_h}$ = the fraction of observations allocated to stratum h (each health care center)

The sample size is

$$n \geq \frac{4490788.20}{(4238)^2 \times 0.000625 + 1059.5}$$

$$\geq 365.5 \approx 366$$

The required sample size is at least 366 women. In many social research surveys, the response rates are typically well below 100%. Therefore, the sample size 515 (366/.71) women (71% response rate assumed) is determined to collect the data in this study. Since the cost of sampling within each health care center (stratum) does not vary from stratum to stratum, the sample size of each stratum is determined by using the following Neyman allocation.

$$n_h = n \times w_h$$

where, n_h = sample size for stratum h.

The corresponding allocation for each stratum (healthcare center) is presented in Table (3). The sample size for each stratum is 126,198, 78, and 113 respectively.

Table 3 Sample Size for Each Stratum

Strata	N_h	\hat{p}_h	\hat{q}_h	$N_h \hat{p}_h \hat{q}_h$	$w_h = \frac{N_h \hat{p}_h \hat{q}_h}{\sum N_h \hat{p}_h \hat{q}_h}$	$N_h^2 \hat{p}_h \hat{q}_h / w_h$	Sample Size of Each Stratum $n_h = n w_h$
I	1034	0.5	0.5	258.5	0.24	1, 113,704.17	$n_1 = 515 \times 0.24 = 126$
II	1633	0.5	0.5	408.25	0.39	1,709,416.03	$n_2 = 515 \times 0.39 = 198$
III	642	0.5	0.5	160.5	0.15	686,940	$n_3 = 515 \times 0.15 = 78$
IV	929	0.5	0.5	232.25	0.22	980.728	$n_4 = 515 \times 0.22 = 113$
	4238			1059.5		4,490,788.20	$n = 515$

Factors Affecting on the Antenatal Care Usage

Based on data of ANC Usage in Dagon Myothit (East) township in Yangon region, the significant factors of ANC usage are studied by using Binary Logistic Regression model.

Dependent Variable

Dichotomous dependent variable is created for ANC usage, namely

Y=1, if woman has received ANC checkup at least once during their pregnancy

Y=0, if woman has not received ANC checkup at least once during their pregnancy

Independent Variables

These variables are categorized as follows:

X_{i1} = Woman's education level

= 1, if woman's education level is primary

= 2, if woman's education level is secondary

= 3, if woman's education level is higher

= 4, if woman's education level is no education (reference category)

X_{i2} = Husband's education level

= 1, if husband's education level is primary

= 2, if husband's education level is secondary

= 3, if husband's education level is higher

= 4, if husband's education level is no education (reference category)

X_{i3} = Woman's Exposure to media

= 1, more frequent (if ith respondent most frequently listened to the radio or watched television or read newspapers or magazines at least once a week)

= 2, less frequent (reference category)

X_{i4} = Woman's working status

= 1, if woman is working (during last 12 months)

= 2, if woman is not working (reference category)

X_{i5} = Husband's occupation group

= 1, if husband's occupation is own business

= 2, if husband's occupation is private employee

= 3, if husband's occupation is company staff

= 4, if husband's occupation is government staff

= 5, if husband's occupation is daily wages

= 6, if husband's occupation is casual worker

= 7, if husband do not work (reference category)

X_{i6} = Wealth index

= 1, if poorest (first wealth quintile)

= 2, if poorer (second wealth quintile)

= 3, if middle ((third wealth quintile)

- = 4, if richer (fourth wealth quintile)
- = 5, if richest (fifth wealth quintile) (reference category)
- X_{i7} = Age group
 - = 1, if age group is 15-19 years
 - = 2, if age group is 20-34 years
 - = 3, if age group is 35-49 years (reference category)
- X_{i8} = Place of residence
 - = 1, if place of residence is Urban
 - = 2, if place of residence is Rural (reference category)
- X_{i9} = Birth order (number of children)
 - = 1, if woman has one child
 - = 2, if woman has 2-4 children
 - = 3, if woman has 5-9 children (reference category)
- X_{i10} = Head of Household
 - = 1, if husband is head of household
 - = 2, other (reference category)
- X_{i11} = Household Size

Wealth index is measured by a composite score of several indicators of household possession. This was based on the questions about whether the household has facilities and items as drinking water (1. lake, 2. stream/ creek 3. unprotected well, 4. protected well 5. rain water, 6. tube well, 7. piped into house/compound and 8. purified water), toilet facility (1. none, 2. bucket (surface latrine), 3. traditional pit latrine, 4. water seal (improved pit latrine), and 5. flush), source of lighting (1. candle, 2. battery, 3. private generator, 4. private solar, and 5. electricity), possession of vehicles (bicycle, side car, motorcycle, car/truck/van, bullock cart, boat, motor boat, 4-wheel tractor), and generator, television, non-mobile telephone, mobile-telephone, computer, internet, sewing machine and refrigerator. The weight for the drinking water is set as 8, the weight of the toilet facility is set as 5, the weight of the source of lighting is set as 5, and the weight for possession of each vehicle, generator, television, non-mobile telephone, mobile-telephone, computer, internet, sewing machine and refrigerator is set as 1 each. Then each type of drinking water, toilet facility and source of lighting is assigned a score according to the order of each type in questionnaire. Scores are recoded as a 1 if the household has a “yes” answer to the question (for example the household has television) and 0 if it does not have a “yes” answer. Wealth index formula is defined as

$$\text{Wealth Index} = \frac{\sum W \times S}{\sum W} \times 100$$

where W = weight of asset for each household

S = Score of asset for each household

Binary Logistic Regression Model for ANC Usage

For details, the frequency and percentage distributions of the groups are presented in Table (4).

Table 4 Distribution of Women by the ANC Usage (Dagon Myothit East Survey)

Class Name	Frequency	Percentage
Women who have received ANC	449	87.2%
Women who have not received ANC	66	12.8%

Data Source: Dagon Myothit (East) Survey (2016)

As shown in Table (4), it can be seen that the data set has 515 women which can be classified into two sub groups such as $n_1 = 449$ (87.2%) cases in the first group (Women who have received ANC service), and $n_2 = 66$ (12.8%) in the second group (Women who have not received ANC service).

Summary results for significant independent variables of ANC usage are shown in Table (5) and Table (6).

Table 5 Model Fitting Information for Binary Logistic Regression Model with Significant Independent Variables of ANC Usage

Model fitting criteria	χ^2 value	df	<i>p</i> -value
Omnibus Tests of Model Coefficient	148.026	21	0.000
Hosmer and Lemeshow (H-L) Tests	2.851	8	.943
-2 Log Likelihood	246.325		
Cox & Snell R- Square	.250		
Nagelkerke R- Square	.467		
Overall Correct Prediction	89.9%		

Data Source: Dagon Myothit (East) Survey (2016)

According to the Omnibus tests of model coefficients, it was found that the binary logistic regression model for ANC usage is significant (Chi-Square = 148.026, df = 21, $p = 0.000$). There is no evidence of lack of fit based on the H-L statistic, so apparently any lack of fit (Chi-Square=2.851, df = 8, $p = 0.943$). The existence of a relationship between the independent variables and the dependent variable is supported according to the -2 log likelihood value (246.325). According to the results of Cox & Snell R^2 and Nagelkerke R^2 , 25 % and 46.7 % of variation in ANC usage can be explained by the variation of the independent variables. Overall, 89.9% of the women are predicted correctly.

Table 6 Summary Results for the Binary Logistic Regression Model of ANC Usage

Variables	B	S.E	Wald	df	P-value	Exp(B)	95% CI	
							Lower	Upper
Constant	-4.349**	1.697	6.564	1	0.010	0.013		
Woman's Education level								
Primary	.781	.928	.709	1	.400	2.183	.354	13.449
Secondary	1.676*	.923	3.294	1	.070	5.343	.875	32.638
Higher	4.295***	1.475	8.473	1	.004	73.297	4.067	1321.029
Husband's Education level								
Primary	-.520	2.054	.064	1	.800	.595	.011	33.302
Secondary	3.057**	1.332	5.270	1	.022	21.257	1.564	289.008
Higher	3.409***	1.350	6.379	1	.012	30.222	2.146	425.674
Woman's working Status								
Working	2.659***	.778	11.674	1	.001	14.275	3.107	65.598
Husband's Occupation Group								
Group (1)	1.406**	.674	4.347	1	.037	4.081	1.088	15.306
Group (2)	1.482**	.657	5.087	1	.024	4.400	1.214	15.945
Group (3)	3.891***	1.191	10.670	1	.001	48.964	4.741	505.635
Group (4)	2.509**	1.234	4.135	1	.042	12.292	1.095	138.002
Group (5)	1.687***	.630	7.171	1	.007	5.404	1.572	18.580
Group (6)	1.884**	.750	6.312	1	.012	6.579	1.513	28.602
Wealth Index								
Poorest (First Quintile)	-1.803***	.586	9.466	1	.002	.165	.052	.520
Poorer (Second Quintile)	-1.453**	.597	5.930	1	.015	.234	.073	.753
Middle (Third Quintile)	-.568	.611	.866	1	.352	.566	.171	1.875
Richer (Fourth Quintile)	-.077	.907	.007	1	.920	.926	.156	5.481
Age Group								
15-19	-1.746*	.900	3.766	1	.052	.174	.030	1.081
20-34	.068	.420	.026	1	.872	1.070	.470	2.438
Place of Residence								
Urban	.826**	.404	4.190	1	.041	2.284	1.036	5.038
Head of Household								
Husband	1.240**	.580	4.567	1	.033	3.455	1.108	10.771

*** denotes significant at 1% level, ** denotes significant at 5% level and * denotes significant at 10%

Data Source: Dagon Myothit (East) Survey (2016)

According to Table (6), the coefficient of woman's secondary education level is statistically significant at 10 % level and it is positive in relation to the ANC usage. The odds ratio suggests that compared to uneducated women (reference category), women with secondary education level are 5 times more likely to use ANC service. The 95 % confidence interval suggests that the magnitude of the effect could be anywhere from a .875 fold increase to a 32.638 fold increase. The coefficient of woman with higher education level is statistically significant at 1% level and its sign is positive. The odds ratio suggests that those women are 73 times more likely to use ANC service compared to uneducated woman (reference category). The 95 % confidence interval suggests that the magnitude of the effect could be anywhere from a 4.067 fold increase to a 1321.029 fold increase.

The coefficient of husband's secondary education level is statistically significant at 5 % level and it has positive relation to ANC usage. The odds ratio means that women whose husbands have secondary education level, those women have larger multiplicative factor of 21 indicating the progressively higher chance of ANC usage than women whose husbands are

uneducated (reference category). The 95 % confidence interval suggests that the magnitude of the effect could be anywhere from a 1.564 fold increase to a 289.008 fold increase. The coefficient of husband's higher education level is statistically significant at 1% level and it is positively related to the ANC usage. The odds ratio suggests that women whose husbands have higher education level are 30 times more likely to use ANC service than women whose husbands are uneducated (reference category). The 95% confidence interval suggests that the magnitude of the effect could be anywhere from a 2.146 fold increase to a 425.674 fold increase.

The coefficient of woman's working status is statistically significant at 1% level and it is positively related to usage of ANC service. It has been found that, working women are 14 times more likely to use ANC service than non working women (reference category). The 95% confidence interval suggests that the magnitude of the effect could be anywhere from a 3.107 fold increase to a 65.598 fold increase.

The coefficients of husband's occupation group (1) (husbands do own business), and group (2) (husbands are private employees), group (4) (husbands are government staff) and group (6) (husband is casual worker) are statistically significant at 5% level and the coefficient of group (3) (husbands are company staff) and group (5) (husbands are daily wages) are statistically significant at 1 % level. It has been found that there is positive influence on the ANC usage. The odds ratio of the women whose husbands do own business appears to be 4 times more likely to use ANC than women whose husbands do not work (reference category). When women whose husbands are private employees, those women are 5 times more likely to use ANC than women whose husband does not work (reference category). It has been found that women whose husbands are government staff, those women are 12 times more likely to use ANC than women whose husbands do not work (reference category). When women whose husbands are casual workers, those women are 7 times more likely to use ANC than women whose husbands do not work (reference category). When women whose husbands are company staff, those women are 50 times more likely to use ANC service than women whose husbands do not work (reference category). The 95 % confidence interval suggests that the magnitude of the effect could be anywhere from a 1.088 fold increase to a 15.306 fold increase in occupation group (1), from a 1.214 fold increase to a 15.945 fold increase in occupation group (2), from a 4.741 fold increase to a 505.635 fold increase in occupation group (3), from a 1.095 fold increase to a 138.002 fold increase in occupation group (4), from a 1.572 fold increase to a 18.580 fold increase in occupation group (5), and from a 1.513 fold increase to a 28.602 fold increase in occupation group (6).

With respect to wealth index, the coefficient of the first quintile of the wealth index is statistically significant at 1 % level and the coefficient of second quintile of the wealth index is significant at 5% level. Their signs are negative. It has been found that, the poorest women (women from the first wealth quintile) are 83% less likely to use ANC and the poorer women (women from the second wealth quintile) are 77% less likely to use ANC than the richest women (women from the fifth wealth quintile) respectively (reference category). The 95% confidence interval suggests that the magnitude of the effect could be anywhere from a .052 fold decrease to a .520 fold decrease for the coefficient of poorest women and the magnitude of the effect could be anywhere from a .073 fold decrease to a .753fold decrease for the coefficient of poorer women.

The coefficient of age group 15-19 is negative effect on ANC usage and it is significant at 10 % level. Women in the age group 15-19 are 83 % less likely to use ANC service than women in the age group 35-49 (reference category). The 95 % confidence interval suggests that the magnitude of the effect could be anywhere from a .030 fold decrease to a 1.018 fold decrease.

The coefficient of place of residence is statistically significant at 5 % level and its sign is positive. The odds ratio suggests that compared to women who live in rural area (reference category), women who reside in urban areas are about 2 times more likely to use ANC. The 95% confidence interval suggests that the magnitude of the effect could be anywhere from a 1.036 fold increase to a 5.038 fold increase.

It has been found that the coefficient of head of household is statistically significant at 5% level and it is positively related to usage of ANC service. It has been found that, women whose husbands head are 4 times more likely to use ANC service than women whose other head (reference category). The 95% confidence interval suggests that the magnitude of the effect could be anywhere from a 1.108 fold increase to a 10.771 fold increase.

Discussion

This study provides some information regarding factors influencing the utilization of ANC among ever-married woman aged 15-49 years who was asked to give information on the ANC utilization for her latest live birth preceding the survey. It is found that higher educated woman exerts a stronger positive influence on the use of ANC service. This implies that women's education plays a critical role in using antenatal care service. With respect to husbands' education, women with higher educated husbands were found to be significantly more likely to use antenatal care. One possible explanation for this result is that husbands can influence the wife's decision to seek modern health care services. It has been found that woman's working status plays a critical role in using ANC service in this township. It has been observed that husband's occupation group related to the use of ANC services. The reason is that the more wealthy family use ANC service than less affordable or less wealthy family. The coefficients of the poorest and poorer woman have negative relation to ANC utilization. It can be explained that those women may need extra cost for medicine, costs for transportation and costs related to access health care services. Women age 15-19 have negative effect on the ANC usage which means that those women are less likely to seek maternal health care services than older women. It has been found that women who resided in urban area have more chance to use ANC service. The reason is due to fact that availability and accessibility of health services are more convenient in urban areas than in rural areas. With respect to household head, women with husbands as household head are more likely to use ANC service.

Conclusion

Based on the results of this study, it was found that higher educated women, higher educated husbands, working women, women whose husbands have occupation, and women who resided in urban area and women with husbands as household head have more chance to use ANC. Women from the poorest wealth quintile, and poorer wealth quintile and women aged 15-19 have negative relation to ANC utilization. Hence, health education programs intended to enhance community use of ANC service should be strengthened with special focus for women with low or no education. On the other hand, involving husbands during health education is also

necessary as they can play a role in encouraging their wives to use ANC. Information on services provided free of charge by public health institutions should be extended to community and volunteer health worker training/ refresher training should be frequently performed in order to scope of ANC services and enhance the ability of pregnant women to reach them for getting accessibility of health care services.

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THE EFFECT OF WOMEN'S DECISION-MAKING POWER ON INFANT MORTALITY IN MYANMAR

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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. This study tried to investigate the effect of women's empowerment on infant mortality in Myanmar. Sample of 4815 ever married women whose age are 15 to 49 years were drawn from 2015/16 Myanmar Demographic and Health Survey. Furthermore, the binary logistic model had been specified and estimated to investigate the effect of women's empowerment on infant mortality. Results showed that women who were more empowered were significantly less likely to experience infant mortality. This highlights the importance of women's empowerment in efforts to reduce infant mortality.

Keywords: Demographic health survey, infant mortality, women's empowerment

Introduction

Infant mortality rate (IMR) is a widely used indicator of health status of all population as well as the level of development of a country (Reidpath and Allotey, 2003). It is defined as the number of deaths in children under the age of one year per 1000 live birth. High IMR is strongly related to low general living condition, low social well-being, low quality of environment, and low level of economic development that affect the health of the entire population. The reason behind the use of IMR as a measure of health status of the population is that the causes of infant 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. Further, the IMR as a measure of health status can be calculated easily and more accurately with less data.

The IMR, which has declined significantly over time, still remains high in many developing countries and varies widely across countries (WHO, 2013; Schell, et. al. 2007). High IMR, 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 IMR to an acceptable level. Accordingly UN Millennium Development Goal 4 (MDG4) set the target to reduce the under-five mortality rate by two-thirds by 2015 from 1990 level (WHO, 2013). Meanwhile, the United Nation's Sustainable Development Goal 3 (SDG3) set the target to reduce the under-five mortality rate to at least as low as 25 per 1,000 live births.

In Myanmar, around 56,000 children under five die 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,

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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 to a mother lacked basic education. In addition, the main causes of child deaths 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.

Myanmar has experienced a decrease in IMR from 73 deaths per 1,000 live births in 1990 to 68 deaths per 1,000 live births in 2007. According to the 2014 Myanmar Population and Housing Census (MPHC), infant mortality was 62 deaths per 1,000 live births. It is still high compared to other countries in the region. Despite declines in early-age mortality (infant and child mortality) over several decades, mortality rates remain high in Myanmar in comparison with its neighboring South-East Asian countries, developing countries, and globally.

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 contribute to decline in fertility and child mortality rates.

Women empowerment seems to be related to the fertility and child mortality in developing countries. Duflo (2012) highlights three dimensions of women empowerment: (i) education, (ii) participation in decision making process, and (iii) involvement in economic activities. An educated woman is expected to be more enlightened and be more conscious and therefore can make better decisions for her as well as for the family (Hossain and Hoque, 2015). She may be better informed about how the health care system functions and can get better access to it. Further, she can easily interact and communicate with health service providers to get required care for her as well as for her newborn (Bloom et al., 2001). That is, an educated woman is expected to utilize all available resources and information effectively which reduce the risk of child morbidity and mortality.

In many developing countries, where a man is normally the head of a household who makes most of the household decisions, and the wife experiences no equity in this process (Holland & Hogg, 2001). For instance, men often control the financial matters no matter who earns the cash and make decisions regarding major household purchases. This translates into financial vulnerability and lack of autonomy of a woman and more dependent on her spouse. In such cases, a woman who needs health care services has to rely on husband's judgment and

willingness to spend on such cares (Hossain and Hoque, 2015). It can be hypothesized that the higher the participation in the household decisions making process by women the higher is the likelihood of receiving health care, which may increase the survival of the child in a developing country. Several factors have been associated with this decline in infant mortality. For this reason, the aim of this study is to investigate the effect of women's empowerment on infant mortality in Myanmar.

Data and Methods

This study used data from 2015-2016 Myanmar Demographic and Health Survey (MDHS). It was implemented by the Ministry of Health and Sports of the Republic of the Union of Myanmar. This is a nationally representative survey of Myanmar households with a stratified random sample of 13,238 households. In this study, the unit of analysis was women who had last childbirth in period 2011-2016. With this limitation, there were 4,815 women aged 15-49 years old. 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 infant and 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.

In order to meet the objective, Descriptive statistics method 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 sanitation, source of water, delivery place, and tetanus toxoid injection, contraceptive use, going to health center, major household purchase alone, visiting families alone, employment, education levels, and age at first birth. In addition, logistic regression model was developed to investigate the most important predictors of infant mortality. The key explanatory variable that was investigated in this study was women's empowerment. Women's empowerment was measured on the individual level. Infant mortality for the last child of a woman was the primary outcome of the analysis. The response options were yes (code = 1) and no (code = 0).

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 sanitation, access to water and delivery place were also grouped accordingly.

The model used in this study can be formulated as Equation 1, where $\pi(x)$ is probability to use a skilled birth attendant during delivery, β_0 is a constant to be estimated, β_p are parameters to be estimated, and x_p represents independent variables. Definitions of variables which were used in this model and priori expectations were shown in appendix-1.

$$\ln\left(\frac{\pi(x)}{1-\pi(x)}\right) = \beta_0 + \beta_1x_1 + \dots + \beta_px_p \quad (\text{Equation 1})$$

Results and Discussion

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

Table (1) displays the sample characteristics. The proportion of male babies born stood at (52.5%) compared to female babies (47.5%). Birth order 2-3 was (40.5) which was slightly larger than the remaining categories. Majority (54.5%) of the children born had birth spacing of more than two years and (86.6%) of 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 compared to only (6.2%) who gave birth in private hospital. More than half (55.3%) of women used open wells were main source of water and only (12%) of women used piped water. Most of the women (40.6%) used pit toilet and (37.6%) of the women used flush toilet. For cooking fuel source, firewood was the main source of cooking fuel especially in the rural areas where it was easily accessible. The findings further revealed that respondent's participation in different household decision varies from (18.3%) in major household purchase to (40.5%) in seeking child healthcare. Similarly, respondents had say in the use of contraception was (52.7%) and mostly (95.9%) of the respondents were employed. Nearly one-half (44.3%) had primary education, (17.9%) of the respondents had no education, (31.0%) had secondary education and only (6.8%) had higher education respectively.

Table 1 Demographic, Environmental and Socio-economic Characteristics

Variables	Percentage
Gender of the child	
Male	52.5
Female	47.5
Birth order	
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

Variables	Percentage
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

Variables	Percentage
Age at first birth	
< 15 age at first birth	2.7
≥ 15 age at first birth	97.3

Data Source: MDHS Data (2015-16)

Table (2) shows the total number of live births, total number of infant deaths and infant mortality rates by residence. Based on the survey data, it can be seen that infant mortality rate of Union was 47 deaths per 1000 live births. The infant mortality rate of rural was much higher than that of the urban area. Regarding the State and Region, it was found that Chin State had the highest rate of infant mortality (84 deaths per 1000 live births) and this was followed by Shan State (70) which was second largest among the States and Regions, then Taninthayi Region (48), Mandalay Region (47), Ayeyarwaddy Region (43), Kayin State (42), Naypyitaw (38), Bago Region (37), Kachin State and Sagaing Region (35), Yangon Region (33), Rakhine State (31), Magway Region (30), Mon State (29), and Kayah State (27) respectively.

Table 2 Infant Mortality Rates by Residence

Residence	Total Number of Live Births	Total Number of Infant Deaths	Infant Mortality Rates
State and Region			
Kachin	340	12	35
Kayah	369	10	27
Kayin	336	14	42
Chin	439	37	84
Sagaing	334	12	35
Taninthayi	310	15	48
Bago	270	10	37
Magway	261	8	30
Mandalay	255	12	47
Mon	239	7	29
Rakhine	346	11	31
Yangon	240	8	33
Shan	326	23	70
Ayeyarwaddy	300	13	43
Naypyitaw	232	9	38
Rural	3617	170	47
Urban	980	31	32
Union	4597	201	47

Data Source: MDHS Data (2015-16)

Table (3) displays the summary results and marginal effects of Logistic regression are shown in Table (3). In this analysis, the infant mortality is as a dependent variable (if infant mortality occurs =1, if not = 0) and mother's age, number of children, age at first birth, types of residence, household wealth, source of water, sanitation facilities, source of cooking fuels, birth order and size, gender of child, birth spacing, health service, and women empowerment variables are independent variables. The aspects of women empowerment which are considered in this study include; education, contraceptive use, women's participation in household decisions, women's freedom of movement, and employment.

The results of logistic regression model showed that age of mother, age at first birth, sources of water, sanitation facilities, births spacing, size at birth, birth in last three years, breast feeding, sex of child, empowerment variables such as education, women's participation in household decisions, women's freedom of movement, and employment were significant predictors which have impact on infant mortality.

Starting from the age of women, age of women had negative effect which shows lower probability for infant mortality. This means that an increase in the mother's ages by one year will reduce the probability of infant mortality by 9.8% holding all other factors constant. Mothers with less than three children had a lower probability of infant mortality by 2.11% as compared to those mothers who had more than two children. This can be attributed to education levels. Moreover, women who age at first birth were 15 years and above had a lower probability of infant mortality by 6.8% as compared to their counterpart.

Regarding the place of residence, compared between urban and rural, the women who lived in urban area had a 4.94% lower probability of infant mortality than those who lived in rural areas. For the wealth status, women who were rich had a lower probability of infant mortality by 5.49%, women who were of middle wealth status had a lower probability of infant mortality by 1.88% than those who were poorest. 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 infant mortality is lowered.

Besides, source of water was expected to improve the status of health of the child and thus reduce mortality levels. Thus, piped, public tap, open well, spring and river water sources can lower the probability of infant mortality by 28.37%, 24.57%, 26.44%, 25.47%, and 25.20 % respectively relative to those other sources of water.

It was found that, increase in preceding birth spacing reduces the chances of infant mortality. Mother who birth spacing was more than two years was likely to reduce the infant mortality by 7.43 % compared to mother who birth spacing was less than equal to two years. Short birth interval may reduce mothers' recovery time leading to adverse perinatal outcomes. This study found that significant association between short birth interval and greater risk for adverse perinatal outcomes, such as preterm birth, low birth weight, and small size for gestational age.

Regarding the child factors, birth in last three years and breastfeeding also significantly affected infant mortality. Children who were of average and large size at birth had 10.55% and 15.07% lower probability of facing deaths as compared to infants who were of small sizes at birth. Mother who gave birth in last three years had less likely to reduce the infant mortality by 6.89% compared to its counterpart and mother who were breastfeeding had less likely to reduce the infant mortality by 6.02% compared to those were not breastfeeding.

Regarding the child sex, the result pointed out that the female babies had less likely to decrease the infant mortality by 3.48% compared to its counterparts. Thus, boys and girls have different probabilities of death due to biological factors, and these differences vary between infancy and early childhood. Boys were more likely to die before reaching their first birthday.

The result showed a child born in the government hospital has a higher chance of die less than one year than a child born in the private hospital. Mothers who use private hospital had lower probability of infant mortality by 2.82 % compared to government and other delivery.

Immunized for TTI were also important for the status of child health and reduce mortality rates. Furthermore, mothers who were immunized for TTI had a 3.99% lower probability of infant mortality as compared to mothers who were not immunized for TTI.

Concerning the level of education, women with higher level of education had the infant death had lower than uneducated women. The educated mothers prefer fewer children whom they are able to take proper care of thus reducing the probability of child death.

For the household decision making, the coefficients of the variables measuring the participation of household decision making process, going alone to health center and visiting families alone are 0.0215, 0.0751, and 0.0306 respectively. These results indicate that the probability of infant mortality are 2.15 % more if mothers participate in household decisions and mothers who go alone to health center and visit families alone are 7.51% and 3.06% more likely to increase the probabilities of infant mortality compared to those of reference groups. The coefficient of women employment shows -0.1269 suggesting that the probability of infant mortality are expected to be 12.69% less if mothers participate in income generating activities compared to their counterparts.

Table 3 Marginal Effects of Infant Mortality

Variable	Coefficients	Marginal Effects
Individuals factors		
Mother's age	-0.097 (-2.06)**	-0.098 (-2.061)**
< 3 number of children (ref: ≥ 3 number of children)	-0.2124 (-0.28)	-0.0211 (-0.28)
≥ 15 years (age at first birth) (ref: < 15 years (age at first birth))	-0.0683 (-1.98)**	-0.068 (-1.97)**
Household factors		
Urban residence (ref: Rural residence)	-0.4975 (-1.98)**	-0.0494 (-1.984)**
rich	-0.5531 (-0.85)	-0.0549 (-0.85)
middle (ref: poorest)	-0.1900 (-0.40)	-0.0188 (-0.40)
Source of water		
Piped	-2.8580 (-2.13)**	-0.2837 (-2.15)**
Public tap	-2.4749 (-1.73)**	-0.2457 (-1.74)**
Open well	-2.6626 (-2.05)**	-0.2644 (-2.06)**
Spring	-2.5653 (-1.84)**	-0.2547 (-1.85)**
River (ref: others)	-2.5382 (-1.89)**	-0.2520 (-1.91)**
Sanitation facilities		
Flush toilet	2.8717 (2.05)**	0.2851 (2.06)**
Pit toilet (ref: others)	2.8363 (2.03)**	0.2816 (2.04)**
Source of cooking fuel		
Electricity	-0.2207 (-0.18)	-0.0219 (-0.18)
Wood	-0.6191 (-0.60)	-0.0614 (-0.60)
Coal (ref: others)	-1.0263 (-0.92)	-0.1019 (-0.92)

Variable	Coefficients	Marginal Effects
Child factors		
First order	-0.4140 (-0.54)	-0.0411 (-0.54)
Two- three birth order (ref: above third order)	-0.0302 (-0.07)	-0.0030 (-0.07)
> 24 months birth spacing (ref: ≤ 24 months birth spacing)	-0.7482 (-2.18) **	-0.0743 (2.18)**
Average (birth size)	-1.0624 (-1.83)	-0.1055 (-1.84)
Large (birth size) (ref: Small (birth size))	-1.5185 (-2.32)**	-0.1507 (-2.33)**
Birth in last 3 years	0.6945 (2.24)**	- 0.0689 (2.25)**
Breastfeeding-yes (ref: Breastfeeding-no)	-0.6059 (-1.16)***	- 0.0602 (-1.64)***
Female (ref: Male)	-0.3506 (-1.16)*	-0.0348 (-1.16)*
Health service factors		
Private-delivery (ref: Government-delivery and others)	-0.2843 (-0.61)	-0.0282 (-0.61)
Immunized for TTI (ref: Not Immunized for TTI)	- 0.4021 (-1.25)	-0.0399 (-1.25)
Empowerment factors		
Primary education	-0.2020 (-2.50)**	-0.02019 (-2.56)**
Secondary education	-0.2906 (-2.57)**	-0.02892 (-2.57)**
Higher education (ref: No education)	-0.4536 (-2.134)**	-0.04531 (-2.14)**
Contraceptive-use (ref: No contraceptive-use)	- 0.4318 (-1.28)	-0.0429 (-1.28)
Going alone to health center	0.7583 (2.15)*	0.0751 (2.14)*
Going health center with husband (ref: others)	0.0998 (2.22)*	0.00996 (2.23)*
Major HH purchase alone (ref: others)	0.2168 (0.48)	0.0215 (0.48)
Visiting families alone (ref: others)	0.3082 (1.78)**	0.0306 (1.79)**
Employment	-1.2788 (-2.52)*	-0.1269(-2.55)*
Number of observations = 499: Iteration = 35: log likelihood = -166.1086: LR $\chi^2(35) = 53.89$, Prob > $\chi^2 = 0.0216$: Pseudo $R^2 = 0.1396$ *, **, *** significant at the 1%, 5% and 10% level respectively, Z statistics in parenthesis. Dependent variable: if infant mortality occurs =1, not occur = 0.		

Source: MDHS Data (2015-16)

Conclusion

This study shows the effects of women empowerment on infant mortality in Myanmar. The probability of infant mortality is substantially lower 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 infant survival.

Infant mortality is also affected by age at delivery, source of water, sanitation facilities, birth weight, birth in last three years, breastfeeding, sex of child, birth interval, and employment.

This study has shown that women who are more empowered have better outcomes on child health, especially in reducing infant mortality.

In addition, boys and girls have different probabilities of death due to biological factors, and these differences vary between infancy and early childhood. This finding shows that boys were more likely to die before reaching their first birthday. It can be suggested that risky behaviour and poor health habits among males may be the cause of such mortality disparities between the sexes. This has to be investigated further and confirmed through research studies so that appropriate policies and programmes can address the root causes of such behavioural patterns. Short birth interval may reduce mother's recovery time leading to adverse perinatal outcomes.

Policy Recommendation

The study has shown that women who were more empowered would have better outcomes on child health, especially in reducing infant mortality. It can be strongly indicated the need for policy to promote women empowerment to improve achievement in health development, especially in reducing infant mortality.

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Appendix

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 infant mortality.
Residence type	Household's residence whether in rural or in urban area.	Urban residents are expected to have low mortality risks as
Wealth of the Household	The households are categorized as poor, middle or rich	Children born from poor families are expected to have
Access to water	Source of drinking water for households. Whether piped, well, rainwater, river water.	Clean drinking water is expected to improve child survival.
Access to sanitation	Availability of sanitation services in households, it is captured as no facility, flush toilet, pit toilet and ventilated improved toilet.	Clean human waste disposal availability reduces 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.
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 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.
Gender	Sex of the child which is either male or female.	Girls are expected to have lower mortality risk than boys.
Birth spacing	The birth spacing between children captured as less than 24 months or more than 24months.	Birth spacing of 24 months or more is expected to decrease infant mortality.
Delivery	Place where child was born, either at the hospital or non-hospital deliveries.	Hospital delivery is expected to lower infant mortality
Tetanus Toxoid injection	Captures as whether mother received immunization or not.	Children whose mothers are immunized are expected to have lower mortality risks.
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.

THE EFFECT OF LEADERSHIP STYLES ON GROUP ENGAGEMENT AT SSEAYP: A PERSON-CENTERED APPROACH*

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Abstract

This study was conducted with the objectives of investigating the leadership styles practiced by national leaders (NLs) at SSEAYP; how different leadership styles influence group engagement of participating youths (PYs) and how that relationship was moderated by leader-member-exchange relation. As SSEAYP is one of the most successful youth program in the world and it is very important to build trust, friendship, cross-cultural mutual understanding, and future cooperation among ASEAN and Japan, it is very important to select well representing youth ambassadors of the country. The findings from this research would not only be able to use in the selection and training of future NLs, and PYs, it can also be applied in industry setting. Data was collected from 104 PYs from ASEAN and Japan from 43rd SSEAYP. Google form questionnaire was sent to over 300 participants to answer online. Two step cluster analysis was used to classify different leadership profile and regression analysis was used to analyze the impact of leadership styles on LMX and engagement. From the results, 4 distinct profiles of leaders among 43rd SSEAYP came out such as very high transformational, high transactional, and low transformational style (Cluster 1); very high transformational, moderate transactional, and very low laissez-faire style (Cluster 2); low transformational, low transactional and low laissez-faire style (Cluster 4); and medium transformational, low transactional, very low laissez-faire style (Cluster 5). It was found that Cluster 1 leaders can create a strong leader-member exchange relationship and lead to highly engaged team. LMX serves only a partial mediator. Cluster 2 leaders have positive significant effect on employee engagement and LMX but to a lesser extent than Cluster 1 leaders. Cluster 4 leaders can generate very negative engagement and relationship with PYs. For Cluster 5 leadership, their engagement and LMX is not significantly influenced by this type of leadership style. LMX either does not mediate for this relationship as well. Group engagement is of great importance for the PYs to generate favorable outcomes to the team to create better image of the country as highly cooperative, engaging, and outperforming delegates among ASEAN and Japan. The findings suggested that the government should consider great care in selecting and training of NLs and PYs for the program because it is held every year and need top, and talented youths who will raise the flag high among international community. It can also be contributed to business world where managers need to nurture their leadership styles and take great care of forming a good relationship with subordinates to elicit employee engagement. Leaders should take care of their way of interacting with subordinates and they should be equipped with proper knowledge, skills and attitude which would be used in different situations with different people. This study also warned the importance of relationship that a leader should build with his or her subordinates in order to create more engaging workplace.

Keywords: transformational leadership, transactional leadership, and laissez faire leadership, engagement, leader-member exchange.

Introduction

Leadership is a process whereby one individual influence a group of individuals to achieve a common goal (Northouse, 2004). One of the main basis of organizations is having a competent leader for influencing and affecting employees, and directing them toward the predetermined organizational goals (Dhivya, 2015). Leadership is the main source of productivity, efficiency, motivation, commitment, job satisfaction, and employee engagement. It can make the whole organization lead the radical change, survive in the high competition, and strive for innovation. Leadership approaches can be categorized into seven groups: character

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traits, leadership styles, situational leadership, contingency theory, path-goal theory, transformational leadership theory, leader-member exchange theory or LMX. Among them, full range theory which is the baseline of transformation, transactional and laissez-faire leadership styles are the ones that are recently used these days. Good leaders have the remarkable ability to motivate and encourage employees to be and give their best. These leaders positively influence their employees to work toward reaching the established vision and objectives of the organization. It is therefore crucial for advancing organizations as these leaders inspire employees towards the vision and role model the attitudes and behaviors expected of employees. Studies show that leadership is positively related to work engagement and that it is these leaders that are able to motivate employees to become more engrossed in their work. As a result, this leads to higher levels of job satisfaction, commitment of employees and increased productivity within organizations. Understanding leadership and its impact on the engagement of employees has therefore become of utmost importance irrespective of management/supervisory levels as it has been found that even first-line supervisors within an organization will directly affect the engagement of its employees (Gibbons, 2006).

The Ship for Southeast Asian and Japanese Youth Program (SSEAYP) is an international youth exchange program sponsored by cabinet office of the government of Japan, in cooperation with ASEAN countries. It has been launched in 1974 and 2019 would be its 46th anniversary. Host to young, talented and highly brilliant youth ambassadors from ASEAN and Japan, SSEAYP plays a very crucial role to build regional integration, future cooperation, cross-cultural understanding and economic and social initiatives. The program last about 52 or 53 days and participants have to travel Japan and some ASEAN countries alternately by the ship specially built for that program. Every year, 28 participating youths (PYs) and over 30 participants from Japan were selected to represent their countries together with 1 national leader (NL) respectively. All the PYs from different countries pass through very tough selection process, smart training and thorough preparation under the guidance of their leaders.

In order to represent their countries well, as well as enjoy the program at the same time is very stressful job for the PYs as they have to perform different roles and responsibilities, sometimes to act creatively and actively under limited time frame. They have to follow the tight schedule and prepare their day to day activities which is quite challenging and highly competitive, and important responsibility for their country. As they are top performers in their countries and to represent their own countries, each and every PY used to be so motivated, has their own ideas and skills to show their abilities and to promote the image of their countries. Conflict is inevitable in such kind of circumstances and a good leadership is the top important factor for the performance of the whole team. While each and every PYs role is very important to accomplish many of the activities throughout the program, their engagement is vital to have consistently from beginning till the end of the program.

In order to keep the whole team organized, highly motivated and in high morale, leaders not only need to lead the whole team with high inspiration, they sometimes need to control with strict rules and regulations while maintaining a good relationship and strong tie. It is clear in such a situation that a specific type of leadership style is not the one that leaders solely rely upon. The basic assumption is that a good leader is the one who is admired and loved by the PYs and sometimes control the team in a strict manner. The traditional view that leadership styles are classified into three under full range theory but that three leadership styles are no longer viewed

as the ones that differentiate leaders, rather they are what make leaders in different combination. The purpose of this study is therefore to view leadership styles in person centered approach rather than variable centered approach used traditionally. Research questions are:

- (1) Can leadership styles of NLs be differentiated into clusters composed of three different leadership styles?
- (2) What is the impact of different leadership profiles on leader-member exchange (LMX)?
- (3) What is the impact of different leadership profiles on group engagement?

The objectives of this study are:

- (1) To classify leaders into different profiles which composed of three leadership styles based on the leaders' characteristics and preferences;
- (2) To analyze the impact of different leadership profiles on exchange relationship and
- (3) To analyze the impact of different leadership profiles on engagement of PYs.

Literature Review

Leadership can be defined as being part of a group process, being linked to individual personality, a function of influence, a form of persuasion, a power relationship and many combinations of these approaches. Leadership is about influence and relies heavily on the interpersonal aspects of the relationship between the leader and follower. Owusu- Bempah (2014) mentioned in favor of a follower-centric approach, emphasizing followers' contribution and roles in the leadership process. It has been shown that leadership is an evolving concept, but it could be satisfactorily defined as the process of interactive influence that occurs when, in a given context, some people accept someone as their leader to achieve common goals. This concept seems to fit properly to the modern concept of leadership that gives the leader, the followers, and the context a very important role in the leadership process.

In order for developing leaders to fully understand the relevance of today's leadership evolution, it is essential that they are familiar with the past theories to ground their leadership growth. There are more individual leadership theories that have evolved since the early twentieth century: great man, trait, behavior, participative, situational, contingency, transactional, and transformational theories. This leadership theory background will provide a relevant foundation for the main focus of full-range leadership. (Arenas, Connelly, & Williams, n.d.)

Full Range Leadership Model (FRLM)

In the Full Range Leadership Model (FRLM), the components exist in a single continuum that ranges from the highly active and effective leadership style called transformational to other end of the continuum which is passive and ineffective leadership style called laissez-faire, in the middle of the continuum transactional leadership style is represented. FRLM is used in this research work because it is the dominant theory in the recent leadership studies.

Bass (1998, 1990) and his colleagues (Bass and Avolio, 1993) further conceptualized transformational leadership into four components: idealized influence; inspirational motivation; intellectual stimulation; and individualized consideration. Each of the components helps to build followers' commitment in different ways (Angle & Perry 1983, Bass 1985). The first two

dimensions represent the notion of 'charisma' and are based on a follower's admiration for a leader, in equal measures as a follower's confidence in a leader's vision and his or her values. The third dimension, intellectual stimulation is concerned with providing followers with challenging tasks. Individualized consideration, as the last transformational dimension, describes the degree to which leaders are concerned with the follower's individual needs and wants. (Rothfelder, Ottenbacher, & Harrington, 2012). Transformational leaders are effective in promoting organizational commitment by aligning goals and values of the follower, the group, the leader, and the organization (Avolio & Bass. 1991). Its strong, positive effects on followers' attributes and commitment will then motivate followers to reach their fullest potential and exceed expected performance (Aven, Parker & McEvoy 1993).

On the other hand, Bass (1990) and Bass and Avolio (1995) developed that transactional leadership involves two distinct dimensions. The first dimension is the use of contingent rewards, which implies that leaders reward followers in exchange for attaining the specified performance levels. The second dimension is management by exception (MBE), which has the dimensions of Active and Passive. In Active MBE, leaders monitor their followers' performances and take corrective actions as necessary. In Passive MBE, leaders do not intervene until mistakes or problems occur, then leaders take corrective actions. The transaction between the leader and the employees in doing work is totally based on promise of what the employees need in exchange for the needs of leader (Lai, 2011). The leader may use reward system which can be negative like punishment whenever employees disagree with or it can be positive like praise and recognition, if employees agree with the goal and directions set by the leader. Transactional leadership involves making sure that organizations are managed according to the plans and rules and regulations. This leadership style limits or fences the long run vision of the leader and the engagement level of employees.

The FRLM also visualizes Laissez-faire leadership as an inactive and ineffective form of leadership in which there is no leadership, no interaction between the leader and his followers. It is passive, avoidant and ineffective. This leader abdicates responsibility, delays decisions, gives no feedback and makes little effort to help followers satisfy their needs. Laissez-faire leadership is passive type of leadership style. There is no any type of mutual exchange or relationship between followers and leaders. (Hamidifar, 2009). Followers under this leadership style have conflicting roles and responsibilities (Kirkbride, 2006). This leader will give up all of his responsibilities and will not utilize his authority for overseeing the organization. In addition, laissez-faire leader demonstrates passive indifference that is the capability of being moved by other people for subordinates and the task. The laissez-faire leader does not consider followers needs and problems. This leadership style may be applicable in organization in which the workers have level of self-actualization.

A Person-Centered Approach to Leadership

The present study employs a person-centered approach rather than traditional variable-centered approach to advance the leadership styles research. Applying the person-centered approach to leadership research, it is examined how a set of leadership styles combine to form leadership types. The person-centered approach offers a methodology for understanding the configuration and systematic connection of leadership styles within a particular person. Individuals belonging to a type share similar profiles (i.e., patterns of relative strengths and

weaknesses) across leadership styles. The person-centered approach profiles individuals. Consequently, it focuses on identifying a typology of leaders. Further, such classification can help to understand what different types of leaders look like (Dai & Meuse, 2013).

The name 'variable-centered' refers to the idea of grouping items in the most optimal way representing underlying variables. An example would be the variable work engagement consisting of the three elements –absorption, vigour and dedication – which are measured by three items for each sub-category. A factor analysis is used to explore the relationship between items, exploring underlying groups in a set of questions. This type of analysis finds a number of questions together to represent a latent variable. The aim of this grouping of items is to represent the variance in the data in the most optimal way, in such that the grouping of the items into variables explains most of the variance of each subject.

A person-centered approach can be seen as the exact opposite. This approach assumes subjects to be heterogeneous, with underlying groups of subjects to be responsible for explaining the variance in the data. In other words, the data is explored on the existence of underlying typical groups of subjects existing of typical employees, teams and organizations. People, teams, projects or organizations are grouped on the basis of similarity, in the way the groups explain most of the variance in the data. Within these groups, the relation between all variables and indicators measured in the data is assumed to be the same. This approach has been used in various fields of research, more frequently in marketing (exploring consumers on specific consumption patterns) and in the medical sciences (exploring groups of symptoms by grouping patients into medical conditions).

Following the person-centered approach, the grouping is not based on variables but on subjects, which can be organizations and teams but are very often persons, hence the name. In other words, grouping individuals into unique and distinct profiles, for which the relations with other constructs and outcomes may differ, creates typologies. A wide variety of names are used for the groupings that are found using a person-centered approach, including typologies, clusters, types, classes, profiles, modes, and so forth (Van Rossenberg, 2015).

This person-centered approach towards the study of the multiple foci of leadership, as opposed to a variable-centered approach, captures the complex interplay among multiple styles of leadership in a person. This seems a more appropriate approach for studying the multiple types and foci of leadership.

Leader-Member Exchange (LMX)

Leader-Member Exchange (LMX) theory focuses on the dyadic and quality of the relationship between leader and follower (Center for Leader Development, 2006). In this concept, a successful leader is characterized by high LMX that refers to a high quality relationship where members feel a part of in-group. As a result, they have more responsibility, decision influence, higher satisfaction, and access to valuable resources. Reciprocally, when members feel in the out-group, this relationship is characterized by low LMX. Here, the leader offers low levels of support to the member, and the person has less responsibility and ability to influence decisions. Leader-member relationships emerge as the result of a series of exchanges and interactions during which these roles develop.

Group Engagement

Engagement as “people employ and express themselves physically, cognitively and emotionally during role performances” (Kahn, 1990, p. 694). Olivier and Rothmann (2007) mentioned that it is important for leaders to cultivate work engagement because work is the expression of the self in the workplace. Engaged people are seen as energetic, having an effective connection with the workplace and are able to deal effectively with the demands of work. The significant part of group engagement, as it relates to this study, is contained in the way that individual, interpersonal, group and intergroup factors influence the work experience.

Work engagement which is composed of three dimensions that include absorption, vigor and dedication. Absorption means concentration and being engrossed in people’s work, whereby passing time will be intangible and being detached from the job has some difficulties for them (Gonzalez-Roma et al., 2006; Langelaan et al., 2006; Liorens et al., 2007). Furthermore, it is pleasurable to have job experience for individuals. Vigor is another aspect of work engagement that implies high levels of energy and mental resilience while working. There is also a determined investment in the actual work, together with high levels of persistence even when faced with difficulties (Schaufeli and Bakker, 2004). The third dimension is dedication that refers to a sense of significance, enthusiasm, inspiration, pride, and challenge (Schaufeli and Bakker, 2004, 2010). In another word, this aspect can be seen when a person has a great involvement with his or her job (Brown, 1996). (K, A, A, & M, 2018)

The success of an organization highly depends on the active employee engagement due to the fact that it improves performance and productivity. Employee engagement levels can be seen through the impact of employees’ work performance and the longstanding contribution to an organization. In other words, an organization with a steady engaged workforce guarantees the advancement of the organization. (Swarnalatha & Prasanna, 2014).

Relationship between Leadership Styles and Group Engagement

Leaders impact organizational effectiveness through their followers. Leadership can have a great impact on engaging employees within the organization. However, transactional leadership limits the leader to using reward-based behaviors in order to achieve higher performance from employees, which only have short-term effects. Transformational leadership emerges as a style that fosters the development of employee engagement. As Kaiser, Hogan, and Craig (2008) suggested, transformational leadership changes the way followers see themselves-from isolated individuals to members of a larger group. When followers see themselves as members of a collective, they tend to endorse group values and goals, and this enhances their motivation to contribute to the greater good. Bakker and Schaufeli (2008) found that employees who have positive interactions with their managers have increased levels of engagement. Cartwright and Holmes (2006) found that leaders who focus on relationship building and trust development increase engagement levels. From this perspective, transformational leaders have the capacity to directly impact the engagement levels of their employees. (Nohria, Groysberg, & Lee, 2008)

Therefore, leaders play an important role in the development of engagement by projecting the ideals and characteristics that are tied to engagement drivers, such as being supportive, and providing a vision to the employees that goes beyond short term goals and long term goals. Two constructs, leadership and work engagement as discussed, provide some insight into the outcomes and inputs of each, which in turn allows one a glimpse into the possibility that work

engagement may be influenced by a leader exhibiting a positive influence in the guise of effective and active transformational leadership. (Dibley, 2009) Therefore, leadership plays an important role while dealing with group including the diverse mix of employees to achieve group engagement. It can be said that leadership is the direct cause for work engagement.

Method

Sample and Research Design

Until 2018 October, by the time of data collection, SSEAYP has been in its 45th batch and the program was being held by that time. Although 44th batch had come back, by its nature, they still have to carry out their post-program activities. As SSEAYP was not one time event and do not finish as the main program finished and all the participants and leaders went back to their respective countries, they still have to carry out their post program activities (PPAs) which sometimes take about one year to implement, it would be incomplete to fully detect the group engagement of the whole batch prior to their PPAs have been completed. Therefore, 44th batch was invalid to be collected as sample and 45th batch again was still on the trip in the ocean that it will not be fully able to explore the leadership style yet for the PYs and to know their group engagement as well. Therefore, 43rd SSEAYP batch was the most suitable by the time be the data was to be collected. All the rest of batches will be quite far away for the PYs to recall their memories and answer the questionnaire that PYs of the 11 countries including ASEAN and Japan from the 43rd SSEAYP batch were collected as sample.

The google form questionnaire was sent in late October, 2018, to the whole batch of 320 PYs using mailing list obtained from the profile book of 43rd batch with the permission of the cabinet office, Japan and respective national leaders of the batch. Out of 320 PYs, 104 from all different countries responded that, 32.5% response rate was maintained. The questionnaire included three parts. Part A asks the respondents' demographic profile, their contingent concerned, Part B describes PYs perception on leadership styles of their respective national leader; and Part C collected information about the self-reflection of PYs' group engagement and their exchange relationship with national leader.

Measures

All the items in the questionnaire measuring three types of leadership styles and group engagement used 5-point Likert scale ranging from 1= strongly disagree to 5= strongly agree. All the measures were drawn from the existing well-known studies to ensure a good reliability and validity.

Leadership styles. Three leadership styles such as transformational, transactional and Laissez-faire were asked with items taken from the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (1989) with 40 items rated on a 5-point scale ranging from "1 = not at all" to "5 = frequently, if not always" was used. For PYs' perception of leadership styles, 23 items for transformational leadership style; 12 items for transactional leadership style and 5 items for Laissez faire leadership style were used in this study.

Employee engagement. It was asked with 17 items of self-reported questionnaires to PYs. The items were taken from Schaufeli et al. (2002), consists of vigor (6 items), dedication (5 items), and absorption (6 items). The sample items include "There is an open communication with my

NL.”; “My NL is aware of possible PY life issues, which may have precluded me from contributing my best work.”

Leader-member exchange. LMX was measured using the scales developed by (Graen and Uhl-Bien, 1995) with 7 items. A sample item is “I can count on my NL to support me.”

Analysis and Result

Two - step cluster analysis was used to form different latent profiles comprising of different levels of transformational, transactional and laissez-faire leadership styles. Two - step cluster analysis procedure is an exploratory tool designed to reveal natural groupings (or clusters) within dataset that would otherwise not be apparent. Latent class analysis involves the construction of Latent Classes which are unobserved (latent) subgroups or segments of cases. The latent classes are constructed based on the observed (manifest) responses of the cases on a set of indicator variables. Cases within the same latent class are homogeneous with respect to their responses on these indicators, while cases in different latent classes differ in their response patterns. Formally, latent classes are represented by K distinct categories of a nominal latent variable X. Since the latent variable is categorical, Latent Class modeling differs from more traditional latent variable approaches such as factor analysis, structural equation models, and random-effects regression models since these approaches are based on continuous latent variables. A Latent Class cluster model includes a nominal latent variable X with K categories, each category representing a cluster. Here in this study, nominal latent variable is a combination of different leadership styles deployed by a person. The resulting clusters in this study are different profiles of leaders who practice different levels of leadership styles in different composition. Each cluster contains a homogeneous group of persons (cases) who share common interests, values, characteristics, and/or behavior (i.e., share common model parameters). In this study, it is assumed that the perception of PYs on specific profile of composition of leadership style will generate different levels of engagement among those who perceived another different profiles of leadership styles.

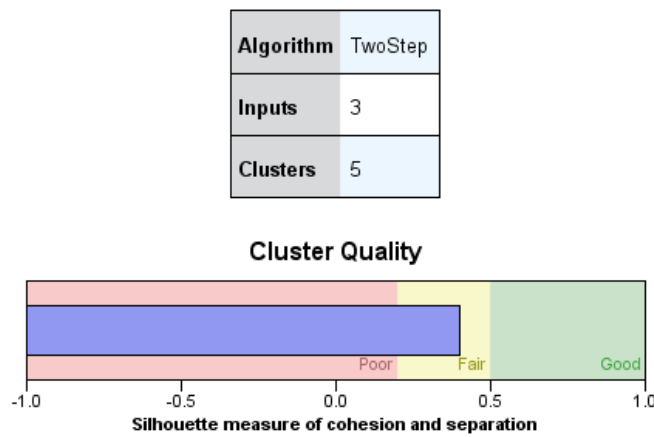
Initially, reliability of the construct variables was examined. Table 1 show the result of the reliability test and it was found that all the variables were well above 0.7 cut off criteria that they have high internal consistency. Before the cluster analysis, maximum number of clustering criteria was set as 5 based on the literature. Actually, different numbers of clusters were run and test the model validity and the result of 5 clusters in comparing with 4, or 3 was better as shown in Figure 1. According to the set criteria, 5 clusters or leadership profiles were formed from data collected from 102 respondents after adjusting outlier. Cluster 1 includes 12 PYs whose perception of their leaders is very high in transformational, high transactional and low laissez-faire (4.34, 3.97 and 1.35 respectively); Cluster 2 includes 22 PYs who perceived their leaders as very high transformation, moderate transactional and very low laissez-faire (4.52, 3.25, and 2.02); Cluster 3 includes 23 PYs having perception of leaders with moderate transformational, low transactional and low laissez-faire leadership styles (3.62, 2.93, and 2.17); Cluster 4 includes 9 PYs with leader perception of somewhat low transformational, low transactional and low laissez-faire but a little bit of laissez-faire dominant leadership (2.41, 2.93, and 3.22); while Cluster 5 has 36 PYs with having perception of leaders with moderate transformational, low transactional and very low laissez-faire leadership styles (3.69, 2.53, and 1.54). All the resultant clusters were presented in Table 2. Without proceeding to regression analysis, it was found that

Cluster 1 type of leadership profile create the highest group engagement, followed by Cluster 2, and then 3, and 5; and 4 as the lowest.

Table 1 Reliability statistics

No.	Variable	Reliability
1.	Transformational leadership	0.969
2.	Transactional leadership	0.835
3.	Laissez-faire leadership	0.718
4.	Employee engagement	0.924

Source: SPSS output, survey result (2018)



Source: SPSS output, survey result (2018)

Figure 1 Model summary showing the validity

Table 2 Five clusters formed with PYs’ perception of their leaders

Cluster	5	3	2	1	4
Label					
Description					
Size	35.3% (36)	22.5% (23)	21.6% (22)	11.8% (12)	8.8% (9)
Inputs	LZFNew 1.54	LZFNew 2.17	LZFNew 2.02	LZFNew 1.35	LZFNew 3.22
	TF 3.69	TF 3.62	TF 4.52	TF 4.34	TF 2.41
	TS 2.53	TS 2.93	TS 3.25	TS 3.97	TS 2.93
Evaluation Fields	EE 3.75	EE 3.72	EE 3.99	EE 4.30	EE 3.07

Source: SPSS output, survey result (2018)

As shown in Table 2, it could be seen that cluster 3 and 5 are having similar type of profile in terms of composition of three leadership styles. In order to test the effect of different leadership profiles, regression analysis was run in SPSS. Firstly, dummy variables for 5 different clusters were formed from the cluster numbers maintained from two - step cluster analysis. Multiple linear regression was then run with 5 clusters on group engagement. As expected, cluster 3 was removed from the analysis due to collinearity issue. The final result of the regression model was shown in Table 4.

Table 3 Regression result of new profiles of leadership styles on group engagement

	Unstandardized coefficient		Standardized coefficient	t	Sig
	B	Std error	Beta		
Constant	3.721***	0.106		35.076	0.000
Cluster 1	0.578***	0.181	0.323	3.189	0.002
Cluster 2	0.268*	0.152	0.191	1.767	0.080
Cluster 4	-0.649***	0.200	-0.320	-3.246	0.002
Cluster 5	0.029	0.136	0.024	0.212	0.833
F value	8.480***				
R square	0.259				
Adjusted R square	0.229				

Source: SPSS output, survey result (2018)

*** Significant at 1 percent level, ** Significant at 5 percent level, * Significant at 10 percent level.

Cluster 1: very high transformational, high transactional, and low laissez-faire; Cluster 2: very high transformational, moderate transactional, and very low laissez-faire style; Cluster 4: low transformational, low transactional and low laissez-faire style; and Cluster 5: moderate transformational, low transactional, very low laissez-faire style.

From the table it was seen that the model showed R-square of 0.259 which is quite low in terms of statistics but generally acceptable in social science, particularly involving psychological state of people. The regression results show that Cluster 1 which is very high transformational, high transactional and low laissez-faire style has positive, significant effect on group engagement of PYs ($\beta = 0.578$, $p = 0.002$). Cluster 2 which is very high in transformational, moderate transactional and very low laissez-style influence positively and significantly on group engagement ($\beta = 0.268$, $p = 0.08$). Cluster 4 which is the weakest leadership style with somewhat dominant in laissez-faire and low in both transformational and transactional styles has negative, significant effect on group engagement ($\beta = 0.649$, $p = 0.002$). Again, for Cluster 5, the moderate level of transformational, low transactional and very low laissez-faire style does not have significant effect of group engagement ($\beta = 0.029$, $p = 0.833$).

Table 4 shows the regression result of leadership profiles on LMX and it was found that leadership profiles whether they are of any combination except Cluster 5 have significant impact on LMX. Cluster 1 and 2 have positive, significant effect on LMX ($\beta = 0.658$, $p = 0.000$) and ($\beta = 0.360$, $p = 0.023$). Cluster 4, however, has negative significant impact on LMX.

Table 4 Regression result of profiles of leadership styles on LMX

	Unstandardized coefficient		Standardized coefficient	t	Sig
	B	Std error	Beta		
Constant	3.925***	0.109		35.929	0.000
Cluster 1	0.658***	0.187	0.287	3.526	0.001
Cluster 2	0.360**	0.156	0.201	2.305	0.023
Cluster 4	-1.529***	0.206	-0.587	-7.420	0.000
Cluster 5	0.063	0.140	0.041	0.448	0.655
F value	26.441***				
R square	0.522				
Adjusted R square	0.502				

Source: SPSS output, survey result (2018)

*** Significant at 1 percent level, ** Significant at 5 percent level, * Significant at 10 percent level.

Cluster 1: very high transformational, high transactional, and low transformational style; Cluster 2: very high transformational, moderate transactional, and very low laissez-faire style; Cluster 4: low transformational, low transactional and low laissez-faire style; and Cluster 5: moderate transformational, low transactional, very low laissez-faire style.

Table 5 shows the effect of LMX on group engagement. LMX has positive significant impact on engagement. It highlights the importance of leader-member relationship to have engagement among followers so that the whole organization would be effective.

Table 5 Regression result of LMX on engagement

	Unstandardized coefficient		Standardized coefficient	t	Sig
	B	Std error	Beta		
Constant	2.182***	0.269		8.128	0.000
LMX	0.408***	0.067	0.522	6.128	0.000
F value	37.553***				
R square	0.273				
Adjusted R square	0.266				

Source: SPSS output, survey result (2018)

*** Significant at 1 percent level, ** Significant at 5 percent level, * Significant at 10 percent level.

Cluster 1: very high transformational, high transactional, and low transformational style; Cluster 2: very high transformational, moderate transactional, and very low laissez-faire style; Cluster 4: low transformational, low transactional and low laissez-faire style; and Cluster 5: moderate transformational, low transactional, very low laissez-faire style.

Above mentioned results show the direct path of different leadership profiles on group engagement. Baron & Kenny (1986) approach is used to test the mediation effect of LMX on the above relationship. Baron and Kenny proposed a four steps approach in which several regression analyses are conducted and significance of the coefficients is examined at each step. Among then, three steps approach will be used in this study.

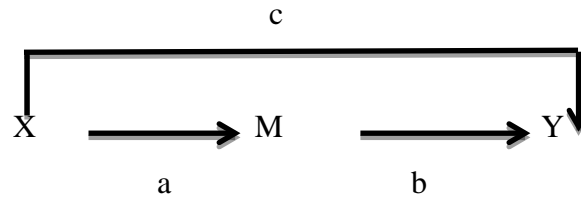


Table 6 Step for Testing Mediation

	Analysis	Visual Depiction
Step 1	Conduct a simple regression analysis with X predicting Y to test for path a alone, $Y = B_0 + B_1X + e$	
Step 2	Conduct a simple regression analysis with X predicting M to test for path a, $M = B_0 + B_1X + e$	
Step 3	Conduct a simple regression analysis with M predicting Y to test the significance of path b alone, $Y = B_0 + B_1 M + e$	
Step 4	Conduct a multiple regression analysis with X and M predicting Y, $Y = B_0 + B_1X + B_2 M + e$	

Source: Baron and Kenny (1986)

The purpose of Steps 1-3 is to establish that zero-order relationships among the variables exist. If one or more of these relationships are non-significant, researchers usually conclude that mediation is not possible or likely (although this not always true; see Mackinnon, Fairchild, & Fritz, 2007). Assuming there are significant relationships from Step 1 through 3, one proceeds to Step 4. In the Step 4 model, some form of mediation is supported if the effect of M remains significant after controlling for X. If X is no longer significant when M is controlled, the finding will support full mediation. If X is still significant (i.e., both X and M both significant predict Y), the finding will support partial mediation.

In order to test the mediation, another regression analysis is run. The results are shown in Table 7. In this analysis, following the step 4 of Baron & Kenny, all the independent variables of different leadership profiles and mediating variable, LMX, were run to test impact on engagement.

Table 4 Regression result of profiles of leadership styles and LMX on engagement

	Unstandardized coefficient		Standardized coefficient	t	Sig
	B	Std error	Beta		
Constant	2.638***	0.387		6.820	0.000
Cluster 1	0.396**	0.185	0.221	2.136	0.035
Cluster 2	0.169	0.150	0.120	1.123	0.264
Cluster 4	-0.227	0.241	-0.112	-0.942	0.349
Cluster 5	0.011	0.131	0.010	0.088	0.930
LMX	0.276**	0.095	0.354	2.905	0.005
F value	8.992***				
R square	0.319				
Adjusted R square	0.283				

Source: SPSS output, survey result (2018)

*** Significant at 1 percent level, ** Significant at 5 percent level,* Significant at 10 percent level.

Cluster 1: very high transformational, high transactional, and low transformational style; Cluster 2: very high transformational, moderate transactional, and very low laissez-faire style; Cluster 4: low transformational, low transactional and low laissez-faire style; and Cluster 5: moderate transformational, low transactional, very low laissez-faire style.

According to mediation analysis, it is found that LMX as a partial mediator on a relationship between Cluster 1 type of leadership profile and its effect is still significant even after controlling LMX. And then, it is found that LMX as a full mediator on a relationship between leadership profiles 2 and 4 and engagement because they are no longer significant when the expected mediator is controlled.

Findings and Discussions

The primary objective of this study is to see the leadership styles in person-centered approach, rather than variable-centered approach: rather than seeing the different leadership styles on traditional focus of three distinct styles independently, a leader is seen as the one who practices different leadership styles in different composition, forming different leadership profiles among the national leaders of 43rd Ship for Southeast Asian and Japanese Youth Program. Two step cluster analysis was used to classify different profiles of leadership styles among the leaders of 43rd SSEAYP. It was found that among the national leaders of 43rd SSEAYP, 4 distinct profiles came out such as very high transformational, high transactional, and low transformational style (Cluster 1); very high transformational, moderate transactional, and very low laissez-faire style (Cluster 2); low transformational, low transactional and low laissez-faire style (Cluster 4); and moderate transformational, low transactional, very low laissez-faire style (Cluster 5). All the resultant profiles seem realistic the nature of SSEAYP program. It is a good opportunity to learn people having different leadership profile and their influence on LMX and group engagement.

As it is expected, a leader should not be the one solely using a specific form of leadership style as seen in variable centered approach. Transformational leadership style can enhance motivation, inspiration, trust, and better relationship among leader and followers, transactional type of leadership is also required as a basis because it can bring an organization a clear purpose, structure, and specific direction under good leadership. SSEAYP is a youth program participated

by top, talented youths from each country and they have to conduct most of their job in timely manner, creatively, in a good teamwork, and the youths are so important for the representative of their own country that they somehow need specific clear goal, direction and at the same time, they need to have a good inspiration, trust, mutual understanding, a strong bond and a high motivation from the leader and have considerable degree of autonomy, delegation and freedom. Needless to say, national leaders selected for this kind of program should have the above-mentioned characteristics. This type of leader would be perfect, and the best to lead the team in this kind of situation. However, leaders, as different individuals and having different personalities and qualities, came out as four distinct profiles as found out in the result. Although it is expected that leaders for this program should be Cluster 1 type, leaders often fall into trap of building transformational type only as in Cluster 2, very ignorant one as in Cluster 4 possibly due to selection error, and those who try to be good at transformational but still not reach a desired level and end up as in Cluster 5.

Cluster 1 type of leadership which is also a very perfect, and highly effective leaders were found to have strong influence over leader-member exchange relationship as well as create high level of group engagement among participating youths. As transformational leaders are kind of charismatic that in combination with strong transactional basis, it can create a strong leader-member exchange relationship and lead to highly engaged team. LMX serves only a partial mediator may be because leaders already gave empowerment, delegation, trust, followers would enjoy the program as well as the work is done efficiently. This type of leadership can be the best for the participants to carry out their own roles and responsibilities, as well as enjoy the program and build strong friendship, mutual understanding and cooperation among international communities with full of their confidence.

Cluster 2 when leaders have very high transformational, medium transactional and low laissez-faire style can have positive significant effect on employee engagement but to a lesser extent than Cluster 1 leaders. It also has significant but lesser impact on leader-member relationship than Cluster 1 type of leadership. Leaders can influence PYs in terms of motivation, inspiration and empowerment, but they are sometimes needed in control of rules, regulations and procedures. When PYs are under urgent situation, some of PYs expect leaders to give clear guidance, strict rules and policies that this type of leaders would not get full satisfaction and high engagement as Cluster 1. However, if leaders of this type can build strong bonding with the PYs, it can still lead to engagement to a desirable degree because LMX serves as a full mediation role for this Cluster 2 leadership style and engagement.

Every authority concerned, and government side intends to select the best national leader to lead the whole contingent and represent their country at its best. However, there may sometimes be selection error, or simply may there be conflict between leaders and PYs that perception of PYs on the leadership style is not satisfactory and Cluster 4 type of leadership style is also assumed by some of the PYs on the leaders. When it comes to this, many of the conflict arise throughout the journey, PYs lost trust and confidence, they underperformed and cannot enjoy the whole program well. The whole team would be under disaster for this type of leadership style. It can be seen that Cluster 4 leaders can generate very negative engagement and relationship with PYs. When this happens, PYs would have to face stress, burden and lots of dissatisfaction over the program. They may not be able to perform at their best to represent the

country and they cannot be proud of their leader at the same time. LMX serves as a full mediation role but in a negative way.

And Cluster 5, when leaders just tried to build good relationship but forget to make things done, when they have medium transformational, low transactional and low laissez-faire, PYs should have high motivation and engagement but as they are not bound with the effective, powerful and strong leadership, their engagement and LMX is not significantly influenced by this type of leadership style. LMX either does not mediate for this relationship so well.

Implication of the Study

SSEAYP is believed to be one of the most successful youth programs all over the world to build friendship, trust, future cooperation, mutual understanding among ASEAN and Japan. Every year, 28 participating youths and one national leader is selected to well represent the country, to raise their flag high, to build international cooperation among 300 plus youths and five to six host families for cultural exchange as youth ambassadors of their country. The program is in tight schedule, PYs have to show their talent, abilities and social skills while they have to pass through a tough journey in the ocean. PYs are expected to outperform with full engagement in the face of international community, showing their teamwork and confidence. In order to make the whole contingent energetic, highly motivated, and be creative, they need a high level of empowerment, delegation as well as control of proper rules and regulations. Leaders are the most important role for the whole contingent to keep their high level of morale. Countries should select not only PYs but also NLs with great care and train them properly so that they would be able to fit in the situation without difficulty. Leaders should be aware of the fact that they cannot solely rely on transformational type of leadership but in combination with strong transactional type, they can lead the whole contingent by example, set the high target and achieve their excellence with pride. Once they rely on transformational type alone and fail to build upon transactional foundation, their leadership would be just a failure. The worst thing is that leaders should never ever forget their role and try to avoid to be Cluster 4 type of leaders as it will create just the conflict, dispute, dissatisfaction and the whole contingent will be disorganized.

This study shed light on the importance of leadership on employee engagement not only in this kind of youth program level but also in the business organizations whether they are private or public. In this day of high competition, and of radical change, organizations need highly engaged employees who are not only creative, but also are willing to work for the organization both in-role and extra-role. Organization should have proper selection procedure and good training program to nurture Cluster 1 type of leadership or at least Cluster 2 type as well but avoid Cluster 4 and 5. Recognizing the role of LMX, leaders should also think of building strong bonding with their subordinates while they are trying to be target oriented. With the help of strong leaders, organization and the whole team would be able to face even the challenging, highly competitive and rapidly changing environment with their full potential successfully, and satisfactorily.

Suggestion for Further Study

As this study focus only on the youth program, the findings are solely based on the specific situation. Future researchers can apply this type of approach in business setting in order to make generalization of the findings. Researchers can also include the impact of leadership

styles on commitment and performance of the whole team or the organization for more comprehensive framework. Moreover, they may use the longitudinal type of survey so that how the impact of leadership styles would be changing in employee engagement and exchange relationship among leaders and followers.

Conclusion

The aim of this study is to approach leadership style in person-centered rather than variable-centered method used traditionally. The major assumption behind this is that leaders are individuals practicing different leadership styles in different composition as they prefer. This study tried to find out those different kinds of leadership styles that individual leaders would prevail and its effect on group engagement and exchange relationship among subordinates. It could successfully classify the leadership profiles among the national leaders of 43rd SSEAYP into four distinct profiles and found that leaders who use high transformational, high transactional and low laissez-faire and high transactional, medium transactional and very low laissez-faire outperform than other type of leadership style combinations. Out of over 300 PYs, 104 responded the questionnaire. One limitation is that PYs have to recall their memory during their journey as well as their post-program activities. However, the choice of batch is the most suitable among different batches of SSEAYP in order to reflect their full understanding of the leader and themselves because SSEAYP does not end even after the program ends officially. Post program activities extend sometimes several months that engagement is to be seen also until those activities are conducted by the respective contingent. This would be a great contribution to leadership literature and make strong recommendation to managerial setting in business world as well.

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FACTORS INFLUENCING STUDENT ADOPTION OF INTERNET BANKING IN YANGON UNIVERSITY OF ECONOMICS

Aye Thu Htun*

Abstract

The main objective of the study is to analyze the influencing factors on Internet Banking adoption among students in Yangon University of Economics. Descriptive and analytical methods are used in this study. Primary data as well as secondary data are used to achieve the objective. To collect the primary data, 400 students who have experience in Internet Banking services at private banks and study in postgraduate programmes at Yangon University of Economics were selected and then, interviewed with structured questionnaire. Internet Banking adoption is the dependent variable and influencing factors that consist of convenience, trust, perceived risk, perceived security, perceived ease of use, and perceived usefulness are the independent variables in this study. This study found that convenience, trust, perceived risk, perceived security, perceived ease of use, and perceived usefulness have influences on Internet Banking adoption among students of Yangon University of Economics. The study revealed that trust is the most significant influencing factor on the student adoption of Internet Banking in Yangon University of Economics, Myanmar.

Keywords: influencing factors, trust, student adoption of Internet Banking, Yangon University of Economics

Introduction

At present, majority of the people recognize and accept that Internet Banking is used as a different idea and concept from traditional banking system for performing banking and financial transactions. Maenpaa, et., al, (2008) pointed out that advances and improvements in technology made significant and important operating changes to Internet Banking. Internet Banking can offer substantial benefits to not only customers but also banks. From perspective of banks, since Internet Banking can decrease the transactional costs of traditional banking services that include reducing the cost of paperwork, opening new branches, hiring new skilled and talent personnel, and, walk-in customers, nowadays, majority of the banks become to attract their customers to use Internet Banking services. Alam, et. al, (2007), as cited in AlKailani, (2016) stated that Internet Banking services are also more convenient, ease of use and attractive than traditional banking services. Bauer & Hein (2006) as cited in AlKailani, (2016), also stated that Internet Banking can increase satisfaction of their customers because of convenience, faster and easier services are provided by using Internet Banking than traditional banking. Though there are significant benefits provided by Internet Banking, majority of the banks are faced with many challenges for the growth and development of Internet Banking. Moreover, there are some barriers including lack of awareness, skill and knowledge to use Internet Banking for users. Moreover, unfamiliarity with technology and trust on security and safety are also the important barriers for users to increase the usage of internet banking services.

In Myanmar, banking and finance sector plays a significant and vital role in the development and growth of economy. Government of Myanmar has implemented significant reforms and liberalization in banking and finance sector since 2011. Therefore, at present, there are (27) private banks that are allowed to open and provide financial and banking services in Myanmar. Among the private banks, Central Bank of Myanmar permits (12) private banks to

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provide the financial products such as mobile banking, internet banking, mobile wallet and card services which are the cashless banking and financial transactions. For the development and growth of banking sector in Myanmar, one of the main problems is that customers are heavy reliance on cash when they perform their banking and financial transactions. Therefore, Myanmar banks need to promote and encourage their customers to use the cashless banking and financial transactions including internet banking. Moreover, the critical factors that influence on customer adoption of Internet banking are needed to understand and identify to increase internet banking usage.

Objectives of the Study

The objectives of this study are as follows:

- (1) to examine the association among convenience, trust, perceived risk, perceived security, perceived ease of use, and perceived usefulness, and Internet Banking adoption among Yangon University of Economics students and
- (2) to analyze the factors that influence on student Internet Banking adoption in Yangon University of Economics.

Method and Scope of the Study

This study only emphasizes on factors influencing Internet Banking adoption among students who are attending the Postgraduate programmes in Yangon University of Economics. This study attempts to investigate how these students of Yangon University of Economics perceived Internet Banking adoption. In this study, descriptive and quantitative methods are used. Primary data as well as secondary data are employed to investigate the objectives. To get the primary data, 400 private bank customers from Postgraduate students, Yangon University of Economics, are selected and simple random sampling method is used to select the respondents. Reports of the banks, relevant text books, theses, articles and journals from internet websites are used to obtain the secondary data. In this study, survey questionnaire consists of three parts. First part describes the respondents' demographic factors and second part presents the consumer perception towards factors including convenience, trust, perceived risk, perceived security, perceived usefulness, and perceived ease of use. Third, the last, part deals with adoption of Internet Banking. To determine the agreement level of each statement, the five-point Likert scale was used in the questions. To achieve the study objectives, Regression analysis and Pearson Correlation analysis are used as the statistical tools.

Literature Review

Internet Banking

Yiu et. al, (2007) as cited in AlKailani, (2016) stated that Internet Banking is the delivery of banking services by using the open-access computer network directly to customer home on private address. AlKailani, (2016) mentioned that Internet Banking can be used as a new distribution channel for the banking service delivery.

Technology Acceptance Model (TAM)

Davis (1989) as cited in AlKailani, (2016) introduced and developed TAM. He stated that user adoption of computer system depends on their behavioral intention to use and the positive attitude toward the technology when users perceived the technology to be easy to use and be useful.

Adoption

Baraghani, (2007) highlighted that the acceptance and continuous usage of the products or services or ideas are referred to as adoption.

Factors Influencing Internet Banking

Riquelme and Rios, (2010) made a research on adoption of mobile banking in Kuwait based on TAM model that consists of perceived usefulness and perceived ease of use. Jeong, Yoon, (2013) stated that perceived usefulness, perceived ease of use, perceived credibility, perceived financial cost and self-efficacy are factors that influence customer acceptance of Internet Banking Service.

Perceived Ease of Use

Davis (1989), as cited in Kazi, (2013) mentioned that perceived ease of use is the extent to which a person believes that using a particular system would be free of effort. Hainudin, (2007) and Wang et al, (2003) stated that perceived ease of use has a positive impact on user intention to use and then, adoption of Internet Banking.

Perceived Usefulness

Davis (1989), as cited in Kazi, (2013) asserted perceived usefulness as the extent to which one believes that using a particular system can enhance his or her performance.

Perceived Security

One of the major influencing factors related to the use of internet banking is that of security. Salisbury et al. (2001) mentioned that perceived security is the extent to which customer believes that the World Wide Web is secure on the transferring of sensitive and important information.

Perceived Risk

Andretha S. E. Langelo (2013) pointed out that perceived risk is the uncertainty faced by users when they cannot anticipate and expect the consequences of buying decisions. Schiffman and Kanuk, (2004), as cited in Andretha S. E. Langelo (2013) pointed out consequences and uncertainty as the two relevant dimensions of perceived risk.

Perceived Trust

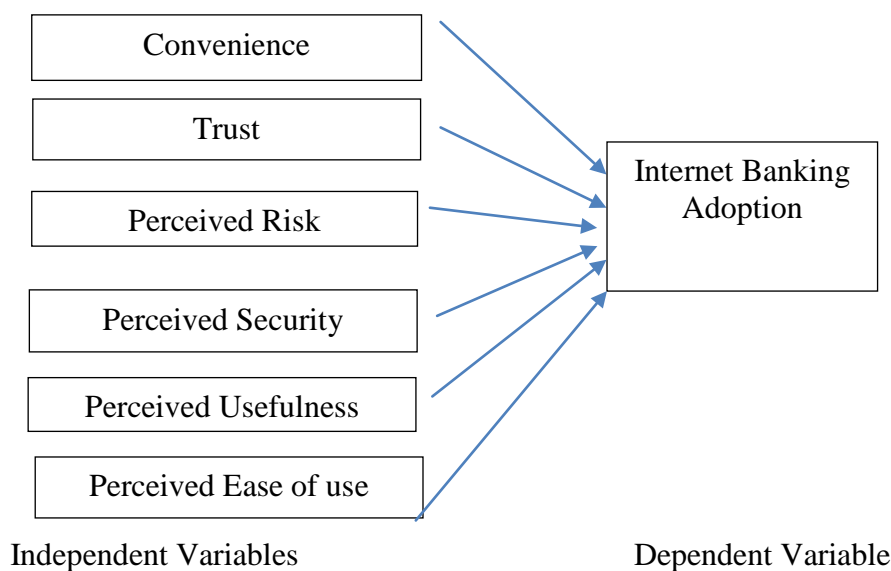
Trust is a very important factor to perform the banking and financial transactions. Juan Carlos Roca, Juan Jose' Garcí'a and Juan Jose' de la Vega, (2009) stated that trust is characterized in terms of the willingness and expectation of the trusting party engaging in a business transaction.

Convenience

Yu and Lo, (2007) and Ramsaran, (2003) as cited in Kazi, (2013) stated that people can bank online to check balances, pay bills, apply for mortgages and auto loans, transfer funds, and use other banking and financial services at the tip of a finger anytime from anywhere.

Based on above theories, ideas and concepts, the study developed the Conceptual Framework shown in Figure (1).

Figure 1 Conceptual Framework of the Study



Source: Own Compilation (2019)

Results and Findings

Demographic Profile of the Respondents

Table (1) shows the Demographic profile of the respondents including age, income level, studying programme and working organization of the respondents.

According to Table (1), with regard to the respondent's age, 44% of the respondents are at the age group of under 30 years. Regarding the working organization of the respondents, 88%, the majority of the respondents work in private sector. Regarding the salary of the respondents, 61%, the majority, of the respondents get over 500,000 kyats per month. The majority of the respondents (81%) are studying in the Master degree programmes offered by the Yangon University of Economics.

Table 1 Profile of the Respondents

Respondent's Age		
Particular	No. of Respondents	Percentage
≤30 years	176	44
31 to 40 years	152	38
41 to 50 years	68	17
≥51 years	4	1
Total	400	100
Respondent's Monthly Salary		
Particular	No. of Respondents	Percentage
≤300,000 Kyats	52	13
300,000 to 500,000 Kyats	104	26
≥500,000 Kyats	244	61
Total	400	100
Respondent's Working Organization		
Particular	No. of Respondents	Percentage
Private Sector	352	88
Public Sector	48	12
Total	400	100
Respondent's Study Programme at the University		
Particular	No. of Respondents	Percentage
Postgraduate Diploma	76	19
Master Degree	324	81
Total	400	100

Source: Survey Data (2019)

Reliability Test

In this study, to evaluate the reliability of the scale, Cronbach alpha coefficient is used. Nunnally (1978) stated that for construct, Cronbach Alpha level of 0.60 or above can be considered to be acceptable.

Table 2 Reliability of the Scale

Sr. No.	Particular	Cronbach α	Number of Items
1	Internet Banking Adoption	0.721	3
2	Perceived Ease of use	0.762	4
3	Perceived Usefulness	0.734	4
4	Perceived Security	0.862	4
5	Perceived Risk	0.713	5
6	Perceived Trust	0.772	5
7	Convenience	0.718	5

Source: SPSS output based on Survey Data (2019)

Table (2) presents perceived ease of use, usefulness, security, risk, trust, convenience and Internet Banking Adoption with internal consistency values of 0.762, 0.734, 0.862, 0.713, 0.772, 0.718 and 0.721, respectively which are greater than recommended alpha value of 0.60. According to Table (2), Internet Banking adoption alpha coefficient was 0.721 while all Alpha coefficients of factors influencing Internet Banking were obtained over 0.60. Thus, internal consistency of all items to the concept is good in this study.

Table 3 Correlation among Influencing Factors and Student Adoption of Internet Banking

	PEUsed	PerUF	PSec	PRisk	Trust	Conve	Iadopt
PEUsed	1						
PerUF	0.412**	1					
PSec	0.291*	0.412**	1				
PRisk	-0.301**	-0.422**	-0.493**	1			
Trust	0.417**	0.201**	0.218**	-0.424*	1		
Conve	0.422**	0.356**	0.225*	-0.378	0.376	1	
Iadopt	0.407**	0.427**	0.519**	-0.409**	0.596**	0.506**	1

* 0.05 level, ** 0.01 level (significant correlation)

PEUsed = Perceived Ease of use, PerUF = Perceived Usefulness, PSec = Perceive Security, PRisk = Perceived Risk, Trust = Trust, Conve = Convenience, Iadopt = Internet Banking Adoption

Source: SPSS output based on Survey Data (2019)

In this study, Correlation analysis was applied to analyze the association among independent variables, influencing factors (perceived ease of use, perceived usefulness, perceived security, perceived risk, trust and convenience) and dependent variable, Internet Banking adoption. The statistical results on Correlation analysis of these variables are shown in Table (3).

As shown in Table (3), it can be found that among the influencing factors, there is a strongest association between trust and Internet Banking adoption. Perceived security is the second strongest association with Internet Banking adoption, followed by convenience, perceived risk and perceived ease of use. Moreover, statistical results showed that there are significant positive associations among perceived security, perceived ease of use, perceived usefulness, trust and convenience and Internet Banking adoption but this study found that there is a negative significant association between perceived risk and Internet Banking adoption among postgraduate students in Yangon University of Economics.

As shown in Table (4), ANOVA Table, the significance of F statistic is less than 0.05. Therefore, it can be observed that the summary model of the study is statistically significant.

Table 4 ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	16.373	5	4.155	5.112	0.000
	Residual	109.345	394	0.813		
	Total	125.719	399			

Dependent Variable: Iadopt

Source: SPSS output based on Survey Data (2019)

According to Table (5), it can be found that 83% change in dependent variable (Internet Banking adoption) is due to their independent variables (influencing factors on Internet Banking adoption).

Table 5 Summary of Model

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	0.913 ^a	0.833	0.831	.14621

Predictors: (Constant), PerEUsed, PerUF, PSec, PRisk, Trust, Conve

Source: SPSS output based on Survey Data (2019)

Table 6 The Coefficients of Influencing Factors on Student Internet Banking Adoption

Factors	B	Stand. Beta	T	Significance
Perceived Ease of use	0.428	0.432	7.015	.000
Perceived Usefulness	0.141	0.451	2.432	.023
Perceive Security	0.058	0.411	0.952	.001
Perceive Risk	-0.356	-0.316	-5.015	.000
Trust	0.537	0.556	5.478	.004
Convenience	0.352	0.458	4.757	.000

Source: SPSS output based on Survey Data (2019)

Regression analysis presented in Table (6) showed that the most significant influencing factor is trust that can explain the variance in Internet Banking adoption at 1% significant level. In additions, perceived convenience affects Internet Banking adoption with 0.458 standardized beta. The statistical results also revealed that perceived usefulness, use easily, and security affect adoption of Internet Banking significantly with 0.451, 0.432, and 0.411 standardized beta, respectively. In this study, according to the statistical results, risk had a significant negative effect on student internet banking adoption with standardized beta 0.316.

Discussion

The results of this study revealed that perceived ease of use, usefulness, security, risk, trust and convenience have a significant association with Internet Banking adoption. Moreover, the study also observed that perceived trust, perceived ease of use, convenience and security have significant influences on adoption of Internet Banking services whereas perceived risk has a significant negative effect on adoption of Internet Banking. If the users and potential users perceived that risk on using internet banking service is high, it cannot be expected to use internet banking because there is a negative significant association between risk and the adoption of Internet Banking. But, if the user and potential user perceptions on ease of use, usefulness, security, trust, and convenience in using Internet Banking service are high, it can be expected that they will have more desires and willingness to use Internet Banking services. With regard to the trust, the statistical result showed that trust has a strong effect on Internet Banking adoption. It can be seen that if the users and potential users believe in reliability and safety of internet banking services and if they understand and accept the advantages and benefits of internet banking services, the adoption rate on Internet banking will be increased. To build the trust between users and bank, bank's reputation and image are the most important factors. To enhance reputation and image, this study observed that Myanmar private banks try to provide faster, reliable, responsive and accurate facilities and increase internet capabilities. Concerning the perception on convenience of respondents, the study found that there is a significant influence and effect of convenience on Internet Banking adoption among postgraduate students studying at Yangon University of Economics.

Recommendations

This study had proved that perceived ease of use, risk, security, trust, and convenience have significant influences on Internet Banking adoption among students studying at postgraduate programmes of Yangon University of Economics. Since perceived security is one of the influencing factors, the security of internet bank services needs to upgrade and improve by private banks to reduce the worry and anxiety on their financial loss of users and to build and maintain the loyalty of customers. Particularly, management of banks should expand the functions and features of security because these functions and features can provide assurance to their customers to make banking and financial transactions. Moreover, Marketing departments of the banks should develop and organize the sales and marketing programmes to promote the strong safety features of internet banking for changing the perceptions on security. To improve the security, banks should develop monitoring teams to reduce and eliminate doubtful financial transactions and bank staff fraud.

This study highlights that trust is also one of the most influencing factors on adoption of Internet Banking. Since trust in Internet Banking services can affect the usage rate, banks must make key improvements in customer relation and care in customers to increase the number of customers' Internet Banking adoption. To build the trust with customers, the banks need to keep their promises. With respect to the perceived ease of use, the banks should develop clear and understandable guidelines and instructions on using internet banking services. Therefore, the users can easily understand and not feel difficulties when they adopt Internet Banking.

Since convenience has a significant effect on Internet Banking adoption, the banks should offer effective and proper training courses such as product knowledge, customer relationship,

business communication and etc., and train their staff to provide quick and right response to issues and complaints. Similarly, call center team should be developed and trained to improve customer services through the customer verification. In additions, online application system should be developed when the user log in situation. Moreover, the statistical results proved that perceived usefulness, perceived ease of use, perceived risk, perceived security, trust and convenience have dominant effect on adoption of Internet Banking. Therefore, these factors are needed to consider by the policy makers and management of the banks for the success of their banking services and products.

Conclusion

The main objective of this study is to analyze the factors that influence the student Internet Banking adoption in Yangon University of Economics. Four hundred students who study at post graduate courses of Yangon University of Economics and have bank experience were drawn as the sample. This study revealed that perceived ease of use, usefulness, risk, security, trust and convenience are influencing factors on Internet Banking adoption among Yangon University of Economics students. Hence, as a conclusion, the number of users can be increased by improvements in ease of use, usefulness, security, convenience, and trust and decreases in perceived risk on Internet Banking services offered by Myanmar private banks.

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THE ANTECEDENTS OF INNOVATION IN SMEs OWNED BY MYANMAR WOMEN ENTREPRENEURS

Aye Aye Win *

Abstract

Despite the importance of entrepreneurship is changing the economic landscape of many countries, identification of entrepreneurial opportunity is still in its early stages. Women entrepreneurship is identified as women entrepreneurs being catalytic in job creation and innovation. The transformation of educational status of women and varied aspirations for better living necessitated a change in the life style of Myanmar women. This research paper is intended for the development of the Myanmar Women entrepreneur's opportunities identification and innovation based upon their personal and business characteristics. Data are compiled from a sample of 40 women entrepreneurs in Myanmar and analyzed using regression to determine relationship between the independent and dependent variables. It was found that creativity, flexibility and market orientation have strong relationship to the product innovation and creativity. Flexibility and market orientation have strongly relationship with process innovations. SMEs are recognized as the significant contribution to economic growth and development, employment and the social progress of economic. Exploring women entrepreneurs' success will lead to the recognition of the economic and social contribution and they are making to their country, as well as their economic and abilities and worth. Thus, this study will be a strong point for improving support for SMEs in general, and, in particular, for women-operated SMEs to improve their operations and enhance productivity.

Keywords: Entrepreneurship, Innovation and Women Entrepreneurs

Introduction

Innovation is one of the most important concerns of each business organization and its role in the development and coordination of the market is not alienable. Innovation usually refers to renewing, shifting or creating processes that are more efficient, productive ways of doing things, for businesses, it means generating and implementing new ideas, creating dynamic products or improving enterprises providing better services. It can be atomically for the growth and success of any business and it help to adapt and grow in the marketplace. Being innovative does not mean changing business model and adopting to change only it means changing business model and adopting to change only according to the environment to deliver better products or services in the market place, which gives a competitive advantage to the firm.

A new firm creation is recognized as a major driver of economic growth and smaller firms are increasingly being recognized as making significant contribution to innovation. Small and Medium Enterprises is the key part of any country's economic development, especially developing countries like Myanmar that needs sustainable development for the country.

SMEs are finding ever increasing opportunities to enhance their business activities in various sectors. There are a number of advantages for SMEs development in the country because they are less capital intensive and high labor absorption in nature.

Currently, Myanmar economy is growing rapidly domestically and internationally. At the same time, economic industry is making extraordinary progress in different industry like

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manufacturing, agriculture, services etc. According to D.H Hold (2015) pointed out innovation is the transformation of creative idea into useful application but creativity is pre-requisite to innovation. Van De Ven (1986) states that managing innovation process involves idea, people, transaction and context executed over a period of time. The focus on innovation and women's entrepreneurship effects the nation's economic development and has impact on development of Myanmar SMEs.

Nowadays, the rise of women entrepreneurs throughout the world has gain the attention from both spheres of business and academic. The participation of women entrepreneurs in the entrepreneurship is important in transforming and empowering the society through female participation in the labor market. This involvement is accepted to be one of the efforts to alleviate poverty and unemployment problems in most of the developing or emerging countries (Apergis & Pekka-Economou, 2010; Bhardwaj, 2014).

There has been a sea of change in the way women's entrepreneurship is perceived around the world over the past 20 years, and a rising tide of interest in and keep up for women's enterprise development on the part of national economic policy- makers, international development institutions, and in civil society. Women entrepreneurship has been recognized as a remarkable source of economic process, although they still represent a minority of all entrepreneurs. Women entrepreneurs usually face many barriers to begin and grow their businesses as in like marital status, laws, lack of access to formal finance mechanisms; restricted mobility and access to information and networks, etc. Women's entrepreneurship can produce a really strong contribution to the economic well-being of the family and communities, home country, poverty reduction and women empowerment.

Thus, the current study aims to add to the general understanding of women entrepreneurs in Myanmar, particularly in relation to innovation.

Objectives of the Study

The main objectives of the study are:

1. To investigate the influencing factors of product innovation on SMEs owned by Myanmar Women
2. To identify influencing factors of process innovation on SMEs owned by Myanmar Women

Literature Review

The effect of market and technological change on the economic structure is creating huge transformation in the way every business and nations organize production, trade goods, invest capital and develop new products and processes. So that innovation makes the ability to treat efficiently the information a crucial factor for business continuation. Thus, the innovations in the market come out a challenge for enterprises. Bruno, Fonseca Netto and Bruno (2011) mentioned that innovation is the process that transforms new ideas into new products or new procedures that lead to productivity gains. Additions, Garcia and Calantone (2002) referenced that innovation is the development and production of new products and services to get commercial success.

In contempt of, various studies have also concluded that innovation will assist firms to emerge from an economic downturn in a much stronger position than their competitors who choose to cut costs or improve internal efficiencies through innovative production, process and marketing (Trott, 1998; Gilbert, 1990; Ghemawar, 1993; as cited in Chaston and Scott, 2013). University of Cambridge (1992) pointed that small firms are often better placed than larger firms to react quickly and efficiently to changing patterns of market demand and to take advantage more easily of the opportunities opened by the innovative developments in production and operational process.

Creativity is in regard to the capacity of individuals or groups to create, invent, imagine new something (Tremblay, 2011). Bruno-Faria (2003) described that creating is Generating ideas of products, services of process that produce some valuable contributions to organization and/or for the welfare of people that work that context and that have essential elements for implementation.

Creativity is seen in their article as a differential that promotes the expansion of a sense creator resulting in innovation. A researcher of (Roff, 1999) study innovation in connection with creativity. His perception of researched source a company aims to become creative and innovative because of global forces that influence it as well as the benefits derived from aspects of its business and prospects. As to the relationship between creativity and innovation, this author considers that idea generation is a critical part in the innovative process and creativity is the thought process that assists in this view, considering that improvements in these skills that will lead to a greater likelihood of emergence of new alternatives, approaches and solutions to problems. Souza and Soars, (2007) comment about creativity appreciation in the commerce competitiveness of the times, in seeking fast and innovative solutions to organization's problems.

Defining entrepreneurship as risk-taking neglects other major elements of what we usually think of as entrepreneurship, such as a well-developed ability to recognize unexploited market opportunities (Gupta 2017). While there is still much that is not known about innovation and women's entrepreneurship, there is an increasing amount of information about innovation and women – both about the positive effect that innovation can have on the lives of women, and about an underrepresentation of women in fields that frequently produce innovation.

Verma (2010), in her study Challenges faced by women entrepreneurs in a developing economy. She found that women entrepreneurs faced constraints in aspect of financial, marketing production, work place facility and with problems. Financial problems faced were non-availability of long term finance, regular need of working capital. In marketing problems they face location and lack of transport facility. In production problem was non availability of raw material.

Amador (2003) suggested that if the marginal innovation is done under pressure from outside, a better venture capital increases the innovation rate. If the marginal innovation would have been implemented without outside pressure, a better venture capital, by decreasing the rents of being the incumbent firm, decreases the rate of Innovation.

Table 1 Research Hypothesis

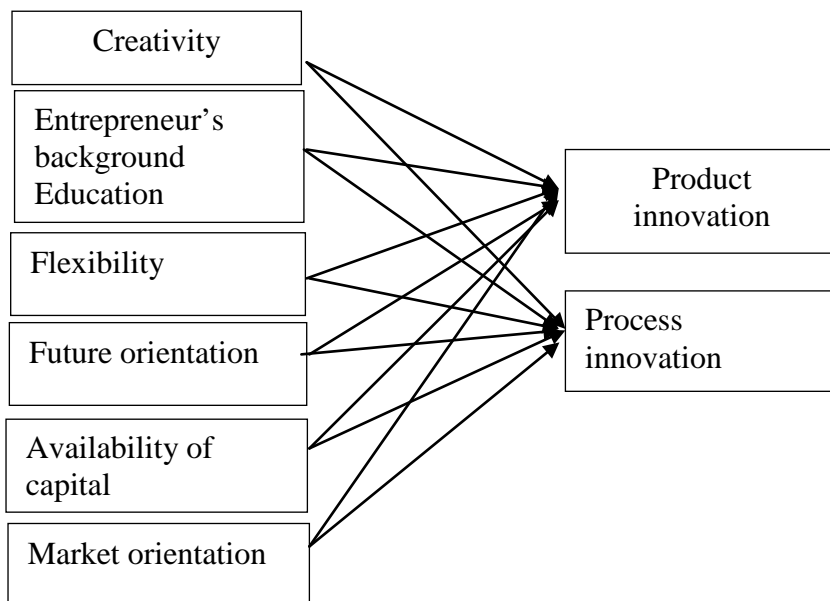
Hypothesis	Description
1	Creativity has a significant effect on product innovation.
2	Entrepreneur’s background has a significant effect on product innovation
3	Flexibility has a significant effect on product innovation.
4	Future orientation has a significant effect on product innovation
5	Availability of capital has a significant effect on product innovation.
6	Market orientation has significant effect on product innovation.
7	Creativity has a significant effect on process innovation.
8	Entrepreneur’s background has a significant effect on process innovation
9	Flexibility has a significant effect on process innovation.
10	Future orientation has a significant effect on process innovation
11	Availability of capital has a significant effect on process innovation.
12	Market orientation has significant effect on process innovation.

Research Method

A survey instrument in the form of closed-ended questionnaire was developed for the purpose of collecting the main data for the study. The population used in this study was 393 SMEs owned by Myanmar women in Yangon. Data were collected from 40 SMEs using simple random sampling method. All the variables were adopted from previous researches and a five-point Likert scale point was used. This instrument used in this study is composed of 3 parts. The first part deals with antecedents of innovation. Part 2 includes two groups of innovation and part 3 includes of number of demographic questions.

Various statistical methods have been employed to compare the data collected from 40 respondents. These methods include description analysis and regression analysis. Each method is used to analyse the relationship of different variables.

The Analytical Framework of the study



Source: Developed for this study

Hypothesis Testing

To test twelve hypotheses the data were analyzed using multiple linear regression analysis following the guidelines established by Hair et al. (1998). The purpose of regression analysis is to relate a dependent variable to set of independent variables (Mendenhal & Sincich, 1993).

Table 2 Results of Hypothesis

1	Creativity has a significant effect on product innovation.	Supported
2	Entrepreneur's background has a significant effect on product innovation	Not supported
3	Flexibility has a significant effect on product innovation.	Supported
4	Future orientation has a significant effect on product innovation	Not supported
5	Availability of capital has a significant effect on product innovation.	Not supported
6	Market orientation has significant effect on product innovation.	Supported
7	Creativity has a significant effect on process innovation.	Supported
8	Entrepreneur's background has a significant effect on process innovation	Not supported
9	Flexibility has a significant effect on process innovation.	Supported
10	Future orientation has a significant effect on process innovation	Not supported
11	Availability of capital has a significant effect on process innovation.	Not supported
12	Market orientation has significant effect on process innovation.	Supported

Analysis and Discussion of Findings

The internal reliability of item was verified by computing the Cronbach's alpha (Nunnally, 1978). Nunnally (d1978) suggested that a minimum alpha of 0.6 sufficed for early stage of research. The Cronbach's alpha estimated for creativity was 0.870, Flexibility scale was 0.882, and future orientation scale was 0.698 and market orientation scale was 0.747. (Entrepreneur's background and availability of capital), as the Cronbach's alpha in this study were all much higher than 0.60, the constructs were therefore seemed to have adequate reliability.

These results are presented in a structural force according to the sequence of the questionnaire survey and the interviews, reflecting the dimensions of Myanmar Women Entrepreneurs based on the research questions (Smile Dzisi, 2008). The independent variables are creativity, education background of entrepreneurs, flexibility, availability of capital and market orientations on effect of the dependable variables are product innovation and process innovation. The linear regression analysis is employed to find out influencing factors of innovation Myanmar women entrepreneurs. From the result that the R- square is 0.77 (77%) and adjusted R- square is 0.739 (73%) which is strongly in terms of statistics. The regression analysis results indicate that flexibility, creativity, and market orientation are significant level of 1% significant level on

product innovation. Next, the result of survey R-square is 0.622 (62%) and adjusted R-square is 0.553 (55%) which is great in terms of statistics. The regression analysis results represent market orientation; flexibility and creativity are 5% and 1% significant level on process innovation. Overall evaluation state that the consideration produced anticipated signs and significant coefficient. Thus, it can be concluded that increasing level of creativity, flexibility and market orientation have strong positive effect on product innovation and process innovation.

Above all, entrepreneurial success of the SMEs owned by Myanmar women entrepreneurs has played an important role in shaping the community's perception of women. Business Women are no longer dependent on men and only good enough for household duties and looking after a child. The entrepreneurs try with degrees of self-worth, success and struggle for their business success. Society and government are recognized them more because they notice that women are serious about their business.

Implications and Suggestions

This study could reference that, in SMEs owned by Myanmar women entrepreneurs, the optimum way for gaining creativity is significantly product innovation and process innovation market. From result survey, it could be concluded that trying to innovate totally new product and process would not be effective to increase market share. Nevertheless, customers are interesting to welcome the new products and process they have never seen in the market, they will not be ready to adopt them which are functionally and technologically complex to use in Myanmar. Thus, Myanmar women entrepreneurs are thoughtfully trying to attract customers with new products and processes.

Myanmar women entrepreneurs of SMEs-owners would attempt to get customer acceptance and market share by introducing new products and new processes custom-built with improved processes at the start-up stages of their firms. Consequently, they would also try to decrease unit cost of production. Therefore, at the early stage of maturity of their products and processes in markets, they would try for profitability. At this maturity stage, their business would be able to highlight more on process innovation because they already gained market share with introduction of new products. The result of this study, found that women entrepreneurs' work hard to attract loyal customers with processes and products which are not new but which increase existing products and processes would not reach target sales as well as profit for Myanmar women business owners. In addition, it would not be helpful to lower production cost per unit and also not be supportive to protect surroundings, and safety and health of workers.

Additionally, business owners also need to consider the availability of capital. At the introduction stage, their initial capital would not be large enough to pioneer introducing new product and process innovation into business. If women entrepreneurs were not have good background education and future orientation that particular two influencing factors would not lead to product innovation and process innovation. Women entrepreneurs cannot start new process or product unless they have creative thinking. At that, women owners of SMEs would not think about innovation if they are not aware of changes of markets in the future and needs of customers. Women entrepreneurs should be considered to be flexible to the new process and products.

Since, Myanmar has been using the open market system and trying to economically concentrate its economy with international and regional markets, the role of women-owned

SMEs and their participation have become very important. The percentage of women labor force in Myanmar is important in the world. Currently, women are transforming entrepreneurs in manufacturing, services, and etc. and healthcare.

Some women entrepreneurs have other pressing priorities, such as extra-household duties, and balancing household while other express a strong desire to build into full-fledged powerful business and eventually formally registered firms. Social and political instability, consist of unremitting difficulty in certain regions, means that sustainable growth of entrepreneurs businesses is not yet a realistic option for many women owners of SMEs. There is considerably more room sustain for women to transformations from informal business activity into the formal sector.¹

In Myanmar, there are some business associations which are established for the development of SMEs owned by women. Myanmar Women Entrepreneurs Association (MWEA) was established in 1995, the MWEA is a strategic alliance of more than 1,600 businesswomen and women in academia that aims “to unite and bring into focus and world attention the role and capabilities of Myanmar women entrepreneurs.” Cited the MWEA

MWEA engages foreign donors and possible investors and is experienced at managing grants for training and building capacity among its members. MWEA supports microfinance loans for women and also supporting women business-owners by connecting their firms to market.

Moreover, to connect women-entrepreneurs to markets, the MWEA emphasizes entrepreneurial capacity-building. Beginning in 2012, MWEA channeled significant donor support into training and coaching its members, specifically focused on communication, finance, management, and reporting. A series of thematic conferences took place in Yangon in 2013, bringing together more than 550 entrepreneurs, leaders, and government officials. In addition, the MWEA aired at least ten radio programs to share knowledge with women entrepreneurs all over Myanmar.

ASEAN Women Entrepreneurs Network (AWEN) was established in 2014 and provides a venue for business women from throughout ASEAN to expand their networks and build new business contacts. MWEA also engages outreach to ASEAN and to national governments on women’s economic empowerment issues. Myanmar is represented in AWEN by a leading member of Myanmar Women Entrepreneurs Association (MWEA).

As mentioned above, the business associations have been implementing many projects for implement of businesses owned by Myanmar women entrepreneurs, there is an inadequacy of evidence to prove the success of their businesses. Number of successful Myanmar women business owner still need to know grow. In this study, sales of their firms can be expanded by launching products innovation and processes innovation into the market. Form processes innovation and product innovation which will lead to increase in availability of capital and sales are necessary. Therefore, Myanmar women entrepreneurs of SMEs should plan to grow.

¹ The Ecosystem for Women’s Entrepreneurship in Myanmar: Networks, Associations, Organizations and Other Services that Support Women Entrepreneurs, March 2016. This publication was produced by Nathan Associates Inc. under Contract AID-486-C-13- 00004 for review by the United States Agency for International Development.

Government and business associations should consider the future orientation to support finance to launch new process and product into market. Women business owners should use such finance mainly for new product and process launch, and they can apply also for upgrading the process to manufacture goods or to deliver services. To provide finance, the SMEs owners' creative ideas need to be standard instead of emphasizing on only collateral. An association should be arranged with innovative Myanmar women entrepreneurs and they can distribute information about Myanmar innovative products and processes to international market. This new form of association would rise for giving ideas, technology support and financial support to SMEs- women owners if they have creative ideas. Thus, at the first stage, particularly for start-up SMEs owned by Myanmar women entrepreneurs, government or non-government associations should consider the exemption of costs to them to participate in exhibitions and trade shows to show their products (MWEA, 2016).

The finding suggests that the upgrade education that the business women have obtained, irrespective of the level and areas of specialization, has been a very useful factor in the successful setting up and operations and ventures. Benefits derived from formal education included literacy, ability to identify an opportunity and market tendency and ability to attract investors, stake holders and banker for their need of capital and to prepare basic financial statements, make financial projections and profit.

Conclusion

Myanmar SMEs sector plays crucial roles in economy development through income generating, employment for Myanmar Women entrepreneurs. But compare with rest of the world Myanmar SMEs sector shows less development due to internal factors and external factors each factor are interrelated on each other's. Internal factors of low level of motivation and to less innovation.

This study of success can be investigated from respondents in two main areas. At first are economic contributions, which involve business creation and innovation, employment and job creation. Next one is social contribution to society and communities at large by the business women's contribution in society, voluntary work and sponsorships and donations to various organization, institutions and individuals.

In addition, through business owner of SMEs making job creation have resulted in the reduction of unemployment in their nation. Women entrepreneurs risk to invest in new business and those who did not start new business changed the business that they took over and still reflect their own innovations. Since the government is only able to provide a few job opportunities and proudly forms part of the SMEs business owner's success.

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COMPETITIVE STRATEGIES AND PERFORMANCE OF SUPERMARKETS

Win Yin Htike*

Abstract

This study aims to analyse competitive strategies and supermarkets' performance. Supermarkets have become very competitive today and are facing challenges due to the changing lifestyles and the demanding nature of today consumers. Amid heightened competition, supermarket managers need to understand the impact of different competitive strategies in order to choose appropriate ones that lead to survival and prosperity of the supermarkets' performance. The purpose of the study is to identify the competitive strategies adopted by the supermarkets and to analyze the linkages between the competitive strategies and the performances of supermarkets at determining the mediating effects of firms' operational characteristics, on the link between competitive strategies and performance of supermarkets in Yangon. Primary data are collected from (15) senior managers and (35) branch managers of supermarkets through in-depth personal interviews and a questionnaire survey regarding their competing practices and organization performance. Moreover, performance data are also collected from (481) employees and (512) customers from selected supermarkets in Yangon. This study applies Path Analysis in order to identify the direct and indirect effects of operational characteristics between competitive strategies and firm performance. The study found that cost leadership strategy is practiced by ten supermarkets; differentiation strategy by three supermarkets and focus strategy by two supermarkets. The cost leadership strategy has significant negative effect but the differentiation and focus strategies have significant positive effect on supermarket's performance measuring in terms of firms' growth, employees' satisfaction and customers' satisfaction. Generally, operational characteristics have the mediating effects on firm performance when supermarkets practices differentiation focus strategies but is no mediating effect when practicing cost leadership strategy. Thus, it can be concluded that differentiation and focus strategies are currently appropriate as competitive strategies for improving the performance of supermarkets in Myanmar.

Keywords: Cost leadership strategy, Differentiation Strategy, Focus strategy, Supermarkets, Firm's growth, Employee satisfaction, and customer satisfaction.

Introduction

Nowadays, supermarkets play an important role in serving the local community. Supermarkets are the places where the majority of people shop for food items and groceries. People prefer to buy goods from supermarkets and purchase a variety of goods such as meat, fruit, vegetables, fresh and dried seafood, kitchen ware. In Myanmar, with the development of the economic conditions and improving social status, people have become more habitual in shopping at high-end department stores that are sophisticated and match with their changing lifestyle. Moreover, modern stores are emerging in different parts of the cities and largest towns. In Yangon, the trading environment has changed dramatically in recent years. Whether in towns, cities or rural areas, there has been a significant economic and social change that has altered the ability, perception, and behavior of consumers concerning shopping and retailing. Furthermore, many supermarket chains are operating in a profitable market but they are on fronted with the problem of high competition, and this creates the necessity for the adoption of appropriate competitive strategies. Therefore, supermarkets' managers need to understand the different effects of competitive strategies which are critical for supermarkets to survive in a continually

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changing environment. Thus, it is required to adopt an appropriate strategy that would lead to surprise and delight consumers through higher perceived performance than their expectations and thereby boosting the supermarket's profits. The sustainable development and increasing profit of supermarkets depend on their adopted strategies. Under this context, competitive strategies become a priority for supermarket operators to improve firm performance. Choosing the appropriate strategy that fits with internal factors and external business is imperative for improving firm performance.

Rationale of Study

Nowadays, in Myanmar, there are remarkable changes in people's lifestyles. People have become more interested to make their purchase at supermarkets rather than from local traditional markets due to their rising income and the convenience and choice offered by the supermarkets. These changes in shoppers' behavior create unpredictable purchase decisions and intense competition among supermarkets. In such a turbulent environment, competitive strategies become a priority for supermarket operators to sustain business performance by upholding their competitiveness through relevant business strategies. Porter (1980) identified three generic strategies: low cost, differentiation, and focus that a company needs to follow either one in pursuing a competitive advantage in its chosen market scope. The success of a profit-seeking organization is a function of its strategies. Performance is also determined by the organization's quest for excellence and survival in highly competitive markets. Thus, in the context of the highly competitive nature of supermarkets, understanding the impact of competitive strategies on firm performance is not only imperative to operators of supermarkets but also an essential field of study as applicable research for business development in Yangon. Therefore, this study intends to examine the competitive strategies used by supermarkets in Yangon.

Problem Statement

The business environment is turbulent and chaotic and this calls for rapid response strategies to ensure the sustainability of the business in the competitive environment. In Yangon, under the context of an increasing number of supermarkets and changing lifestyles of people, competition among supermarkets becomes inevitable and even more intense. Some supermarkets can expand their operation while others remain stable even decline or fall seem to because of their strategies. The rising commodity prices that are coincident with increasing completion squeeze the profit margins of supermarkets. Moreover, while supermarkets need several labors more than another type of firm, the labor turnover rate is also high. Other challenges facing the supermarkets are to choose a convenient location with enough space for car parking, to create an attractive shopping environment, to provide efficient customer services and to build customer relationships. Under the context of such challenges, supermarket operators have to choose appropriate strategies that affect and enhance their performance.

Objectives of the Study

The main objective of the study is to examine the influence of competitive strategies on the performance of supermarkets in Yangon. To realize this objective, the specific objectives are set up as follows:

- (1) To identify the dominant competitive strategies adopted by supermarkets in Yangon.
- (2) To examine the effects of competitive strategies on the performance of supermarkets.

- (3) To analyze the mediating effects of firms' operational characteristics on the linkage between the competitive strategies and performance of supermarkets.

Research Methodology

This study applies both quantitative and qualitative methods by using both primary and secondary data. In Yangon, there are 15 groups of supermarkets from which 77 outlets of supermarkets operated in 2017. From these, 15 senior managers from 15 groups of supermarkets were interviewed. Besides, 35 respondents who are managers of 35 branches were selected from 73 outlets of 11 groups of supermarkets by using a simple random sampling method. Moreover, in analyzing the firm performance, 4 outlets of the single outlet supermarket were also included and thereby, altogether 39 supermarkets' managers are involved in this study. After selecting 39 supermarkets, to measure employee satisfaction, the sample size is determined as 481 employees among 3734 employees from selected 39 outlets of supermarkets based on the formula of Taro Yamane (1973). For customer satisfaction, the sample size is determined by using Cochran's method (1977), 512 respondents are chosen from customers who come into selected 39 outlets of supermarkets by using a systematic sampling method. Moreover, multiple regression-based path analysis was applied to measure the direct and indirect effect of competitive strategies and firm characteristics on the performance of the supermarkets.

Literature Review

The strategy is the complete plan of an organization to achieve the highest goals or objectives. The competitive strategy involves the position of a business to maximize the value of capabilities that distinguish it from competitors. Porter (1985) asserts there are basic business strategies: cost leadership, differentiation, focus, and a company performs best by choosing one strategy on which to concentrate. Whatever strategy a business chooses, it must fit with the company and its goals and objectives to gain a competitive advantage. Cost leadership strategy is a strategy that entails striving to be the overall low-cost provider of a product or service that appeals to a broad range of customers. A cost leader basis for competitive advantage is lower overall costs than competitors. Differentiation strategy offers unique attributes that are valued by customers and those customers perceive them to be better than or different from the products of competitors. Porter, (1980) stated that a product can be differentiated in various ways such as unusual features, responsive customer service, perceived prestige and status, different tastes and performance. Focus strategy refers to the firm's concentration on a select few target markets (Porter, 1980). Focus aims at growing the market share through operating in narrow markets or niche markets that are overlooked by the larger competitors. Moreover, as operating characteristics in firm, researchers have identified many retail firm-specific characteristics such as location and property (Guy, 1994), skill and experiences, human resources (Melvin & Harriet, 1992), and merchandise, product lines and square feet of storage space. These researchers asserted that these factors contribute to retail effectiveness and differential firm advantages. Among different factors, the operating characteristics of a firm that can affect the performance of supermarkets are identified as to location, capital, managerial skill and network, and supply chain. Neill & Rose (2004) cited by Uyen (2007) stated that organizational performance should be judged on multiple dimensions: customer-based, efficiency-based, and financial-based. Concerning improved or reduced organizational performance affect customer satisfaction, customer loyalty, customer awareness, labor productivity, sale growth, market share,

and profitability. Similarly, several other researchers interpreted organizational performance based on indicators such as several complaints, return on investment, financial performance, sales growth, productivity, customer satisfaction, and employee satisfaction.

Competitive Strategy practiced by Supermarkets

Firstly, this study investigated on competitive strategy practiced by supermarkets. To identify supermarket strategies, in-depth personnel interviews and questionnaire surveys are conducted with 15 senior managers of each supermarket. The dominant strategies used by each supermarket are identified and shown in Table (1).

Table 1 Competitive Strategy Used by Each Group of Supermarkets

Sr. No.	Supermarkets	Cost Leadership		Differentiation		Focus		Dominant Strategy
		Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	
1	Ocean	4.25	0.71	3.31	0.75	2.78	1.39	Cost Leadership
2	Days to Days	4.63	0.74	2.54	0.78	2.78	1.48	Cost Leadership
3	Ga Mone Pwint	4.13	0.83	3.62	0.77	2.56	1.01	Cost Leadership
4	Orange	4.13	0.99	1.92	0.64	1.89	0.78	Cost Leadership
5	Sein Gay Har	4.13	0.99	4.15	0.99	2.89	0.93	Cost Leadership
6	Super One	4.25	0.71	2.15	0.80	1.67	0.71	Cost Leadership
7	Asia Light	4.50	0.93	1.77	0.93	1.33	0.50	Cost Leadership
8	Gandamar Wholesale	4.63	0.52	3.08	1.32	2.56	1.67	Cost Leadership
9	Ruby Mart	3.63	0.52	3.54	0.97	3.00	1.12	Cost Leadership
10	Fuji	4.38	0.92	2.15	0.99	2.00	0.87	Cost Leadership
11	City Mart	3.13	0.99	4.85	0.55	3.78	1.39	Differentiation
12	Capital	2.50	1.69	4.69	0.48	3.78	1.30	Differentiation
13	Star Mart	2.38	0.52	3.46	0.88	2.67	1.00	Differentiation
14	Myanmar Big Shop	3.13	0.83	3.00	1.00	3.56	1.59	Focus
15	Marketplace	1.25	0.46	4.38	0.96	5.00	0.00	Focus

Source: Survey Data (2017)

The table indicates the dominant strategy adopted by the 15 supermarkets. Ten supermarkets have adopted the cost leadership strategy and three supermarkets have adopted the differentiation strategy. However, the focus strategy has adopted by Marketplace and Myanmar Big shop.

Analysis on the Effect of Competitive Strategies on Performance of Supermarkets

To determine whether competitive strategies influence the firms' growth, employee satisfaction, and customer satisfaction, multiple linear regression analysis was used. In Table (2), the results indicate that taking all other independent variables equal, a unit increase in focus

strategy will lead to a 0.083 unit increases in on firms' growth. Cost leadership and differentiation strategies are insignificant; highlighting both strategies do not affect overall firms' growth.

Table 2 Effect of Competitive Strategies on Firms' Growth

Dependent Variable: Firm Growth	Unstandardized Coefficients		t	Sig	VIF
	B	Std. Error			
(Constant)	-0.278*	0.125	-2.218	.032	
Cost Leadership Strategy	0.006	0.019	0.291	.772	2.006
Differentiation Strategy	0.036	0.019	1.909	.063	2.099
Focus Strategy	0.083**	0.022	3.755	.000	2.457
R ²	0.568				
R ² (Adj.)	0.540				
F-test	20.173**				

Source: SPSS Outputs (Appendix G)

Statistical significance indicate** at 1% level* at 5% level

As shown in Table (3), the result reveals that taking all other independent variables constant, a unit increase in cost leadership strategy will lead to a 0.088 unit decreases in employees' satisfaction. Among the three strategies, only cost leadership strategy has a significant negative effect on employees' satisfaction, however, differentiation and focus strategies are insignificant, meaning that they do not affect employees' satisfaction.

Table 3 Effect of Competitive Strategies on Employees' Satisfaction

Dependent Variable: Employees' Satisfaction	Unstandardized Coefficients		t	Sig	VIF
	B	Std. Error			
(Constant)	3.967**	0.265	14.955	.000	
Cost Leadership Strategy	-0.088*	0.037	-2.348	.019	2.296
Differentiation Strategy	0.023	0.039	0.591	.555	1.902
Focus Strategy	0.012	0.042	0.297	.767	2.385
R ²	0.041				
R ² (Adj.)	0.035				
F-test	6.671**				

Source: SPSS Outputs (Appendix G)

Statistical significance indicate** at 1% level* at 5% level

Concerning consumer satisfaction, the results show that all strategies have a significant positive effect on customer satisfaction in Table (4). By holding all other independent variables equal, a unit increase in cost leadership strategy, differentiation strategy, and focus strategy will lead to a 0.109 unit, 0.303 units, and 0.17 unit increases in customers' satisfaction, respectively.

Table 4 Effect of Competitive Strategies on Customers' Satisfaction

Dependent Variable: Customers' Satisfaction	Unstandardized Coefficients		t	Sig	VIF
	B	Std. Error			
(Constant)	1.675**	0.225	7.454	.000	
Cost Leadership Strategy	0.109**	0.035	3.122	.002	2.496
Differentiation Strategy	0.303**	0.030	10.086	.000	2.242
Focus Strategy	0.170**	0.036	4.701	.000	2.606
R ²	0.396				
R ² (Adj.)	0.392				
F-test	104.488**				

Source: SPSS Outputs (Appendix G)

Statistical significance indicate** at 1% level* at 5% level

Therefore, based on the results, cost leadership strategy has a significantly negative effect on supermarket performance while differentiation strategy and focus strategy have a significantly positive effect on the performance in terms of firms' growth, employees' satisfaction and customers' satisfaction.

Mediating Effects of Operational Characteristics on the relationship between the Strategies and Firm's Performance

To determine whether the mediating effect of operational characteristics on firms' growth, path analysis is conducted with simple linear regression analysis. The regression results on the effects of competitive strategy on firms' growth are shown in Table (5). In this Table, if supermarkets practice a cost leadership strategy, firms' growth will lead to a decrease and they need to focus on the issues including capital requirement, managerial skill, and experience, networking and supply chain management as critical factors. Moreover, if supermarkets used differentiation strategy, firms' growth will lead to an increase and the operation characteristics can also affect firm growth to improve. Furthermore, a focus strategy can be a strategic choice of supermarkets to enhance firms' growth and to improve the capacity of firms' operation characteristics. Thus, sufficient capital, managerial skill & experience, and networking & supply chain management are the main determinants of accelerating the firms' growth.

Moreover, Table (6) shows the direct, indirect, and total effects of the competitive strategy on firms' growth. In this Table, the total effects of cost leadership strategy on firms' growth through operational characteristics is less than the direct effect of cost leadership strategy on firms' growth. If the firm practiced a cost leadership strategy, location does not have a mediated effect on firms' growth. The total effects of differentiation and focus strategies on firms' growth through operational characteristics are greater than the direct effect of differentiation and focus strategies on firms' growth. Therefore, if the firm practiced differentiation and focus strategies, capital, managerial skill, and experience, network, and supply chain have mediated effect on firms' growth

Table 5 Path Coefficients of Firms' Growth of Each Competitive Strategy

	Cost leadership		Differentiation		Focus	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Cost leadership on Firms' Growth	-0.513**	-4.145				
Cost leadership on Location	-0.111	-0.777				
Cost leadership on Capital	-0.398**	-3.005				
Cost leadership on Managerial Skill and Experience	-0.422**	-3.221				
Cost leadership on Network and Supply Chain	-0.458**	-3.571				
Differentiation on Firms' Growth			0.642**	5.808		
Differentiation on Location			0.330*	2.420		
Differentiation on Capital			0.680**	6.421		
Differentiation on Managerial Skill and Experience			0.389**	2.927		
Differentiation on Network and Supply Chain			0.647**	5.871		
Focus on Firms' Growth					0.730**	7.410
Focus on Location					0.148	1.039
Focus on Capital					0.475**	3.735
Focus on Managerial Skill and Experience					0.420**	3.208
Focus on Network and Supply Chain					0.499**	3.986
Location on Firms' Growth	0.275	1.984	0.275	1.984	0.275	1.984
Capital on Firms' Growth	0.636**	5.712	0.636**	5.712	0.636**	5.712
Managerial Skill and Experience on Firms' Growth	0.373**	2.787	0.373**	2.787	0.373**	2.787
Network and Supply Chain on Firms' Growth	0.632**	5.655	0.632**	5.655	0.632**	5.655

Source: Survey Data (2017), Notes: ** and *are statically significant at 1% and 5% levels respectively

Table 6 Mediating Effects of Operational Characteristics on Firms' Growth of Each Competitive Strategy

Competitive Strategies	Location			Capital		Managerial Skill and Experience		Network and Supply Chain	
	Direct	Indirect	Total	Indirect	Total	Indirect	Total	Indirect	Total
Cost leadership	-0.513	-0.030	-0.544	-0.253	-0.766	-0.157	-0.670	-0.289	-0.802
Differentiation	0.642	0.091	0.733	0.432	1.074	0.145	0.787	0.409	1.051
Focus	0.730	0.040	0.771	0.302	1.032	0.157	0.887	0.315	1.045

Source: Survey Data (2017)

Furthermore, the results of the path analysis for testing all variables are presented in Figure (1), (2), and (3). As shown in Figure (1), cost leadership strategy has a negative direct effect on firms' growth. As an indirect effect, the coefficient of cost leadership strategy is negatively significant with capital, managerial skill, and experience, network, and supply chain variable and then coefficients of location, capital, managerial skill and experience, network and supply chain variable are positively significant with firms' growth. Thus, there is a partial mediating effect of operational characteristics except location between cost leadership strategy and firms' growth.

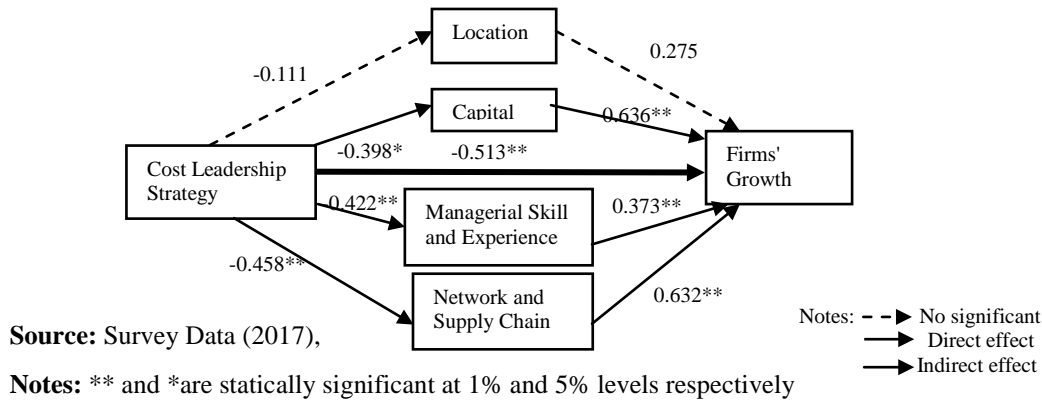


Figure 1 Path Analysis for Firms' Growth of Supermarkets which Practiced Cost Leadership Strategy

The results of the path analysis for the growth of supermarkets which practiced differentiation strategy is also presented in Figure (2). Differentiation strategy has a positive direct effect on firms' growth. As an indirect effect, differentiation strategy has a positive significant effect on all operational characteristics, and in turn, the coefficients of these operational characteristics except location have also a positive significant effect on firms' growth. Thus, there is a partial mediating effect of a firm's operational characteristic except for location between differentiation strategy and firms' growth while the location has no mediating effect on this linkage.

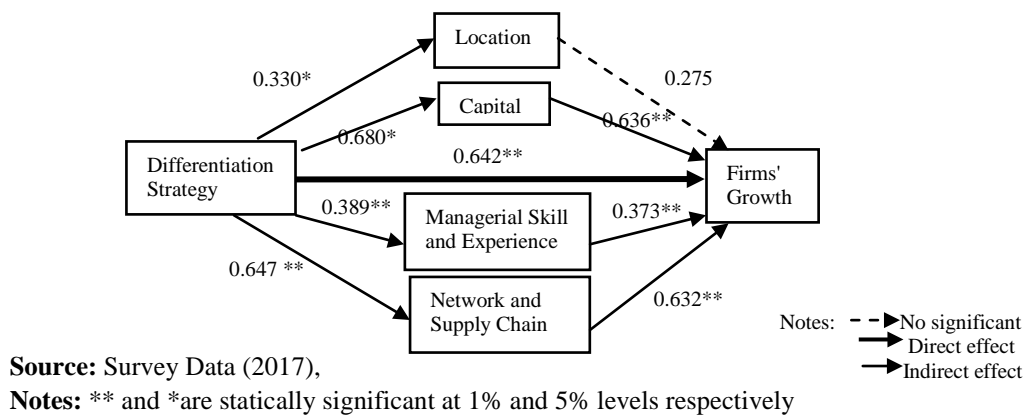
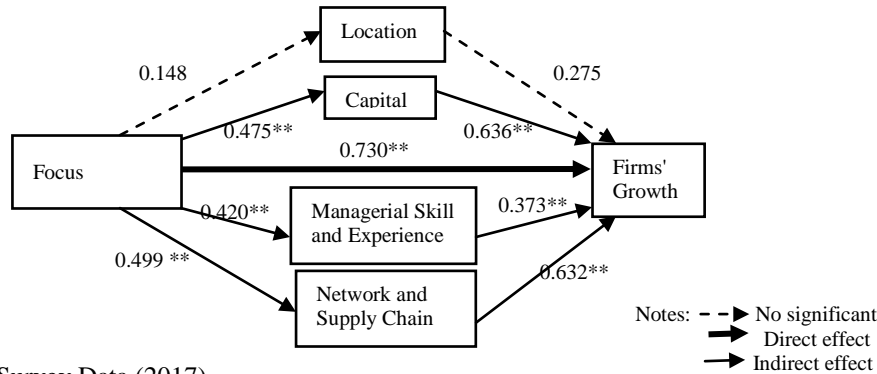


Figure 2 Path Analysis for Firms' Growth of Supermarkets which Practiced Differentiation Strategy

In Figure (3), the result of the path analysis on the growth of supermarkets that practiced focus strategy is presented. The results show that all operational characteristics except for location have a mediating effect on the firm’s growth of supermarkets which practiced focus strategy. However, the location variable has no mediating effect on the linkage between focus strategy and firms' growth.



Source: Survey Data (2017),

Notes: ** and * are statically significant at 1% and 5% levels respectively

Figure 3 Path Analysis for Firms' Growth of Supermarkets which Practiced Focus Strategy

To determine whether the mediating effect of operational characteristics on employees' satisfaction, path analysis is conducted and the regression results on the effects of competitive strategy on employee satisfaction are shown in Table (7). The results show that if supermarkets used cost leadership strategy, employee's satisfaction at supermarkets lead to a decrease and they need to focus on the issues including location choice, capital requirement, managerial skill and experience, networking and supply chain management for the improvement of the firm’s performance. Moreover, if supermarkets used differentiation strategy, employee's satisfaction at supermarkets leads to an increase and they need to consider capital, managerial skill, and network & supply chain as critical for employee satisfaction. Furthermore, focus strategy can be a strategic choice of supermarkets to enhance capital availability, to improve the managerial skill and experience, and to strengthen the network and supply chain. Thus, the results highlight that having sufficient capital, high skill and experience of managers and strengthening network and supply chain management will lead to employees' satisfaction.

Table (8) shows the direct, indirect, and total effects of the competitive strategy on employee satisfaction. In this Table, indirect effect through operational characteristics is calculated by multiplying contributing path coefficients. The total effects of the cost leadership strategy on employee satisfaction through operational characteristics are less than the direct effect of cost leadership strategy on employee satisfaction. If the firms applied a cost leadership strategy, studied operation characteristics cannot have a mediating effect on employee satisfaction. The total effect of the differentiation strategy on employee satisfaction through operational characteristics is larger than the direct effect of differentiation strategy on employee's satisfaction except for location, for which total effect is less than the direct effect. The total effect of focus strategy on employee satisfaction through operational characteristics is greater than the direct effect of focus strategy on employee satisfaction. If firms used focus strategy, location, capital, managerial skill and experience, network and supply chain will have a mediating effect on employee satisfaction.

Table 7 Path Coefficients Employee's Satisfaction of Each Competitive Strategy

	Cost leadership		Differentiation		Focus		R ²
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	
Cost leadership on Employee's Satisfaction	-0.198**	-4.407					0.039
Cost leadership on Location	0.136**	2.992					0.019
Cost leadership on Capital	-0.191**	-4.228					0.036
Cost leadership on Managerial Skill and Experience	-0.220**	-4.903					0.048
Cost leadership on Network and Supply Chain	-0.304**	-6.956					0.093
Differentiation on Employee's Satisfaction			0.151**	3.327			0.023
Differentiation on Location			0.088	1.931			0.008
Differentiation on Capital			0.490**	12.245			0.240
Differentiation on Managerial Skill and Experience			0.255**	5.736			0.065
Differentiation on Network and Supply Chain			0.571**	15.141			0.326
Focus on Employee's Satisfaction					0.160**	3.527	0.026
Focus on Location					-0.021	-4.54	0.000
Focus on Capital					0.381**	8.982	0.145
Focus on Managerial Skill and Experience					0.339**	7.846	0.115
Focus on Network and Supply Chain					0.496**	12.423	0.246
Location on Employee's Satisfaction	-0.021	-0.449	-0.021	-0.449	-0.021	-0.449	0.000
Capital on Employee's Satisfaction	0.177**	3.910	0.177**	3.910	0.177**	3.910	0.031
Managerial Skill and Experience on Employee's Satisfaction	0.175**	3.873	0.175**	3.873	0.175**	3.873	0.031
Network and Supply Chain on Employee's Satisfaction	0.215**	4.791	0.215**	4.791	0.215**	4.791	0.046

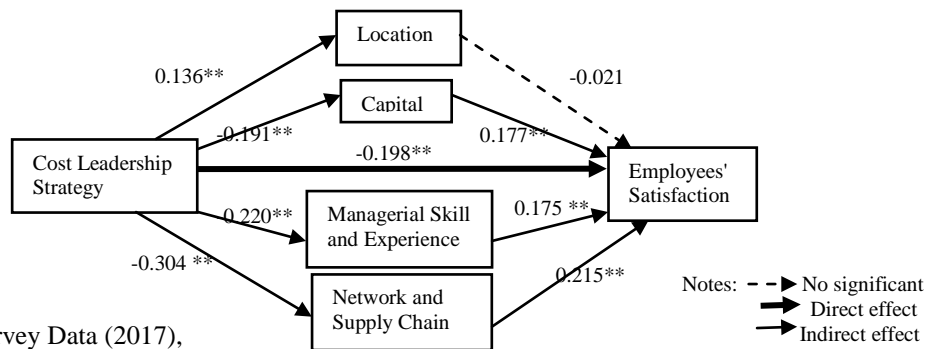
Source: Survey Data (2017), Notes: ** and *are statically significant at 1% and 5% levels respectively

Table 8 Mediating Effects of Operational Characteristics on Employees' Satisfaction of Each Competitive Strategy

Competitive Strategies	Location			Capital		Managerial Skill and Experience		Network and Supply Chain	
	Direct	Indirect	Total	Indirect	Total	Indirect	Total	Indirect	Total
Cost leadership	-0.198	-0.002	-0.200	-0.033	-0.231	-0.038	-0.236	-0.065	-0.263
Differentiation	0.151	-0.002	0.149	0.087	0.238	0.045	0.196	0.123	0.274
Focus	0.160	0.001	0.161	0.067	0.227	0.059	0.219	0.107	0.267

Source: Survey Data (2017)

The results of the path analysis for testing all variables are presented in Figure (4), (5), and (6). As shown in Figure (4), it is clear that, except firm's location, all firms' operational characteristics have a partially mediating effect on the relationship between cost leadership strategy and employee satisfaction while the location of the firm does not have mediated effect on employee's satisfaction.

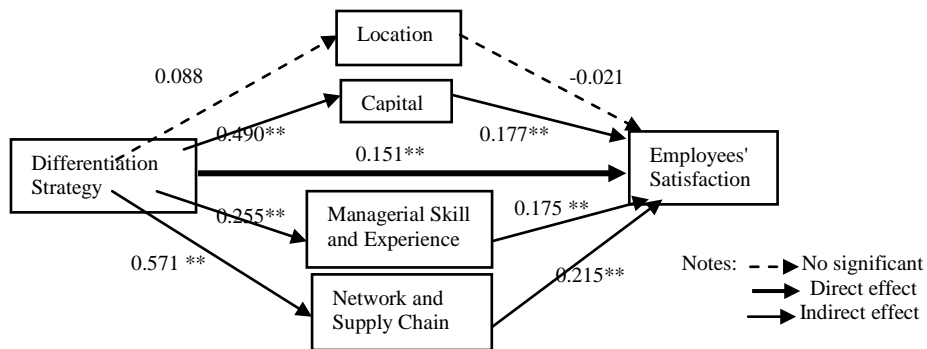


Source: Survey Data (2017),

Notes: ** and *are statically significant at 1% and 5% levels respectively

Figure 4 Path Analysis for Employees' Satisfaction of Supermarkets which Practiced Cost Leadership Strategy

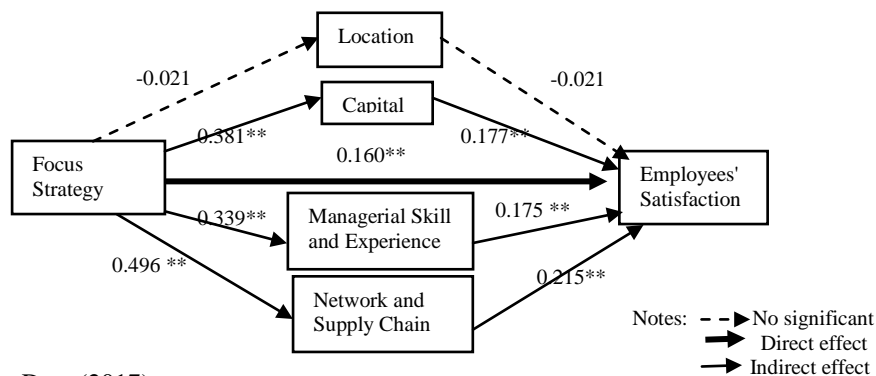
In Figure (5), the results show that, except for location, all firms' operational characteristics have a partially mediating effect on the relationship between differentiation strategy and employee satisfaction while location does not have a mediated effect on employee satisfaction.



Source: Survey Data (2017), Notes: ** and *are statically significant at 1% and 5% levels respectively

Figure 5 Path Analysis for Employees' Satisfaction of Supermarkets which Practiced Differentiation Strategy

In Figure (6), all firms' operational characteristics, except for location have a partially mediating effect on the relationship between focus strategy and employee satisfaction while the location of the firm does not have a mediated effect on employee satisfaction.



Source: Survey Data (2017),

Notes: ** and *are statically significant at 1% and 5% levels respectively

Figure 6 Path Analysis for Employees' Satisfaction of Supermarkets which Practiced Focus Strategy

To determine the mediating effect of operational characteristics on customers' satisfaction, path analysis is conducted with simple linear regression analysis. The regression results on the effects of competitive strategy on customer satisfaction are shown in Table (9). Thus, the results prove that if supermarkets used a cost leadership strategy, customer's satisfaction on supermarkets will lead to a decrease and they need to focus on capital, managerial skill, and experience, network and supply chain as the important factors to increase customer's satisfaction. Moreover, if supermarkets practice the differentiation strategy, customer satisfaction on supermarkets will lead to an increase and the operational characteristics can be expected to improve. Furthermore, a focus strategy can be a strategic choice of supermarkets to improve customer satisfaction and the capacity of firms' operational characteristics.

Table 9 Path Coefficients Customers' Satisfaction of Each Competitive Strategy

	Cost leadership		Differentiation		Focus		R ²
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value	
Cost leadership on Firms' Growth	-0.513**	-4.145					0.264
Cost leadership on Location	-0.111	-0.777					0.012
Cost leadership on Capital	-0.398**	-3.005					0.158
Cost leadership on Managerial Skill and Experience	-0.422**	-3.221					0.178
Cost leadership on Network and Supply Chain	-0.458**	-3.571					0.210
Differentiation on Firms' Growth			0.642**	5.808			0.413
Differentiation on Location			0.330*	2.420			0.109
Differentiation on Capital			0.680**	6.421			0.462
Differentiation on Managerial Skill and Experience			0.389**	2.927			0.151
Differentiation on Network and Supply Chain			0.647**	5.871			0.418
Focus on Firms' Growth					0.730**	7.410	0.534
Focus on Location					0.148	1.039	0.022
Focus on Capital					0.475**	3.735	0.225
Focus on Managerial Skill and Experience					0.420**	3.208	0.177
Focus on Network and Supply Chain					0.499**	3.986	0.249
Location on Firms' Growth	0.275	1.984	0.275	1.984	0.275	1.984	0.076
Capital on Firms' Growth	0.636**	5.712	0.636**	5.712	0.636**	5.712	0.405
Managerial Skill and Experience on Firms' Growth	0.373**	2.787	0.373**	2.787	0.373**	2.787	0.139
Network and Supply Chain on Firms' Growth	0.632**	5.655	0.632**	5.655	0.632**	5.655	0.400

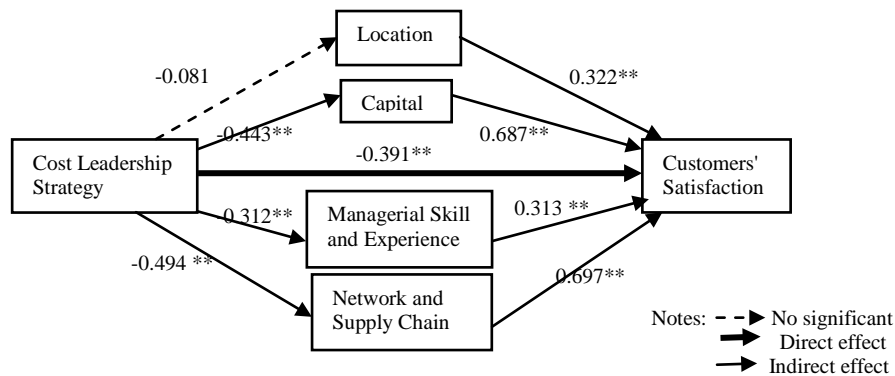
Source: Survey Data (2017), Notes: ** and *are statically significant at 1% and 5% levels respectively

Table 10 Mediating Effects of Operational Characteristics on Customer's Satisfaction of Each Competitive Strategy

Competitive Strategies	Location			Capital		Managerial Skill and Experience		Network and Supply Chain	
	Direct	Indirect	Total	Indirect	Total	Indirect	Total	Indirect	Total
Cost leadership	-0.391	-0.026	-0.417	-0.304	-0.695	-0.098	-0.489	-0.344	-0.735
Differentiation	0.606	0.090	0.696	0.510	1.116	0.114	0.720	0.530	1.136
Focus	0.517	0.042	0.559	0.385	0.902	0.123	0.640	0.424	0.941

Source: Survey Data (2017)

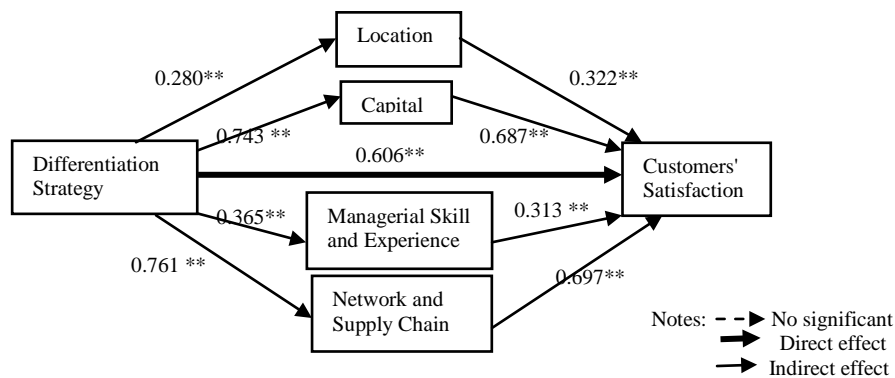
In Table (10), the results show that if the firms applied a cost leadership strategy, studied operational characteristics cannot have a mediating effect on customer satisfaction. However, if firms practiced differentiation and focus strategies, location, capital, managerial skill and experience, and network and supply chain have a partially mediating effect on customer satisfaction.



Source: Survey Data (2017), Notes: ** and *are statically significant at 1% and 5% levels respectively

Figure 7 Path Analysis for Customers' Satisfaction of Supermarkets which Practiced Cost Leadership Strategy

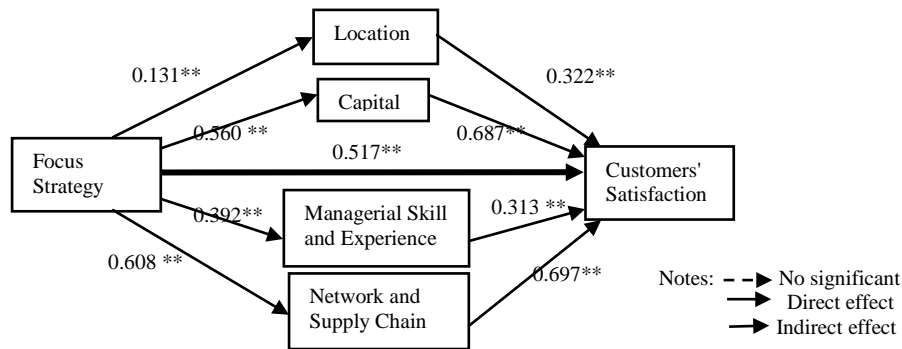
The results of the path analysis in testing all variables are presented in Figure (7), (8), and (9). As shown in Figure (7), the results show that except firm's location, all firms' operational characteristics have a partially mediating effect on the relationship between cost leadership strategy and customer satisfaction while the location of the firm does not have mediated effect on customer's satisfaction.



Source: Survey Data (2017), Notes: ** and *are statically significant at 1% and 5% levels respectively

Figure 8 Path Analysis for Customers' Satisfaction of Supermarkets which Practiced Differentiation Strategy

Figure (8) show the results that a differentiation strategy has a positively direct effect on customer satisfaction. As indirect effects, the coefficient of differentiation strategy has a positive significant effect with operational characteristics while the coefficients of operational characteristics show a significantly positive effect on customer satisfaction. Thus, all firms' operational characteristics have a partially mediating effect on the relationship between differentiation strategy and customer's satisfaction.



Source: Survey Data (2017), Notes: ** and *are statically significant at 1% and 5% levels respectively

Figure 9 Path Analysis for Customers' Satisfaction of Supermarkets which Practiced Focus Strategy

As shown in Figure (9), focus strategy is a positive direct effect on customer satisfaction. As an indirect effect, the coefficient of focus strategy has a positively direct effect on firms' operational characteristics whereas coefficients of firms' operational characteristics are positively significant with customers' satisfaction. Thus, it is clear that all of the firms' operational characteristics have a partially mediating effect on the relationship between focus strategy and customer's satisfaction.

As a mediating effect, among firms' operational characteristics, the location has not mediated effect on the relationship between cost leadership strategy and the firm's growth, employees' satisfaction, and customers' satisfaction. However, the location has a mediating effect on both relationships between differentiation strategy and customers' satisfaction as well as focus strategy and customers' satisfaction. Remaining operational characteristics (capital, managerial skills, and experiences, and network and supply chain) have a partially mediating effect on the relationship between all competitive strategies and supermarkets' performance.

Findings and Recommendation

Based on the finding of this study, of the fifteen supermarkets studied, ten practiced cost leadership strategies, three adopted differentiation strategy, and the remaining two used focus strategy. Cost leadership strategy is practiced by Ocean, Sein Gay Har, Gandamar Wholesale, Ruby Mart, Super One, Orange, Asia light, Fuji, Days to Days and Ga Mone Pwint. Differentiation strategy is practiced by City Mart, Capital and Star Mart while the focus strategy practiced by Marketplace and Myanmar Bid Shop.

A second objective, differentiation strategy, and focus strategy have a large impact on improving the performance of the supermarkets in terms of a firm's growth, employee satisfaction, and customers' satisfaction. Cost leadership strategy hurts the performance of the supermarkets in all dimensions. A third objective, capital, skills, and experience of management and network and supply chain of supermarkets have mediating effects on all dimensions of the

performance of supermarkets which practice differentiation strategy and focus strategy. The location of the supermarkets has a mediating effect on only the firm's growth and customer satisfaction of supermarkets which practice differentiation strategy and focus strategy.

Based on the results of this analysis, it is safe to suggest that practicing differentiation strategy and focus strategy can enhance the performance of the firm, under the context of the market situation in Myanmar. Besides, having sources of investment, possessing skill and experience of management, and establishing networks and supply chain management are essential factors improving the performance of the supermarkets. Although the cost leadership strategy cannot improve the firm performance of supermarkets in the current situation in Myanmar, it can be an appropriate strategic choice for large retail enterprises in the long-term since changing the lifestyle of Myanmar people and improving the economic environment of the country are factors creating an opportunity to practicing cost leadership strategy. Therefore, it can take place as an effective strategy for supermarkets in the later years.

In conclusion, supermarkets should monitor the changing market trends in Myanmar to adopt the competitive strategies by altering customer's tastes and preferences, attitude and behavioral patterns and by doing so; it can expect to enhance the performance of the supermarket industry in Yangon.

Limitation and Needs for Future Research

This study analyzes the effect of competitive strategy on supermarket's performance. This study only focuses on supermarkets and does not include convenience stores, departmental stores, mini markets, and shopping malls/centers. Moreover, this study mainly emphasizes competitive strategies and performance of supermarkets in the Yangon area and excludes another area in Myanmar. More in-depth research using other typologies (Miles and Snow, Bowman's Strategic Clock) should be carried out to give a better insight for setting up strategies to realize sustainable competitive advantages. Further, the analysis could be applied in other industries such as manufacturing, construction, financial services for planning and formulates strategies for improving the performance of the firms in their respective industries.

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THE CHALLENGES OF ETHNIC MEDIA IN CHIN STATE, MYANMAR*

Zin Mar Kyaw¹

Abstract

Ethnic media play a vital role for their communities. The content of ethnic media may be focused on the life of a particular ethnic community, the news from an ethnic region, or both. In addition, they could be bridge between urban and rural, plain and hilly residing all national races. In Myanmar, the remote and mountainous Chin State consists of nine townships in four districts of Hakha, Falam, Mindat and Matupi, Chin people are made up of six groups (*Asho, Sho, Masho, Mizo, Laimi, Zomi*) and speak different dialects. The main dialects are *Zomi, Laimi, Mara, Matu, Zotung* and *K'Cho*. There are around a dozen of newspaper and journals are publishing in the townships of *Kalay, Hakha, Falam, Tedim, Mindat* and *Matupi* using their local dialects. The ethnic media do what the mainstream media can't: they inform the community of their own issues and local happenings and help organize the community by pointing its readers to service sources and connecting them to the larger society. Ethnic media compete within its own ethnic group and mainstream for funding and market penetration. Now, the print industry is struggling, some of those print media have struggling funding. Print media expand their media market and transform into broadcasting and online media. The purpose of the research is that what are main challenges of Chin ethnic media and to find the ways for sustainable development of ethnic media in Chin state. The research question is that what are the struggles of chin ethnic media to sustain themselves? The target areas are the townships of *Kalay, Falam, Tedim, Hakha, Mindat* and *Kanpetlet*. Target population includes youths and adult residing in these township of Chin States. The data collection methods will include a questionnaire and Focus Group Discussion (FGD) and in-depth interview and this research discuss three case studies to highlight the challenges of ethnic media in Chin State, Myanmar.

Keywords: *newspaper, ethnic, media, Chin, dialect*

Introduction

During a UNESCO 3 May conference in 1991, the participants arrived at a consensus on the meaning of “an independent and pluralistic press” and stated it in the Windhoek Declaration. UNESCO is the lead agencies in promoting, defending, monitoring, and advocating freedom of expression and freedom of the press as a basic human right within the United Nations system. UNESCO highlights media independence and pluralism as a fundamental component in the process of democracy. The pluralistic press means the end of monopolies of any kind and existence of the greatest possible number of newspapers, magazines and periodicals reflecting the widest possible range of opinion within the community².

The key element of pluralistic is the idea of media diversity, which broadly means that the media provides voice opportunities to and satisfies the information needs of all stakeholders. Diversity is encompassed three different elements: diversity of outlet, diversity of source and diversity of content. It is important to promote different three types of media- namely public, commercial and communities are able to operate. Community media is defined broadly as non-profit that is provided by and for the members of a particular community, whether a geographical community or a community interest. These media also make an important contribution to

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² Freedom of Expression Toolkit, Communication and Information Sector, UNESCO, 2013

* Best Paper Award Winning Paper in Journalism (2019)

diversity, providing voice opportunities to communities¹. Therefore, one of the facts to prove the flourishing media diversity in a democratic society is existing community media sometime called ethnic media.

“Ethnic media,” refers to media outlets that produce or deliver content for a particular ethnic community. It also defined as media produced for a particular community; it is produced by and for racial ethnic and linguistic minorities. Although ethnic media generally are aimed at the same goal and purpose, they are very among different categories. These categories include: who produces the media, who the target audiences is, language used within the media, the size of the organization producing the media, the location of the organization, how the organization is funded, what content the media focus on, and lastly how the content is distributed to its intended audience². These facts are obviously existence in media environment of Myanmar which is one of the significant facts of Myanmar media development.

The Union of Republic of Myanmar is marching toward the democratic path of the way and exercises the democratic practices. Flourishing free, independent and pluralistic media is necessary component in democracy. One of the scenes in media environment is that uplifted the pre –censorship system, abolished the Press Censorship Board and welcoming exile media groups to publish in–country, the government of President U Thein Sein pursued major advances towards press freedom in Myanmar since 2012. In April 2013, the government gave the permission to publish private daily newspaper. As consequences more than 885 publications including 50 published in ethnic languages have been approved by the government, up from 300 registered in 2014. In 2019, total publications of 460 there are 24 newspaper and 155 journals are still publishing in the whole Myanmar. Among these publications four Chin ethnic language newspapers³ and four Chin ethnic language journal⁴s are included according to the report of Ministry of Information in July 2019.

Chin language used many publications and media outlets have been established in Chin State especially in Northern Chin State after 2013. According to the report of media development independent fund Chin State is one of the States which the most ethnic media outlets publishing their own language. According to the initial study for the research of ethnic media in Chin State sixteen newspaper and journal⁵s are published in the whole Chin State between 2013 and 2016.

However, some Chin language newspaper and journals are suspended and the closed their media outlets after 2016. It is obvious that ethnic media in Chin State are facing many difficulties for their sustainable development. Simultaneously, the changing of media convergence and advancement of new technology are bringing advantages and drawback to these ethnic media in Chin State. For these reasons, this research aimed to uncover the main challenges for the ethnic media in Chin State and how much extent do they faced the challenges to establish and to publish the newspaper and journal, and what are their weakness and threats to develop the media in Chin

¹ *Media Diversity*, Briefing Notes 8 of 12, Briefing note series on freedom of expression, Center of Law and Democracy, International Media Support.

² Matsaganis et al., *Engaging Ethnic Media to help Spread your Message*, 2011

³ (1) Chin Land News (2)The Hakha Post (3) Chin Land Herald (4) Vitoria Newspaper

⁴ (1) Tongsan Weekly Journal (2) The Matu Land News Journal (3) Khunumthung News Journal (4) The Tahan Post

⁵ (1) Hakha Post (2) Chin Land Post (3) Chin Land Herald (4) Chin World (5) Khonumthung (6) The Chin Voice (7) Chinthung (8) The Chin Times (9) Zomi Post (10) Tahan Times (11) Tongsan Media (12) The Matupi Times (13)Zo Lengthe (14) Tedim Post (15) K’cho Post (16) Falam Today

State. The research also aimed to provide suggestions to ethnic media organizations for the advantages and how to use the new way to the sustainable development of the ethnic media in Myanmar.

Chin State is located within Myanmar, and has a shared border with Rakhine State in the south, Bangladesh and India in the west and north, and Sagaing and Magway Divisions in the east. The whole state has 13,906.97 square miles in area and capital city is Hakha. Chin state comprises of four districts and nine townships which are Mindat district including Mindat Township and Kanpalet Towhsip, Hakha district including Hakha Township and Thanhlang Township, and Falam district including Falam Township, Tedim Township, and Tuanzang Township. Chin State is over 300 miles long in south to north, and in east to west, it has 100 miles width in the widest and over 30 miles in the narrowest areas generally. Currently, there are more than 520,032 population is staying in Chin State¹.

Chin nationals are made up of six groups; Asho, Sho, Masho, Mizo, Laimi and they speak different dialects. The main dialects are Zomi, Laimi, Mara, Matu, Zotung and K'Cho. Lai is used as main communication dialect in most part of Falam, Hakha and Thantlang habit areas although it is not used by all the Chin people. As some dialects in the areas of Hakha and Falam are the same, people from Falam can easily communicate with Hakha dialect (Lai) and vice versa. K'Cho is used as main dialects in Mindat district and Matu dialect is used in Matupi district². Currently, Chin nationals in Hakha mainly used Lai dialects, Lai and Laizo dialects in Falam and Zomi dialects in Tedim respectively. These differences of racial dialects are led as one of the barriers to develop ethnic media in Chin state. According to the initial study among the Kalay, Hakha, Falam and Mindat, Kalaymyo are the base of the publishing ethnic language newspaper in Chin state.

Method

In this study, research typically focuses on in-depth interviews to answer the research questions and also used quantitative method for survey to examine the media consumption of local people which is to evaluate audience readership to local dialect newspaper and journals. As described in the introduction, four townships were selected for the research, Kalay, Hakha, Falam and Mindat and added two townships which are Tedim Township and Kanpetlet Township. Two focus groups discussion (FGD) are held with Chin media organization and nine in-depth interviews took place in Chin State including Kalaymyo. Of the two focus group discussions, one was 10 male only from Chin media outlets and one was mixed with ten persons of male and female of Chin youths.

The collecting of survey questionnaires conducted in six townships of Kalay, Hakha, Falam, Tediam, Mindat and Kanpetlet in Chin State to examine the media consumption of Chin community and their readership to local publications. The total respondents to the survey are 462 persons who are 164 respondents from Kalay, 101 persons from Hakha, 61 persons from Tedim, 40 persons from Falam, 50 persons from Mindat and 36 respondents from Kanpetlet Township in Chin State. The answers on the questionnaires are examined in Focus Group Discussion with media organization and in-depth interviews. The survey questionnaires are collected at the Media and Information Literacy awareness seminar and training which were held in Kalaymyo at Kalay

¹ Chin State.gov.mm/about-state

² Vumson, *Zo History*, Alzawl, Mizoran, India.

University, Kalay Peace Network, Civil Society Organization and media organizations of Kalaymyo, Hakha College, Timothy Bible School of Tedim, Chin Institute of Social Science (CISS) in Falam and Mindat and Kanpetlet Township in Chin State from 2017 November to November 2018.

By collecting survey forms the public including youth in college and institute, civil society organizations in Chin State, the research could be evaluate media consumption of the native people, access of media in Chin state, real situation of chin media organizations and could be answer the research question of what are the challenges of ethnic media in Chin State. The total of nine Chin Media outlets and Chin Media Network completed the survey by the end of the study.

Finding

The result of readership survey shows that the media consumption of the native people are not highly concern. Many respondents answer that they could not effort to read the newspaper and journals every day. And then also although most of youth could be speaking with local dialects, they could not be able to read their own languages newspapers. The different racial dialects are used in the whole chin state. Most native could be speak and read Laizo dialects. These dialects are mostly used in Kalay, Tediam and Hakha. Zo dialects are also broadly spoken in Kalay, Falam and other parts of Northern Chin State. Matu and K'cho dialects are also used in Southern Chin State, especially in Mindat, Kanpetlet and Matupi. Ethnic media used their own racial dialects for their publication to maintain their own language and literature. This point led to the limitation of distribution market of the ethnic newspapers and journals in Chin state.

On the other hand, one of the challenges is that Ethnic media outlets face human resources problems because they cannot provide attractive salaries to professional journalists and editors, as mainstream publications can. It is big difficult for ethnic groups to begin their own media outlets. The capability building of the journalist and editors are still need to ethnic media organization. Despite these challenges, some ethnic media groups are trying to grasp the advantages of new technology, using social media to share what is happening in their area and to broadcast their local news on online, to convert some news to online version.

The problem facing ethnic media vary depending on the state and region. Some ethnic media in Chin State based publications cannot maintain their publications in the long term because of dependence on international donors, limitations of their markets, and a lack of human resources. The distribution networks of mainstream media are far-reaching to every state and region. Thus, ethnic media could not effort to compete the publications of the main stream media which are based in Yangon and Mandalay.

People in rural area and ethnic areas have little access of information rather than big cities. The main stream media could not be covered all local stories in their publication and broadcasting. They mostly focused on all types of news of the big cities and only crime news and conflict news from ethic area. Thus, ethnic media can give the minority communities a chance to see the news that is targeted more toward them. Their stories and programmes are distributed in various forms in ethnic newspapers and journal. It is obvious that Chin media outlets serve as important resources of information for minority communities.

One of the challenges of the state is the transportation systems. Some areas do not have a proper road and public transportation because of the difficult access and hilly region. It is one

of the obstacle for the distribution process for media business and their locations became their dialectal groups so called Hakha Chin (speaking Lai dialect), Falam Chin (speaking Laizo, Lai dialects), Tedim Chin (speaking Zomi dialect), Mindat Chin (speaking K'Cho dialect), Matupi (speaking Matu dialect) etc. The research found that the lack of common Chin language is crucial barrier to successful newspaper and journals in the whole Chin State.

The research find that the ethnic media in Chin state are mainly need for their news room capacity and capacity building training to nurture professorial journalists. The limitation of distribution network which lead to the one of the challenges of the sustainability of Chin ethnic media.

Media Consumption of the Chin Community

Some of the respondents of the survey describe as news users. Quite a lot of them watch international news channel such as BBC and VOA as the RFA. Some of them watched the news of the local channels, and they choose these channels specifically for the reason that, according to them, ethnic minorities seem more integrated in the programming them in Chin state. Only (10%) participants did not read a newspaper. Most of the respondents preferred ethnic local dialect newspaper and journals and they describe at least two journals of main stream media on the survey. Readership survey show that Chin nationals have got the access of media from print; newspaper and journals of main stream media, television, radio and ethnic media. In Kalaymyo, their readership and media consumption from mainstream media is higher than ethnic media¹. In Hakha Township, native peoples' media consumption is more focus on newspaper and journals of mainstream media and television². The native peoples' readership on ethnic newspaper and journals is higher than other township in Tedim Township³. In Falam Township, their readership on ethnic media is significantly higher than television and radio⁴. The readership of native people to newspaper and journals is higher than ethnic media in Mindat and Kanpetlet Township⁵.

The Chin media established facebook page and online version for their news to share their concerns. With internet capable mobile phone penetration dramatically increasing (to 70 percent in 2015, according to Freedom House) and the number of social media users also rising (reaching 21,000,000 in January 2019, according to internet World Stats). The challenges of print publication pushed the ethnic media to change their publication into online version on social media. Thus, the people in Chin state also became the social media user for their news consumption and access of information.

¹ See Figure 1: Access of Media in Kalaymyo

² See Figure 2: Access of Media in Hakha Township

³ See Figure 3; Access of Media in Tedim Township

⁴ See Figure 4: Access of Media in Falam Township

⁵ See Figure 5: Access of Media in Mindat and Kanpetlet Township

Media Consumption of the Chin Community

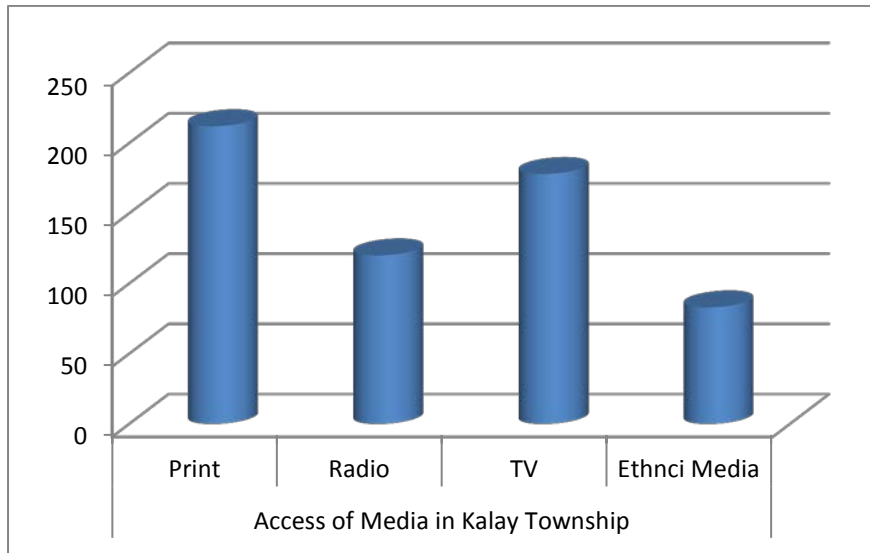
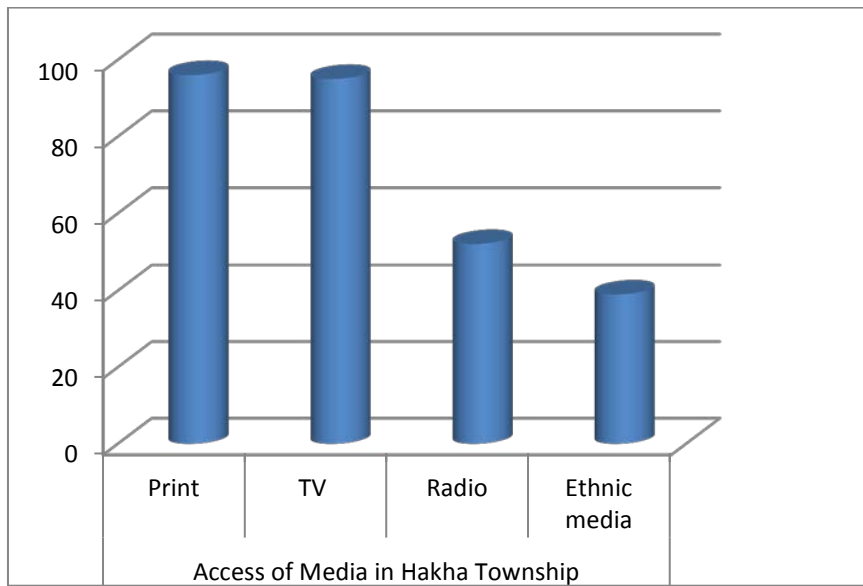


Figure 1 Access of Media in Kalaymyo



Source: Survey questionnaires

Figure 2 Access of Media in Hakha Township

Media Consumption of the Chin Community

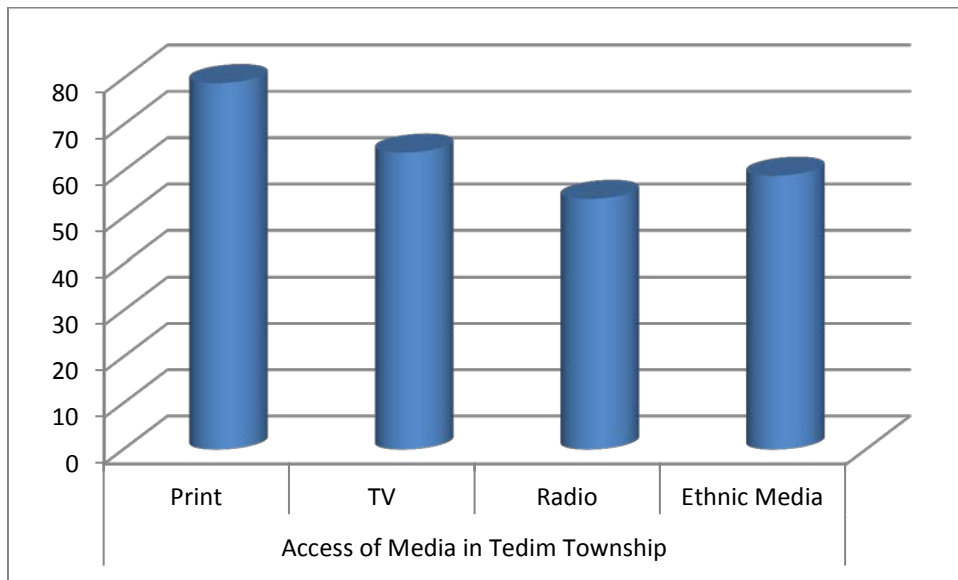
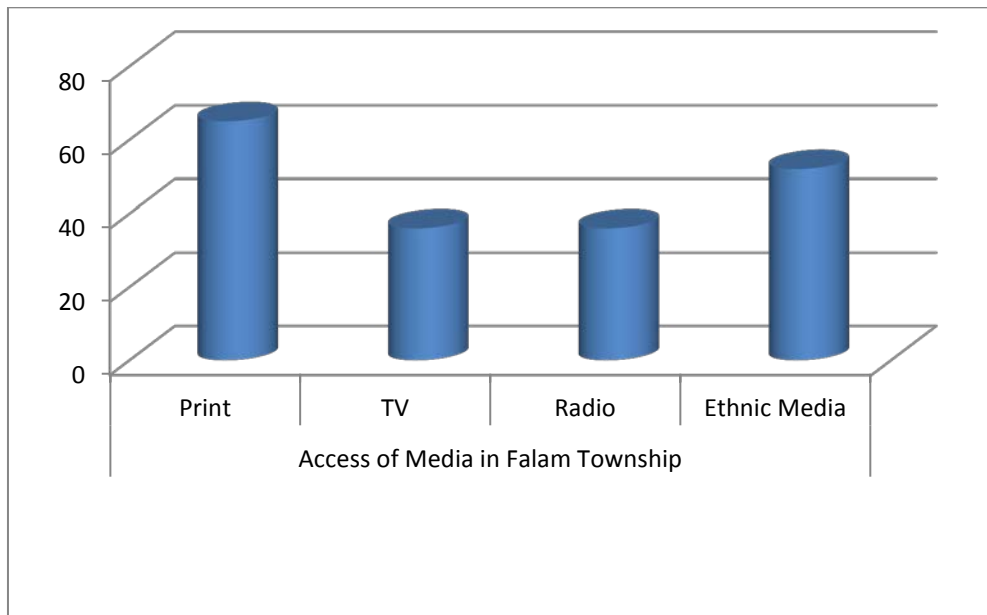


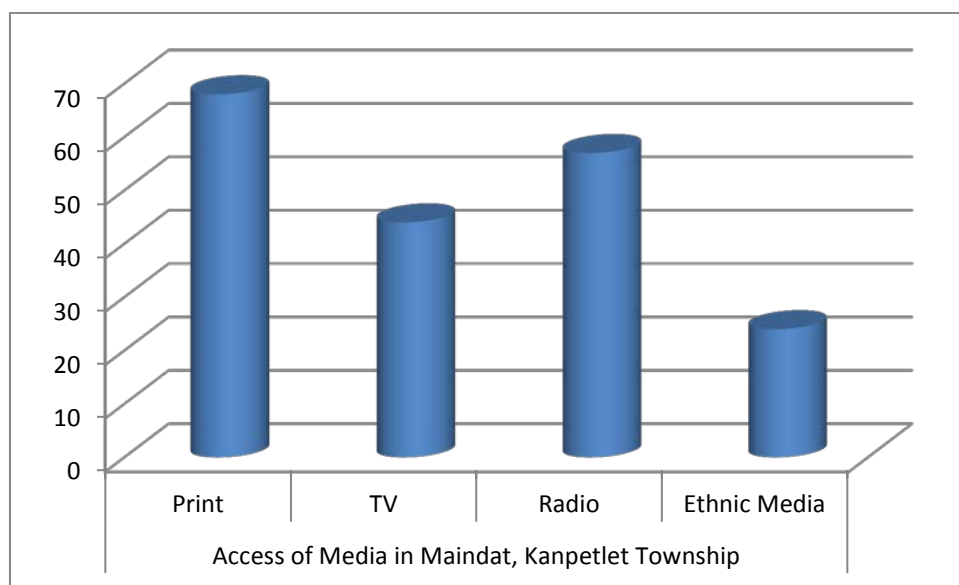
Figure 3 Access of Media in Tedim Township



Source: Survey questionnaires

Figure 4 Access of Media in Falam Township

Media Consumption of the Chin Community



Source: Survey questionnaires

Figure 5 Access of Media in Mindat and Kanpetlet Township

Discussion

Ethnic media are at the heart of the everyday practices that produce and transform ethnic identity, culture, and perceptions of race. The contents of ethnic media are focused on the life of the ethnic community, the news from a local area. While there are many ethnic newspapers, journal, newsletters and magazines, ethnic media producers are also making use of cable networks technology, and the Internet to distribute their stories and programs. Even so, language barrier continues to exist for those viewers or readers whose first language is not majority language in Chin State. For example, this research discusses the following three case studies:

Case Study 1: Hakha Post Newspaper (Laizo dialect used Chin Newspaper)

Hakha Post Newspaper is published in capital city of Chin State, Hakha in 14 January 2012. Hakha Post used Lizo dialects in the publication. Although their main aim is to upgrade their language and literature, they could be fulfilling the contents of news and information to the needs of local community. Hakha post have been published 1600 circulations of (Two pages of A3 paper size) in initial stage. They officially registered in December 2014 to Ministry of Information. Hakha Post newspaper distributes their circulation to 68 villages in Hakha Township.

Formerly, Hakha Post printed their publication with the assist of printing press (Raso Press) of the Church. Currently, Hakha Post prints their publication with their own Raso printing press. (Most chin media outlets could not effort to set up printing press and they could be used Riso press for their publication and colour printing publication could be getting only in Mandalay. The churches are usually support to ethnic media outlets for printing.) Hakha Post well organized their news room and editorial team including photo journalist, marketing manager and finance assistant with altogether 15 staffs. They appointed sale representative in every village

and wards of Hakha Township. Hakha Post reaches the number circulation to 2000. Hakha Post could be still publishing by using their strength of sale network in Hakha Township.

On the other hand, Hakha Post set up the Hakha Net (TV) in 2016 which is online broadcasting TV to alongside social media booming in capital city of Hakha. They broadcast the features and news on Hakha Net selecting on the highly news values of the print version. Hakha Post is still publishing as the highly circulations in Chin State, mainly based in Hakha using their strong marketing system.

Case Study 2: Khonumthung () Journal and Chin World (Burmese Language used Chin journal and online media)

Khonumthung News is established as website news in Mezorom in India since 2012. Firstly Khonumthung News was published in English and later changed to Myanmar language and published monthly. After the registered in 2013, Khonumthung published as 16 pages journals mainly focus on Chin local news and features. Later, Khonumthung used not only the Burmese language but also Hakha Chin of Mizo dialect in their publications. They could be circulated nearly 2000 regularly. Focal distribution areas of Khonumthung journal are Kalay, Kabaw, Hakha, Falam, Tedim, Tonzang, Rihkhawdar and Mindat, and distributed by township sale agent¹. Although Khonumthung journals are still publishing in Chin State, they are facing insufficient human resource problems, capacity building of journalists and financial difficulty for sustainable development of Chin media. In this case, it is clear that, using majority language is easy to spread out the market for their distribution and could be find sustainable way to uphold their publication.

“There is also needed to reach media investment in Chin State. Ethnic media outlets should know advertising and marketing strategy for their sustainability. It should be aimed not only the keep up of language but also to develop the media in Chin state.”

Editor- in- Charge

Chin World journals are published in 2012 with Myanmar language. Their publication reached up to 5000 circulations. Chin World journals based in Kalaymyo and it could be distributed up to 27 townships including Sagaing division and Chin state as the bi-weekly journals for one year and as weekly for two years until 2016. However, Chin World was faced financial constraint and challenging of the readership.

Chin World transforms as News and Media Website and set up online broadcasting TV with Burmese language in late 2016. Chin World media work as the content provider of Democratic Voice of Burma (DVB) and Radio Free Asia (RFA). Being a member of Burma News International (BNI) Chin World media provide the content of the news and features programmes weekly². It is obvious that the ethnic media changed their platform for their survival and sustainable according to the media convergence. But, changing platform is not easy and they are still facing struggling for the technology friendly human resource and capacity building of the journalists. On the other hand, they could be passing through these difficulties because of using

¹ Interview with Editor- in- Charge of Khonumthung Journal, Salai Robert is the Director and one of the founders of Chin Media Network.

² Interview with Editor-in-Charge of Chin World Media.

majority language. Currently, news and media website of Chin World Media reached to over 100,000 viewers.

Case study 3: Publishing Closed Local Dialects used Chin Newspaper & Journals

No.	Publication Name	Dialect	Main Publishing Area
1	The Chin Voice	Zo	Kalaymyo
2	Zomi Post News Journal	Zo	Kalaymyo
3	Tahan Times	Zo	Kalaymyo
4	Zo Lengthe	Lais (Tedim)	Tedim
5	K' Cho Post	K'Cho	Mindat

These local dialects used newspaper and journals are closed their publications during the recent years because they were struggle not only the limitation of the distribution market by the using of minority dialects, financial constraint but also insufficient of human resource for their news room¹. It is obvious that, although ethnic media could be stage to maintain ethnic language, they cannot effort to resist the narrow market constraints which lead to delay and suspend their operation. These indicate that the readers are becoming more and more segmented to local dialects.

“The reason of market limitation of the Chin media is differences of Chin dialects and because of the lack of common Chin Language.”

Editor –In- Charge
Kalaymyo

The readership survey result shown that Chin nationals read newspaper and journals of main stream media which used majority language Burmese. There are many Chin nationals are also read their own language newspaper and journals. The obvious fact is that although nearly all Chin youths can speak their own racial dialects, but they cannot well understand to every dialect because of the differences of the Chin dialect. Thus, they prefer to read the majority language used publications. The elderly persons are more prefer reading local dialect periodicals.

“There are many people, especially in the ethnic minority area, who lack the knowledge of both Burmese and English. In such a case, newsletters and journals written in ethnic languages are practically helpful for them. People who do not know Burmese or English are constantly out of touch with the world. Under such situations, media in ethic language is the only channel of transmitting news and information.”

*Reader; Male (Zomi dialect speaking)from Kalay University
(Focus Group Discussion in Kalaymyo)*

“Our siblings including me can speak with own dialects but cannot read and write only over 65 years old father and mother can. They read only local language newsletters, but we sometime read Burmese language journals. “

*Reader: Female (Lai dialect speaking) from Tedim
(Focus Group Discussion in Kalaymyo)*

¹ Interview with Secretary of Chin Media Network

On the other hand, access of information is also vital important for ethnic media which enhance awareness between the government and public to uphold professionalism of journalists, public understanding of roots of the conflict and peace process of Myanmar. It is deniable that ethnic media could be coverage real situation of the ethnic minority, ethnic areas by touching reliable source in the scene. They could be linkage to government and public including all community.

Henceforward, one of the consequences of the media freedom in Myanmar ethnic media conference was held annually in alternative state since 2012. From this time on wards, they are willingness to fulfill their ethnic media' desires of the sustainability of ethnic media, increasing the number of qualified female reporters in ethnic media, development of the right to teach mother-tongue literature, obtaining the right to information from government departments, and uplifting the safety and protection of reporters.

Conclusion

In conclusion, media have become bolder in check and balance towards fourth estate and more effective in sharing the information to the public. People depend on the media for vital information that will help them understand what is going on around them and to make informed decisions about their lives. Ethnic media can educate and orient new-comers to their new community and its resources. Chin media outlets could be serves as an important resource for information for Chin society. They can bridge the information between urban and rural, plain and highland for the community. Overall finding suggest that ethnic media have positive effects on ethnic minority to maintain their language, literature and culture.

On the other hand, ethnic media could be increase accurate and comprehensive news production in order for the public to become more aware of local conflicts and the peace process. All stakeholders should be endeavors for the sustainable development of the ethnic media in Myanmar and to flourish media pluralism and diversity which is one of the characteristic of the democratic country.

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I am also grateful to the following Rector and Principals of Kalay University, Hakha College, Chin Institute of Social Science in Falam and Timothy Bible School in Tedim, Kalay Peace Network, Mindat Youth Association and Kanpetlet Chin Women Development Organization in Kanpetlet for hosting media and information literacy (MIL) awareness seminars where conducted the survey.

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Appendix I

Private Local Ethnic Media in Chin State, Myanmar

No.	Newspaper/Journal	Using Language	Types of Media	Publishing
1	The Chinland Post	Lais (Hakha)	Print/Online	Weekly
2	The Hakha Post	Lais (Hakha)	Print/Online	Weekly
3	Chin Land Herald	Lais (Falam)	Print/Online	Weekly
4	Tedim Times	Lais (Tedim)	Print/Online	Weekly
5	Zolenthe	Lais (Tedim)	Print	Weekly
6	Zingsol	Lais (Tedim)	Print	Closed
7	The Tedim Post	Lais (Tedim)	print	Weekly
8	Chindwin Today	Lais (Tedim)	Online	
9	Zomi Times	Zo	Print/online	Weekly
10	Zomi Post News Journal	Zo	Print	Weekly
11	Zalen	Burmese	online	
12	Meifer	Zo	Print	Weekly
13	Lairawn Post	Zo	Print	Tri-weekly
14	Chinland Today Media	Zo	Online	
15	Chin World	Burmese	Multimedia	
16	Khonumthung Journal	Burmese	Print/online	Weekly
17	The Chin Voice	Zo	Print	Weekly
18	The Chin Times	Zo	Print	Closed
19	Central News Myanmar	Zo	Print/Online	Closed
20	K'Cho Post	K'Cho	Print	Closed
21	Vitoria Journal	Burmese	Print	Weekly
22	Matupi Times	Burmese	Print	Bi-weekly

Source: Personal Communication with media outlets and Chin Media Network

Appendix II

Interview with Ethnic Media Outlets in Chin State

No.	Editor/ Manager	Media Organization	Date
1	Salai Pa Pui (Editor -in- Chif)	The Hakha Post (Print)	10-2-2018
2	Salai Za Biak Thawng (The Editor-in-Charge)	The Hakha Post (Print)	10-2-2018
3	Lang Khan Khai (Editor-in-Chief)	Zomi Times (Print)	11-2-2018
4	Do Khan Tuagn @ Ko Do	Zomi Post (Online)	11-2-2018
5	Suangh Chin Dal	Tongsan (Print)	12-2-2018
6	Salai Gin Khan Khup	Zo Lengthe (Print)	3-3-2018
7	Salai Cin Suan Mung	Zo Lengthe (Print)	3-3-2018
8	Thang Shia Houg	Tedim Times (Print)	28-3-2018
9	Salai Robert(Editor-in - Charge)	Khonumthung (Print)	4-3-2018
10	Salai Hun Tun Gay (Editor-in- Charge)	Chin World (Print/Online)	23-4-2018

ZO LENGTHE

BIWEEKLY NEWS Reg:0082 Zomi Thukizakna, Tedim Vol. 13 No.09 * TISA TAWI KHAT LEH KHAT NA BIRTHAL US * Gal. 5143 20 August, 2017

Editorial

Democracy gam ah mipi te in hong ukdng kumpi, mipi haksat nate honggen sak ding tangmi (MP) te meeting tawh kitel kha aa, hih in mipi thuneh na alan xen cileng kkhial lu ding hi Kawlgam ah gambup kiteepi 20:0 kum leh 2015 kum in kinei kha aa, lakkhielna (By Election) 2012 in kinei hi.

Mipi in amanpha 1 meeting te izat khialh leh ut taleng, ut takel leng Kumpi Terni khatung asia/apha ihuak hongkul ding hi. Kawlgam in kumpi terni khat pen kum (5) ciameh ahb man-in mipi te in meeting izat khialh leh kum 5 sung asia/apha ihuak loh hong phamaah ding hi.

Banghang hiam cih leh 2008 thukhumpi khaepi (396), khenska (B) na ah aa irelsa MP te ideili kolieh meelang nei mipi 1% in akician thute tawh kikhia thei aa, Kihelso Committee in tua MP te sit-in maawna nei takpi ahb leh kik bawl sakthei ci-in akigell hang in, tuni dong ciang Kawlgam ah hihdan atuak MP omni lo hi.

Iet sa MP te deihlo ci-in khat sawrsang in, kitepi hantai in iet ding te ki cian tak in iet phat mahmah ding hoag kism hi. Mipi in bangteng ih en cikiam?

- (1) Aser ding miam te-il nanglu, anaph, miam aa ding in bangzah te dehsak na nei cih Iet kul ding hi.
- (2) Meekung alut na Party zong, Iet hongkul ding hi, (example) apau party policy, bengcia agot party cihce
- (3) Mec tang zom hunsang in, hong kigen te mipi in tuni palpa lo-ir, ahi thei ding mah tuam? ci-in thu leh la ikan cian mahmah hong kuding hi.
- (4) Hluttaw tuantuan ah akah MP te-in bangteng semthei uah aa, bangteng semthei lo uah cihhu te zong itheih kholh hongkul cing hi.

Tua ahli man in 2020 gambup kitepi ci ciang in hihce 2 cu in, mipi in meeh ahi amanpha mahmah mee tang tawh mipi kispap te, gam kispap nate honggen thading? asem trak ding tangmi iet thei nading hanciam ni cih Zo Lengthe Editorial pen ki theisak hi.

Tedim Road leh Kam Hau Road Signboard suanna nei

Tedim khuapi, lawhbul veng Branch Middle School sanginn gei ah Gual Sin Hual kipawlna in Tedim Road leh Kam Hau Road cih Signboard bawl in suanna August 3, 2017 ni-in nei uah cihhu kiza hi.

Hihdan lampi lak Sign board pen nidang in Sia Khawna Pau in dehsak natawh bawl/ suang ngei himah in, ki susia ahb man-in Gual Sin Hual te-in asuang kilc uah ahi hi ci-in Gual Sin Hual facebook page ah gelh un hi.

Gual Sin Hual kipaw na pea, 2006-2007 Pilin khawm teng kipawlna hi-in, Tedim Khuasung aa ding in, Zo Lengthe ni tuapi alkuang kik theih nading leh mei atan theih nading ahi zong, BEHS (1) leh BEHS (2) aa sang korgkhab pi bawisak ahi zong, Tedim, Sannial aa International Prayer Mountain ah Siag Lamteh khat phuhna ahi zong in sem uah hi.

Hihdan, aseep nading, ko sang kakhawm lawm leh gual teng sumtang kidong in asem hihung ci-in Gual Sin Hual makai



Tu laitakin leitunghu tawh kisa, akigenpha pen Israel khuapi Jerusalem vai ahi hi. US President Donald J. trump in President ka ngah leh Israel khuapi dingin Jerusalem kigena kipsakna leh US - Israel Palaizum pen Jerusalem ah tuah ding hing ci-in agensa bangin tu-in sem takpi ahb manin leitunghu phial in mawhsak hi. Adiakin Christian sung ah Catholic kumpi Pope Francis nangawn in mawhsak a, EU leh UN Security council in zong, mawhsakna genin vote akhiat clangin mawhsakna lam ah avekpi phial-in vote kipla hi. Ahih hangin US Palaiu in Israel gupna dingin Veto power azat loh kum 40 val apha, tu-in zang kik a, adangte bangbang apau hangin US Veto Power in Jerusalem pen Israel khuapi dingin kipsakna nei ta hi. Gam pawkhatte in Israel Palaizum pen Jerusalem ah tuah dingin tangko ta uhi.

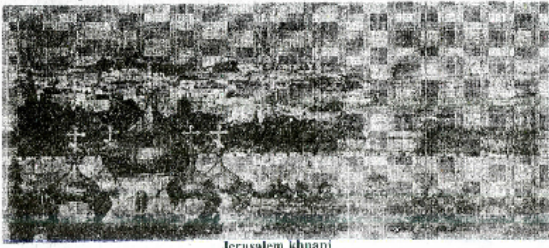
Israel agum mahmah gam 10 ah Denmark, Poland, Czech Republic, Netherland, Sweden, Phillipine, France, India, UK, USA hi a, aha mahmah gam 10 - Jordan, Bahrain, Kuwait, Tunisia, Algeria, Saudi Arabia, Yemen, Pakistan, Iran leh Palestine gamte ahi uhi. Jerusalem khuapi pen Judaism, Christian leh Islamic biakna nam 3te khuapi hi a. Jerusalem khuapi veng 4



Israel khuapi Jerusalem Ahi Trump



USA in Israel Veto Power tawh guin



Jerusalem khuapi

Christain veng, Jews veng, Muslim veng leh Armenia veng ci-in kikhin hi. Khuapi lutna kulhkongpi 11 om a, kongpi 7 kihong hi. Khuapilul sung ah Haram Al Sharid muslim biakinnpi om a, Muslim

tumlam, suahlam leh Gaza tuipi gei luh a, suahlam alakzawh clangin Israel gam hi ci-in tangko uhi. BC 1400 kumin kisat a, BC 998 kumin David khuapi suak hi. BC 586 kumin Babilon kumpi Nebuchanezzar in la a, BC 445 kumin Persia kumpi Arterxes khuapi suak hi. Greek kumpi Alexander the Great in la a, BC 39 kumin Herod in la hi. AD 70 kumin Rome khumpi Titus in susia hi. AD 638 kumin Muslimte in la a, AD 1099 kumin Turkey, 1187 - Muslim, 1517 kumin Turkey leh 1917 kumin Britist kumpi in uk a, 1947 kumin UNO in uk hi. 1948 May 14 ni-i Israel kipla hi. 1950 January 23 ni-in Israel in Jerusalem khuapi dingin tangko hi. 1967 ni 6 galdona sungin Jerusalem bup Israel in gnah hi. 1980 kumin UNO in Muslimte piak kik ding gen a, Israel in khantawn khuapi dingin pulakna hangin 1980 July 30 ni-in Holy War - Arab, Egyot, PLO, Saudi Arabia, Kuwait, Algeria, N. Yemen Islamic gam 13 in do hi. 2017 kumin USA in Jerusalem pen Israel khuapi taktak hi ci-in tangko a, Israel mipi nuam mahmah hi.

UN Security Council ah gam 14 in alangpan hangin USA in Veto Power tawh nial ahih manin Jerusalem pen Israel khuapi taktak asuak hi ta a, Arab muslim gam khempuuh hehna khang

Map of Chin State



Source: Website of the Myanmar Information Management Unit (MIMU).

A STUDY OF THE MEDIA PREFERENCES OF THE COLLEGE STUDENTS

Cho Cho Thwin*

Abstract

Students in our education institutions are becoming more addicted to using media for various reasons and it can be change in social lifestyle. This study aims to examine about the students' media preferences which affects their lives in recent years. Questionnaire and interview technique was used to obtain the data of the study among 106 students of journalism subject between the age group of 17-22 years who use media network. The findings include the how students using on print media and electronic media including social media in their lifestyle, students' consumption of the media content, and media preferences and perspectives.

Keywords: Print media, Electronic media, Social media, Media content, Media preferences

Introduction

“Media” refers to various means of communication and print media is one of the oldest and basic forms of mass communication. It includes newspapers, magazines, and other forms of printed journals. The contribution of print media in providing information and transfer of knowledge is remarkable. Electronic media is media that uses electricity, including television, radio, the Internet, fax, CD-ROMs, DVDs and online video streaming. It includes any medium that uses the digital or electronic encoding of information.

Nowaday, improvement of technology and communication channels are mainly in sharing and transfer of information in media and it has essential among students for utilization in various fields such as learning, sharing and entertaining. Also, the advancement in social media globally many students has up their attentions in media utilizing with various reasons and most of their time that adds waste time to their life such as chatting and games. At the current situation, smartphones and computers can be easily sharing information on the social media such as email, facebook, youtube, message, blogs for communication of society.

Problem statement

The print media industry has changed dramatically with the popularity of internet and digital platforms. According to students' using media can be influence on their education and behaviour with positive and negative effects. It's interesting to explore the current using situation among the students. Shabir, Hameed, Safdar and Gilani (2014) argued that sometimes, using social media can be negative impacts for youths. Also, Boyd et al. (2008) stated that youth likes social networks due to the variety of technical features.

Objectives

1. To examine the media preferences on students' social life
2. To highlight which media content influence on students' life
3. To explain the reasons why the students prefer the media

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Study Related

As new technologies become existing with companies such as Microsoft, eBay, Amazon and Google. The explosive growth of the smart phone and mobile computing is affecting the strategy, as social media connectivity is becoming easier. LinkedIn is professional site and its using to connect the world's professionals as a link(LinkedIn, 2012). MySpace is one of the social networking site and (Boyd & Ellison, 2008; Newman, 2008). Facebook founders, Harvard students Mark Zuckerberg, Dustin Moskovitz, Chris Hughes, and Eduardo Saverin had developed the network exclusively for Harvard Students but it gradually permeated to other universities (Facebook, 2012).

Twitter was invented in 2006 by Jack Dorsey, Evan Williams, and Biz Stone as a faster means of staying in touch (Beaumont, 2008 as cited in Sauerbier, 2010). A blog makes the post and it easy for anyone a type of content management system. Blog software provides a variety of social and it can be highly effective a form of online media. Games are creating an ideal opportunity for entertainment and merchandising. Items were branded and it has been developing in facebook. Social Shopping, using of facebook is to create more than just an ecommerce store within a facebook frame. Facebook is containing its entire catalog of products and retailers must make it easier for people on the site to communicate about products and promotions. Online marketing is about providing current and potential customers with interesting, informative content. Media sharing sites, YouTube (videos) can be accessed from anywhere in the world by media sharing sites.

Literature study

Berkowitz and Prichard (1989) found that the print media to be a very strong indicator of political knowledge enhancement. Sanderson (2002) argued that people learn through reading, and reading about interesting new things in one's interest subject, undoubtedly helps motivation. Beckert (1992) argued that through books the students gain the legacy of knowledge earned by those who came before and without books no education could have been possible. They are the primary source of information used by all humanity. Singh (2005) stated that the print media are different types of useful material, devices and symbols that make the study of a subject more comprehensible and interesting. Dubin and Olshtain (1981) found that the magazines and newspapers can be an effective source of reading material in order to achieve the true objectives of reading lesson when reading activities are carried out for getting information and entertainment.

Huston et al., (1991) found that the electronic media have a important influence on children and that it will continue to affect children's cognitive and social development. Chaffe and Frank (1996) argued that while newspapers constitute the primary information source for actively seeking information and television is a stronger instrument of political learning . Barwise et al (1981) stated that information programmes had smaller audience but higher appreciation scores than entertainment programmes in television broadcasting.

Rajeev (2015) argued that social media influences youth daily life and particularly the students. Mehmood (2000) stated that the technology of media is an important part of student's lives in the twenty-first century and play very important role in creating awareness related various aspects of life and personality. Al-Sharq, Hashim & Kutbi, (2015) found that the social

media is becoming part of our society, changing social norms and culture. Also, Mingle and Adams (2015) suggested that the using of social media negatively cause bad hand writing and spelling, lateness to class and assignment submission. Jha, Shah, Basnet, Paudel, Sah and Adhikari (2016) maintained that Facebook is among the type of social media application widely used across all ages and professions.

Lowisz, (2014) stated that world events of today are impacted by social media as researches prove that 50% of people on daily basis gets instant news through this channel. Chen, Kaewkitipong & Ractham, (2016) found that the social media if utilised wisely can serve as a good avenue for collaborative learning for students. Al-Sharq et al., (2015) argued that a few years ago, high education institution students has engaged on excessive usage of social media which has coined a debate on whether the usage of social media has impacted on their social lifestyle, wellbeing and behaviour . Students are using smartphone with many apps that can be downloaded and using smartphones may be for learning while others may be for entertainment. Kucirkova, Messer, Sheehy, & Fernández Panadero (2014) stated that the app can be for entertainment or learning actually depends on their design and content features. Miller, Fabian and Lin (2009) argued that social networks are important as it facilitates an immediate, interactive and low cost communication between customers and the marketer.

Research methodology

Questionnaire and interview method was chosen to collect the data. The primary data source was collected through questionnaire while the secondary data was also built using literature study. This study focused on the students' using media situation. The sample size of 106 students of journalism between the age group of 17-22 years was involve in the study through questionnaire data gathering technique. The obtained data were analyzed quantitatively and using simple percentages. In this study work, descriptive research method was used in understanding and exploring the using media of students.

Research questions

What media content do the students most regularly consume?

What media do the students prefer?

What social media networks do the students mostly frequent for information?

Data Analysis

The research was conducted in 2019. The target population for this study is journalism students of NMDC. The total number of participants students was 106 and the median of the age group was 17 to 22. About 17% of them are male and 83% were female. Among them 80% of the students are living in Yangon and 20% are other townships.

Reading Newspaper and Journal

Newspapers representatives of the printed media and its bring to audience specific information and can be easily used as authentic materials. Also, newspaper can support as a emotional medium to the students. In Myanmar, The Mirror (Kyemon) Daily, Myanma Alinn Daily, Myawady Daily, New Light of Myanmar, The Yadanabon newspapers are state owned print media. 7Day Daily, The Myanmar Times, D-Wave, Daily Eleven, The Myanmar Times,

The Standard Time Daily, The Straits Times Myanmar Edition - a private daily newspaper (English) The Union Daily, The Voice Daily, Daily Eleven are private newspaper. The Commerce journal, The Education Digest, First Eleven, Popular journal, Weekly Eleven journal, Internet journal, Pyimyanmar journal, Health journal, Kumudra journal, Myanmar Now are weekly journals. The results of the questionnaire showed that 89% of the students used in newspapers and journals are shown in Figure (1).

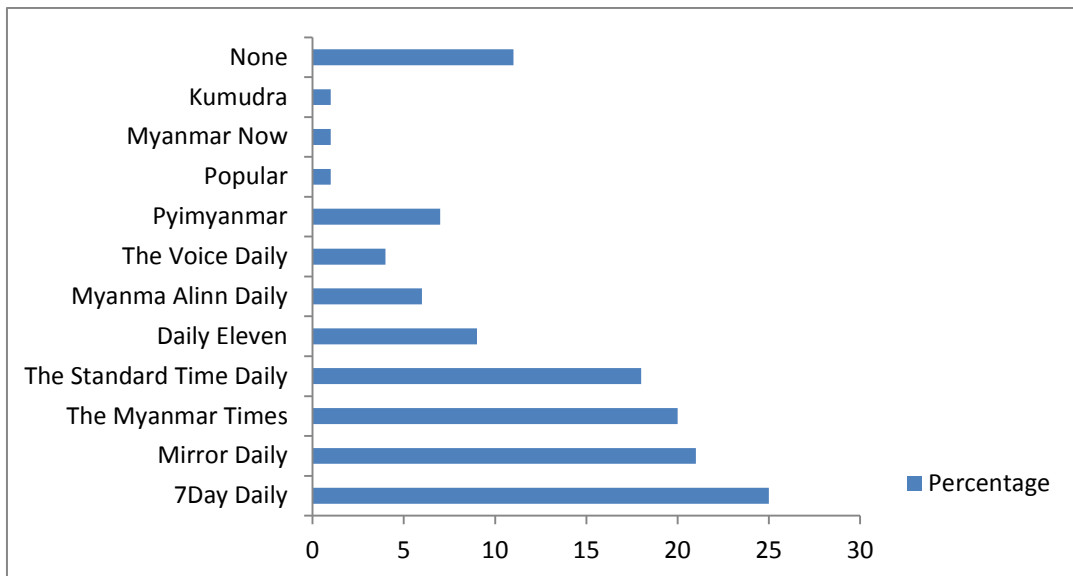


Figure 1 Newspaper / journal reading of Students

Purpose of reading Newspaper and Journal

Purpose of reading print newspapers are significant. The data (Figure 2) shows significant differences in reading purposes of print newspaper among the students.

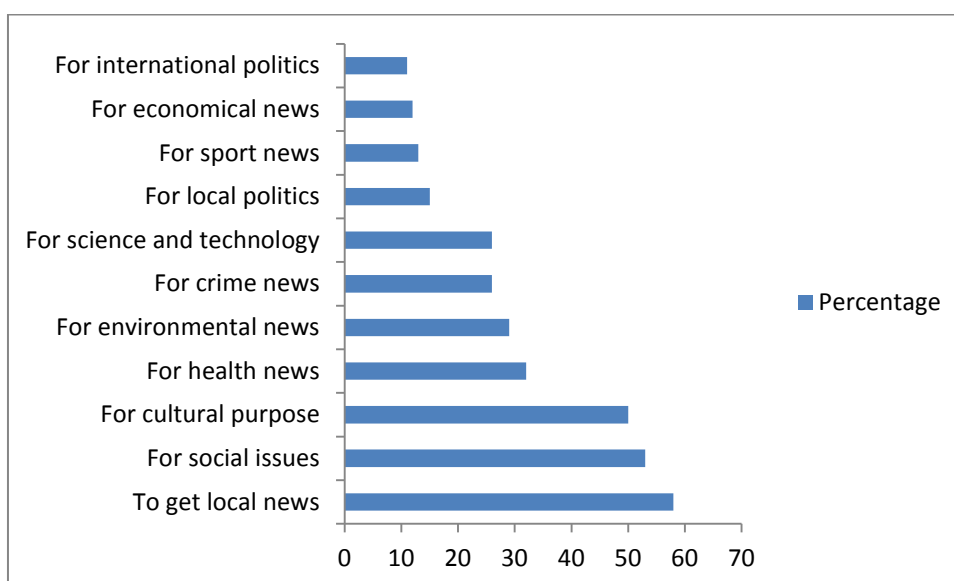


Figure 2 Purpose of reading newspaper among Students

Watching Television

Information provided by television is obtained first and foremost through news programmes. Myanma Radio and Television (MRTV) is a State-run TV broadcaster and MRTV-4, MITV and MRTV Entertainment are joint ventures with privately-owned Forever Group. Forever Group is the largest private media Groups and offering its own Pay-TV channels and packages. Shwe Than Lwin (Sky Net) has Myanmar National TV (MNTV), Myanmar International TV (MITV), Channel 9 and MRTV. MRTV Entertainment is cooperating with several media companies for broadcasting the programs related with Myanmar women and travelogues made by Mizzima Media, the programs on youth, jobs and workers’ rights made by Myanmar Cable Network and programs belonged to public health, literary and career sectors made by Myit Ma Ka Media.

MRTV has included five lines of DVB-T2 System broadcast with the MRTV Multi Channel Play Out System and has produced several channels such as; Mizzima Channel from March 23, 2018; DVB Channel from 21 April, 2018; Channel K starting Jan 1, 2019; Y-TV Channel from Feb 15, 2019; Fortune TV Channel from March 13, 2019. Viewers can also choose from the Analogue system provided by MRTV and its partners, Free to Air Channels via DVB T-2 and DTH systems for news, entertainment, education and other variety shows. Myawaddy (MWD) is a TV network that is owned by the Ministry of Deference. The data show (Figure 3) that the students’ watching on TV channel.

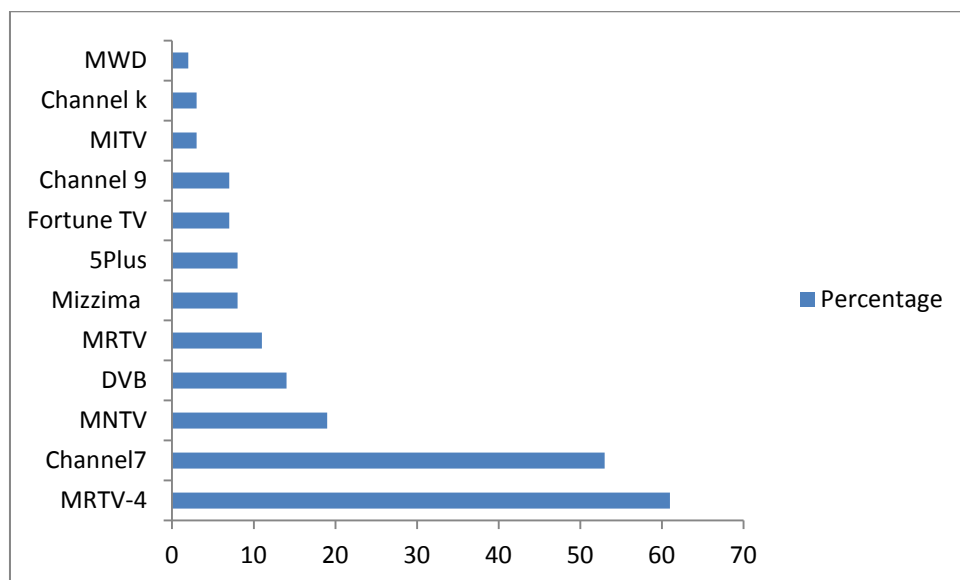


Figure 3 Watching on TV Channel of Students

Variety of TV Content

Television channels are broadcasting the news (from local and international sources), education programme cultural programme and entertainment programme. There are also other segments including the Department of Meteorology and Hydrology’s weather forecasts and international weather trends from around the world, share prices from Yangon Stock Exchange, Exchange rates from Central Bank of Myanmar and the daily prices of different local produce

brought by Agriculture & Market Information Agency. Students' watching on TV programme are shown in Figure 4.

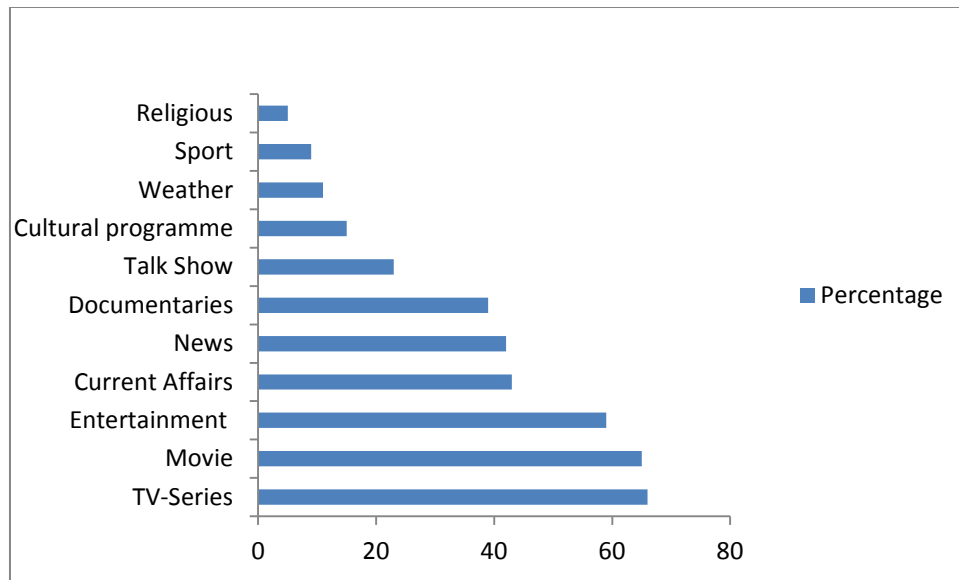


Figure 4 Watching on Television Programme of Students

Listening Radio

Myanma Athan Radio (state -owned station) had stood as the only one radio station for over 60 years. City FM radio station, under the YCDC, has been launched in 2002. To promote wider access to information, the MOI has assigned each of its joint-venture FM radio stations to broadcast over a specified geographic area even when it is not economically advantageous for them to do so. This has served to improve access to information in remote areas. Out of Myanmar's 14 states and regions, joint-venture radio broadcasters tend to cover two or three states or regions each. These broadcasters air some content each day in the prominent ethnic language of the area they cover. There are seven joint-venture FM stations such as Mandalay FM(4 stations), Shwe FM(15 stations), Bagan FM(7stations) , Cherry FM(16 stations), Pyinsawaddy FM(5 stations), Padamyar FM (12 stations) and Khayay FM- Htantabin (community radio). Myawaddy operates the Thazin FM. The data shows (Figure 5) that students 86% are listen to radio.

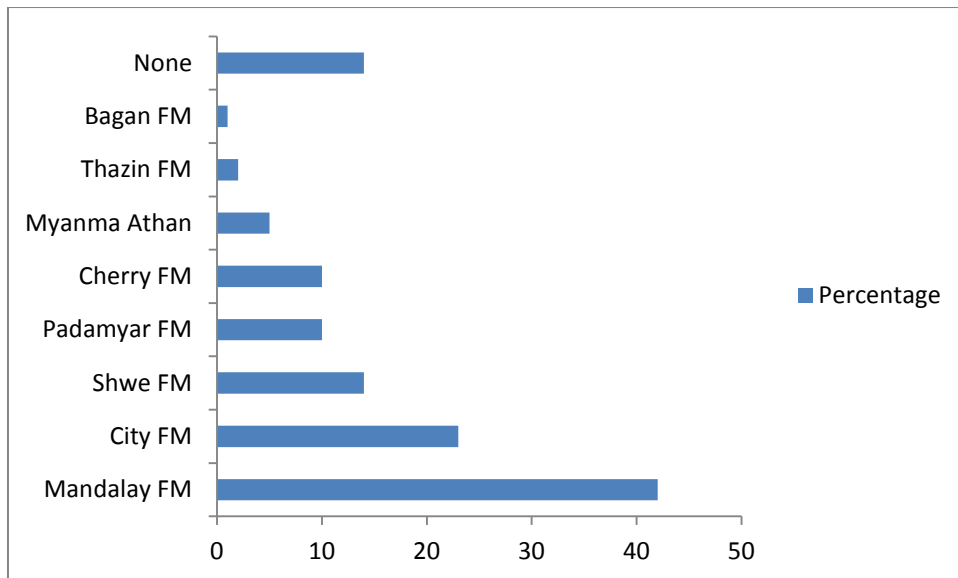


Figure 5 Listening on Radio Channel of Students

Social Media Sites

The popular site of social media for students are Facebook , YouTube, Instagram, Twitter and WeChat. Figure (6) shows the students’ using on social media network sites.

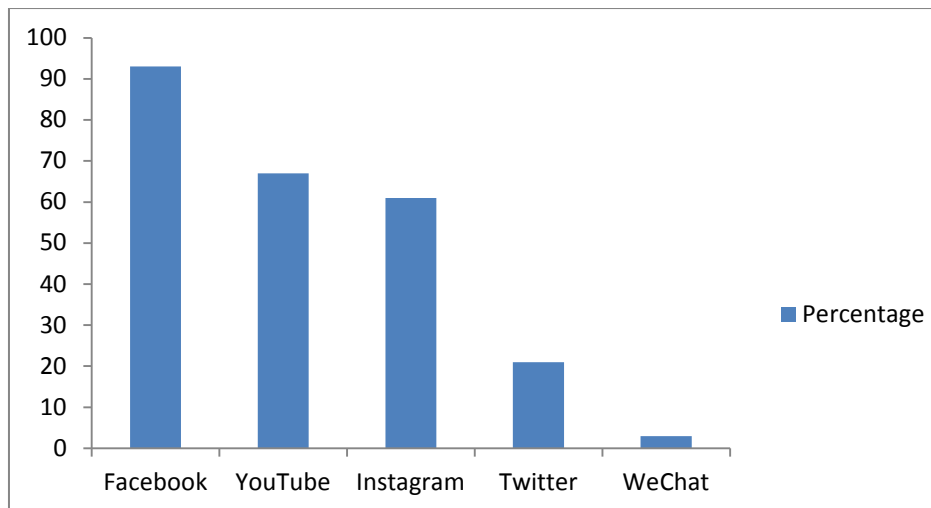


Figure 6 Students’ using on social media network sites

Social Media

Characteristics of Facebook is easier to navigate and very user-friendly, most popular among friends and family members, provides greater opportunity for interactivity and it can do a number of things including the ability to upload information especially chat with friends , sharing of pictures and videos, get updates of friends’ activities and link with other social media by using mobile phone. In Myanmar, the privatization of the sector has brought with it a sharp drop in the price of SIM cards which has made owning a mobile phone affordable for a large percentage of the population. Consequently, there has been a significant increase in mobile phone ownership. Uses of Social Media content among students are shown in Figure 7.

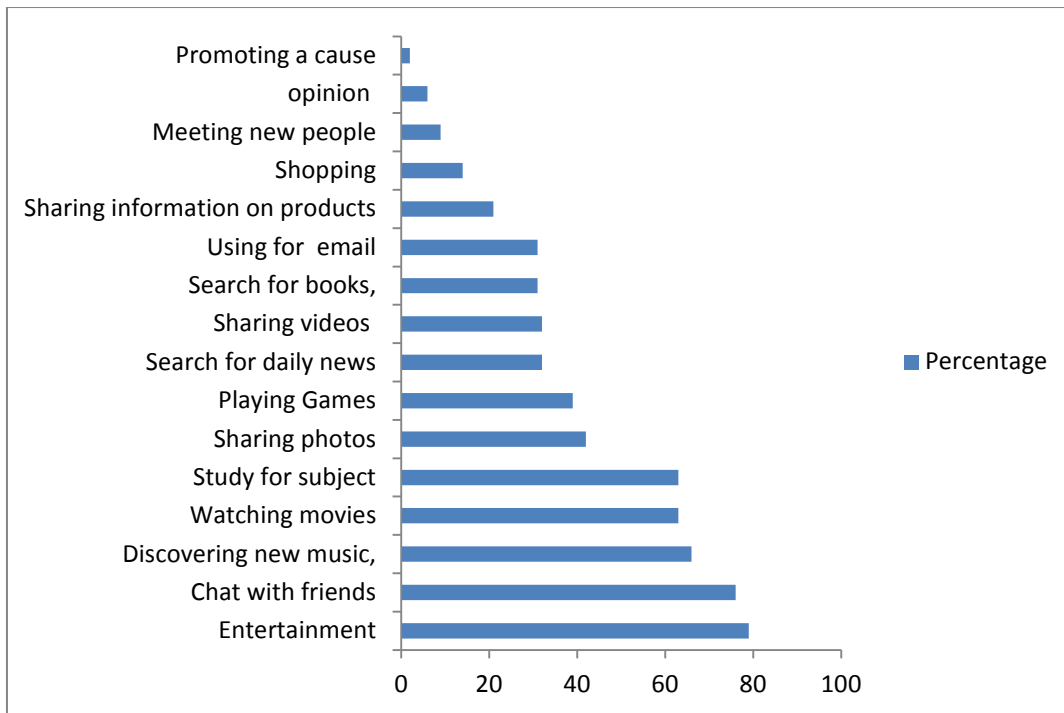


Figure 7 Using on Social Media Content of Students

Media Preferences of Students

There is significant competition between print and electronic media in attracting students’ attention. The data of media preferences of students are shown in Figure 8.

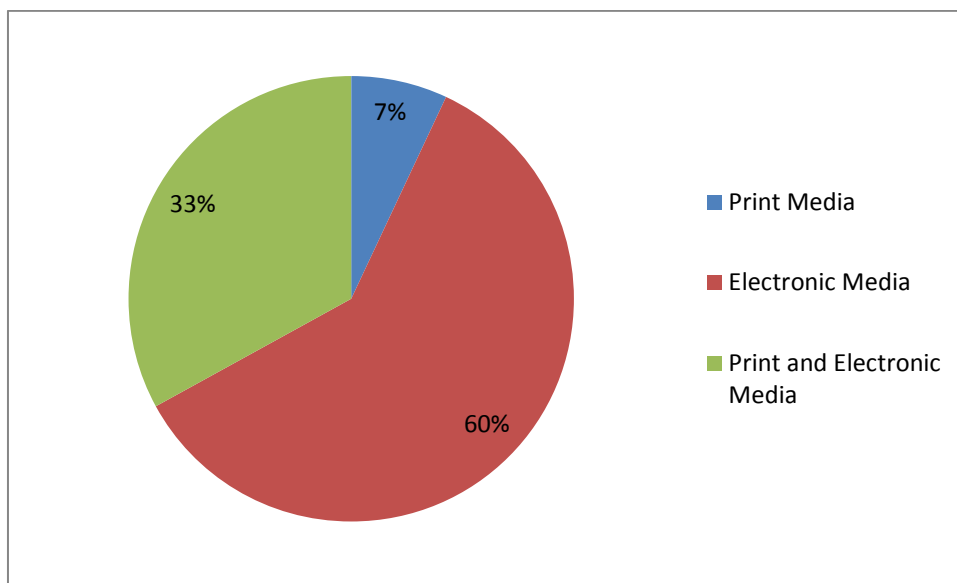


Figure 8 Media Preferences of Students

Findings

Results are presented according to the research questions covering uses of media networks among students. For print media, the study shows differences in reading purposes of print newspaper among the students. Students are found to read mainly for local news (58%) followed by social issue purpose (53%) and cultural purpose (50%) while students read for (32%) followed by health news with the environmental news (29%), crime and science (26%) respectively and local politics (15%), international politics (11%), sport (13%) and economical news (12%).

From the findings of the consumption of television programme, TV-Series programmes had 66%, movie programmes 65% and Entertainment 59%. Also, students are using on social media and most of them are willing to entertainment 79% and online chatting 76% are used to get information and interaction among friend. Followed by discovering music 66%, study for subject 63% and watching movies 63%. While sharing photos 42% gives the students with the preferred. Online games 39% and sharing videos 32% may be more convenient and easier to access and sharing with smart phone.

The favorite site of social media for students is Facebook and 93% of the participants have a Facebook account, 61% have Instagram, 67% have created an account on YouTube while only 21% of the participants in the current study owning a Twitter account and 3% of the students are using in WeChat. According to study, students preferences on electronic media are 60% and print media are 7% and 33% are both.

The majority of the students 88% stated that they consume electronic media because it makes communication easy to connect people and good source to get update information. And then, 70% of the students expressed that listening to music, going to the movies, playing the games as well as many things can get to learn quickly through the electronic media. Also 96% of the students stated that the job opportunities in the electronic media are abundant such as presenter, reporter, producer, editor, script and story writers, camera professionals, program manager etc. 90% of the students expressed that they prefer the electronic media for searching information and searching daily news while 10% of the students prefer the print media. The result further shows, 58% of the students stated that they want to work in electronic media fields as the professionally. It is interesting to express that 83% of the students stated that the print media is more exact and responsibility than electronic media.

Among significant findings, the study also found that the students preferred less on print media than electronic media as well as they have a high appreciation for entertainment. There is a possibility that development of technologies, especially mobile phone offer a bundle of chat, mail, and web. In Myanmar, The privatization of the sector has brought with it a sharp drop in the price of SIM cards which has made owning a mobile phone affordable for a large percentage of the student. Consequently, there has been a significant increase in mobile phone ownership and it can be expand the place of social networking site. Location and the standard of living have some influence on their choices of media.

Conclusion

According to the study results, it can be stated that several media are very relevant and continuing to be in high use, however, in a changing environment. Print media were deemed to have high values of usage frequency and satisfaction as well as electronic media are utilized with easy and comfortable to access and use. Among the students, electronic media are widely used. The results indicate that students tend to prefer the electronic media. Although television is found to be the most available media at home and social media such as TV, face book, YouTube, Instagram and Twitter when such media are available either at their homes or university, library, cyber cafes and public places. So, owner of print media should encourage the their design and content features with the audience's need and perspective.

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Appendix

Table 1 Newspaper/journal reading of Students

Newspaper/ Journal	Percentage
Myanma Alinn Daily	6
Mirror Daily	21
7Day Daily	25
The Myanmar Times,	20
The Standard Time Daily	18
The Voice Daily	4
Daily Eleven	9
Pyimyanmar	7
Popular	1
Myanmar Now	1
Kumudra	1
None	11

Source: Survey

Table 2 Purpose of reading newspaper among Students

Purpose of reading	Percentage
For cultural purpose	50
For local politics	15
To get local news	58
For crime news	26
For science and technology	26
For environmental news	29
For social issues	53
For international politics	11
For health news	32
For sport news	13
For economical news	12

Source: Survey

Table 3 Watching TV Channel of Students

TV Channel	Percentage
MRTV	11
MNTV	19
MITV	3
MRTV-4	61
Channel7	53
Channel9	7
Mizzima Media	8
DVB	14
5Plus	8
Fortune TV	7
MWD	2
Channel k	3

Source: Survey

Table 4 Watching Television Programme of Students

Programme	Percentage
News	42
Sport	9
Talk Show	23
Documentaries	39
Religious	5
Entertainment Show	59
Watching movie	65
TV-Series	66
Cultural programme	15
Current Affairs	43
Weather	11

Source: Survey

Table 5 Radio Listening of Students

FM Station	Percentage
MRTV	5
City FM	23
Cherry FM	10
Shwe FM	14
Padamyar FM	10
Mandalay FM	42
Thazin FM	2
Bagan FM	1
None	14

Source: Survey

Table 6 Students’ preferences on social media network sites

Social Media	Percentage
Facebook	93
Instagram	61
YouTube	67
Twitter	21
WeChat	3

Source: Survey

Table 7 Social Media Network Uses of Students

Media Content	Percentage
Search for daily news	32
Discovering new music,	66
Playing Games	39
Sharing photos	42
Sharing videos	32
opinion to mainstream media	6
Sharing information on products/brands	21
Study for subject	63
Promoting a cause	2
Chat with friends	76
Using email	31
Watching films	63
Search for books,	31
Entertainment	79
Meeting new people	9
Shopping	14

Source: Survey

Table 8 Media Preferences of Students

Kind of Media	Percentage
Print Media	7
Electronic Media	60
Print and Electronic Media	33

Source: Survey

SUSTAINABLE TOURISM IN MYANMAR: ADAPTATIONS OF GLOBAL EDUCATION AND ENHANCING CULTURAL AND SOCIAL AWARENESS*

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Abstract

The future of Myanmar lies in the capability of youth today by adapting educational excellence. Research and Development in educational institutions that produce graduates with global education are of vital importance for sustainable development in Myanmar. To achieve this goal, life skills should be adapted in school projects. This study explores the learning culture of university level students, especially final year students from National Management Degree College, Tourism Department, their exposure to field trip study in doing research, capacity building, interacting with villagers at community - based tourism site. The study looks into faculty members and students' joint study tour of Community-Based Tourism (CBT) site in Ma Gyi Kan Village in Magway Division. Data collection methods mainly focus on interviews and opinion survey to support qualitative research, whereas set questionnaires as an optional if available. Issues that were investigated include development obtained from CBT, job creation, income generation, exposure of cultural tourism, empowerment and participation, leadership skills, problems and hindrances that villagers encounter in CBT site, training needs, technology aids for agricultural and eco-tourism.

This research aims at finding an appropriate strategy for students to equip with life-skills required in 21st century education, enhancing awareness in preserving environmental, social, and cultural values of diverse ethnicity and natural resources, empowering students to create projects to develop community -based cultural tourism for career development, job creation, income generation to sustain CBT as new economy. Through this sustainable tourism, every stakeholder is beneficial and taking shared responsibility to protect Myanmar society for sustainable development.

Keywords: Community Based Tourism, Education for Sustainable Development, Life Skills, Environmental, Social and Cultural Awareness

Introduction

Tourism is one of the world's fastest growing Industry. With over 1.2 billion people now crossing international borders each year, which accounts for some 10% of the world's economic activity, the United Nations has proclaimed 2017 as the International Year of Sustainable Tourism for Development. The United Nations World Tourism Organization (UNWTO) data shows the significance of tourism as a vehicle for job creation, generating revenues for host communities representing 1 in 11 jobs worldwide. (UNWTO, 2015 <https://en.unesco.org/iyst4d>)

In 2012, United Nations set up a blueprint of sustainable development goals to achieve in 2030. In September 2015, the Sustainable Development Goals (SDGs) were adopted by the United Nations General Assembly with the 2030 Agenda for Sustainable Development, and 190 world leaders committed to 17 categories of SDGs to fight poverty, injustice, inequality and climate changes etc. Over the next decade, the SDGs must form an action plan to free humanity from poverty and put the planet back on the road to sustainability. (UN Global Goals for SDGs.

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2015) Tourism has also the potential to contribute, directly or indirectly, to the 2030 Agenda for Sustainable Development Goals. Among several definitions, UNESCO defined sustainable tourism as “tourism that respects both local people and the traveler, cultural heritage and the environment”. It seeks to provide people with an exciting and educational holiday that is also of benefit to the people of the host country. (UNESCO Digital Library 2006). United Nations World Travel Organization (UNWTO) expressed sustainable tourism as *"Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities"* (UNWTO, 2015, P. 11-12).

Sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments. Sustainability principles refer to the environmental, economic, and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability. Thus, sustainable tourism should: 1. Make optimal use of environmental resources that constitute a key element in maintaining essential ecological processes and helping to conserve natural heritage and biodiversity. 2. Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance. 3. Ensure viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation. (Making Tourism More Sustainable - A Guide for Policy Makers, UNEP and UNWTO, 2005, p.11-12). Various definitions imply as an industry committed to making a low impact on the environment and local culture, helping to generate future employment for local people to ensure that development is a positive experience for local people; tourism companies; and tourists themselves.

Community-based tourism (CBT) has been compelling in international tourism market for three decades (ICRT Occasional paper. 2009, P.11). However, there are few studies of CBT in Myanmar, where the actual benefits to local communities, development obtained from CBT, job creation, income generation, environmental impact, empowerment and participation of villagers and regional administrators have yet to find out through pragmatic research. Cultural, environmental and social awareness need to be in high consideration to draw CBT blueprint in Myanmar. By means of promoting CBT, the social, environmental and economic needs of local communities are met through a local wisdom, local culture, which are valuable assets of tourism product. CBT is alternative to the mainstream eco-tourism. The sustainable tourism should make the low impact on environment and local culture. It has tendency to create jobs and income generation for local people, to preserve local culture, to gain knowledge and experiences for mutual benefits to all stake holders.

On the other hand, United Nations announced the Decade of Education for Sustainable Development, where UNESCO is the lead agency. Education for Sustainable Development (ESD) empowers people to change the way they think and work towards a sustainable future. (The United Nations Decade of Education for Sustainable Development 2005-2014). Individuals and societies need to learn to live together sustainably. It aims to transform society, improve access to quality education at all levels and in all social contexts by reorienting education and

help people develop knowledge, skills, values and behaviors needed for sustainable development. It encompasses various issues, such as climate change and biodiversity into teaching and learning. Individuals are encouraged to be responsible actors who resolve challenges, respect cultural diversity and contribute to creating a more sustainable world. (UNESCO Digital Library, 2006).

In the blueprint of United Nations Sustainable Development Goals, there are 17 SDGs. Among 17 categories, quality education, clean water and sanitation, industry innovation and infrastructure, sustainable cities and communities are strongly involved in CBT. While United Nations has been calling the world community for sustainable development, UNESCO announced a decade of education for sustainable development. In this context, we may need to see where Myanmar stands today in terms of sustainability. (UNESCO, 2006).

The meaning of the word “Sustainable Society” is very broad from various perspectives such as business, environment, conservation, energy, green-house effect, information technology and many other numerous sectors. According to the UN Human Development Report 1990, a “sustainable society” is commonly used as economically viable, environmentally sound and socially responsible. Sustainable Society has been an international agenda since 1990. (UN Human Development Report 1990). In practice, it may be very difficult to measure sustainable society of Myanmar. However, Sustainable Society Index (SSI) was firstly introduced by Netherlands, the Sustainable Society Foundation in 2006. SSI Index from 154 countries represents 90 percent of the world population. (Sustainable Society Foundation, Netherlands, 2017).

According to Netherlands Sustainable Society Foundation, “SSI ranking” measures (1) Human Well-being, (2) Environmental Well-being, and (3) Economic Well-being. (1) Human Well-being is basic needs such as nutrition, shelter, safe water, clean water, personal and social development of gender equality, education, health, sanitation etc.(2)Environmental Well-being is nature and environment such as quality of air ,water, green-house effect, haze, natural resources, eliminate waste, biodiversity etc. (3)Economic Well-being is employment, efficient farming techniques like organic farming, transparent economic system, ethical and fair production and distribution etcetera. According to Sustainable Society Index(SSI) of the country ranking among 154 countries, in the year 2014 and 2016, Myanmar’s ranking in human well-being stood 112 both in 2014 and also 112 in 2016, environmental ranking was 42 in 2014 and 84 in 2016, economic Well-being stood 68 in 2014 and 61 in 2016. (Sustainable Society Foundation, Netherlands, 2017).

For Myanmar to increase its sustainable society index (SSI) numerical ranking depends on how policy makers lay down good policies, how they implement them and follow up actions, as well as their awareness of the fundamental three categories of SSI human well-being, environmental well-being, economic well-beings. To achieve this, the country definitely requires morally strong and well-disciplined citizens who follow the rules of law strictly. It is consequently important to create environmentally sound and socially responsible Myanmar society by laying down solid foundation of 21st century learning through university level institutions to be equipped with research and development, life skills to be in line with the modern age of information technology.

While Myanmar students are in drastic need to equip with life skills, it is of vital importance to be aware of 21st century learning and life skills to consider to put into curricula

development in adapting education reform blueprint. 21st Century skills are 12 abilities that students of today necessitate to succeed in their careers in this Information Age. These abilities include 1. Critical thinking 2. Creativity 3. Collaboration 4 Communication 5. Information literacy 6. Media literacy 7. Technology literacy 8. Flexibility 9. Leadership 10. Initiative. 11. Productivity. 12. Social skills. (Skills for the 21st century, 2015). It is also categorized as: 1. critical thinking, problem solving, reasoning, analysis, interpretation, synthesizing information 2. research skills and practices, interrogative questioning 3. creativity, artistry, curiosity, imagination, innovation, personal expression 4. perseverance, self-direction, planning, self-discipline, adaptability, initiative.

According to World Health Organization -WHO, life skills include: 1. Problem solving 2. Decision making 3. Critical thinking 4. Creative thinking 5. Effective communication skills. 6. Self-awareness. 7. Empathy 8. Interpersonal-relationship 9. Coping with emotions 10. Coping with stress. (WHO 1997). The main objectives of life skills are to 1. to develop positive social skills and etiquette 2. to develop work ethics 3. to learn job interview skills 4. to listen, speak, and understand English language 5. to become self-confident 6. to remove stage fear (WHO 1997).

Materials and Methodology

This study explores if our education is adapting the 21st century life skills for sustainable development. Preliminary research questions are set as: 1. How and in what way tourism students' school projects can enhance CBT in terms of enhancing social and cultural awareness? 2. Whether school activities and field trips are in line with 21st century life skill for sustainable development?

The research aims at finding benefits and problems arising in CBT in terms of social equity and the environmental quality, drawing attention to enhance the awareness in promoting CBT for welfare of local people and tourists, protecting our country's environmental, social and cultural heritage. The study looks into National Management Degree College, Tourism Management, final year students' exposure of research survey through their field trip, capacity building skill, interacting skill with villagers at CBT sites in Ma Gyi Kan village in Magway Division. Ma Gyi Kan Village has 110 households with 450 population. It is located in Salay Town, Chauk Township, Magway Division, an hour drive from Bagan and 20-minute drive from Chauk.

Research methods included observatory, exploratory, interviews, and opinion survey. Six faculty members and 140 students went a study trip to explore the CBT site in Ma Gyi Kan Village. Faculty members interviewed to village leaders, whereas students in groups visited households and farms to survey. Students prepared their own research design differently on their group's interest and observed CBT sites. One constraint is short of time to distribute paper-based questionnaires to villagers and give them some time to answer, then to collect their answers vice versa. Another obstacle is that villagers are uncomfortable to write on paper since they are not familiar with set questionnaires in research format. Survey was formed into (11) groups among 140 students, where 6 groups survey ecotourism and 5 groups explore community-based tourism to simply support qualitative data. Students worked in teams by drawing outlines to ask interrogative questions, interviewing, note taking, and report writing. Despite different groups work on their own research design, data collections are mainly focused on villagers' opinion on

pros and cons of CBT, homestay business, their attitude to strangers like foreigners and local visitors, chances of job creations and income generation, reflection of local life style and local culture, their problems etc.

Learning outcome will have proven the potential of students' research ability, their communicative skills, interpersonal skills, interview skills, self-direction in team work, collaborative learning and self-confidence in line with 21st century learning skills, the guidelines drawn by UNESCO Education for Sustainable Development.

Finding

The researchers intend to observe students' research ability, their learning outcomes, whether they have chances to exercise learning by doing approach, self-directed learning, collaborative learning and if their learning culture is somewhat in line with global education, the 21st century life skill. Most importantly, the researchers investigate the students' awareness on preserving environmental, social and cultural values of diverse ethnic groups in Myanmar, especially in enhancing community-based tourism. Groups of students design their own survey questions for their final year term paper during the field trip. The researchers interviewed some student representatives from 5 groups who survey CBT to analyze their feedback. It was found some commonality among the differences in various groups.

Based on common ground from their survey, 10 items are drawn out, divided into two parts, part 1 emphasize on opinion of CBT villagers, whereas part 2 focus on students' research exposure. Part 1 highlights on (1) Whether Tamarind Lake villagers can make use of their local culture and wisdom to showcase to tourists (2) If there are any man-made environmental degradations such as cutting trees, deforestation, forest fire, global warming, garbage and the waste in disorder to affect water pollution, air pollution and noise pollution and any impact students see in their trip (3) If they see good opportunity in job creation and income generation in CBT sites (4) Cleanliness of toilet, bathrooms, sanitary to meet the hygienic standard and how do they want them to improve to attract more tourists (5) How do Tamarind Lake Village CBT site manage on day to day basis, top down from village leaders or bottom up from the youth, who sponsor the budget to run the CBT sites. Part 2 is to observe the students' research skill. These include (6) whether students can exercise research skill in their field trip (7) students have good chances to work in team spirit of cooperate learning, exercise leadership skill, self-directed planning, decision making, problem solving, and critical thinking (8) they have any problems in interviewing , approaching villagers in survey process, in order to learn their social and interpersonal skills (9) If villagers are willing to help students to learn more about their traditions and cultural resources and (10) students' perception on the field trip, whether they gain first-hand information from villagers and if the trip is beneficial for conducting research. Lastly, (11) their overall impression and their personal opinions on how they love to preserve environmental, social and cultural values in Myanmar together with ethnic groups and in what way they want to enhance culture-based tourism for our country's new economy.

From our interview to representatives of 5 teams who conduct CBT research, they responded as follows. From part 1,

1. When asking if Ma Gyi Kan villagers can make use of their local culture and wisdom to showcase to tourists, most respondents say "yes". For example, there are 3 home stay houses for tourists, which can accommodate about 15 tourists. Villagers cook for the

guests all meals including breakfast, lunch and dinner, but they don't make different menu for foreigners. Foreigners can taste the same food as the way villagers eat daily and local people don't change their cooking recipe for foreigners. In this way, all foreigners and local guests can taste local dish and they can even try to participate in cooking together with hosts and hostesses. Foreign tourists can join Myanmar traditional sports of Chin Lone with local people. Some students observed that tourists can take bullock carts to go around the village for sightseeing to Salay and Irrawaddy bank. Tourists can enjoy the beauty of Irrawaddy river and tamarind tress by taking bullock carts in their sightseeing tour. One faculty member asked the village leader about selling local made handy crafts to make money. The village leader replied that they are weak in making hand-made arts at the moment, but they will try and consider to produce local souvenirs in the future. At this moment, instead of selling products, they give their farming products, fruits etc. as take away gifts for the guests. It shows generosity of Myanmar traditional customary that is very rare to see in the profit-making society all over the world nowadays. This is one beauty of local culture, found in CBT site. Another villager said they are trying to use local resources to create local products of Ma Gyi Kan Village to promote in the future. Another faculty member expressed the villagers' generosity, picking fruits and vegetables and give to the guests to join cooking activities together by using vegetables from their home compound. She noticed that she saw only the elders, aged above 40s and children in the village. When asking whereabouts young adults, elders replied they were working in neighboring village, but some were joining the merit making events in other village helping there temporarily away from homes.

2. If there are any men-made environmental degradations: most students responded that they did not see anything harmful to the environment. Village is clean, cool and calm, peaceful, simple, no noise pollution, no air pollution and local significance of tamarind tress make good ventilation. One student pointed out that villagers keep maintaining tamarind trees in their compound and that make environmentally friendly clean surrounding without dirty disposal and garbage. They can feel touching of natural air breeze and not feel hot even in summer time during their visit. One faculty member said that the area is peaceful, no crimes, clean and she can feel the beauty of nature.
3. If they see good opportunity in job creation and income generation in CBT sites: Most students say "yes". Despite the mainstream villagers are making their living by farming, livestock breeding, agricultural products, especially growing paddy and plantation of different fruits and vegetables, CBT as seasonal job helps them additional income in tourist season. They can make money by cooking 3 meals for the tourists, home stay accommodation, riding carts, taking around and showing local products, but they cannot rely their income only on CBT as tourists don't come all year long. Students notice that some villagers are not very interested in CBT, whereas one villager said to them he has passion in giving hospitality service to the guests, and upon tourists arrival, they can get job to make money.
4. Cleanliness of toilet, bathrooms, sanitary to meet the hygienic standard and how do they want them to improve to attract more tourists: One student responded that it might be alright for the locals, but for the conveniences of foreign tourists, they should improve hygienic standard, build more quantity and squatting type for the convenience for tourists.

Some students and one faculty member observes good sanitation, clean bath room and toilets in their home stay.

5. How do Ma Gyi Kan Village CBT site manage on day to day basis, top down from village leaders or bottom up from the youth, who sponsor the budget to run the CBT sites: Students and one faculty member responded that usually chief of the village take charge in management and do some maintenance from the profit. One faculty member noticed that only the elders manage CBT as traditional way of top down hierarchy management style, and only a few people are interested in CBT, because it is seasonal job and they cannot rely on tourism only to make their living all year long. When asking them about budget and idea to establish CBT, at the initial stage of creating CBT site, two travel agents visited the village and educated them about CBT, taught them how they should prepare to host tourists to build home stay houses to make money. The sources of budget are unknown, but when we interviewed one NMDC alumnus, the tour coordinator of Ma Gyi Kan Village CBT site informed that a small group of people interested to establish CBT in the village proposed to UK based Business Innovation Facility for grant and they received fund to implement in 5 years. Sometimes, Ministry of Hotel and tourism arranged to give them training. Some contribution come from the guests when they need to buy generator to run electricity and sometimes foreign guests donated some stationaries for the village children. One student said a former village leader is leading CBT activities in team.

In part II, we observe students' performance on research skills as follows:

6. Whether students can exercise research skill in their trip: All respondents said yes.
7. Students have good chances to work in team spirit: All students replied yes and it is not easy to work alone. Some groups divided into sub groups, walked around to visit households and farms to meet different villagers to collect data.
8. Any problems in interviewing, approaching villagers in survey process, their social and interpersonal skills: One respondent said it is very interesting to meet villagers to ask information, but some villagers are afraid to answer questions, whereas some are very friendly, welcoming and taking them around village and explaining the history of the village. Most students are satisfied with and some are excited to interview local people and all of them enjoy dealing with villagers.
9. If villagers are willing to help students to learn more about their traditions and cultural resources: This question is to counter check our students' interpersonal and social skills and found out that they have good ability to communicate well with villagers.
10. Students' perception on the field trip, whether they gain first -hand information from villagers and if the trip is beneficial for conducting research: Most students responded that the field trip is very beneficial and great chance to do research. On the other hand, some students said they are tired to walk around one place to another along the village to meet their groups in limited time slot. Some students get a chance of riding bullock carts and they really enjoy firs hand information and experience. One student said it is a great chance to learn a serene life of village people, their customs, their life style and how they give community services to the foreign and local tourists.

11. Overall impression and their personal opinions on how they love to preserve environmental, social and cultural values in Myanmar together with ethnic groups and in what way they want to enhance culture-based tourism for our country's new economy: Students concern more on cultural tourism than community-based tourism. Tourists may get bored if they are taken only to pagodas and listening to history. They suggest to add tourist attractions such as colonial heritage sites, Portugal old churches, Thanlyian BOC Oil refinery site, Jewish building, 135 ethnic socio-cultural heritage extensively. There should be many ethnic cultural centers for tourists. One student suggests to keep Narga, Palaung traditions the way it was before. They are aware of environmental impact and climate change due to cutting trees and removing mountains. It was found that the degree of students' concern on environmental, socio-cultural awareness is pretty high.

Discussion

Ma Gyi Kan Village CBT site was funded by UK based Business Innovation Facility (BIF). All Asia Inclusive tour agency helped to submit application to Project & Package (PPIC) in 2014 for financial grant. PPIC announced that Ma Gyi Kan Village was the winner among many competitors in 2015, then BIF granted the budget to establish CBT site there and the village management had to report monthly progress for 3 years to BIF. One senior faculty member noted it runs for 3 years now with significant development. There are currently 6 local guides, two graduates, three 10th grade, and one 8th grades local people, working in their own village as guides. Village management arranged to send them to regional guide course in Magwe, but they have to be self-funded. Regional guide course opens twice a year and each course lasts for 10 days. There are three home stay village houses and it can accommodate altogether 15 people, 5 in each house with clean sanitation. Foreigners are charged 10,000 kyat per night for accommodation, 15,000 kyat for breakfast, lunch, dinner 3 meals, 10,000 kyat for community development service. Thus, they can generate income about 35,000 kyat per head for food and accommodation service.

For transportation, they can take bullock carts, 5,000 kyat per one bullock cart to visit around the city tour. During the peak season, they can earn 500,000 kyat per house, out of 3 village houses. From this income, village leaders invest again for maintenance and further development for infrastructure, utilities etc. Payment for tour guides depend on the income per day. Some tourists don't stay overnight, they don't ask tour guides, but travel agents often added in the Pagan package to visit day trip tour to Ma Gyi Kan village and those tourists come with their own guides arranged by their agents. Foreign tourists stay there maximum 3 nights only. Most of the tourists come from France, follow by Japan and Finland. Tourists start visiting to the village in August and September, but November, December and February are the busiest period for the village. In March and April, only a few guests come and there are no visitors in other months, especially in the rainy season. For this reason, many villagers show no motivation in promoting CBT as they cannot rely income from tourism to make their own living, whereas some are only interested in doing normal agriculture, farming and live-stock breeding as their traditions.

Thus, job creation and income generation from CBT look good but not really promising for income stability all year long. However, CBT is just an initial stage in Myanmar. It needs to draw more attention from investors, authorities, policy makers to establish many more CBT in

Myanmar in giving training and running tourism business. On the other hand, Myanmar is still an infant baby in environmental awareness and resource management. Even some research studies posit that “Integrated Conservation and Development Projects (ICDPs)” were the predominant form of the early initiatives of CBT. In 1992 Wells & Brandon reviewed ICDPs and reported that the results had been disappointing, it was unusual for any additional revenues from tourism to be made available to local management, revenues were remitted to national treasuries; that it was “extremely rare for a revenue share to go to local communities”; and that local employment opportunities linked to tourism were “insufficient to attract much local popular support for the parks.” (ICRT occasional paper 11, 2009).

Ma Gyi Kan Villagers are running CBT in a small -scale degree in their own pace in their capability. This is fortunate enough, not monopolized by mega city-development projects and giant investors in the small village, otherwise such mega projects might trade-off the development with environmental damage to focus only on their profit making and as a consequence, villagers may not get their share they deserve. The strength is that the site is preserving cultural values, natural resources and surroundings with tamarind trees and green environment which look very neat and impressive. There appears to have no environmental impact in the Ma Gyi Kan village. They can still maintain the Myanmar traditional life style very well, generosity, simplicity, honesty, hospitality. Thus, foreigners appreciate the villagers for giving them authentic local experience of food culture and teaching them cooking, sports like playing chin lone with villagers, riding bullock carts etc.

When observing students’ learning culture, they show their high motivation in active learning through field trips. They are excited to observe around the village, work in teams, create their own survey design, and prepare for interview questions. In their feedback, students substantiate that they enjoy team work and share responsibility, divide duties to take turn of leadership roles in interviewing, note taking, report writing, selecting the interviewees and places. Later, they will have to develop their research into final year term papers and presentation in their classes. Students said this research project is a great challenge in their study life. In doing this field trip research, students validate that they can apply critical thinking, collaboration, information literacy, leadership role and team works, productivity and social skills. They can exercise research skills and practices, interrogative questions, curiosity, imagination, personal experiences, self-discipline, self-direction, adaptability and initiatives. All these students’ learning culture encompasses in the 21st century life skills.

Conclusion

To conclude our research outcomes, a few suggestions are made in the following. To integrate community development and preserving environmental impact, socio-cultural awareness, many school projects can be created in collaboration with different sectors.

1. Some suggested projects include: Garbage Free Day; Tree Plantation Weeks or Let’s grow; Stop Cutting Trees Campaign; Noise Pollution Free Day, No Water Pollution, No Air Pollution Day” etc. These campaigns can be organized peacefully as week- end projects in community, by creating some prize given contests for clean and green environment in every corner of the whole country.
2. To enhance socio cultural awareness, we should showcase more cultural values of our 135ethnic diversity in collaboration with gallery and cultural centers for students’

performance to show to tourists. For example, Bamboo Dance, Karen Done- Yane Dance, Kachin Dance Week, Myanmar Dance Week etc. open the floor to tourists so that they can learn, participate to enjoy Myanmar culture and art. Street Walk Art; Street Food Week etc. by creating such events, income generation from tourists and socio-cultural awareness can be enhanced.

3. To help villagers, network building with different sectors should be established to utilize local wisdom for local productions of souvenirs or consumers products with own village brand name. For example, Ma Gyi Kan Village can produce tamarind juice, tamarind toffee, herbal medicines using tamarind tree bark to prevent from red-eyes monsoon disease etc. Respective authorities should help giving training, technical knowhow, soft loan to run SMEs, tour guides training course etc.
4. Most importantly, in order for new graduates to equip with life skill, when final year students focus on research papers, from the first year to third year students can engage in creating many school projects under different themes. These include: Giving back to the society projects; Buddy Training Program; Reading Hubs etc. Their performance should be given credit either some score allocations for social skill or create a stamp booklet. Students require to collect stamps from teachers by showing each activity they contribute to the society, such as giving moral support to orphans, knowledge sharing to villagers, teaching how to use computer, speaking English, story-telling to orphans and children through reading hubs etc. Through youth language, they enjoy buddy to buddy learning atmosphere in sharing knowledge. Buddy training 10 hours English class can be any motivating topic such as football talk, world cups or tournaments or new innovations whatever, students can create self- directed learning skill.

While the term “21st century skills” is widely used, there are some other alternative terms, including applied skills, cross-curricula skills, cross-disciplinary skills, interdisciplinary skills and many other terms. No matter how differs the terminology, they are all closely associated with 21st century learning. Since 21st century skill encompasses a wide ranging, the future of learning resources, curricula, and even teaching staff to survive for their dominant roles are unpredictable in this information technology age. Teachers may or may not keep abreast with rapid changing technology. On the other hand, students can learn extensively through borderless information technology. However, teachers are still role models, steering as pilots, as their coach, facilitator, mentor, leader to float together with students in the same boat to encounter the tremendous changes of the global challenges in educational institutions. Teachers are to swift their teaching style into flip classrooms, assigning to find information through online digital libraries, VDO clips, and e-books for class discussion.

As UNESCO definition put it, Education for Sustainable Development (ESD) empowers people to change the way they think and work towards a sustainable future. (The United Nations Decade of Education for Sustainable Development 2005-2014). Individuals and societies need to learn to live together sustainably. Quality education is momentous at all levels and in all social contexts, to transform society by reorienting education, developing knowledge, skills, values and behaviors needed for sustainable development. Sustainable Development Goals (SDGs) cannot be achieved by luck, but as Kishore Mahbubani put it, “*Educational excellence is an essential prerequisite for cultural confidence*” (Kishore Mahbubani, 1998, 2000, P.23). In his book “Can Asians Think” Mahbubani says “*Asian minds today no longer believe that only way to progress was through emulation of the West through copying; Asians believe they can work out their own*

solutions; Asians no longer consider the Western societies as their role models although most Asian leaders are graduates of Western Universities. Asians are now beginning to believe that they can attempt something on their own". (Kishore Mahbubani, 1998, 2000, P.23-24). He convinced us by saying "What Europe achieved yesterday, the developing world will achieve tomorrow "(Kishore Mahbubani, 1998, 2000, P.190). His initiatives are thought provoking to change our old mindset, old way of thinking and behavior. Likewise, Myanmar minds can attempt something for the future of our country. Myanmar students today are promising future of tomorrow if we nourish them well to equip with 21st century life skills, based on the solid ground of moral disciplines.

In order to reach the Sustainable Development Goals in 2030, we should prepare for educational excellence, to adapt changes in learning culture in line with education for sustainable development, allow students to bring case studies from various sources to apply in the class as alternative discussions, critical thinking and debate, pave the ways for students to steer self-direction, self-discipline to enhance their awareness of sustaining the environment, social, cultural values in CBT to overcome all the challenges for sustainable tourism. Thus, every stakeholder is beneficial and taking shared responsibility to protect Myanmar society for sustainable development.

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CORPORATE CRIME IN MYANMAR: LEGAL FRAMEWORK AND IMPLEMENTATION*

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Abstract

Company transactions in Myanmar have been growing since 1989 when the market-oriented economic system was first adopted. As more companies are established, more corporate crimes tend to be committed. A number of such crimes have occurred in Myanmar. This research focuses on corporate crimes leading to corporate manslaughter and corporate homicides like passenger accidents of private transportation services, fatal accidents in the workplace, and unsuccessful treatments in health services and private hospitals. The lack of public awareness of corporate crime and corporate liability results in legal actions against individuals who actually committed the crimes but not the corporations employing them. Injured parties take legal action against the employee only through criminal prosecution, not against the corporations and would request damages only from the employees. Thus, corporations always escape from criminal prosecution and civil liability for their wrongs. This research will explore what kinds of corporate crime generally occur in Myanmar, the basis for corporate criminal liability and how regulatory systems for corporate criminal liability have been developed and implemented in countries such as the UK, the US and Australia. It will also explore legal frameworks of corporate crime especially corporate killing and its implementation process in Myanmar.

Keywords: *corporate body, corporate crime, corporate liability, corporate criminal liability.*

Introduction

Along with the initial existence of companies in Myanmar, the Myanmar Companies Act was passed on 1st April 1914 during the British Colonial Era. After the independence in 1948, the Revolutionary Council took over the power of the State in 1962 and many companies were abolished due to a socialist economic system. When the State Law and Order Restoration Council (later called the State Peace and Development Council) handed over the State's power in 1988, the market-oriented economic system was started in Myanmar while companies have flourished throughout the country.

Since the time when the new government has taken the responsibility of the State in 2016, Myanmar has experienced many political changes including its economic policies. Several laws and regulations are enacted to address the current situation. The new Myanmar Companies Law was enacted in 2017. With the growing business and a flourishing of various companies, many challenges including corporate wrongdoings arise in business transactions. This research will focus on corporate killings such as passenger bus accidents on private transportation services, workplace accidents in mining and construction sites, poorly done treatments in health services and private hospitals or clinics.

Objectives

The main aims of the research are to define corporate crime and corporate criminal liability, to describe how to develop corporate criminal liability, to discuss the state practice of corporate criminal liability in some leading countries such as the UK, the US and Australia, and to explore the legal framework of corporate crimes and the challenges implementing them in Myanmar.

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Research Methods

A review was made of the concept of corporate crime and corporate criminal liability. The Corporate Manslaughter and Corporate Homicide Act (UK), 2007, the Model Penal Code (US), 1962, the Criminal Code Act (Australia), 1995 and the relevant cases are studied. Published law books, journals, articles and reports are used.

Research Findings

For taking legal action for corporate crime effectively in Myanmar, it is necessary to consider enacting a specific statutory provision for corporate crime in Criminal Law. However, it is impossible to insert directly as a provision of corporate crime in the Penal Code, 1860. Hence, it should be added a specific provision of "corporate criminal liability" as a part of the Penal Code of Myanmar.

Discussion

Corporate Crime Issues in Myanmar: Crime is generally defined as an act or omission, prohibited by law as injurious to the public at large and punishable by the State.¹ Corporate crime is such a crime that is committed by a corporate body or its individuals acting on its behalf.² Corporations are already subject to the criminal law,³ and they can also be punishable by the law when they do commit the crimes. Some corporate offences, however, are based on corporate officers' mismanagement and careless manner, for instance, managing in operating a motor vehicle and other machineries causing bodily harm or death,⁴ showing wanton and reckless disregard for the lives or safety of others,⁵ and supervising medical treatment by wrongful advices or

¹ Garner, Bryan A., *Black's Law Dictionary*, 9th Edition, Thomson/West, 2009, p. 427; Martin, Elizabeth A., *Oxford Dictionary of Law*, 4th Edition, Oxford University Press, 2007, p. 119; Ba Han, Dr., *The University English - Myanmar Dictionary; Volume. I*, 3th Edition, Yone Kyi Chet Sar Pay, 2007, p. 185; F.G. Neave, LL, *Mozlay and Whiteley's Law Dictionary*, 4th Edition, Butter Worth & London, 1923, p. 82.

² Garner, Bryan A., *Black's Law Dictionary*, 7th Edition, St.Paul, Minn.West Publishing Co., 2000, p. 165.

³ Modern criminal statutes, such as the Model Penal Code of the United State, and other Statutes, the Uniform Commercial Code, either expressly provides that corporation may convict crime or define the term person to include corporation. In English Law, this was matched by the decision in *Salomon v.Salomon*, [1897] AC 22 and in Australian Law, under the Corporation Act, 2001; it is provided that a corporation is legally a person. Likewise in Myanmar, the Penal Code, 1860 also provides that the word "person" includes any company or association, or body of persons, whether incorporated or not. A corporation, therefore by the law, regarded as a person and may be held responsible for a crime.

⁴ Than Naing Soe, '*Bus Crash on Deathly Highway Kills Five, Injures Fifteen*', The Arrawaddy, 01 June 2015. An Elite Express bus running from Yangon to Pyin Oo Lwin turned over near Milestone 357 on the Yangon-Mandalay highway on May 31. The bus, which was carrying 35 passengers, flipped with it collided with Tataroo Circle at high speed. Driver has charged by the Police under Penal Code Section. 337, Section. 338 and Section. 304 (causing the death of any person through a rash or negligent act not punishable as homicide or murder)

⁵ Toe Wai Aung, '*Three Killed in Construction Site Accident*', Myanmar Time, 25 January 2016, Three workers, including a child, were killed and another three are still missing after a retaining wall under construction at a Yangon monastery collapsed yesterday. The accident occurred while the workers were digging up dirt to use on the retaining wall at Withuddhayone Dhamma Beikman Pakokku monastery in Mayangone Township. Construction site accidents are common around the country and the injured parties can claim compensation according to the Workmen Compensation Act, 1923.

services.¹ But they do not actually know themselves committing such kind of crime as a corporate crime and having responsibility on them because they do not actually committed these crimes. Those are only committed by an individual during the time when he or she is serving for the benefit of the company. The main issue here is that the company or corporation itself or the responsible staffs working are lack awareness and understanding towards the term "corporate criminal liability" because there are not any impositions of corporate liability in the legal framework of Myanmar. This leads to the issue of absence of taking action for corporate crime in Myanmar, which is the first problem/issue addressed by this research.

Relating to corporate crime in Myanmar, there are several kinds of corporate crime in their respective business dealings. But the people in Myanmar do not really know or have the knowledge of putting the companies' owner of these businesses on trial for the accidents. All they know for these accidents are taking legal actions to single individuals like a careless driver, a worker, or a medical servant on trial only with the Penal Code. They are taken action by section. 304A of the Penal Code, 1860 (causing death by negligence) and all cases are punished within the criminal law. The lack of or limited knowledge possessed by local people of Myanmar towards normal criminal litigation on corporations lead to the second problem/issue.

All the crimes committed by the company are actually committed by their employee who is serving as an agent for the benefit of the company. In this respect, most of the companies in Myanmar are not used to solve the problems legally. The liable companies of those accidents solve their problems in cash by giving "Ka Yu Nar Kyae"² informally so that any problem and reported case would not emerge legally. This becomes an important third problem/issue where corporate crimes are exempted without legal enforcement and measure.

The final problem/issue which will be addressing in this research is a corporation has no body that could be imprisoned. The local people have been known that the corporations are not like as natural persons and they cannot be jailed. So they cannot be taken in criminal action. It is only concerned to civil proceeding and not to criminal proceeding.

Corporate Criminal Liability: A corporation is created as a separate person;³ it has no physical existence like a natural person, it cannot commit a crime physically but can commit only through its human agents. Furthermore, corporations can also be criminally liable when their human agents' activities negligently caused death or injury, regardless if it were an accident and the act had no intention to kill or cause severe damage in any way. According to Stephen Tully,⁴

¹ Yamon Phu Thit, 'Myanmar Medical Council (MMC) Suspends Doctor for Five Years over 2010 Death', Myanmar Times, 11 February 2013. This is the second case in which a new-born baby died from premature births due to medical negligence of a gynecologist. Although the victim's mother pledged to Myanmar Medical Council and Ministry of Health to take legal action on private hospital for failing to provide medical care and so to provide compensation, only the gynecologist who handled the newborn baby's delivery got legal charge by withdrawing her medical license for 5 years. In that case, the injury party had told the private hospital which is responsible on the incident to give K50 million as compensation but the hospital had refused and denied any suggestion that it was to blame for the child's death.

² "Ka Yu Nar Kyae"-The meaning is a financial payment to the victims and beneficiaries in sympathy for their troubles or grievances.

³ *Salomon v. Salomon* [1897] AC 22; *Macaura v. Northern Assurance Company* [1925] AC 619; *Lee (Catherine) v. Lee's Air Farming Ltd* [1960] 3 ALL ER 420.

⁴ Stephen Tully, *International Corporate Legal Responsibility*, Wolters Kluwer, 2012, p. 9.

"corporations become criminally responsible for their employees acting within the scope of their employment where the conduct was intended to benefit the corporation".

The Basis for Corporate Criminal Liability: Under the English common law, the basis for corporate criminal liability was the identification theory.¹ It based on the doctrine of respondent superior. The theory originated from the civil case of *Lennard's Carrying Co. Ltd v. Asiatic Petroleum Co. Ltd*,² and it was decided that a corporation was responsible only for the actions and state of mind of those of its directors and managers who present its directing mind and will. It means the court must look for the 'directing mind and will' of the company. If the offenders are those of its senior officers, the court will impose the liability upon the corporation.³ If not, the court will not impose upon it.⁴

This approach has been criticized because it restricts corporate liability to the acts of directors or senior officers and has been recommended as 'narrow view'. The identification theory led to the unsatisfactory situation of corporations escaping liability due to the fact that it was difficult to find out a manager or senior officer who was to blame for the crime.⁵ This unfairly favors larger corporations because they will escape criminal liability for the acts of all the employees who manage the day-to-day activities of the corporations.⁶

In order to overcome the weakness of the identification theory, the court would simply impose liability on the corporation without identification of the senior or controlling officer.⁷ It would apply the vicarious liability upon the corporation without applying to the identification theory.⁸

Both in the UK and in the US, the industrial revolution and the attendant expansion of the railroads led courts to apply the civil doctrine of vicarious liability in criminal cases.⁹ In Australia, the courts applied the doctrine of vicarious liability in the criminal cases first and later they followed the identification theory when it was developed in the UK. So the UK which is leading country in progress of corporate criminal liability, the US and Australia which followed the UK are described as some examples in expressing the development of corporate criminal liability.

¹ Dorothy Farisani, "Corporate Homicide: What can South America Learn from Recent Development in English Law?", [2008] 9 IUS Gentium 3, 221.

² [1915] AC705.

³ *HL Botton (Engineering) Ltd v. TJ Graham & Sons Ltd* [1957] 1 QB 129, [1956] 3 All ER 624 (Court of Appeal).

⁴ *Tesco Supermarkets v. Natress* [1972] AC153

⁵ *National Rivers Authority v. Alfred McAlpine Homes East* [1994] CLR 760.

⁶ Simon Parsons, "The Doctrine of Identification, Causation and Corporate Liability for Manslaughter" [2003] 67 Journal of Criminal Law 69.

⁷ *Environment Agency v. Empress Car Co. (Abertillery) Ltd* [1998] 2 WLR 351, HL.

⁸ *Tesco Stores Ltd v. Brent London Borough Council* [1993] 1WLR1037; *Meridian Globle Funds Management Asia Ltd v. Securities commission* [1995]2 AC 500, PC; *National Rivers Authority v. Alfred McAlpine Homes East* [1994]CLR 760.

⁹ Mark Pieth & Radha Ivory, "Corporate Criminal Liability, Emergence, Converence, and Risk", Part I the Analytical Framework, Chapter 1 Emergence and Convergence: Corporate Criminal Liability Principles in Overview, [2011] 9 IUS Gentium 3, 5.

The Development of Corporate Criminal Liability: UK, US and Australia: In the UK, English common law initially rejected that a corporation could commit a crime and could be criminally responsible for the actions of its human agents. However, as corporate activities play a major part in social life and societies need to control their activities, the common law rules on corporate criminal liability have begun to change since early 1840s.¹

After one hundred years, the English court held that it was possible to prosecute corporations.² Criminal liability against corporations for their employee's actions was first imposed in 1944.³ A corporation being prosecuted for manslaughter was accepted in 1990. In *R v. P&O Ferries (Dover) Ltd*,⁴ Channel ferry "Herald of Free Enterprise" capsized in at the harbor in Zeebrugge. Consequently, P&O Ferries Ltd was prosecuted for the deaths of 154 passengers and 38 crewmembers. After investigation it was made clear that the cause of the accident was due to the fact that the ferry's bow doors had been closed. The trial judge insisted that a company can be prosecuted for deaths in law, however in this instance there was no senior officer who could be blamed for the deaths and thus, the court held that a corporation could be properly indicted for manslaughter.

The first successful case in conviction for corporate manslaughter was *R v. Kite and OLL Ltd*⁵ in 1996 and the first time a company was charged with a culpable homicide was *Transco plc v. HM Advocate*⁶ in 2004.

At the time, there was no statutory law to prosecute corporations for corporate killing. Because of the public pressure to reform the law on corporate manslaughter and corporate homicide, the United Kingdom's Parliament adopted a new statutory regime of corporate criminal liability for manslaughter and homicide in 2007; the Corporate Manslaughter and Corporate Homicide Act (UK), 2007.

This legislation in section.1 provided that

- (1) an organization to which this section applies is guilty of an offence if the way in which its activities are managed or organized (a) cause a person's death and (b) amounts to a gross breach of a duty of care owed by the organization to the deceased."
- (3) an organization is guilty of an offence under this section only if the way in which its activities are managed or organized by its senior management is a substantial element in the breach referred to in subsection(1).
- (6) an organization that is guilty of corporate manslaughter or corporate homicide is liable on conviction on indictment to a fine.⁷

¹ *R v. Birmingham and Gloucester Rly Co* [1842] 3QB 224 and *R v. Great North of England Rly Co* [1846] 9 QB 315.

² Simon Goulding, *Company Law*, 2nd Edition, Cavendish Publishing Limited, 1999, p. 59.

³ *DPP v. Kent and Sussex Contractors Ltd* [1944] KB 146; *Moore v. I Bresler Ltd* [1944] 2 All ER 515; *R v. ICR Haulage* [1944 KB 551.]

⁴ [1990] 93 Cr App R 72.

⁵ [1996] 2 Cr App Rep (S) 295.

⁶ [2004] JC 29; [2004] SLT 41.

⁷ Section.1 of the Corporate Manslaughter and Corporate Homicide Act (UK), 2007.

The first conviction on corporate manslaughter under the 2007 Act was *R. v Cotswold Geotechnical Holdings Ltd.*¹ In this case, it was alleged that an employee of a company had entered an unsupported pit and had died when the pit collapsed. This accident was considered to have happened due to a gross breach of the company itself as it had not stopped the deceased from entering the trial pit due to a lack of strict prohibition enforcement in place, unless it was made safe by shoring or otherwise. The defendant, who was the director of the company, had alleged that the deceased had experience in the field and had the capacity to form his own judgment about safety of the particular trial pit, the allegation was not agreed upon as the court held the company convicted of corporate manslaughter and fined £385,000.

In the United States, the concept of convicting a corporation of a crime had generally been rejected until the eighteenth century. In 1852, the courts held that corporations could be indicted for criminal nuisance² and criminally liable for wrongful death.³

In 1904, there was a case; *United States v. Van Schaick*,⁴ set a contrary precedent by holding a corporation could be indicted for manslaughter. In 1909, there was a landmark case that the doctrine of *respondent superior* allowed courts to impute the corporations with the misbehavior of employees acting within the scope of their employment and for the benefit of the corporation. It was *New York Cent. & Hudson River R.R. Co. v. United States*.⁵ In this case, the Court held that a corporation can be indicted for the acts of its agents when the agent is acting within the scope of his employment; in the business of the principal; a corporation will be held responsible for any damages done to the individual(s) who have suffered by such conduct. This US practice of imposing criminal liability for crimes committed is inclusive of even low-level employees of a corporation.⁶

In 1962, the American Law Institute presented its proposed official draft of the Model Penal Code (MPC), which adopts the *respondent superior* standard.

The Model Penal Code, 1962 provided that

- (a) An offense by an agent acting within the scope of his/her employment, and on behalf of a corporation, is imputed to the corporation when a legislative purpose to impose such liability “plainly appears.”
- (c) a corporation is liable only if “the commission of the offense was authorized, requested, commanded, performed or recklessly tolerated by the board of directors or by a high managerial agent acting on behalf of the corporation within the scope of his/her office or employment.”⁷

¹ [2012] 1 Cr. App. R. (S.) 26.

² *State v. The Morris and Essex R.R.*, 1852 WL 3499(Sup. Ct.1852).

³ *State v. Dilmore*, 1852 WL 2109(Sup. Ct.1852).

⁴ 134 F. 592(S, Dist. N.Y. Cir. Ct.1904).

⁵ 212 U.S.481(1909).

⁶ Ved P. Nanda, "Corporate Criminal Liability, Emergence, Convergence, and Risk", Part II Country Report, Chapter 2 Corporate Criminal Liability in The United States: Is a New Approach Warranted?, [2011] 9 IUS Gentium 3, 4.

⁷ Section. 2.07(1) of the Model Penal Code, 1962.

In the 1980s, American courts began to hold that corporations could, indeed, be prosecuted for manslaughter and negligent homicide. In *Commonwealth v. Fortner LP Gas Co.*,¹ where a corporate driver was unable to stop his truck because of defective brakes and fatally injured a child, the Kentucky Court affirmed that the corporation could be criminally liable for manslaughter. In the *Vaughn & Sons, Inc. v. State*² case whereby two persons died in a motor vehicle collision caused by the corporate defendant's agents, the Court of Criminal Appeals of Texas affirmed that the defendant corporation could be criminally prosecuted for criminally negligent homicide.

In Australia, the Courts initially relied on principles of vicarious liability,³ but have largely followed the identification theory since it was developed in the UK in the 1940s. The courts have generally followed the House of Lords' decision in *Tesco Supermarkets Pty Ltd v Natrass*,⁴ which limited liability to cases involving a senior officer who can be assumed as the directing mind and will of the corporation. This narrow standard continues to apply in most cases, but several legislative initiatives have imposed broader standards.⁵

In 1990, the federal government of Australia undertook a major review of corporate criminal liability, in part because of an awareness of several disasters that had caused loss of life.⁶ In 1995, the national commission recommended a major revision of corporate criminal liability, which was adopted as part of the new federal criminal code. Accordingly, the Criminal Code Act (Australia), 1995 was passed as a new legislation and it provided the general principle in section 12.1 that this Code applies to bodies corporate in the same way as it applies to individuals....⁷ and a body corporate may be found guilty of any offence, including one punishable by imprisonment.⁸ And if a physical element of an offence is committed by an employee, agent or officer of body corporate acting within the actual or apparent scope of his or her employment, or within his or her actual or apparent authority, the physical element must also be attributed to the body corporate.⁹

Australian National Railways Commission case¹⁰ was the first successful prosecution inclusive of corporate criminal liability in Australia. In this case, an employee of the Australian National Railways Commission (ANRC) died in a shunting accident at Pt Pirie in South Australia in 1993. ANRC was charged responsible of offences which were against *Occupational Health and Safety (Commonwealth Employment) Act 1991* which places an obligation on employers to secure the health, safety and welfare of Commonwealth employees. The man was employed as a

¹ 610 S.W.2d 941 (Ky.Ct. App. 1980).

² 737 S.W.2d 805 (Tex. Crim.App.1987).

³ *Trade Practices Commission v Tubemakers of Australia Ltd* [1983] 47 ALR 719 (relying on the UK decision in *Tesco Supermarkets Pty Ltd v Natrass* [1972] AC 151); *Entwells Pty Ltd v National and General Insurance Co Ltd* [1990-91] 5 ACSR 424.

⁴ [1972] AC 151.

⁵ Sara Sun Beale, "Article: a Response to the Critics of Corporate Criminal Liability"[2009] 46 Am Crim L Rew 9

⁶ John Thornton, Criminal Liability of Organizations (2008) <www. isrc.org> accessed 17 October 2018.

⁷ Section.12.1(1), the Criminal Code Act (Australia), 1995.

⁸ Section.12.1(2), Ibid.

⁹ Section.12.2, Ibid.

¹⁰ [1993] HCA78; 67 ALJR 526. John Thornton, Criminal Liability of Organizations (2008), DPP Annual Report: 1996-1997 <www. isrc.org> assessed 17 October 2018.

rail operator and he had suffered fatal injuries whereby he was run over by a loosed shunted rail wagon that had been directed to come to a stop. In 1996, it was finally affirmed that ANRC was convicted of three summary offences against section 16(1) of the Occupational Health and Safety Act. ANRC defended the charges and the trial ran for six weeks. However, the magistrate found that ANRC had exposed the dead worker to some unnecessary risks. ANRC was fined \$50 000 and ordered to pay costs of \$101596.

Legal Frameworks of Corporate Crime and Implementation Process of Myanmar: In order to taken legal measures against the crimes committed by the companies in Myanmar, a specific law should be enforced with the measures and provisions in the Criminal Law. In Myanmar, the two Acts concerned with the companies are the Myanmar Companies Act, 1914 and the Special Company Act, 1950. However, in order to match with the modern day's need, the new Myanmar Companies Law was enacted on 6th December 2017. However, there is a lack of provisions on the corporate crime and corporate criminal liability in them.

That is why, the Penal Code, 1860 taken from India has to be referred to in making enforcement and taking measures. However, in the Penal Code, 1860, there is no provision regarding the corporate crime and corporate criminal liability. Instead, in the Penal Code, 1860, 10 there are provisions, which include the section. 299 (culpable homicide not amounting to murder), section. 300 (murder) and section. 304A (causing death by negligence).

Thus, if a person or a group of people dies due to negligence or poor management of a corporate officer, the crime is taken under section. 304A (causing death by negligence) to the direct committer or the person who directly committed the act. And he will get prosecuted under the Penal Code, 1860 for the case of death by the persons related to the dead. There is no specific provision under the criminal law and thus, it is not possible to take action against the company because of its poor management and negligence of corporate officers with the criminal law.

To explore the implementation process of the Corporate Crimes in Myanmar, in this research, it will present the three areas of accidents occurring in the private sectors. Among the three areas, the first case is regarding the passenger bus accidents of private transportation services. In this case, if there is a death of a person or of the customers who are riding the bus, the driver of the bus is charged with the section. 304A of the Penal Code, 1860. The owner of the car is sued according to the Law of Tort and the expected legal action outcome from the owner is only to pay for the compensation fee. Besides, if there is an insurance scheme, the victim or the victim's family members (in case of a fatal accident) could ask for the compensation from the insurance company according to the Third Party Liability Insurance under the Law of Insurance.

In the second case, the workplace accidents, if another worker die due to the negligence of a machine driving worker. Then, that machine driving worker can be punished with Section. 304(A) of the Penal Code, 1860. Then, the legal representative of the dead worker could ask for the compensation fee from the employer according to Section. 4(1)A of the Workmen Compensation Act, 1923.

In the third case, the medical negligence, if a patient gets injured or dies as a result of the careless or faulty treatment of a doctor due to the medical negligence, the doctor may be

punished by the Penal Code's section. 304 (A). And the injured party can also sue by the Law of Tort.¹ Then, the offender could be charged for his/her negligence according to Section. 45

(c) of the Medical Council Law, 2015 as well as by the administrative action under Section. 51

(b) of this law.

In the legal actions taken on the corporate crime in Myanmar (the corporate killing in this research for instance), the disadvantages could be found as follows:

- (1) The usage of existing laws to punish the corporate crime based on its types.
- (2) The inability to effectively take actions and punishments due to the lack of specific provisions assigned especially for the corporate crimes.
- (3) The inability to provide legal protections for the actual loss.

So there is an important need to have specific provisions for the corporate crime in Myanmar. Regarding crimes committed by the company, there is a need in Myanmar to consider enacting specific statutory provisions relating to the corporate crime specifically in the area of corporate killing. This will help solve problems in the case of such corporate crime. Thus, the following questions should be addressed:

- (1) Should a specific law following the legal system of the United Kingdom (UK) be adopted? (or)
- (2) Should a section of provisions for corporate criminal liability be added to the existing New Myanmar Companies Law? (or)
- (3) Should "the corporate criminal liability" provision be added as a part to the Penal Code of Myanmar in order to emerge as a criminal law?

To answer the questions, it will not be possible to provide as a specific law regarding the corporate crime and corporate criminal liability if it is only for the case of accidental deaths or murders committed by the companies in Myanmar. In the new Myanmar Companies Law, 2017, it is not appropriate to incorporate the punishable provisions that are relating to crimes. Thus, in the Penal Code of Myanmar, the sections detailing the provisions on the corporate crime and corporate criminal liability should be merged as a criminal law by inserting it in the Code.

For imposing the corporate criminal liability on the corporations or companies, the following provision described in the criminal law book is to be taken as a good example. According to the book of Criminal Law for the 21st century- A Model Code for Singapore, the provisions of corporate criminal liability are given below as a potential sample provision to put in the Penal Code of Myanmar. In the book, it says

"Corporate Criminal Liability"

¹ U Win Tin v. Myotaw Hospital (it's Representative: Daw New New Win), Civil Case No. 584, Mandalay District Court, 2016. 11

- (1) Unless it is provided for otherwise, a corporation may be convicted of an offence if:
- (a) the act is performed by an agent of the corporation acting on behalf of the corporation within the scope of his office or employment;
 - (b) the act was expressly or impliedly authorized or permitted by the board of directors or by a high managerial agent acting on behalf of the corporation within the scope of his office or employment;
 - (c) the corporate culture in the corporation expressly or impliedly authorized or permitted the non-compliance with the relevant offence provision; or
 - (d) the corporation failed tacitly or implied to create and maintain a corporate culture that required compliance with the relevant offence provision.
- (2) If intention, knowledge or rashness is a fault element in relation to a physical element of an offence, that fault element must be attributed to a corporation that expressly authorized or permitted the commission of the offence.
- (5) A corporation may be found guilty of an offence, including one punishable by imprisonment (either on its own or combination with any other punishment), in which case a fine will be imposed instead.¹

The above simple provisions can potentially be taken as a sample and can be adopted and enacted as a part of the Penal Code by amending it to fit well with the needs of Myanmar. By doing so, a specific provision may be emerged as a criminal law to solve the cases of corporate crimes and corporate liability. If there is a specific provision for corporate criminal liability, the actions could be effectively taken towards the corporation which is liable for the offences of corporate killing in Myanmar. So a specific provision for corporate killing should be inserted in criminal law but it is impossible to insert directly as a provision of corporate crime in the Penal Code. Hence it should be added a specific provision "corporate criminal liability" as a part of the Penal Code.

Conclusion

In Myanmar, there is no specific provision as well as reported cases to be described for corporate crime and corporate liability. If these kind of similar cases occur, it may be taken action by criminal law; section. 304A (causing death by negligence) of the Penal Code. According to the new Myanmar Companies Law, 2017, it is updated some provisions of the law for the stock share business and the public companies have been occurred in Myanmar nowadays. There surely will arise many complicated cases and problems including corporate crime between companies and their dealers. So to handle these problems, the specific or detail rule or law should be well- prepared ahead especially in corporate killing.

In order to take legal action for corporate crime effectively in Myanmar, a lot of effort should be put legal awareness into the community first and should try to help them in legal proceeding. Furthermore, legal educations are also required to help supporting the legal practitioners. And it should be provided in Criminal Law by adding a specific provision of

¹ Chan Wing Cheong, Stanley Yeo, Micheal Hor, *Criminal law for the 21st Century: A Model Code for Singapore*, Academy Publishing, 2013, p. 123& 124.

"corporate criminal liability" as a part of the Penal Code. By doing so, it can be taken action for those corporations which are actually liable for the offences of corporate killing in Myanmar and the people can also realize that corporations, as participants in society, must accept and abide by social rules like all other persons. As a corporation is a separate legal person, it can enter into contract, sue and be sued and own property. Therefore, they are properly subject to criminal laws and can be punishable by the criminal proceeding.

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LEGAL RIGHTS FOR FAIR TRIAL IN MYANMAR

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Abstract

The right to a fair trial is a basic human right and essential for the prevention of the abuse of all other human rights. It is an essential safeguard of a just society and guarantee of the rule of law. Without fair trials, victims can have no confidence that justice will be done and then trust in government and the rule of law collapses. Every person has the rights to a fair trial both in civil and criminal cases and the effective protection of all human rights depends on competent, independent and impartial courts established by law and then the professions of prosecutors and lawyers each of whom in his own field of competence. And then, judges are required to maintain and enhance their legal knowledge, skills and personal qualities necessary for the proper performance of judicial duties. Judicial system shall have the principles of justice, liberty, equality and transparency. Therefore, fair trial is the only way to prevent miscarriages of justice and is an essential part of a just society.

Keywords: *Justice, Qualities, Impartial, Rights, Guarantee*

Introduction

The right to fair trial is a norm of International Human Rights Law and also adopted by many countries in their procedural laws. Fair trials have special protections that make sure everybody accused of a crime gets treated fairly, or justly, within the criminal justice system. Justice must be based on respect for the people, their freedom and their rights. This research mainly focuses on the legal rights during trial especially the intermediate time between stages of investigation and final judgment. It presents the right to equality, right to be presumed innocent, right to be heard by a competent, independent and impartial tribunal, the right to a fair and [public hearing](#), the right to be heard within a reasonable time, right to counseling, right to remain silent, right to examine witnesses and right to interpretation. In Myanmar, fair trial rights are guaranteed in the Constitution of the Republic of the Union of Myanmar 2008 and other related Laws.

Material and Methods

This paper reviews and analyzes on the legal concepts and terminology of human rights during fair trial under some of the International Instruments, Regional Instruments and National Laws in Myanmar. For the research of this topic, it has been used the Qualitative Research Work.

Findings

Fair trial rights shall have as the minimum standards in judicial system to trust on the courts by the people, to find out the truth, to access the justice and to strengthen the court system. A violation of fair trial rights is a threat to the entire rule of law system. The challenge is to ensure that justice is fair and applied equally to all people in every community regardless of colour, religion, race, social status, language, culture, origin and historical background. The main criteria for the effectiveness of the courts are a low level of corruption, a high level of education of judges, guarantees of independence and impartiality of judges and comply with the existing laws, rules and guidance. Then, judges should maintain and enhance their legal knowledge, skills and personal qualities necessary for the proper performance of judicial duties. Moreover, law

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officer, lawyer, parties and witnesses are also required to have necessary qualities, skill and comply with the existing laws, rules and procedures. The government of the Republic of the Union of Myanmar places great importance on the citizens can fully enjoy the valuable standards of judiciary, right to independence, impartiality, integrity, prosperity and equality.

Conceptual Development of Fair Trial Right

The right to a fair trial is a central cornerstone of the Universal Declaration of Human Rights. Then, it is included in many International and Regional Human Rights Instruments and in many Constitutions around the world.

The right to fair trial goes way back. It has developed over thousands of years. In 1215, [Magna Carta](#) was a key first step in giving all freemen the right to fair trial by jury. Then, after the horrors of World War II, the [Universal Declaration of Human Rights](#) recognised the fundamental rights of human beings, including the right to fair trial.¹

Fair trial rights are a complex bundle of interlinked rights and norms derived from a range of international human rights treaties and principles.²

The rights concerning the fair trial have been provided in the following International and Regional Human Rights Instruments;

- Universal Declaration of Human Rights (UDHR), 1948
- International Covenant on Civil and Political Rights (ICCPR), 1966
- Convention on the Rights of the Child (CRC), 1989
- The Statute of the International Criminal Court, 1998
- Convention on the Rights of Persons with Disabilities (CRPD), 2006
- African Charter on Human and Peoples' Rights, 1981
- European Convention on Human Rights, 1950
- Protocol No. 7 to the European Convention on Human Rights, 1984
- The American Convention on Human Rights, 1969.

The major legal provisions on fair trial are to be found in article 14 of the International Covenant on Civil and Political Rights 1966, article 7 of the African Charter on Human and Peoples' Rights 1981, article 8 of the American Convention on Human Rights 1969 and article 6 of the European Convention on Human Rights 1950.

In Myanmar, the government is getting implemented to fully enjoy the valuable standards of judiciary, right to independence, impartiality, integrity, prosperity and equality. It has been ratified the Convention on the Rights of the Child (CRC) 1989 in 15 July 1991, Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) 1979 in 22 July 1997, Convention on the Rights of Persons with Disabilities (CRPD) 2006 in 7 December 2011 and International Covenant on Economic, Social and Cultural Rights (ICESCR) 1966 in 6 October 2017.

According to the Constitution of the Republic of the Union of Myanmar 2008 and the Union Judiciary Law 2010, judicial principles are as follows:

¹ <https://rightsinfo.org/ARTICLE-6-why-the-right-to-a-fair-trial-is-important-for-everyone/>

² Justice Base, An Analysis of Myanmar's Compliance with Fair Trial Rights, OSF, 2017, Pg 6.

- (a) to administer justice independently according to law;
- (b) to dispense justice in open Court unless otherwise prohibited by law;
- (c) to obtain the right of defence and the right of appeal in cases according to law¹;
- (d) to support in building of rule of law and regional peace and tranquility by protecting and safeguarding the interests of the people;
- (e) to educate the people to understand and abide by the law and nurture the habit of abiding by the law by the people;
- (f) to cause to compound and complete the cases within the frame-work of law for the settlement of cases among the public;
- (g) to aim at reforming moral character in meting out punishment to offender.²

Therefore, the right to a fair trial has been provided in numerous International and Regional Human Rights Instruments. It is one of the most extensive human rights and all international and regional human rights instruments enshrine it in more than one article.

Legal Rights during Trial

The fundamental human rights during trial are as follows;

- right to equality before the court;
- right to be presumed innocent;
- right to be tried by a competent, independent and impartial court;
- right to a fair and public hearing;
- right to be tried without undue delay;
- right to defend and right to counsel;
- right not to be compelled to testify or to confess guilt;
- right to call and examine witnesses;
- right to interpretation and translation.

Right to Equality before the Court

The right to equality before the courts and tribunals and to a fair trial is a key element of human rights protection and serves as a procedural means to safeguard the rule of law.³ All are equal before the law and are entitled without any discrimination to equal protection of the law.⁴

Then, all persons shall be equal before the courts and tribunals.⁵ All persons are equal before the law and are entitled without any discrimination to the equal protection of the law. In this respect, the law shall prohibit any discrimination and guarantee to all persons equal and effective protection against discrimination on any ground such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.⁶

¹ Section 19, Constitution of the Republic of the Union of Myanmar 2008; Section 3(a)(b)(c), The Union Judiciary Law of Myanmar 2010.

² Section 3(a)(b)(c), The Union Judiciary Law of Myanmar 2010.

³ General Comment No.32 (Article 14), UN Human Rights Committee, 9th Session, 2007, Pg.1.

⁴ Article 7, Universal Declaration of Human Rights (UDHR) 1948.

⁵ Article 14(1), International Covenant on Civil and Political Rights (ICCPR) 1966.

⁶ Article 26, Ibid.

According to the Convention on the Rights of Persons with Disabilities 2006, states parties shall ensure effective access to justice for persons with disabilities on an equal basis with others, including through the provision of procedural and age-appropriate accommodations, in order to facilitate their effective role as direct and indirect participants, including as witnesses, in all legal proceedings, including at investigative and other preliminary stages.¹

The principle of equality before the courts means in the first place that, regardless of one's gender, race, origin or financial status, for instance, every person appearing before a court has the right not to be discriminated against either in the course of the proceedings or in the way the law is applied to the person concerned. Further, whether individuals are suspected of a minor offence or a serious crime, the rights have to be equally secured to everyone. Secondly, the principle of equality means that all persons must have equal access to the courts.²

In Myanmar, every citizen shall enjoy the right of equality, the right of liberty and the right of justice, as prescribed in Section 21(a) of 2008 Constitution. Besides, the Union shall guarantee any person to enjoy equal rights before the law and shall equally provide legal protection.³

The Union shall not discriminate any citizen of the Republic of the Union of Myanmar, based on race, birth, religion, official position, status, culture, sex and wealth.⁴

Moreover, the persons with disabilities shall have the rights from birth, right survive, and right to be a citizen, to have freedom, justice, security, equality and dignity.⁵

The right to equality before courts or tribunal must be available to all individuals, regardless of nationality or statelessness or asylum seekers or refugees or migrant workers, who may find themselves in the territory or subject to the jurisdiction of the State party. All human beings must have equal access to the courts without discrimination. In particular, women must have access to courts on an equal status with men, in order to be able to claim their rights effectively.

Right to be Presumed Innocent

The right to be presumed innocent until proved guilty is another principle that conditions the treatment to which an accused person is subjected throughout the period of criminal investigations and trial proceedings, up to and including the end of the final appeal.⁶

Everyone charged with a penal offence has the right to be presumed innocent until proved guilty according to law in a public trial at which he has had all the guarantees necessary for his defence.⁷

¹ Article 13(1), Convention on the Rights of Persons with Disabilities (CRPD) 2006.

² OHCHR, Profession Training Series No. 9, Human Rights in the Administration of Justice: A Manual on Human Rights for Judges, Prosecutors and Lawyers, United Nations, 2003, Pg 217.

³ Section 347, Constitution of the Republic of the Union of Myanmar 2008.

⁴ Section 348, *Ibid.*

⁵ Section 8, The Right of the Persons with Disabilities Law of Myanmar 2015.

⁶ OHCHR, Profession Training Series No. 9, Human Rights in the Administration of Justice: A Manual on Human Rights for Judges, Prosecutors and Lawyers, United Nations, 2003, Pg 219.

⁷ Article 11, Universal Declaration of Human Rights (UDHR) 1948.

Everyone charged with a criminal offence shall have the right to be presumed innocent until proved guilty according to law.¹

Under the Convention on the Rights of the Child, 1989, every child alleged as or accused of having infringed the penal law has the guarantees to be presumed innocent until proven guilty according to law.²

Everyone shall be presumed innocent until proved guilty before the Court in accordance with the applicable law. The onus is on the Prosecutor to prove the guilt of the accused. In order to convict the accused, the Court must be convinced of the guilt of the accused beyond reasonable doubt.³

Article 7(1)(b) of the African Charter on Human and Peoples' Rights, article 8(2) of the American Convention on Human Rights and article 6(2) of the European Convention on Human Rights all also guarantee the right to presumption of innocence.⁴

The presumption of innocence, which is fundamental to the protection of human rights, imposes on the prosecution the burden of proving the charge, guarantees that no guilt can be presumed until the charge has been proved beyond reasonable doubt, ensures that the accused has the benefit of doubt, and requires that persons accused of a criminal act must be treated in accordance with this principle. It is a duty for all public authorities to refrain from prejudging the outcome of a trial.⁵

In Myanmar, the basic legal principle in conducting criminal cases is that the burden of proof lies on the prosecution.

Under Evidence Act 1872, whoever desires any Court to give judgment as to any legal right or liability, dependent on the existence of facts which he asserts, must prove that those facts exist. , When a person is bound to prove the existence of any fact, it is said that the burden of proof lies on that person.⁶ Besides, the burden of proof in a suit or proceeding lies on that person who would fail if no evidence at all were given on either side.⁷

Under the Jail Manual of Myanmar, arrestees shall be kept separately from prisoners.⁸

In *Maung Tin Mya v. The Union of Myanmar*⁹ case, whether the action is right or wrong in reality, a finding of guilt and sentencing are based upon the statements made by the witnesses in the court of law. If evidence is in doubt, the accused shall be entitled to enjoy the benefit of the doubt.

¹ Article 14(2), International Covenant on Civil and Political Rights (ICCPR) 1966.

² Article 40(2)(b)(i), Convention on the Rights of the Child (CRC) 1989.

³ Article 6, Rome Statute of the International Criminal Court 1998.

⁴ OHCHR, Profession Training Series No. 9, Human Rights in the Administration of Justice: A Manual on Human Rights for Judges, Prosecutors and Lawyers, United Nations, 2003, Pg 219.

⁵ General Comment No.32 (Article 14), UN Human Rights Committee, 9th Session, 2007, Pg.9.

⁶ Section 101, The Evidence Act of Myanmar 1872.

⁷ Section 102, Ibid.

⁸ Para. 415(3), The Jail Manual of Myanmar, 1969.

⁹ *Maung Tin Mya v. The Union of Myanmar*, 1966 M.L.R (H.C) Pp.644-653.

In *Maung Saw Bwar v. The Union of Myanmar*¹ case, in a trial for a case that can be sentenced to the death penalty, the decision should not be made based on the evidence of one witness that is not sufficient. The appeal complainant shall enjoy the benefit of doubt.

The right to be presumed innocence is the fundamental right for the protection of other fair trial rights. Everyone charged with a penal offence has the right to be presumed innocent until proved guilty according to law in a public trial. By reason of the presumption of innocence, the burden of proof of the charge is on the prosecution and the accused has the benefit of doubt.

Right to be tried by a Competent, Independent and Impartial Court

Everyone has the right to an effective remedy by the competent national tribunals for acts violating the fundamental rights granted him by the constitution or by law.²

The right to be tried by an independent and impartial tribunal must be applied at all times and is a right contained in article 14(1) of the International Covenant on Civil and Political Rights, which provides that “in the determination of any criminal charge against him, or of his rights and obligations in a suit at law, everyone shall be entitled to a fair and public hearing by a competent, independent and impartial tribunal established by law”.³ Article 40 of the Statute of the International Criminal Court provides that “the judges shall be independent in the performance of their functions” and that they “shall not engage in any activity which is likely to interfere with their judicial functions or to affect confidence in their independence”.⁴

Under the Convention on the Rights of the Child, 1989, every child alleged as or accused of having infringed the penal law has the guarantees to have the matter determined without delay by a competent, independent and impartial authority or judicial body in a fair hearing according to law.⁵

A competent, independent and impartial Judiciary is not only of importance to the rights and interests of human beings, but is essential to other legal persons, including economic entities, whether smaller enterprises or large corporations.⁶

In Myanmar, the administration of justice shall be independently according to law. The three branches of sovereign power namely; legislative power, executive power and judicial power are separated, to the extent possible, and exert reciprocal control, check and balance among themselves. The three branches of sovereign power, so separated are shared among the Union, Regions, States and Self-Administered Areas⁷, in order to carry out the independent and impartial by each other.

¹ *Maung Saw Bwar v. The Union of Myanmar*, 1964 M.L.R (C.C) Pp.686-691.

² Article 8, Universal Declaration of Human Rights (UDHR) 1948.

³ Article 14(1), International Covenant on Civil and Political Rights (ICCPR) 1966; OHCHR, Profession Training Series No. 9, Human Rights in the Administration of Justice: A Manual on Human Rights for Judges, Prosecutors and Lawyers, United Nations, 2003, Pp 253-254.

⁴ Article 40 of the Statute of the International Criminal Court; OHCHR, Profession Training Series No. 9, Human Rights in the Administration of Justice: A Manual on Human Rights for Judges, Prosecutors and Lawyers, United Nations, 2003, Pp 253-254.

⁵ Article 40(2)(b)(iii), Convention on the Rights of the Child (CRC) 1989.

⁶ OHCHR, Profession Training Series No. 9, Human Rights in the Administration of Justice: A Manual on Human Rights for Judges, Prosecutors and Lawyers, United Nations, 2003, Pg 216.

⁷ Section 11, Constitution of the Republic of the Union of Myanmar 2008.

The Chief Justice of the Union or Judges of the Supreme Court of the Union, The Chief Justice of the High Court of the Region or State and Judges of the High Court of the Region or State or Member of the Constitutional Tribunal of the Union shall be free from party politics.¹

Although the 2008 Constitution guarantees the separation of powers and the independence of the judiciary, they sometimes have improper executive influence over the judicial function, judicial corruption and inadequate training of judges and lawyers.

Besides, judges shall have the provided qualifications in 2008 Constitution. The full capacity of judges and judicial officers is very crucial for public confidence in the judiciary. In order to improve the capacity of judges, judicial officers and court staff, the Supreme Court of the Union has been making the regular courses and workshops in collaboration with International Organizations and other States.

Basically, factors that may influence the judge to favour one of the parties, such as engaging in commercial activities with one of the parties, accepting presents, accepting private invitations, giving or taking bribes are strictly prohibited.²

Myanmar ratified the United Nations Convention against Corruption (UNCAC) in 2012, and the Myanmar Anti-Corruption Law, 2013 was subsequently enacted to comply with the Convention. Under this law, all public servants, including judges and law officers, are subject to penalties including imprisonment and a fine if they engage in corruption. Moreover, the Supreme Court issues the directions from time to time to protect the case of corruption.

A competent, impartial and independent judiciary plays the important role in the protection of fair trial standards and for the maintaining respect for the administration of justice.

Right to a Fair and Public Hearing

Everyone is entitled in full equality to a fair and public hearing by an independent and impartial tribunal, in the determination of his rights and obligations and of any criminal charge against him.³

Under International Covenant on Civil and Political Rights (ICCPR) 1966, the press and the public may be excluded from all or part of a trial for reasons of morals, public order or national security in a democratic society, or when the interest of the private lives of the parties so requires, or to the extent strictly necessary in the opinion of the court in special circumstances where publicity would prejudice the interests of justice; but any judgment rendered in a criminal case or in a suit at law shall be made public except where the interest of juvenile persons otherwise requires or the proceedings concern matrimonial disputes or the guardianship of children.⁴

According to the Rome Statute of the International Criminal Court 1998, the accused shall be entitled to a public hearing, having regard to the provisions of this Statute, to a fair hearing conducted impartially.⁵

¹ Section 300(a), 309(a) and 333(e), *Ibid.*

² Union Attorney General's Office, *Fair Trial Guidebook for Law Officers*, 2018, Pg. 43.

³ Article 10, *Universal Declaration of Human Rights (UDHR) 1948.*

⁴ Article 14(1), *International Covenant on Civil and Political Rights (ICCPR) 1966.*

⁵ Article 67(1), *Rome Statute of the International Criminal Court 1998.*

In Myanmar, justice is to be dispensed “in open Court unless otherwise prohibited by law.”¹ The right to a public hearing is not absolute and the law permits judges to exclude the public from courts under certain circumstances.

Besides, Section 352 of the Code of Criminal Procedure 1898 provides:

The place in which any criminal Court is held for the purpose of inquiring into or trying any offence shall be deemed an open Court, to which the public generally may have access, so far as the same can conveniently contain them: that the presiding Judge or Magistrate may, if he thinks fit, order at any stage of any inquiry into, or trial of, any particular case, that the public generally, or any particular person, shall not have access to, or be or remain in, the room or building used by the Court.²

The judgment in every trial in any criminal court of original jurisdiction shall be pronounced, or the substance of original jurisdiction shall be pronounced, or the substance of such judgment shall be explained in open court either immediately after the termination of the trial or at some subsequent time of which notice shall be given to the parties or their pleaders.³

All judges and magistrates should try cases or hear appeals in the Court room and not in a private chamber unless there are special reasons for so doing. Matters of an informal nature may in the discretion of the judge or magistrate be disposed of in chambers, but other judicial business of a formal nature should be transacted in open Court.⁴

In tried to the juvenile cases, it must be heard and tried in separate Court or separate building. When it does not have the separate Court or separate building, it must be heard and tried in other building or room other than regular open Court.⁵

The 2014 Myanmar News Media Law prevents pre-publication censorship and, among other things, gives media the right to freely criticise the judiciary. But while a Media Access Handbook published by the Supreme Court permits journalists to report on court proceedings, it instructs media to seek permission from the Chief Judge of a Court before entering a courtroom.⁶

A public hearing requires oral hearings held in public, and attendance must not be limited to a particular category of persons. Information about the time and venue of the trial shall be made for the knowledge of the public. In addition, the courts must provide adequate facilities for the attendance of interested members of the public at courtroom. The written judgment must be pronounced orally in the session of the court open to the public.⁷

In the Union of Myanmar v. Maung Shwe (a) Maung Shae⁸ case, the court stated that, ‘Justice must not only be done, but also be seen to be done’. If the court may consider the reasonable connected facts in the decision of the case, it must be more truth. Then, it may be seen the fair and truth decision.

¹ Section 19(b), The Constitution of the Republic of the Union of Myanmar 2008; Section 3(b), The Union Judiciary Law 2010.

² Section 352, The Code of Criminal Procedure of Myanmar 1898.

³ Section 366(1), Ibid.

⁴ Paragraph 21, The Courts Manual of Myanmar, 1999.

⁵ Section 84(1), The Child Rights Law of Myanmar 2019.

⁶ Justice Base, Behind Closed Doors: Obstacles and Opportunities for Public Access to Myanmar's Courts, 2017, Pg 5.

⁷ Union Attorney General's Office, Fair Trial Guidebook for Law Officers, 2018, Pg. 45.

⁸ The Union of Myanmar v. Maung Shwe (a) Maung Shae, 1966 M.L.R (H.C) Pp.616-618.

A transparent judicial system supports the independence and fairness of the legal and judicial systems. The right of public hearing ensures the transparency of proceedings and is an important safeguard for the interest of the individual and of society.

Right to be tried without undue delay

In order to hear the criminal cases fairly and speedily, completion of all proceedings from pre-trial stages to final appeal and passing judgments within a reasonable time is one of the fair trial standards. When an accused is in detention during the criminal proceedings, the right to trial without undue delay takes on additional importance because the aim is not just to reduce uncertainty and ensure a more reliable outcome, but also to limit the length of detention.¹

According to article 14(3)(c) of the International Covenant on Civil and Political Rights 1966, every person facing a criminal charge shall have the right “to be tried without undue delay”.² In the words of article 7(1)(d) of the African Charter, article 8(1) of the American Convention and article 6(1) of the European Convention, everyone has the right to be heard “within a reasonable time”.³

Under the Rome Statute, the accused shall be entitled to be tried without undue delay.⁴

In Myanmar, the Chief Justice of the Union and Judges of the Supreme Court of the Union, the Chief Justices and Judges of the High Court of the Region or State, Judges of the Court of Self-Administered Division, Self-Administered Zone and Judges of the District Courts may inspect prisons, prisoner camps and police lock-ups within their jurisdiction, for enabling convicted persons and those under detention to enjoy lawful rights to which they are entitled and for preventing undue delay in the trial of cases.⁵

The juvenile cases must be tried without undue delay or within a reasonable time.⁶

In the Courts Manual, avoidable postponement and unjustifiable delay are strictly forbidden. When a subordinate judge or magistrate is really unable to overtake his judicial work, it is incumbent on him to represent matters to the district judge or district magistrate, as the case may be. It is the duty of these officers respectively to make suitable arrangements throughout the district for the disposal of all civil and criminal judicial business within a reasonable time.⁷

The case of *Maung Tin Ngwe v. The Union of Myanmar*⁸ pointed out that adjudication should be speedy and done in the correct manner.

Trial without unreasonable delay aims not to be uncertainty due to prolonged trial, not to lose evidence and fade the memory of the witnesses. That is to say “Justice delay is justice denied”, so trial without delay is important for searching the truth.

¹ Union Attorney General’s Office, Fair Trial Guidebook for Law Officers, 2018, Pg. 51.

² Article 14(3)(c), International Covenant on Civil and Political Rights (ICCPR) 1966.

³ OHCHR, Profession Training Series No. 9, Human Rights in the Administration of Justice: A Manual on Human Rights for Judges, Prosecutors and Lawyers, United Nations, 2003, Pg 267.

⁴ Article 67(1)(c), Rome Statute of the International Criminal Court, 1998.

⁵ Section 67 and Section 68, The Union Judiciary Law 2010.

⁶ Section 84(6), The Child Rights Law of Myanmar 2019.

⁷ Paragraph 22, The Courts Manual of Myanmar, 1999.

⁸ *Maung Tin Ngwe v. The Union of Myanmar*, 1966 M.L.R (H.C) Pp.639-643.

Right to Defend and Right to Counsel

In the determination of any criminal charge against him, everyone shall be entitled to have adequate time and facilities for the preparation of his defence and to communicate with counsel of his own choosing.¹

Everyone shall be entitled to be tried in his presence, and to defend himself in person or through legal assistance of his own choosing; to be informed, if he does not have legal assistance, of this right; and to have legal assistance assigned to him, in any case where the interests of justice so require, and without payment by him in any such case if he does not have sufficient means to pay for it.²

Under the Convention on the Rights of the Child, 1989, every child alleged as or accused of having infringed the penal law has the guarantees to be informed promptly and directly of the charges against him or her, and, if appropriate, through his or her parents or legal guardians, and to have legal or other appropriate assistance in the preparation and presentation of his or her defence.³

Article 7(1)(c) of the African Charter on Human and Peoples' Rights, article 8(2)(d) of the American Convention on Human Rights and article 6(3)(c) of the European Convention on Human Rights all guarantee the right of anyone charged with a criminal offence to defend himself in person or through legal assistance of his own choice.⁴

In Myanmar, an accused shall have the right of defence in accord with the law.⁵

Under Section 340(1) of the Code of Criminal Procedure 1898, any person accused of an offence before a criminal Court, or against whom proceedings are instituted under this Code in any such Court, may of right be defended by a pleader.⁶

Then, in the Court Manual Paragraph 455 (1), every person accused may of right be defended by a pleader. Furthermore, if in a case the possible punishment is death, the government must provide the accused with a lawyer under Courts Manual Paragraph 457 (1).

Under the Legal Aid Law 2016, in respect of the detained or arrested persons, the legal aid provider shall provide necessary legal aid during trial.⁷

In tried to the juvenile case, parents, guardian, relative or other reasonable person shall have the right to defend on behalf of the child.⁸

The persons with disabilities shall have the right to request for the necessary arrangements for the rights to sue, to be sued, to defend and to be investigated as a witnesses at the court.⁹

¹ Article 14(3)(b), International Covenant on Civil and Political Rights (ICCPR), 1966; Article 67(1)(b), Rome Statute of the International Criminal Court, 1998.

² Article 14(3)(d), International Covenant on Civil and Political Rights (ICCPR), 1966.

³ Article 40(2)(b)(ii), Convention on the Rights of the Child (CRC), 1989.

⁴ OHCHR, Profession Training Series No. 9, Human Rights in the Administration of Justice: A Manual on Human Rights for Judges, Prosecutors and Lawyers, United Nations, 2003, Pg 271.

⁵ Section 19(c), Constitution of the Republic of the Union of Myanmar 2008; Section 3(c), The Union Judiciary Law of Myanmar 2010; Section 375, The Code of Criminal Procedure of Myanmar 1898.

⁶ Section 340(1), The Code of Criminal Procedure of Myanmar 1898.

⁷ Section 25(d), The Legal Aid Law of Myanmar 2016.

⁸ Section 84(3), The Child Rights Law of Myanmar 2019.

⁹ Section 14(d), The Rights of the Persons with Disabilities Law of Myanmar 2015.

In order to find the truth and justice, the right to defend and right to counsel are the important rights at every stage during trial. Everyone charged with a penal offence has the right to defend oneself in person or through a lawyer of his own choice. Moreover, the government must provide a lawyer if the accused is unable to hire a lawyer in grievous offences.

Right not to be compelled to testify or to confess guilt

Under the International Covenant on Civil and Political Rights, everyone shall not be compelled to testify against himself or to confess guilt, in the determination of any criminal charge against him.¹

Under the Convention on the Rights of the Child, 1989, every child alleged as or accused of having infringed the penal law has the guarantees not to be compelled to give testimony or to confess guilt; to examine or have examined adverse witnesses and to obtain the participation and examination of witnesses on his or her behalf under conditions of equality.²

Besides in the determination of any charge, the accused not to be compelled to testify or to confess guilt and to remain silent, without such silence being a consideration in the determination of guilt or innocence.³

According to article 8(2)(g) of the American Convention, everyone has “the right not to be compelled to be a witness against himself or to plead guilty”, and article 8(3) further specifies that “a confession of guilt by the accused shall be valid only if it is made without coercion of any kind”.

In Myanmar, a confession made by an accused person is irrelevant in a criminal proceeding, if the making of the confession appears to the Court to have been caused by any inducement, threat or promise having reference to the charge against the accused person, proceeding from a person in authority and sufficient, in the opinion of the Court, to give the accused person grounds which would appear to him reasonable for supposing that by making it he would gain any advantage or avoid any evil of a temporal nature in reference to the proceedings against him.⁴

Under Code of Criminal Procedure 1898, a magistrate shall, before recording any such confession, explain to the person making it that he is not bound to make a confession and that if he does so it may be used as evidence against him, and no Magistrate shall record any such confession unless, upon questioning the person making it, he has reason to believe that it was made voluntarily.⁵

In the Union of Myanmar v. U Ye Naung and Three⁶ case, no one shall be compelled by direct or indirect physical or psychologies on the accused, in order to obtain a confession of guilt.

A confession of guilt from an accused in court is not admissible unless satisfied that the confession was made voluntarily. Any coercion, inducement or threat exerted by authorities for making a statement or confess guilt is prohibited. If the authorities draw adverse inferences from the silence of the person suspected and accused of a crime, the right to be presumed innocent is violated.

¹ Article 14(3)(g), International Covenant on Civil and Political Rights (ICCPR) 1966.

² Article 40(2)(b)(iv), Convention on the Rights of the Child (CRC) 1989.

³ Article 67(1)(g), Rome Statute of the International Criminal Court 1998.

⁴ Section 24, The Evidence Act of Myanmar 1872.

⁵ Section 164(3), The Code of Criminal Procedure of Myanmar 1898.

⁶ The Union of Myanmar v. U Ye Naung and Three, 1991 M.L.R (S.C) Pp.63-69.

Right to call and examine witnesses

According to the International Covenant on Civil and Political Rights (ICCPR) 1966, in the determination of any criminal charge against him, everyone shall be entitled to examine, or have examined, the witnesses against him and to obtain the attendance and examination of witnesses on his behalf under the same conditions as witnesses against him.¹ The accused shall also be entitled to raise defences and to present other evidence admissible under the Rome Statute of the International Criminal Court, 1998.²

Article 6(3)(d) of the European Convention on Human Rights contains an identically worded provision, while article 8(2)(f) of the American Convention on Human Rights contains the “right of the defence to examine witnesses present in the court and to obtain the appearance, as witnesses, of experts or other persons who may throw light on the facts”.³

According to the Human Rights Committee, article 14(3)(e) “does not provide an unlimited right to obtain the attendance of witnesses requested by the accused or his counsel”, and where there is no evidence that the court’s refusal to call a certain witness does not violate the principle of equality of arms.⁴

In Myanmar, the accused shall be allowed to examine any witness not previously right of named by him, if such witness is in attendance: but he shall not, be entitled of right to have any witness summoned, other than the witnesses named in the list delivered to the Magistrate by whom he was committed for trial.⁵

According to Section 505(2) of the Code of Criminal Procedure 1898, the parties to any proceeding under this Code may appear before such Magistrate by pleader, or if not in custody in person, and may examine, cross-examine and re-examine the witness.⁶

The order in which witnesses are produced and examined shall be regulated by the law and practice for the time being relating to civil and criminal procedure respectively, and, in the absence of any such law, by the discretion of the Court.⁷

An accused person has the right to call and examine or have examined witnesses against him or her under the same conditions as the prosecution. The right to call witnesses does not mean that an unlimited number of witnesses may be called. Witnesses to be called must be likely to be relevant to the case.

Right to Interpretation and Translation

In the determination of any criminal charge against him, everyone shall be entitled to have the free assistance of an interpreter if he cannot understand or speak the language used in court.¹

¹ Article 14(3)(e), International Covenant on Civil and Political Rights (ICCPR) 1966; Article 67(1)(e), Rome Statute of the International Criminal Court 1998.

² Article 67(1)(e), Rome Statute of the International Criminal Court 1998.

³ OHCHR, Profession Training Series No. 9, Human Rights in the Administration of Justice: A Manual on Human Rights for Judges, Prosecutors and Lawyers, United Nations, 2003, Pg 285.

⁴ Ibid.

⁵ Section 291, The Code of Criminal Procedure of Myanmar 1898.

⁶ Section 505(2), Ibid.

⁷ Section 135, The Evidence Act of Myanmar 1872.

Under the Convention on the Rights of the Child, 1989, every child alleged as or accused of having infringed the penal law has the guarantees to have the free assistance of an interpreter if the child cannot understand or speak the language used.²

In the determination of any charge, the accused shall be entitled to be informed promptly and in detail of the nature, cause and content of the charge, in a language which the accused fully understands and speaks.³ And then, the accused shall be entitled to have, free of any cost, the assistance of a competent interpreter and such translations as are necessary to meet the requirements of fairness, if any of the proceedings or documents presented to the Court are not in a language which the accused fully understands and speaks.⁴

According to Article 6(3)(e) of the European Convention, everyone shall be entitled to “have the free assistance of an interpreter if he cannot understand or speak the language used in court”.⁵ Article 8(2)(a) of the American Convention guarantees “the right of the accused to be assisted without charge by a translator or interpreter, if he does not understand or does not speak the language of the tribunal or court”.⁶

It is not a violation of article 14 that the States parties make provision for the use of only one official court language, and the requirement of a fair hearing does not “mandate States parties to make available to a citizen whose mother tongue differs from the official court language, the services of an interpreter, if this citizen is capable of expressing himself adequately in the official language”.⁷

In Myanmar, when the services of an interpreter are required by any criminal Court for the interpretation of any evidence or statement, he shall be bound to state true interpretation of such evidence or statement.⁸

According to Section 361 of the Code of Criminal Procedure 1898;

- (1) Whenever an evidence is given in a language not understood by the accused, and he is present in person, it shall be interpreted to him in open Court in a language understood by him.
- (2) If he appears by pleader and the evidence is given in a language other than the language of the Court, and not understood by the pleader, it shall be interpreted to such pleader in that language.
- (3) When documents are put in for the purpose of formal proof, it shall be in the discretion of the Court to interpret as much thereof as appears necessary.⁹

Whenever the accused is examined by any Magistrate or by any Court other than the High Court the whole of such examination, including every question put to him and every answer

¹ Article 14(3)(f), International Covenant on Civil and Political Rights (ICCPR) 1966.

² Article 40(2)(b)(vi), Convention on the Rights of the Child (CRC) 1989.

³ Article 67(1)(a), Rome Statute of the International Criminal Court 1998.

⁴ Article 67(1)(f), Ibid.

⁵ Article 6(3)(e), the European Convention on Human Rights 1950.

⁶ Article 8(2)(a), the American Convention on Human Rights 1969.

⁷ OHCHR, Profession Training Series No. 9, Human Rights in the Administration of Justice: A Manual on Human Rights for Judges, Prosecutors and Lawyers, United Nations, 2003, Pg 291.

⁸ Section 543, The Code of Criminal Procedure of Myanmar 1898.

⁹ Section 361, Ibid.

given by him, shall be recorded in full, in the language in which he is examined, or, if that is not practicable, in the language of the Court, any such record shall be shown or read to him, or, if he does not understand the language in which it is written, shall be interpreted to him in a language which he understands, and he shall be at liberty to explain or add to his answers.¹

Under Legal Aid Law 2016, in respect of the accused, defendant, convicted person and confined person, the legal aid provide shall:

- (a) If there is language difficulty in communication although he is a citizen, carry out through the person who understands the language;
- (b) If he is a foreigner, explain through an interpreter that he can access to the legal aid and inform the relevant consulate through the Ministry of Foreign Affairs without delay;
- (c) If he is a person with disabilities, carry out through the expert who understands the gesture, sign language and braille of him.²

In tried to the juvenile cases, it must be arranged the interpreter if necessary for child and witnesses.³

A violation of the right to a fair trial can occur when a conviction was based on a confession allegedly made by the accused without an interpreter. In order to get justice, it must measure to understand the language of the court by the interpreter, if it is different to understand the court language. The right to interpretation and translation is important not only for those who cannot speak the language but also for those who cannot read the language even though they can speak it. Besides, it must be extended to facilitate for people with disabilities including visual or hearing disable persons.

Conclusion

Fair trial is the only way to prevent miscarriages of justice and is an essential part of a just society. The right to fair trial is covered under the core of the human rights protection system because the courts can only restore the violated rights and deliver the fair remedies. The provisions of Myanmar existing laws concerning fair trial standard during trial are almost consistent with the International fair trial standards during trial. The courts of the Republic of the Union of Myanmar place great importance to fully enjoy the fair trial rights without discrimination. In order to access the justice, cases shall be tried by a competent, independence and impartial courts in accordance with the laws. Besides, judges are also to bear in mind that punctuality, courtesy, patience, observance of the prescribed procedure and avoidance of delay. Not only the judges but also law officers, lawyers, parties or witnesses shall have the necessary qualities, skill and awareness. Then, the cases are to be tried with fairly, transparent and speedily. Every person shall have the fundamental rights during fair trial in order to trust on the courts and to implement strengthen of judicial system.

¹ Section 364(1), *Ibid*.

² Section 27, The Legal Aid Law of Myanmar 2016.

³ Section 84(5), The Child Rights Law of Myanmar 2019.

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LEGAL ANALYSIS ON RIGHTS FOR STREET CHILDREN IN MYANMAR

Pa Pa Soe*

Abstract

The research paper examines and studies based on children rights under international and domestic laws approach. The street children have acquired to the same rights for children provided in international and domestic laws because street children are kind of vulnerable children who experiencing poverty, homelessness or both, who are living on the streets of a city, town, or village. Homeless youth are often called street kids or street child; the definition of street children is contested, but many practitioners and policymakers use UNICEF's concept of boys and girls, aged less than 18 years, for whom "the street" (including unoccupied dwellings and wasteland) has become home and/ or their source of livelihood, and who are inadequately protected or supervised. In Myanmar, children means under 18 years aged according to the Child Rights Law, 2019. The target group of this study emphasis on children under 18 years age, who are found in/on the streets of Yangon City development areas for long hours, whether they are hired by others, or work for themselves (such as street vendors, children who give transport services, carriers, kiosk vendors, car cleaners, newspaper sellers, etc). The study includes children working at checkpoints, children who beg, children working at traffic lights, loiterers and living on the streets. This study focuses on the situation of street children in Myanmar and presents an assessment of the problem. This study presents the causal factors, the effects of the problem of street children; the interventions and a response currently face to street children, the emerging gaps and conclude with possible strategies for intervening in the short and long-terms.

Keywords: homeless, poverty, drop out of school, street children,

Introduction

The Street Children phenomenon is one of the important issues facing children today in both the developed and developing countries in the world. Accordingly, the issue needs to be addressed and solved by each country in the world.

Children of the street are subject to some form of institutional violence and face with many difficulty in Myanmar. This research tackles two questions: firstly, the question of which factors can be decisive in the phenomenon of children of the street. It opens a debate on the respective roles of poverty and of other factors, such as domestic violence and parental neglect. Secondly, it considers the question of how they live in the street. Children develop survival strategies that are obviously based on their activities, but also involve an organization that calls for analysis in terms of strategic positioning on the territory they occupy.

Objectives

The objective of this study was to compile, consolidate and validate available information on street children in order to facilitate the development of a long-term national strategy aimed at promoting, protecting and fulfilling their rights. This study is also intended to find out how to provide and safeguard their basic survival needs of shelter, food, clothing, medical care and protection from harm and how to guarantee the right to education for street children in Myanmar.

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Materials & Methods

Research Question and Methodology

My research questions are

1. What are the causes of street children in Myanmar?
2. What are the international human rights standards of relevance to street children?
3. Do Myanmar's Laws live up to these standards?

This study applies a qualitative research by using primary and secondary data review in related literatures, examining, and collecting comprehensive and detailed information. In Myanmar, most of the street children are generally found in city-states. Their existence is less prevalent or nonexistent, in rural areas because of their strong community and family ties to be helpful with each other. Other factors people in rural areas can get food more easily and not much expensive than in city-states. This study also uses semi structure interview with 50 street children in Yangon City Development areas and the age from four to 17 years as a method of data gathering as well as document analysis. This study also compares with the relevant international and domestic laws relating to the rights of children.

Structure of the Paper

In my research paper, there are four main parts. The first part focuses on introduction, research questions and methodology. The second part focuses on definitions of street children, causes and challenges of street children in Myanmar. The third part focuses on international human rights standards. The last part focuses on Myanmar Laws relating to street children.

Definitions and Causes of Street Children

The definition of street children is so vast and complex definition. There is difficult to define a unique definition for street children. Some writers approaches, the process of categorization takes place as an analytic view in understanding street children's everyday lives. In Myanmar, street children is difficult to define a standard definition for the term "street children" because variations are due to differences in the various theoretical and ideological backgrounds of childhood specialists, as well as differences in time and place.

Definitions of Street Children

The World Health Organization (WHO) classifies four categories of street children. These categories are children who live on the streets, children who have left their families and reside on the streets, hotels, shelters, or abandoned places, children living in protection centers or orphanages, who are at risk of becoming homeless and children who have weak or insubstantial relations with their families, and whose circumstances force them to spend the night outside their homes.

The United Nations (UN) defines street children as "boys and girls for whom "the street" (including unoccupied dwelling, wasteland, etc.) has become their home and/or source of livelihood, and who are inadequately protected or supervised by responsible adults."¹

¹ M.Black, *Street and Working Children: Global Seminar Report*, UNICEF Innocent Center, 1993.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) defines street children as “Children with severed family ties, who have found the street their only home; the street is where they stay daily; who all face the same dangers such as becoming involved in drugs or prostitution, and their presence in the streets gives them a sense of freedom.”

According to UNICEF, there are three types of street children. These types are street-living children who have run away from their families and live alone on the streets, street-working children who spend most of their time on the streets fending for themselves, but return home on a regular basis and children from street families who live on the streets with their families.

The report of the Independent Commission on International Humanitarian Issues defines street children as follows: “a street child or street youth is any underage person for whom the street (in the broadest meaning of the word, including uninhabited residences, wastelands, etc.) has become his or her usual place of residence, and this person cannot find adequate protection.”¹

Cairo (1997) define street children as children who always or sometimes work and reside in the street, without being taken care of by their families, or who spend long periods of the day in the streets.²

Clearly, there is no exclusive definition of the concept of street children. The different definitions of “street children” depend on the various situations and criteria. In this research followed the UNICEF definition of street and working children and also did research on street children under 18 years of age. Before the enactment of Child Rights Law, 2019, there is different definition of child between the provisions of the UNCRC and the Child law, 1993 in Myanmar. Most of the provisions of the Child Rights Law, 2019 are in line with the UNCRC provisions. Therefore, there is no different definition of child between the provision of the UNCRC and the Child Rights Law of the Republic of the Union of Myanmar.

Causes of Street Children

In Myanmar, the existence of street children phenomenon depends on many causes. This phenomenon is analyzed on economic, social and educational factors that either trigger or exacerbate the problem. Although each child has his/her own experience that drove him/her to the streets, the reasons contributing to this phenomenon are similar in many countries. There are two categories of street children in my interviewees. One is children work on the streets and the other is children live on the street. Some are homeless and some are work on the street for a long time for search their income to stand their life by many ways.

According to the field data, the followings causes are identified by this research. There are a number of major factors that are believed to cause, or exacerbate, the problem of street children in Myanmar. They include:

- a. Economic Factors
- b. Family Relations
- c. Poor Education Level of Parents

¹ The Independent Commission on International Humanitarian Issues, *Street Children*, 1986, p.30.

² *Working and Street Children*, Cairo, The National Council for Motherhood and Childhood, 1997, P.12.

- d. Large Family Size
- e. Migration from the Villages to the City
- f. Wars and Natural Disasters

a. Economics Factors: Poor economic situation is one of the major factors to constitute the phenomenon of street children in Myanmar. Poverty, unemployment, low income and the increasing gap between the rich and the poor are factors with a direct effect on the rise of the phenomenon of street children. In my research interview, fifteen interviewees' street children face with economics factors.

b. Familial Relations: The family is the primary institution responsible for fulfilling the basic needs of children, including providing security, love, food, clothing, shelter, health care, education and entertainment. Moreover, the family raises children in their own culture and passes this culture to them through the socialization process. The family is considered the reference point for the construction of children's norms, for the shape of their personality and for the direction, they take in life.

The family situation and the type of relations within a family are, thus, important elements in shaping the features of the child's life. Often, the phenomenon of street children is reversely proportional to the prevalence of normal relations within the family. A study by UNICEF examined the reasons why children may leave the family and found that some have left the family because of ill-treatment by their fathers or stepfathers or after the death of a parent. Others decided to leave in order to avoid parental control or because of the dire economic situation of the family. Still others left simply because they wanted to enjoy more independence from their families.¹ In my research interview, six interviewees' street children face with this factor.

c. Poor Education Level of Parents: One of the factors to become phenomenon of street children is poor education level of parents. Education is a major incentive for social advancement that contributes to a better life. If parents are lack of education, they may be unaware of the importance and value of education and may not provide appropriate educational care for their children. This situation may become children to drop out of school and remain in the streets. In my research interview, nine interviewees' street children face with this factor.

d. Large Family Size: The size of the family has a strong impact on the family's economic situation. Families with more children incur more costs and require more efforts in terms of provision of care. If there are many children in poor families, they cannot well fulfill and support their children needs. Parents or guardians are unable to assume complete their responsibility to raise and support their children because of the large size of poor families. Large families provide less time, care, attention, love and money for each single child. In my research interview, eight interviewees' street children face with this factor.

e. Migration from the Villages to the City: Sometimes, migration from the villages to the city is increased phenomenon of street children. Some poor villagers believe that they will achieve their hopes and dreams in cities. Therefore, they transfer from villages to cities. However, unfortunately they may encounter a harsh reality that destroys their hopes and dreams there. In my research interview, six interviewees' street children face with this factor.

¹ The UNICEF, Street and Working Children, Innocent Global Seminar, Summary Report, Florence, 1993, P 20.

f. Wars and Natural Disasters: Wars and natural disasters often lead to massive spikes in the street children population. Wars contribute to the deterioration of the national economy, the destruction of homes, the killing and displacement of thousands and the dispersion of families. This, in turn, leads to an increased number of orphans and homeless children. The same applies to natural disasters, such as earthquakes, volcanic eruptions, floods and hurricanes that result the existence of thousands of street children due to the death of their family members, full demolition of their homes or dispersion of their families. In my research interview, six interviewees' street children face with this factor.

Some interviewees therefore, said their parents are very poor and they have no income so they do not care them and they face very hunger for many days. Therefore, they search their income to get food and they have no rights to education. Some interviewee said their father is very drunk alcohol and very rude and violence against their mother and them. Therefore, they ran away their home, they live on the streets, and they stand convenient their life. Some interviewees have not parents but they have guardian who are not care and they do work on street for search money. Some interviewees have neither parents nor guardian and they have no home to live so they survive on the streets.

International Human Rights Standards

As human beings, children are entitled to all the rights guaranteed by the Universal Declaration of Human Rights (UDHR), but children also need special protection and care. A rights-based approach starts from the premise that all children are "rights holder". In reality, children in street situations are deprived of many of their rights – both before and during their time on the streets – and while on the streets, they are more likely to be seen as victims or delinquents than as rights holders.

United Nations Convention on the Rights of the Child (UNCRC), 1989

United Nations Convention on the Rights of the Child (UNCRC) is adopted by the UN General Assembly resolution 44/25 on 20, November, 1989 and it is entered into force on 2, September 1990. There are 54 Articles in the Convention. Articles - 1 to 41 are substantive articles describing specific rights the majority of which impacts of services provided by local authorities and Articles – 42 to 54 describe how the UN and national governments works to ensure these rights. It is the main international treaty and legislative framework with regard to promotion and protection of the rights of the child. It is the most 'complete' human rights treaty and it applies to all children at all times in all situations. It is ratified by 196 countries in the world including Myanmar. The existence of the phenomenon of street children represents a flagrant infringement of the United Nations Convention on the Rights of the Child (UNCRC). According to the CRC, all children, including street children, have rights to enjoy the following rights.

The Right to Life: The right to life is inherent to every human being regardless of his/her gender or age. The UNCRC stipulates that States Parties should recognize that every child has the inherent right to life. They also ensure to the maximum extent possible the survival and

development of the child. This right entails refraining from jeopardizing the life and development of children or from submitting them to physical or moral threats.¹

The Consortium for Street Children reports that many states kill or torture street children. In some parts of the world, police forces kill and torture street children rather than ensuring their protection.² This contravenes states in Article – 19(1) and (2) of the UNCRC. Article -19(1) of the UNCRC states “States Parties shall take all appropriate legislative, administrative, social and educational measures to protect the child from all forms of physical or mental violence, injury or abuse etc.” Besides, Article -19(2) of the UNCRC states that “Such protective measures include effective procedures for the establishment of social programs to provide necessary support for the child and for those who have the care of the child, as well as for other forms of prevention and as appropriate, for judicial involvement.”

The Right to Health: Street children live in the streets, public places, abandoned houses, cemeteries or unhealthy shelters. This jeopardizes their right to healthy growth and development. Children need a healthy environment that ensures that they grow up free of disease or illness, and which offers them all medical services. Article 24(1) of the CRC stipulates that “States Parties recognize the right of the child to the highest possible standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services.”

The Right to Education: A high percentage of street children do not achieve an educational level that would ensure them sufficient work with appropriate pay. This contravenes the right of the child to a basic standard of education as set out in the provisions of Article 28 of the CRC.

Education helps develop the child’s character; therefore, Article 29(1) sets forth that “States Parties agree that the education of the child shall be directed to: (a) the development of the child’s personality, talents and mental and physical abilities to their fullest potential....”

The Right to an Adequate Standard of Living: Article 27 of UNCRC provides for the right of a child to an adequate living standard. Paragraph one of this article explicitly states that “States Parties recognize the right of every child to a standard of living adequate for the child’s physical, mental, spiritual, moral and social development.” Article – 27(2) of the UNCRC notes that “the parent(s) or others responsible for the child have the primary responsibility to secure, within their abilities and financial capacities, the conditions of living necessary for the child’s development.” In the case of parent(s) or legal guardian(s) who are unable to provide such a living standard, it is the state’s responsibility to do so as set out in Article 27(3).

Special Child Labour Related Rights: In many countries, street children are exploited by working long hours in difficult conditions for low pay. This contravenes Article - 32 of the UNCRC, which states in paragraph one, “States Parties recognize the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child’s education, or to be harmful to the child’s health or physical, mental, spiritual, moral or social development”.

The Right to Participation, Play and Recreation: Street children often lack participation in cultural life and opportunities for play and recreation. The States Parties recognize the right of

¹ Article - 6(1) & (2), the United Nations Convention on the Rights of the Child, 1989.

² Wernham, Marie, Consortium on Street Children, Background Paper on Street Children and Violence, 2001.

the child to rest and leisure, to engage in play and recreational activities appropriate to the age of the child and to participate freely in cultural life and the arts. They also respect and promote the right of the child to participate fully in cultural and artistic life and encourage the provision of appropriate and equal opportunities for cultural, artistic, recreational and leisure activity.¹

Rights to Protection: Street children suffer from maltreatment, sexual abuse, neglect and discrimination. Article - 34 of the UNCRC provides for the protection of children from all forms of sexual exploitation and sexual abuse. Article 37 specifies legal protection in the case of arrest, while Article - 40 stipulates the provision of appropriate and humanitarian conditions of detention that protect the child's dignity.

The relevant General Comments of the UNCRC's committee are: General Comment No.7 - implementing child rights in early childhood (2005), General Comment No.9 - The rights of children with disabilities (2006), General Comment No.13 - The rights of children to freedom from all forms of violence (2011) and General Comment No. 21 - The rights on children in street situations (2017).

The ILO Conventions

With regard to street children, they have specific rights that are stipulated in a number of international conventions, most importantly are International Labour Organization (ILO) Convention No. 138 on the Minimum Working Age (1973), ILO Convention No. 182 on The Worst Forms of Child Labour (1999) and United Nations Convention on the Rights of the Child (1989).

ILO Convention No. 138 on the Minimum Working Age (1973): Article -1 of this Convention specifies that 15 years is the minimum age for working. Article -3 of this Convention states that the minimum age for starting any type of employment, which by its nature or working environment is likely to jeopardize the health, safety or morals of young persons, shall not be less than 18 years. The Convention also urges State Parties to adopt this minimum working age in their national legislation.

ILO Convention No. 182 on the Worst Forms of Child Labour (1999): Article -1 of this Convention urges each State signatory to take immediate and effective measures to prohibit and eliminate the worst forms of child labour. Article -3 defines the worst forms of child labour all forms of slavery or practices similar to slavery, the use, procuring or offering of a child for prostitution, the use, procurement or offering of a child for illicit activities, and work which, by its nature or the circumstances.

Myanmar Laws

The Republic of the Union of Myanmar became a party to the United Nations Convention on the Right of the Child on 15 August 1991 after signing the Convention on 16 July 1991. Therefore, to implement the rights of UNCRC in Myanmar, the Child Law² is provided on 14, July 1993 and the Rules related to the Child Law³ is promulgated in 2001. The Myanmar National Plan of Action for Children (2006 – 2015) was four focused areas – Health and

¹ Article – 31, the United Nations Convention on the Rights of the Child, 1989.

² The Child Law, 1993, SLORC Law No. 9/93 dated on 14th July 1993.

³ Rules Related to the Child Law, Ministry of Social Welfare, Relief and Resettlement Notification No 1/2001 dated on 21st December 2001.

nutrition, Water and Sanitation, Education and Child Development, and Child Protection. More effective implementation of the child rights in Myanmar, the Child Rights law, 2019 repeals the Child law, 1993 on 23 July 2019. This law is in line with the UNCRC.

An Overview of Myanmar Laws

All provisions of child rights in Myanmar are also concerned with all streets children in Myanmar. In Myanmar, the Child Rights law, 2019 defines a child as anyone less than 18 years of age. Section 57 (d) of this Law provides specific provisions for the protection of street children from violence of physical or mental conditions, sexual abuse, economic exploitation, homelessness and neglect – conditions that could push children onto the streets to live, either earn money, or beg.

The Myanmar Maternal and Child Welfare Association is formed to carry out effectively welfare and assistance relating to the health and social affairs of mothers, children and families throughout Myanmar.¹ All the child rights are required to respect, protect and fulfill in Myanmar.

The right to fulfillment of basic needs: Chapter 7, Sections 18 to 24 of Myanmar the Child Rights law, 2019 provides the Child rights but some of the basic needs of the children are not clearly provided in this law such as the right to food, clothes and shelter. These rights are primarily responsible to fulfill by his/ her parent(s) or legal guardian(s). The basic needs for health and educations rights are provided in Chapter 12, Sections 44 & 45 and Chapter 13, Sections 46 & 47 of this Law. These Chapters require the state to take all the necessary steps to ensure fulfillment of these rights.

Need of Protection and Care of Child: The Child Rights Law provides that “Child has no parents or guardian, Child is in the custody of a cruel or wicked parents or guardian, Child on the street, Child is uncontrollable by his parents or guardian, Child earns his living by begging and etc.,” are required to protect and care.²

“Whoever is of opinion that any child mentioned in Section – 57 of this Law should be protected or cared by the State may intimate the relevant Social Welfare Officer stating the facts of the case.”³ These children have the right to receive social assistance from the State and relevant institutions in accordance with the rules and regulations laid down by the state and its institutions. Besides, “all children in Myanmar have right to life, develop, rest, leisure, participate cultural and artistic activities, engage work, right to birth registration and participate in organization.”⁴

Prohibition of exploitation or putting children at risk : “Although every child has the right to be adopted in accordance with law, the adopted parents has responsible for the care and custody of the child to ensure that there is no abduction to the foreign country, sale or trafficking, unlawful exploitation, unlawful employment, maltreatment, pernicious deeds and illegal acts.”⁵

Prohibition of Penal Action: The minimum age of general criminal exemption is different between the provisions of Child Rights Law, 2019 and Myanmar Penal Code. “A child under 7

¹ Section – 2(a) of the Law Amending the Myanmar Maternal and Child Welfare Association Law, the SLORC Law No. 12/93, 1993.

² Section – 57 of the Child Rights Law, 2019, The Pyidaungsu Hluttaw Law No. 22/2019.

³ Section – 58 (a), Ibid.

⁴ Sections –18,19 and 21 of the Child Rights Law, 2019, The Pyidaungsu Hluttaw Law No. 22/2019.

⁵ Section – 25 to 29, Ibid.

years of age has absolute right of exemption from penal action.”¹ Moreover, a child above 7 years of age and under 12 who has not attained sufficient maturity of understanding to judge of the nature and consequences of his conduct on that occasion has also absolute right of exemption from penal action.² A child under 10 years of age has absolute right of exemption from penal action. A child above 10 years of age and less than 12 who has not attained sufficient maturity of understanding to judge of the nature and consequences of his conduct on that occasion has also absolute right of exemption from penal action.³

In Myanmar, the respective Ministries are implementing measures on protection, survival, development, education and participation that children may fully enjoy their rights in accordance with the law.

Comparing Myanmar Laws with International Human Rights Standards

In Myanmar, 2008 Constitution provides enforceable guarantees that related to a range of rights, some of which apply to citizens only and some of which are more broadly applicable. Moreover, although a State has duties to respect, protect and fulfill of children rights in Myanmar as a party of the UNCRC, most of these guarantees does not fully reflect international human rights standards, due to the wide qualifiers and caveats they contain. According to the new Child Rights Law, 2019, a Child means a person who under 18 years of age.⁴ This definition is in line with the UNCRC.⁵ Child marriage is restrained under this law, 2019.⁶ The minimum age of general criminal exemption is different between the provisions of the Child Rights law, 2019 and the Myanmar Penal Code. Besides, the Myanmar Child Rights Law need to provide definite special protection measures for children deprived temporarily or permanently of their family environment, children in situations of emergency, child in conflict with the law, children in situations of exploitation including physical and psychological recovery and social reintegration and children belonging to minority or indigenous group. Now, most of the provisions of new Children Rights Law in Myanmar are in line with the UNCRC and other International Convention for Children Rights

Interview Data Analysis on Street Children

There are two categories of street children in the interviewee. One is children work on the streets and the other is children live on the street. The data collected with 50 street children of Yangon City Development areas and the age from four to 17 years. Some are homeless and some are working on the street for a long time for search their income to stand their life by many ways. Some interviewee said their parents are very poor and they have no income so they do not care them and they face very hunger for many days. Therefore, they search their income to get food and they have no rights to education. Some interviewee said their father is very drunk alcohol and very rude and violence against their mother and them. Therefore, they ran away their home, they live on the streets, and they stand convenient their life. Some interviewees have not parents but they have guardians who are not care and they do work on street for search money. Some

¹ Section- 82 of the Penal Code, 1961, and Section 28(a) of the Child Law, 1993.

² Section- 83 of the Penal Code, 1961, and Section 28(b) of the Child Law, 1993.

³ Section – 78 (a) & (b) of the Child Rights Law, 2019, The Pyidaungsu Hluttaw Law No. 22/2019.

⁴ Section – 3 (b), Ibid.

⁵ Article – 1, the United Nations Convention on the Rights of the Child, 1989.

⁶ Section – 23, the Child Rights Law, 2019, The Pyidaungsu Hluttaw Law No. 22/2019.

interviewees have neither parents nor guardians and they have no home to live so they survive on the streets. The interview findings indicate that family and poverty are main reasons of children for leaving school and home. Both Street children working on the streets and living on the streets have very low income per day. So they are difficult to attend school because they spend all day on the streets for stand their lives.

List of Interviewees

No	Age	Girl	Boy	Children working on the Streets	Children living on the streets
1	4-10	5	5	90%	10%
2	11-15	16	15		
3	16-17	4	5		

Finding

In Myanmar, most of the street children are generally found in city-states. Their existence is less prevalent or nonexistent, in rural areas because of their strong community and family ties to helpful with each other. Other factors people in rural areas can get food more easily and not much expensive than in city-states. In Myanmar, according to the new Child Rights Law, 2019, a Child means a person who under 18 years of age.¹ This definition is in line with the UNCRC.² The minimum age of general criminal exemption is different between the provisions of Child Rights Law, 2019 and Myanmar Penal Code. Besides, Myanmar Child Rights Law need to provide definite special protection measures for children deprived temporarily or permanently of their family environment, children in situations of emergency, child in conflict with the law, children in situations of exploitation including physical and psychological recovery and social reintegration and children belonging to a minority or indigenous group. Now, most of the provisions for children rights in Myanmar are in line with the UNCRC and other International Convention for Children Rights. To implement effective protections for children rights in Myanmar, our country needs financial and technical supports. Moreover, our country needs citizen technical experts to implement child rights protection and requires awareness of Myanmar local people. In Myanmar, the respective Ministries are implementing measures on protection, survival, development, education and participation that children may fully enjoy their rights in accordance with the law.

Finally, to reduce the phenomenon of street children, much larger focused interventions are needed such as better housing plans, all inclusive urban development policies, and increased number of boarding schools for poor children in both rural and urban areas.

Recommendations

To successful implementation process for children's rights in Myanmar, providing services of legal and other institutions' work are needed to more clear and strong services. Financial resources, human resources and institutional capacities must be effective supports for the protection of street children rights. Enhancing capacity building for street children are made by government activity. Social working training, institutional commitment and practical actions

¹ Section – 3 (b) of the Child Rights Law, 2019, The Pyidaungsu Hluttaw Law No. 22/201.

² Article – 1 of the United Nations Convention on the Rights of the Child, 1989.

are required to develop and improve better life for street children and to reduce their tendency of living on the street. Our country needs to awareness of the phenomenon of children working and living on the streets, mobilize the community to become involved, and needs to raise awareness in communities to help sensitize community members to the special requirements of vulnerable children and avoid stigmatizing of former children living and working in the street. Moreover, needs to provide capacity building and empowerment of parents and families to deal with and handle challenging behavior. And also needs to implement Street based program (feeding program, legal assistance, financial services, medical services, street education, family reunion) through advocacy, preventive, institutional full care and rehabilitation program by NGOs response. Our government authorities collaborate with local people to prevent, prohibit and eliminate the worst forms of child labour and to implement child rights under UNCRC. Need to coordination among development agents working for the rights of street children and information sharing among all stakeholders to enhance implementation strategies. The government and NGOs need to develop schemes to support and provide care to the street children and need to increase the number of shelters not only night but also day shelters for street children. Finally to reduce migration of young children from rural to urban areas and to reduce the phenomenon of street children, our country needs the clear policies in order to safeguard and implement child rights for street children.

Conclusion

Future development of our country is strongly based on our children. Children take future responsibility for the country so they are very important for our country. Our country has duty to care and implement development of our children. Most of the children are needed to care and implement their rights because children are kind of venerable people. But some children are neglected from the society and some run away from their home because of domestic abuse by their relatives such as step father, step mother, uncle, aunty and so on. These children are needed to special protection of their rights and provided social care.

This study identifies to understand the real life situation of street children, their experiences, point of view, perspective and rights and to reduce the phenomenon of street children. The common needs for street children are food, shelter, health care, vocational training, education and psychosocial support.

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THE ROLE OF UNITED NATIONS HUMAN RIGHTS TREATY-BASED MONITORING MECHANISM IN MYANMAR

Aye Mar Win *

Abstract

This paper presents the current mechanism obliged by human rights treaties especially in Myanmar. Treaties create legal obligations to State parties under International Law. Obligations are mentioned already in treaties and thus, state has to follow after ratifying. The enforcement of international human rights law is the responsibility of the Nation State, and it is the primary responsibility of the State to make human rights in a reality. This paper focuses the implementation of the protection of human rights in Myanmar in line with human rights treaties. This paper includes the different mechanisms set up UN human rights treaties, the key components of the context of Myanmar, and the gaps and challenges in relation to the human rights in Myanmar. This paper is an attempt to discuss the various facets of human rights, their legal, social, political and economic aspects of protection and enforcement at International as well at National levels.

Keywords: human rights / Monitoring / treaty-based mechanism.

Introduction

The protection and enforcement of human rights has been guaranteed by the establishment of the United Nations (UN) in 1945 and thereafter with the adoption of a resolution on the Universal Declaration of Human Rights (UDHR) in December, 1948.¹ Although being a resolution it does not impose legal obligations upon the member states, rather it sets a common standard of achievement for all people and all nations so that they strive to promote respect for human rights and fundamental freedoms by teaching and educating and by adopting progressive measures in this regard. The expression “human rights” denotes all those rights which are inherent in our nature and without which we cannot live as human beings.²

Human rights treaties are now mostly taken on by the human rights treaty bodies, the UN body that manages human rights issues. Human rights treaties are normally drafted by a UN body which, when completed, is opened for signature to member States. Once a State signed a treaty, it meant the State agreed the terms of the treaty and showed not to break the objects and purposes of the treaty. However, it did but not yet legally binding to the State. States become legally bound to a treaty only after they have ratified it. The State party can leave out some of treaty obligations by making reservation or making an understanding that detail how the State will interpret the article or rights. International human rights treaties are legally binding, but only on those States that ratify it. Myanmar has ratified four international human rights treaty and two Optional Protocol : Convention on the Rights of the Child (CRC) in 1991, Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict in 28 Sep 2015, Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child phonography in 16 Jan 2012, Convention of the Elimination of All Forms of Discrimination against Women (CEDAW) in 1997, Convention on the Rights of Person

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¹ Dr. Chandra, Human Rights, Seventh Edition, Allahabad Law Agency Publications, 2007, p - 25.

² Teaching Human Rights, United Nations, New York, 1989, p - 5.

with Disabilities (CRPD) in 2011 and International Covenant on Economic, Social and Cultural Rights (ICESCR) in 2017.

Research Method

The study used documentary legal analysis and literature review. The relevant data has collected through not only Myanmar Government's reports but also other reports such as initial reports, periodic reports and concluding observations of treaties committees under which Myanmar ratified.

Research Questions

How does the human rights treaty-based monitoring system improve domestic legal framework and policy framework in Myanmar?

International supervisory mechanisms for human rights

This section is a brief introduction with the overall mechanisms established under UN, including Chartered-based bodies, and Treaty-based bodies. After the establishment of UN, according to the preamble and purposes of the UN Charter, UN has main responsibilities for the protection and promotion of human rights of the people. Thus, first of all UN adopted UDHR in 1948.

Since the adoption of the Universal Declaration of Human Rights in 1948, a wide array of human rights norms has been developed, and mechanisms for their promotion and protection have been established at international, regional and national levels.¹ Many UN organs have a role to play in the field of human rights such as Human Rights Council, Office of High Commissioner of Human Rights, and Economic and Social Council.² The United Nations Charter provided for the creation of six principal organs mandated to carry out the overall work of the United Nations. As mentioned earlier, since UN play main role in promotion and protection of human rights. UN's works and they are six principles organs carry on commonly referred to as Charter-based organs.³

Charter based procedures

Under UN charter-based system, there are three main monitoring systems (i) Universal Period Review (UPR) (ii) special procedures (iii) complaint procedure. In order to be non-selective and to ensure equal treatment for every country, a new process called the Universal Periodic Review (UPR) was created in 2006. It involves a review of the human rights record of all 193 UN Member States once every four and a half years. The UPR is a State-driven process, under the auspices of the Human Rights Council (HRC), in which each State's human rights performance is assessed by other States with the ultimate aim of improving the human rights situation on the ground. At the time of writing, the second cycle of the UPR was about to be

¹ Raoul Wallenberg Institute of Human Rights and Humanitarian Law, Asia - Europe Foundation, p - 5.

² Magdalena Sepulveda, Theo van Banning, Gudrun D. Gudmundsdottir, Christine Chamoun and Willem J.M van Genugten, Human Rights Reference Handbook, University for Peace, 2004, p - 79.

³ HUMAN RIGHTS: A Basic Handbook for UN Staff, United Nations, p - 24.

completed. All UN Member States will then have been reviewed twice.¹ Recently, all countries on second cycle UPR were done. Third cycle is now commencing in some countries already. UPR of UN is to check for the implementation of human rights situation in national of UN member states. It is exposed an opportunity for the performance of human rights matters, such as international framework, national framework, related department strategy, country programme, MoU, MoA and recommendations, directly related performance from systematic compilation writing of human rights development of states to the world.

The special procedures system of the Human Rights Council (HRC) is made up of independent human rights experts with mandates to report and advice on human rights from a thematic or country-specific perspective. The system is a central element of the United Nations human rights machinery and covers all human rights: civil, cultural, economic, political and social. The HRC has progressively established new country mandates, of which there were few initially, on the situation of human rights. As of July 2016, there were 41 thematic and 14 country mandates.² Special procedure assists to improve the actual conditions against human rights issue area.

The HRC established a new complaint procedure that largely resembles the old Commission's confidential "1503 procedure" for individual complaints. It also aims to "address consistent patterns of gross and reliably attested violations of all human rights and all fundamental freedoms occurring in any part of the world and under any circumstances". Two working groups, the Working Group on Communications and the Working Group on Situations, have been established and are responsible, respectively, for examining written communications and bringing consistent patterns of gross and reliably attested violations of human rights and fundamental freedoms to the attention of the Human Rights Council (HRC).³ A new complaint procedure requires more knowledge to individual in international community and it far-fetched from UN and individual.

Treaty based procedures

Ten treaties bodies⁴ are generally considered to comprise the core of the UN human rights treaty system, and under each of the treaties, a committee of experts is established to monitor implementation by States parties.⁵ Treaty bodies adopt and publish general comments or general recommendations concerning the provisions and obligations contained in their respective treaties. These documents reflect the committees' experience in the reporting procedure and constitute an authoritative source of interpretation of human rights instruments.⁶ All except one of the treaty bodies review periodic reports submitted by States, and other functions performed

¹ Human Rights Handbook for Parliamentarians, Inter-Parliamentary Union and the United Nations (Office of the High Commissioner for Human Rights), 2016, p - 69.

² <http://www.ohchr.org/EN/HRBodies/SP/Pages/Welcomepage.aspx>.

³ <http://www.ohchr.org/EN/HRBodies/SP/Pages/Welcomepage.aspx>.

⁴ Human Rights Committee, Committee on Economic, Social and Cultural Rights, Committee on the Elimination of All Forms of Racial Discrimination, Committee on the Elimination of All Forms of Discrimination against Women, Committee on the Rights of the Child, Committee against Torture, Committee on Migrant Workers, Subcommittee on Prevention of Torture, Committee on the Rights of Persons with Disabilities, Committee on Enforced Disappearance.

⁵ The Committee on Economic, Social and Cultural Rights was established by the UN Economic and Social Council.

⁶ Human Rights Handbook for Parliamentarians, Inter-Parliamentary Union and the United Nations (Office of the High Commissioner for Human Rights), 2016, p.56.

by treaty bodies, although not common to all committees, include adoption of general comments or recommendations regarding the provisions of the various treaties, consideration of individual communications, and initiation of inquiry procedures.¹

The various supervisory procedures established in human rights treaties can be divided into four main groups:

- Reporting procedure;
- Inter-state complaint procedure;
- Individual complaint procedure; and
- Inquiries and other procedure.²

State Parties are required to submit their reports under each treaty that they have signed and ratified, as a process of self-evaluation. Reporting procedure is the management to show the progressive realization of the fulfill obligations by ratified states. Reporting time frame can different from one treaty to another. For example, although Article 16 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) asks, States Parties to submit reports every five years, Article (18) of the CEDAW, Article 35 of CRPD and Article 44 of the CRC require state parties to submit in every also five years.

Some human rights instruments allow states parties to initiate a procedure against another state party, which is considered not to be fulfilling its obligations under the instrument. In most cases, such a complaint may only be submitted if both the claimant and the defendant state have recognized the competence of the supervisory body to receive this type of complaint.³ International Covenant on Civil and Political Rights (ICCPR), International Convention on the Elimination of All Forms of Racial Discrimination (ICERD), Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment (CAT), Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), Convention for the Protection of All Persons from Enforced Disappearance (CED), Convention on the Rights of Person with Disabilities (CRPD) and International Convention on the Rights of Migrant Workers and Members of their Families (ICRMW) provide for inter-State complaints procedures, under which a State Party is entitled to submit a complaint to the relevant committee, claiming that another State Party is not fulfilling its treaty obligations. The procedure is based on the principle that every State Party to a human rights treaty has a legal interest in the fulfilment of the obligations of every other State Party.⁴

Individual complaint mechanisms are found of five conventions: in the 1st Optional Protocols of ICCPR, CEDAW, CRPD, ICESCR, and CRC allowed the committees to recognize the competency of individual complaints. CAT, CERD, ICMW, CED allowed the committees' competency to recognize the individual complaints unless the article reserves.⁵ Individual

¹ Office of the United Nations High Commissioner for Human Rights (OHCHR), *The United Nations: Human Rights Treaty System: An introduction to the core human rights treaties and treaty bodies* (Fact Sheet No. 30).

² Magdalena Sepulveda, Theo van Banning, Gudrun D. Gudmundsdottir, Christine Chamoun and Willem J.M van Genugten, *Human Rights Reference Handbook*, University for Peace, 2004, p - 54.

³ *Ibid*, p - 56.

⁴ *Human Rights Handbook for Parliamentarians, Inter-Parliamentary Union and the United Nations* (Office of the High Commissioner for Human Rights), 2016, p - 59.

⁵ <https://www.ohchr.org/Document/Publications/Factsheet.7Rev.2pdf>.

complaints under one of the above-mentioned treaties can be brought only against a state that has recognized the competence of the committee established under the relevant treaty or become party to the relevant optional protocols. In the case of the ICCPR and the CEDAW, a state recognizes the Committees' competence by becoming a party to an optional protocol, which has been added to the ICCPR and the CEDAW. In the case of the CAT and the CERD, states recognize the Committees' competence by making an express declaration under Articles 22 and 14 respectively. Anyone under the jurisdiction of a state party can lodge a complaint with a committee against a state that satisfies this condition, claiming that his or her rights under the relevant treaty have been violated. There is no formal time limit after the date of the alleged violation for filing a complaint under the relevant treaties, but the victim should submit a complaint as soon as possible after having exhausted domestic remedies.¹ Everyone has a chance to submit their rights violation individually and they get remedy to something from individual complaint mechanism.

A procedure of inquiry is an additional mechanism allowing treaty bodies to initiate investigations into treaty violations. The procedure is triggered in cases where a particular human rights committee receives information relating to "grave and systematic violations" of the convention. The Committee is empowered to invite the cooperation of the State Party in question to submit its observations. Thereafter, the Committee reviews the information submitted by the State Party and other reliable information submitted by other parties. The Committee may choose to authorize one or more of its members to conduct an inquiry and report "urgently" to the Committee. Such an inquiry may include a visit to the territory of the State Party, subject to that state's consent. The findings of any such inquiry are sent to the State Party, along with Committee views, recommendations and comments. The State Party is given an opportunity to respond within six months. The procedure is confidential; accordingly, the proceedings are entirely closed and the written findings are not made public. Follow-up procedures in relation to communications or inquiry mechanisms enhance compliance with recommendations and other measures.²

In developing the meaning of specific human rights norms, many Committees also rely heavily on procedures known as general recommendations or general comments. These are published interpretations of the content of human rights provisions. Often, NGOs have input into the creation of these important documents, both through invited participation in thematic discussions and other meetings with Committees, and through writing their own parallel documents. Recommendations often provide guidance to states on the content of their reports. While some recommendations interpret existing provisions of a treaty, others address new topics. The main value of recommendations is that they contribute to the interpretation of the human rights conventions and in so doing influence the progressive development of human rights treaty obligations.³

Treaty bodies typically offer several additional avenues for NGOs, UN specialized agencies and other organizations to have influence on the development and implementation of human rights norms. These may take the form of thematic discussions, held on a regular basis or

¹ Magdalena Sepulveda, Theo van Banning, Gudrun D. Gudmundsdottir, Christine Chamoun and Willem J.M van Genugten, *Human Rights Reference Handbook*, University for Peace, 2004, pp - 57 - 58.

² Julie A. Mertus, *The United Nations and Human Rights: A guide for a new era*, Second Edition, 2009, p - 77.

³ *Ibid* p - 78.

called to address a particular concern. In the case of the Committee on the Rights of the Child, a theme is chosen for “Days of Discussion,” an event which occurs annually coinciding with the annual meeting of the Committee. The CRC’s Days of Discussion on Children with Disabilities provides a good illustration as to the link between the treaty system and activism and coalition-building, and the crucial role of fora like the Days of Discussion in this process.¹

Myanmar has not ratified Optional Protocols of ICESCR, Optional Protocol of Article 1-5 CRPD for individual communications and Article 6-7 for inquiries or other procedures, Optional Protocol Article 1-7 of CEDAW for individual communications and Article 29 for inter-state communications are not using against Myanmar. Myanmar only submits state-reporting procedure under UN human rights treaty-body system. Treaty Committees received state reports and review which issue concluding observations and general comments.

Myanmar’s compliance on human rights mechanism

Myanmar submitted state-reports relating three human rights treaties except ICESCR and optional protocol of CRC. Committee on the Elimination of Discrimination against Women on concluding observations on the combined fourth and fifth periodic reports of Myanmar², the progress achieved since the consideration in 2008 of Myanmar’s combined second and third periodic reports³ in undertaking legislative reforms, in particular the adoption of the following legislation:

- (a) Minimum Wage Law of 22 March 2013, which provides that both women and men are entitled, without discrimination, to be paid the legal minimum wage;
- (b) Employment and Skill Development Law of 31 August 2013, which provides for the creation of internal job opportunities and the enhancement of worker skills, without discrimination on the basis of sex;
- (c) Social Security Law of 31 August 2012, which ensures that women and men enjoy, on an equal basis, the benefits of new insurance programmes, including the provision of maternity insurance for women.
- (d) The Labour Organization Law of 11 Oct 2011, which protect the rights of workers, to have good relations among the workers or between the employer and the worker, and to enable to form and carry out the labour organizations systematically and independently.
- (e) The Settlement of Labour Dispute Law of 28 Mar 2012, which safeguard the rights of workers of having good relationship between employer and workers and making peaceful workplace or obtaining the rights fairly, rightfully and quickly by settling the dispute of employer and worker justly.
- (f) Civil Service Personnel Rules of 26 Mar 2014, which enjoy those female service personnel, maternity leave: shall be entitled for six months from the date of the leave.

Myanmar has revised not only the legal framework but also policy framework for the improvement of HRs in domestic level as follow. State party’s effort to improve its policy

¹ Sydney D. Bailey, *The UN Security Council and Human Rights*, (New York: St. Martin’s Press), 1994, p- 123.

² Adopted by the Committee at its sixty-fourth session (4-22 July 2016).

³ CEDAW/C/MMR/3

framework aimed at accelerating the elimination of discrimination against women and advancing women's rights, such as the adoption of the following:

- (a) National strategic plan for the advancement of women, covering the period 2013-2022;
- (b) Five-year strategic plan for reproductive health, covering the period 2014-2018;
- (c) Thirty-year long-term health development plan, covering the period 2001-2030.

Similarly, after Myanmar ratified CRPD, it has evidenced that Myanmar has enacted the Law on the Rights of Person with Disabilities in 2015. Quota system for working opportunity was established.

Committee on the Rights of Persons with Disabilities on list of issues in relation to the initial report of Myanmar ¹ provides information on the measures taken to:

- (a) Amend the Code of Criminal Procedure, the Prisoners Act and the military to harmonize them with the Convention, especially to eliminate the concepts of "lunatic" and "criminal lunatic";
- (b) Recognize before the law all persons with disabilities, including the full legal capacity of persons with intellectual or psychosocial disabilities, and to implement supported decision-making instead of substituted decision-making;
- (c) Reduce the number of persons with disabilities under guardianship, particularly persons with psychosocial or intellectual disabilities, and inform the Committee about the number of persons that remain under full or partial guardianship as well as those whose legal capacity has been fully reinstated.

Myanmar efforts to address some of the concerns and recommendations made upon consideration of the State party's second report,² notes with regret that most of its recommendations have been insufficiently addressed or not addressed at all. Myanmar need to take all necessary measures to address the recommendations from the concluding observations of the second periodic report that have not been implemented, particularly those related to children involved in armed conflicts, discrimination and access to health and education. The Committee also urges the State party to, concomitantly, provide adequate follow-up to the recommendations contained in the present concluding observations.

Regarding to the legislation, while noting the indication given by the State party that the 1993 Child Law is being reviewed to integrate some provisions of the Convention, the Committee is concerned that all principles and provisions of the Convention have not yet been fully incorporated into domestic law and that legal provisions contrary to the Convention remain in force. The Committee also expresses its concern about the application of different sources of law, namely codified and customary laws, which may undermine the State party's efforts to harmonize its legislation with the Convention.

The Committee urges the State party to promptly amend the 1993 Child Law and ensure that it incorporates all principles and provisions of the Convention and undertake a comprehensive review of domestic legislation, namely codified and customary laws, in order to ensure that it is brought into compliance with the Convention. In summarize that above,

¹ Adopted by the pre-sessional working group at its eleventh session (8–11 April 2019).

² CRC/C/15/Add.237

Myanmar's obligations link as follows; it may seem odd that a State would voluntarily agree to a treaty that may limit its obvious power. A question arises; why would they do this? There are a number of reasons.

1. States consist of people who prefer to have their rights protected. It is frequently forgotten that States are run by humans who enjoy their rights, or they rely on civil society for their support be to in government. Civil society pressure is a significant force in persuading States to agree to treaties. Indeed, civil society organizations in many countries have organized events to encourage or pressure States to sign on to international conventions. In Myanmar, civil society urges to conclude ICCPR for all can get in line with ICCPR Rights.
2. States already agree with the treaty's object and purpose. In some cases, the treaty creates little extra commitment for the State because they may already have much of the rights in their domestic law.
3. States are concerned about their global image. Reputation matters in the international area, and States that oppose human rights, or are human rights violators, are often named and shamed for their record. Thus, even states that one would assume would disagree with human rights, still sign human rights treaties.
4. International pressure. States can be encouraged (or even forced) to agree to human rights treaties by other States, or by international organizations. For example, it may be in a State's best interests to agree to some treaties in order to receive aid, or to become a member of an organization such as the World Trade Organization (WTO).
5. No intention to comply anyway. Some States may be insincere when agreeing to a treaty: they have no intention to comply, but think it will improve their image so they sign on. However, as research has shown, a false agreement in the long term often results in the State complying anyway, for when people learn of their rights, they may force the State to comply.
6. Following the herd. Many States agree to, or reject, treaties to stay in line with their regional and political partners.¹

Why states ratify treaty? The answer of this question in two aspects; the states have to chance a check upon their rights and abstain from arbitrary action within international community.

Human Rights in Myanmar

Myanmar revised due to the treaty monitoring mechanism, such as, Child Rights Law 24 July 2019 including 30 chapters and 121 Sections and Protection and Prevention of Violence against Women draft Law with 19 Chapters. The implementation of human rights treaties, Myanmar not reach as well as reporting circle delay and ineffective of inter-state complaint procedure; and individual complaint procedure.

Myanmar has ratified and acceded the obligations of a number of international treaties. By ratifying a treaty, Myanmar is obligated under international law to comply with the provisions

¹ An introduction to Human Rights in South East Asia, First Edition, p - 45.

of the treaty in good faith and cannot use domestic laws to justify a failure to comply with treaty obligations.¹ The most important treaty that Myanmar is a party to being the UN Charter, which is considered a “super-treaty” because Article 103 of the Charter mandates that any conflict between Charter obligations and those under any other international agreement be resolved in favour of the Charter. A more extensive list of international human rights treaties that Myanmar is party to is below in Schedule 1.²

Myanmar participated in human rights treaties with these status in ICESCR - Declaration on Article 1 (Self-determination), CEDAW - Reservation on Article 29 (dispute on interpretation or application of the convention), CRC – Article 15 (Freedom of Expression (FoE) and Freedom of Association and Peaceful Assembly (FoPA), National security), Article 37 (Torture, deprived of liberty unlawfully). Reporting procedure of Myanmar listed below in Schedule 2.

¹ Article 26 of the Vienna Convention on the Law of Treaties 1969.

² Ratification of a treaty notifies the state’s intent to be bound by the terms of the treaty and gives legal effect to the objective and purpose of the treaty. Signatory of a treaty expresses the states which endorse the principles contained within the treaty by signing without having it be legally binding upon them. Accession, though less common, has the same legal effect as ratification; after a treaty has entered into force, a state which did not participate in its drafting can still become a member by acceding to the treaty.

Schedule 1 - Myanmar's International Human Rights Treaties

Title	Signature	Ratification	Accession
Convention on the Prevention and Punishment of the Crime of Genocide (New York, 9 Dec 1948)	30 Dec 1949	14 Mar 1956	
Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) (New York, 18 Dec 1979)			22 July 1997
Convention on the Political Rights of Women (New York, 31 March 1953)	14 Sep 1954		
International Convention for the Suppression of the Traffic in Women and Children (New York, on 12 November 1947)	13 May 1949		
Convention for the Suppression of the Traffic in Persons and of the Exploitation of the Prostitution of Others (New York, 21 March 1950)	14 Mar 1956		
Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime (New York, 15 November 2000)			30 Mar 2004
Convention on the Rights of Persons with Disabilities (CRPD) (New York, 13 December 2006)			7 Dec 2011
Convention on the Rights of the Child (CRC) (New York, 20 November 1989)			15 Jul 1991
Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict (25 May 2000)	28 Sep 2015		
Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography (25 May 2000)			16 Jan 2012
International Covenant on Economic, Social and Cultural Rights (16 December 1966)	16 Jul 2015	6 Oct 2017	
Freedom of Association and Protection of the Right to Organize, ILO Convention 87 (4 July 1950)		4 Mar 1955	

Schedule 2 - Myanmar and Human Rights Report Procedure

Conventions	Reporting Cycle Due	Last State Party's Report
CRC	V - VI 13 February 2017	III - VI 15 July 2009
CEDAW	VI 31 July 2020	IV - V Report under Exceptional Reporting Procedure 8 February 2019
CRPD	I	Initial Report 19 November 2015
OP-CRC-SC	Initial Report 15 February 2014	
ICESCR	6 January 2020	

Myanmar National Human Rights Commission (MNHRC)

Myanmar National Human Rights Commission (MNHRC) was established in September 2011 by Presidential Ordinance 34/2011 to promote and protect human rights. The MNHRC will undertake a rigorous approach to evaluating its progress in achieving its strategic goals. Monitoring and evaluation mechanism will be established in order to ensure on going performance monitoring and evaluation of the strategic plan and the annual work plan. In order to make inform assessment of the MNHRC's performance, quantitative and qualitative measurement tools will be utilized, which will establish benchmarks and the ability to track trends over time. ¹ Myanmar National Human Rights Commission Law enacted in 2014 and the activities of MNHRC are review of proposed legislation to access consistency with international and domestic human rights law, development and implementation of a programme to review existing legislation to access consistency with international and domestic human rights law, investigation of and inquire into alleged violations of civil, political, economic, social and cultural rights including women rights, violence against women, the rights of person with disability, torture prevention, migrant, business and human rights, through research, public consultations and hearings, human rights education on the issue under investigation and inquire, drafting reports and recommendation and advocacy for acceptance and implementation of recommendation, conduct of visit to areas of alleged human rights violations, and activity related to the reports under Conventions of Myanmar's ratified. MNHRC is the main role performance of the human rights situation in treaty body reporting mechanism.

Finding

The four International human rights treaties ratified by Myanmar out of nine International Human Rights Treaties are a mile stone for Myanmar human rights situations and Myanmar is tries to sign as a next step to the International Covenant on Civil and Political Rights now. It is the perspective of the implementation of human rights in Myanmar. The most important benefit of ratification human rights treaty is the actual improvement in the human rights of individuals and groups in the ratifying State. Ultimately, a State with a strong commitment to human rights is likely to be a State that is well-governed, secure and stable. Myanmar should to seek international assistance and cooperation and availing itself of technical assistance in the

¹ Myanmar National Human Rights Commission, Strategic Plan, 2014 – 2015, p – 16.

development, continue to cooperate with specialized agencies and programme of the United Nations system. MNHRC will undertake a rigorous approach to evaluating its progress in achieving its strategic goals.

Conclusion

By ratifying of international human rights treaties, Myanmar should complies with treaty-based monitoring mechanism. State report writing procedure should be cooperating with international expert and technical assistance. Promoting public awareness of human rights and efforts to combat all forms of discrimination through the provision of information and education strengthen by MNHRC. Complaint mechanism, individual those had injured the violation of human rights can access MNHRC's human rights protection functions. MNHRC enhance the function to monitor and investigate human rights abuses and assist victim to obtain remedies. Myanmar should increase progressively ratifies all core human rights treaties and incorporates those treaties into domestic law.

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