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The Diversity to Reflect Domestic Interests on International Trade Policy: 
Comparison of FTA Politics in Korea and Japan and the Role of Indirect Lobbying

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Abstract
This study asks why the government of Korea paid 180 billion US Dollars as agricultural subsidies in ratifying the Free Trade Agreement (FTA) with the United States despite the nation’s farm lobby has not been influential. Compared with Japan, which the farm lobby has had rich political resources, the two major Korean farm lobby of the Korea Advanced Farmers Federation (KAFF) and the Korea Peasant League (KPL) had poor resources and had to rely on the street demonstration to express their opposition to the FTA. While the Japanese farm lobby gained the government’s concession as a result of conventional style of lobbying, however, the street demonstration by the KAFF and the KPL played the role of indirect lobbying and pressured the government to increase the subsidies. This indicates diverse political channel to reflect political-economic interests on public policies.

Keywords: trade liberalization, farm lobby, Korea, Japan, indirect lobbying
Introduction

This study asks why the government of South Korea (hereafter Korea) paid huge budget for its agricultural sector as the compensation of the Korea-United States Free Trade Agreement (KORUS FTA) comparing the political process of the Trans-Pacific Partnership (TPP) in Japan.

Korea and Japan shares the characteristics of agriculture. Both of the two have mountainous landscape, which does not fit to use as farmland. In both of the two, each farm household cultivates less than three hectares, while an average farmer in Western Europe cultivates more than ten hectares. And most part of the two countries has cold and long winter, which prevents agricultural works. Therefore, both Korean and Japanese agriculture is too vulnerable to compete in international competition. This has been the major reason why most Korean and Japanese farmers have opposed to free trade.

On the other hand, the two countries’ agriculture has distinguishing point: Farm lobby. In spite of its democratization in 1987, the farmers in Korea have not been organized influential political lobby such as the Japan Agriculture Group (JA Group) in Japan. The JA Group has been one of the most influential lobbying groups in Japan and the powerful supporter for the conservative Liberal Democratic Party (LDP). Covering more than 10 million rural residents as its membership, which is equal to 10% of the nation’s total voters, the JA Group has pressured the LDP government to protect Japanese agriculture. Its lobbying activity has gained huge concession from the government and the ruling party. In 1993, for example, the JA Group gained approximately half billion US Dollars as agricultural subsidies in exchange for approving the Uruguay Round Agreement of the General Agreement on Tariffs and Trade. In Korea, meanwhile, two nationwide farmers’ organizations of the Korea Advanced Farmers’ Federation (KAFF) and the Korea Peasants’ League (KPL) have been politically marginalized in the nation’s political processes even after the democratization in 1987. The KAFF covers only 400 thousands farmers, one third of the total population of Korean farmers. The KPL covers 20 thousand farmers, less than 2% of total farm population. Differently from the JA Group in Japan, these two Korean groups have no direct connections to the Office of the President, the National Assembly, or ruling parties. Both the KAFF and the KPL have employed street demonstration as a major tool of their political activities instead of pressuring policymakers mobilizing financial donation and ballots. This political weakness of farm lobby has been interpreted as the reason why Korean government has rapidly liberalized its trade.

While the farmers have not been able to organized influential lobbying groups, however, the Government of Korea has paid huge budget for agriculture in liberalizing the nation’s trade structure. In the case of the KORUS FTA, the Ministry of Agriculture, Forestry, and Rural Affairs (MAFRA) paid totally 21 trillion Won, or

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1 The JA-Zenchu (n.d.)
2 Yoshida (2012)
3 KAFF (2014)
4 Nawakura (2017)
180 billion US Dollars, from 2009 to 2018\(^5\). Meanwhile, the Ministry of Agriculture, Forestry and Fishery of Japan expended 310 billion Yen, or 30 billion US Dollars, as agricultural subsidies on the TPP, de facto US-Japan TPP, in financial year 2016\(^6\). Even compared with Japan, where the farmers have organized influential lobby, Korea’s farm sector gained much financial concession from its government in the process of trade liberalization.

Then, why did Korean farmers gain the huge compensation in spite of their poor political channel? Or why did the government of Korea expend huge domestic compensation for farm sector despite it is relatively free from the pressure of farm lobby? This study answers to these question focusing on the Korea’s political process on the KORUS FTA and the Japan’s one on the TPP. These two free trade pacts are ideal for comparison. The KORUS FTA is the largest FTA for Korea and the TPP is also the largest FTA for Japan\(^7\). In terms of agricultural products, the United States pressured Korea and Japan to remove most tariffs of agricultural products in the negotiation of these pacts. And these pacts triggered the farmers’ strong opposition against the trade liberalization with the United States both in Korea and Japan.

The next chapter reviews previous studies on FTA politics and farm lobby in Korea and Japan. The Chapter 2 shows a hypothesis in this study. The Chapter 3 sees the farm lobby politics in Korea. The Chapter 4 sees that in Japan. And the Chapter 5 concludes this study.

1. Previous Studies on FTAs and Farm Lobby in Korea and Japan

Compared with the studies on farm lobby in the Western countries, those on Asian democratic countries have been minor. As one of the minor studies, Aurelia George Mulgan’s work in 2000\(^8\) explains the lobbying process by the JA Group on the LDP. According to her study, the JA Group has pressured the LDP by mobilizing its huge membership, which covers most rural population in Japan. She also points out that the JA Group has not only lobbied the government and the LDP but also led political campaign to oppose unfavorable policies such as trade liberalization. From the perspective of a staff of the LDP, Osamu Yoshida’s memoir in 2012\(^9\) reveals that the LDP lawmakers, particularly elected in rural constituencies, depended on political support by the JA Group. The two works above mention to single non transferrable vote (SNTV) system, the election system employed in the House of Representatives before 1994 and the House of Councillors still today, as the base for the JA Group’s lobbying. The SNTV is the system to elect more than two representatives per constituency while each voter can write only one candidate’s name on ballot. Under this system, parties need to nominate more than two candidates in every constituency and this encourages competition not only between parties but also among candidates in the same party. The SNTV system has, therefore, given candidates to rely on interest groups such as the JA Group rather than their party headquarters and this has made the JA Group influential on candidates in rural constituencies.

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\(^5\) The Chosun Ilbo Dec. 18, 2008
\(^6\) Ministry of Agriculture, Forestry and Fishery (2015)
\(^7\) For the detail of the TPP and the KORUS FTA, see World Policy (2016)
\(^8\) Mulgan (2000)
\(^9\) Yoshida (2012)
In addition to the features of SNTV system, the Japan’s election system has also worked to make rural constituencies over representative. Jun Saito and Yuki Asaba’s study in 2012\textsuperscript{10} compared the FTA politics in Korea and Japan and concluded that the over representation in the House of Councillors has prevented Japanese government from promoting free trade.

After the SNTV system was abolished in the House of Representatives in 1994, therefore, the JA Group lost one of the major channels to be influential on policymakers. Ida’s work in 2015\textsuperscript{11} mentions that the JA Zenchu’s political influence has been weakened since the 1990s. In fact, Yasuyuki Kobayashi, the chief of international planning in the Central Union of Agricultural Co-operatives (JA-Zenchu\textsuperscript{12}) confessed that the abolish of SNTV and the introduction of single member constituency system to the House of Representatives in 1996 weakened the JA Group’s political channel to the LDP\textsuperscript{13}.

However, Otawara’s work in 2008\textsuperscript{14} points out that the JA Group has already recognized that its lobbying channels has been narrow and has taken some countermeasures to sustain its political influence. According to Otawara, since the 1980s, the JA Group has sought the way to gain the support by broad public opinion to be influential socio-politically.

Compared with those on the farm lobby in Japan, previous studies on farmers’ political action in Korea are rare. Though both the KAFF and the KPL have employed street demonstration as the main tool of their political activities\textsuperscript{15}, the political influence and outcome of the street demonstration have been rarely analyzed in the field of political science. A few works to analyze the Korean farmers’ street demonstration have shown skeptical view on the achievement of their political action. Go Myong-hyun and Ham Chai-bong’s study in 2009\textsuperscript{16} analyzed the socio-political feature of the street demonstration to resist the import of US beef in 2008 and concluded that the demonstration was social phenomenon like epidemic, or fashion. Nawakura’s study in 2017\textsuperscript{17} analyzed the KAFF and the KPL’s protest against the Uruguay Round Agreement in 1993 and concluded that the Korean farmers’ political action depending on street demonstration has formed poor channels with policymakers and let themselves politically less influential than the JA in Japan. In short, both Go and Ham’s and Nawakura’s studies see the Korean farmers’ peripheral political action as minor and less influential activities from political peripheries. The argument in the previous studies above, however, cannot explain why the Korean farmers’ peripheral political action has gained some concession by the government such as the expenditure of 180 billion dollars as the compensation of the KORUS-FTA.

\textsuperscript{10} Saito and Asaba (2012)
\textsuperscript{11} Ida (2015)
\textsuperscript{12} JA-Zenchu works as the national center of the JA-Group.
\textsuperscript{13} Author’s interview at the JA Group Headquarters in Tokyo on November 28, 2017.
\textsuperscript{14} Otawara (2008)
\textsuperscript{15} In the case of the protest to the Uruguay Round Agreement in 1993, for example, the KPL mostly depended on street demonstration to express their anger on trade liberalization.
\textsuperscript{16} Go and Ham (2009)
\textsuperscript{17} Nawakura (2017)
Previous studies in political studies have offered insufficient explanation on the achievement of the Korean farmers’ political action. Meanwhile, some recent studies in sociology point out that the street action by Korean farmers and their allies has been operated strategically to achieve their goals. Lee Hang-woo’s research in 2012 argues\(^{18}\) that the street demonstration 2008 against the import of US beef was not simple bottom up networking activities but also collective action mobilized by top-down order to achieve a particular goal. Also the cross national by Ho Ming-sho and Hong Chen-shuo sees that the Korea’s anti-US beef protest in 2008 aims to gain particular political goal\(^{19}\).

The literature review above suggests that this study needs some framework to see street demonstration, which the KAFF and KPL have employed, as a political action to achieve some particular goal. The following chapter shows the framework.

2. Theoretical Model and Hypothesis

This study employs the concept of indirect lobbying, which is the model to see social movement as a kind of lobbying, as the framework for analysis. While traditional concept of lobbying employed in political science has seen direct transaction between policy makers and interest groups, newly emerged concept of indirect lobbying defines social movement such as street demonstration, public relations, and petitions as a lobbying because they indirectly influence the decision of policy makers via the encouragement of public opinion as indicated in Figure 1. This framework emerged in the study of the European Union (EU) to ask why lobbying is active in Brussels despite most EU officers are not elected by the people’s poll. On this question, the study of Bruycker in 2015\(^{20}\) and Duer in 2015\(^{21}\) answer that the interest groups in Brussels promote public opinion to sympathize their preference by appearing on mass media’s news programs, advertisement, and social networking sites on the Internet. The promoted public opinion, thus, works as a pressure on policymakers in the EU even if they are not elected by citizens directly because the decision making against the public opinion causes the distrust on the EU and it can prevent the policy implementation by the EU in near future.

\(^{18}\) Lee (2012)
\(^{19}\) Ho and Hong (2012). However, their study cannot show clear causal relation between the anti-US beef protest and the Korean government’s counteractions.
\(^{20}\) Bruycker (2015)
\(^{21}\) Duer (2015)
In its history of mostly two decades, the studies on lobbying in the EU have revealed some important feature of indirect lobbying. First, though indirect lobbying can gain political concession from the government with lower cost than direct lobbying, the content of the concession cannot match the lobbyists’ demand\(^{22}\). Though Korean government paid budget as concession, the KAFF and the KPL did not demanded subsidies but refuse the FTA itself. Second, while direct lobbying is the influential activity to change the fundamental direction policy such as trade liberalization, indirect lobbying can be useful to gain more governmental expenditure such as subsidies\(^{23}\). This fact is expected to contribute to explain why the Korean government expended the huge compensation. Third, in Europe, while newly emerged interest group coalitions attempt indirect lobbying in the EU level, most conventional interest groups remain to act in national level and tend to concentrate on direct lobbying on the governmental officials in the member states’ government\(^ {24}\). This fact points out that only few interest groups attempt ‘dual’ lobbying, meaning that one interest group attempts both direct and indirect lobbying at the same time. According to the study by Otawara as observed above, meanwhile, the JA Group has sought to gain the support by public opinion to sustain its political influence while directly lobbying the LDP. Analysis on the recent JA Group, which attempt both direct and indirect lobbying, can contribute to the development of indirect lobbying model.

As seen above, indirect lobbying is like to be optimal framework to review the recent farm lobby in Korea and Japan. Based on the feature of indirect lobbying, the hypothesis of this study is launched as below.

**H1**: In the political process of the KORUS-FTA, the KAFF and the KPL mobilized street demonstration and it played the role of indirect lobbying. Because the indirect lobbying worked, the government of Korea expended huge budget as compensation.

\(^{22}\) Binderkrantz et al (2015)  
\(^{23}\) Nelson (2011)  
\(^{24}\) Rasmussen (2012)
H2: In the political process of the TPP, the JA Group attempted dual lobbying. Mobilizing both direct and indirect lobbying, the Group gained the budget of 30 billion dollars.

The following two chapters test whether the hypothesis above is approved.

3. Korean Farmers’ Lobbying against the Korea-US FTA

The government of Korea agreed with Washington on the KORUS FTA at the end of March 2007. A few days later, the KAFF and the KPL began their protest against the FTA. Pointing out the fear of mad cow diseases, the two farmers’ associations mobilized street demonstration insisting ‘The KORUS FTA threatens our food safety.’ For both the KAFF and the KPL, there was only one tool to express their opposition to the FTA in national level: Mass media. Though the KAFF had built its own political channels to policymakers, they formed communication channels to only municipal and provincial assemblies. The KPL, with the membership of only twenty thousand, had no organizational capacity to lobby or to build platforms for lobbying by themselves. In the highly limited resources, The KAFF and the KPL attempted to encourage the mass public’s opposition to the KORUS FTA.

The public disputes in spring 2008 on the import of US beef played the role of turning point for the KAFF and the KPL's activities against the KORUS FTA. Though Korea had banned the import of beef from the United States since 2004 due to the risk of mad cow disease, the newly inaugurated conservative President Lee Myung-bak decided to resume the import. This decision triggered the anger of public opinion of Korea because most opinion polls by major newspapers in early 2008 had indicated that the majority of Koreans had opposed to import risky beef from the United States. In April, twenty thousand citizens assembled to central Seoul and held candlelight demonstration to protest the government's decision.

The KAFF and the KPL joined the candlelight demonstration and insisted that the KORUS FTA encouraged the import of dangerous food such as infected beef.

The government had known that the KORUS FTA could cause serious damage. The Ministry of Agriculture, Forestry and Rural Affairs (MAFRA) estimated the annual damage of Korean agriculture caused by the FTA as 1.2 trillion won, or 10 billion US Dollars, prior to the demonstration in spring 2008. Based on the estimation, the

25 *The Chosun Ilbo* April 2, 2007
26 Since the end of the 1980s, large number of KAFF members have run municipal or provincial elections and some of them have won. The elected members have acted as channels to connect the farmers and policymakers. However, these KAFF’s activities have not reached to the level of the National Assembly (KAFF, 2014).
27 Instead of lobbying by itself, the KPL has formed political alliance with trade unions and student groups to assist progressive parties.
28 To avoid the risk of infected beef, the government of Korea permitted to import the beef from only cow less than thirty month old and introduced the inspection on the imported beef.
29 Realmeter (2008)
30 *The Dong-a Ilbo* Dec. 19, 2008
MAFRA launched the domestic compensation for farmers with 20 trillion Won, or 165 billion Won, during one decade following the FTA. However, both the KAFF and the KPL refused the governmental proposal because the compensation could not contribute to the sustainable production of Korean agriculture but cover a part of financial loss of farming households. Setting 'sustainable production of Korean agriculture' as the goal, the two farmers' associations continued their anti-FTA demonstration after the government's proposal of financial compensation.

The anti-US beef candlelight protest expanded its size by forming networks encouraged by some Internet websites such as chatting. Though the networks had had no particular headquarters or leaders, some social activists launched the National Headquarters to Protest the Import of the Infected US (hereafter the National Headquarters) Beef in April 2008. This was an ad hoc but nationwide organization to cover most social groups to oppose the import of US beef. Following the broad protest to the import, most opinion polls conducted by major newspapers in early summer of 2008 indicated that the majority of public opinion was anxious to import risky food from overseas.

The KAFF and the KPL joined the nationwide actions and insisted that the KORUS FTA could encourage the flood of imported risky foods such as infected beef. This flaming of argument contributed to link the beef import disputes and the KORUS FTA. The street protest opposed to not only beef import but also the KORUS FTA.

The broad opposition against the KORUS FTA appeared on TV news and newspapers almost everyday from spring to summer 2008. It gradually influenced the behavior of major opposition parties in the National Assembly. In the government-opposition party meeting on April 24 2008, Son Hak-gyu, the Chairman of the opposition Democratic Party, insisted on the President Lee that the ratification of the KORUS FTA is 'difficult due to the beef import disputes.'

While opposition parties began to oppose the ratification of the KORUS FTA, the social activists including the KAFF and the KPL continued the street protest. The continuous protest encouraged opposition parties further. When the government formally proposed the National Assembly to ratify the KORUS FTA, two major opposition parties of the Democratic Party and the Democratic Labor Party expressed their will to collaborate to disapprove the FTA.

Backed by the street protest, the opposition parties justified their protest against the KORUS FTA as a just and a democratic action. When a task force of the Office of the President declared to push the KORUS FTA by strengthening public relation in the end of October 2008 in spite of the broad opposition, Won Hye-yeong, a lawmaker of the Democratic Party, criticized the government was stealing the people. The opposition parties' strong opposition indicated that the government had to make some compromise on the FTA.

31 Author's interview at the KPL headquarters in Seoul on September 16, 2016.
32 Realmeter (2008)
33 KAFF (2014)
34 The Chosun Ilbo April 25, 2008
35 The Dong-a Ilbo Nov. 1, 2008
On December 18, 2008, Chang Tae-pyung, the Minister for Agriculture, Forestry and Rural Affairs held a press conference and the MAFRA would pay extra one trillion won, or eight billion US Dollars, as domestic compensation to care the damage of agriculture by the KORUS FTA. The KAFF and the KPL demanded the FTA itself and refused the financial compensation. However, it is fact that the two farmers’ associations’ protest on the street influenced the behavior of opposition parties in the National Assembly and contributed to the financial compromise of the government on the FTA.

4. Japanese Farmers’ Lobbying against the Trans-Pacific Partnership

Since November 2010, when Prime Minister Naoto Kan officially expressed his interest in joining the TPP, the JA Group has resisted to the multilateral trade liberalization pact of Asia-Pacific region. In July 2011, JA-Zenchu President Shigeru Motegi declared to resist the TPP without compromise. Following the Motegi’s declaration, the JA group activated its opposition to the TPP. In December 2012, a JA branch in Miyagi Prefecture held a joint meeting to oppose the TPP with the Democratic Medical Institution of Miyagi and Consumers' Co-operative branches in Miyagi Prefecture. This joint meeting was remarkable for the JA Group because the Democratic Medical Institution has been a traditional supporter for the Japan Communist Party, the most hostile opposition party in the Diet. Also, joint action by the JA Group and the Consumers’ Co-operative was distinctive event in the history of Japanese politics because the Consumers’ Co-operative Act of Japan restricts the Co-op’s political activity. Yasuyuki Kobayashi, chief of international planning in the JA-Zenchu told the author that the JA Group made the effort to encourage anti-TPP public opinion because conventional direct lobbying has been difficult.

After the government officially joined the TPP negotiation in March 2013, the JA Group began to lobby the LDP directly while continuing the promotion of public opinion against the TPP. After the contact of the cadres of the JA Group and the LDP lawmakers, in April 2013, the Standing Committee of Agriculture, Forestry, and Fishery in the House of Councillors passed a resolution on the TPP. This resolution demands the government to exclude sensitive agricultural products such as rice, wheat, meat, dairy products, and sugar from the TPP negotiation. This resolution worked as a ‘defense line’ for the JA Group to lobby against the TPP directly and indirectly.

Based on the resolution in the Diet, the JA Group pressured the LDP lawmakers. Particularly in the Diet elections, the JA Group demanded every LDP candidates to approve the resolution and oppose the TPP. As mentioned above, the JA Group’s political influence has been weakened for the last two decades. Mass media reported the JA Group’s lobbying was not powerful as ever. As Ida points out, however,

36 The Nogyo Kyodo Kumiai Shimbun June 22, 2011
37 JA Miyagi (2013)
38 Author’s interview at the JA Group Headquarters in Tokyo on November 28, 2017.
39 House of Councillors (2013)
40 The Sankei Shimbun Dec. 6, 2014
41 The Sankei Shimbun Dec. 6, 2014
42 Ida (2015)
prefectural branches of the JA Group sustained its organizational resources to mobilize farmers and to contact lawmakers. Based on these resources, the JA Group lobbied the LDP.

After the resolution in the Diet, the JA Group and the LDP played power game on the TPP. Because the LDP had decreased its dependence on rural collective ballots, the Party rejected to accept every request by the JA Group. Shinjiro Koizumi, a LDP lawmaker, warned the JA Group on May 2016 that the Group needs to reform its inefficient retailing networks to fight competition following the TPP. The Party’s approach to the JA Group was based on the confidence that the Party does not need necessarily the support from the JA Group while the JA Group needs legal protection on agriculture provided by the LDP government. Based on the confidence, in the elections of the Diet, the LDP demanded the JA Group to support some candidates who approved the TPP. The JA Group, on the other hand, mobilized its huge membership to be influential on the LDP government. While supporting some pro-TPP LDP candidates in a few prefectures, the Group swung its support to opposition parties in other prefectures. Through these power games, the JA Group demanded the LDP government to protect Japanese agriculture in the TPP.

On the other hand, the JA Group’s efforts to gain the support of wider public opinion in grass roots level fell into the deadlock until the end of 2013. First of all, the cooperation with pro-Communist Party associations was not sustainable. As the Diet elections were repeatedly held in 2013, 2014, and 2016, JA Group supported the LDP and it prevented to strengthen the cooperation with pro-opposition party organizations. Also, the cooperation with Consumers’ Co-operatives and trade unions faced the gap of ideology. While the JA Group has been one of the core supporters for the conservative LDP, Consumers’ Co-operatives and trade unions have been politically neutral or pro-opposition parties. Due to the lack of cross-sectional action as seen in Korea, the JA Group’s action to promote anti-TPP did not work substantially. Differently from Korea, anti-TPP street action with tens of thousands of participants did not occur in Tokyo. Though fifty to hundred JA youth members organized street demonstration in Tokyo or their home town, the small size of protest did not attract mass media. Furthermore, the JA Group’s street demonstration changed its message frequently. In the case of the protest in Yamagata Prefecture in summer 2015, for example, some local JA units insisted that the government had to follow the Diet resolution, other units insisted to reject the TPP without any compromise. These

43 The Mainichi Shimbun May 2, 2016
44 Mr. X (anonymous), a JA cadre in Miyagi prefecture, confessed the author that the JA branches in Miyagi prefecture supported some LDP candidates including the supporters for the TPP against their will in the past elections.
45 Hirokazu Haraguchi, one of the famous lawmakers in opposition parties elected in Saga Prefecture, confessed to the author’s interview on May 30, 2018 that he had gained substantial support from farmers’ organizations in his home constituency.
46 Yasuyuki Kobayashi of the JA Zenchu told the authors that the Consumers’ Co-operatives and trade unions had demanded the JA Group to sympathize their ideology while not a few JA cadres have had allergy on progressive activism.
47 From 2012 to 2014, only a few anti-TPP street demonstrations by the JA Group appeared as the headlines of nationwide-issued daily newspapers.
48 JA Okitama (2015)
resulted in that the JA Group insisted different message in different opportunity and place. It caused the confusion of mass public in knowing the JA Group’s opinion on the TPP. In short, the partisanship and the absence of preparation to organize street action prevented the JA Group’s activities in grassroots level.

Though the indirect lobbying by the JA Group did not work substantially, its direct lobbying on the LDP government functioned. While sustaining the TPP negotiation, the LDP began to launch financial support to protect farm sector under the TPP. On November 2015, the LDP lawmakers held a meeting to demand the Ministry of Agriculture, Forestry and Fishery (MAFF) to prepare the budget for protecting agriculture. Besides the meeting the LDP lawmakers also held the meeting with the delegates of the JA Group49. Though Prime Minister Abe and his government pushed the TPP, individual lawmakers in the LDP needed collective ballots of the farmers for coming elections. Finally the Party decided to demand the MAFF to implement agriculture protection measures following the TPP and to expend more than 30 billion dollars for the first financial year50. Because the government estimated the agricultural sector’s damage caused by the TPP as 130 to 210 billion Yen, or 12 to 19 billion US Dollars, per year51, the size of the expenditure of 30 dollars was not insufficient. The MAFF accepted the LDP’s plan and declared to secure the 30 billion Dollars of budget not only the first financial year but also following years.

In the TPP politics, the JA Group attempted both direct and indirect lobbying to protect its interests. While conventional direct lobbying worked and brought the Group the subsidies more than 30 billion Dollars, indirect lobbying did not due to the Group’s partisanship. In other words, the JA Group’s strong tie with the conservative LDP prevented its indirect lobbying while the tie encouraged the JA Group’s direct lobbying. This indicates indirect lobbying requires different resources from direct one to its actors.

5. Conclusion and Theoretical Implication

Korea and Japan have shared their agricultural structure and, in recent years, have faced similar challenge: Trade liberalization including agricultural products. While the government of Korea launched the KORUS FTA, also Japan joined the TPP. In addition, both the two countries have expended huge budget as compensation for agriculture in exchange for ratifying the free trade pacts with the United States despite the two countries have different structure in terms of farm lobby. Setting two hypotheses, this study has asked why Korean government paid huge budget for agriculture in the absence of influential farm lobby in comparison with Japan.

The analysis above indicates the answer to the question. First, the political process of Korea indicates that the Hypothesis 1 is approved. While the KAFF and the KPL had poor political resources for conventional direct lobbying, the two farm associations operated street protest to express their opposition against the KORUS FTA. Encouraged by the beef import disputes, their street protest got broader social sympathy to oppose the FTA. The mass public’s protest influenced the behavior of

49 MP Kazuo Maeda’s Website (2015)
50 The Nogyo Kyodo Kumiai Shim bun Dec. 18, 2015
51 MAFF (n.d.)
opposition parties in the National Assembly and contributed the government’s concession to expend another one billion won for the compensation for agricultural sector. In increasing the government’s expenditure of concession, in short, indirect lobbying worked.

Second, meanwhile, the Hypothesis 2 is not approved. Though the JA Group attempted get broad social support to resist the TPP, its partisanship and absence of preparation prevented to form social alliance. Instead, the JA Group gained the government’s expenditure of 30 billion dollars as the result of conventional direct lobbying on the ruling LDP.

From the perspective of the theory of lobbying, the comparative analysis in this study indicates that indirect lobbying can maximize the influence of interest groups with poor political resources. The previous studies in European politics indicate that indirect lobbying can be a useful tool to make interest groups influential on government organizations whose officers are not elected by the citizens’ vote. On the other hand, this study shows that the interest groups with poor resources such as the KAFF and the KPL can be as influential as those with rich resources such as the JA Group if they succeed to operate indirect lobbying effectively. This means that the lobbying channels can be more diverse than the studies of classic direct lobbying studies have thought.

However, the KAFF and the KPL’s indirect lobbying observed in this case study was encouraged by an intervening variable: The beef import disputes prior to the ratification of the KORUS FTA. It is the future’s subject to generalize the achievement of the two groups’ indirect lobbying.
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Assessing Quality of Life and Menopausal Symptoms among Lothas of Nagaland, India

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Satwanti Kapoor, University of Delhi, India
Meenal Dhall, University of Delhi, India

Abstract
The study aims at assessing the quality of life and menopausal symptoms in rural population of Wozhuro range, Nagaland. In the studied population a sample size of 202 adult females were selected with age ranging from 35-60 years and were divided into two groups based on the menopausal status. An exclusion criterion was selected where those participants who were pregnant, undergone induced menopause and unmarried were excluded from the study. The quality of life was assessed using WHOQOL-BREF, Greene Climacteric Scale for menopausal symptoms and a structured proforma was formulated for collecting socio-demographic parameters. The mean and standard deviation in all domains of quality of life showed higher values among premenopausal as compared to postmenopausal females and the chisquare value was found to be significant for psychological, social and environmental domain. The multinomial regression suggested that those participants who had lower quality of life were at risk of developing anxiety, depression, somatic and vasomotor symptoms. Poor current health status also showed higher risk of depression whereas education did not show significant association with menopausal symptoms. Menopausal women were also found to be more at risk of developing anxiety and vasomotor symptoms. Rural females of Wozhuro range showed lower quality of life among postmenopausal females as compared with premenopausal females and poor quality of life was associated with the severity of menopausal symptoms. The study on related facts of menopausal women is important to help women undergo the distressing period of their life with ease.

Keywords: Quality of life, menopausal symptoms, Lotha, Nagaland
Introduction

Menopause is the permanent cessation of menstruation resulting from the loss of follicular activity in the ovaries. It is a stage when the menstruation cycle stops for longer than 12 months and there is a drop in the estrogen and progesterone, the two important hormones in the female body (WHO, 1996). The menopausal transition is a function of progressive decline in ovarian follicular population and reduced steroidogenic capacity of ovarian stroma, as such it represents ovarian senescence (Al-Azzawi & Palacios, 2009)

During the menopausal transition, various physiological as well as morphological change occurs. Some of these changes takes place in the body as a result of cessation of ovarian function and related menopausal events, and others are a function of ageing process (WHO, 1996). Most of the women with the onset of menopause suffer from various symptoms which may or may not be related to menopause. The various symptoms of menopause have been categorized by scholars and researchers for in depth study and for the association between the severities of those symptoms with menopause. Little distinction has been made between symptoms that result from a loss of ovarian functions, from the ageing process or from the socio-environmental stresses of mid-life years (WHO, 1996). The experience of menopausal symptoms involves not only a complex interaction between socio-cultural, psychological and environmental factors but also the biological changes related to the altered ovarian hormonal status or deficiency (Dennerstein et al., 2000; Randolph Jr et al., 2003).

With the advancement in technology and increase in life expectancy the number of elderly people has increased significantly. The overall health and well-being of the mid-aged women has become a major public health concern around the world. More than 80 % of the women experience physical or psychological symptoms in the year approaching menopause, leading to a decrease in quality of life (Whelan, 1990).

According to WHO, the quality of life can be defined as the individual’s perception of their status in life according to the cultural and value systems the person live in, considering his goals, expectations, standards and concerns. The study of quality of life among the post-menopause has become an essential component in clinical practice. Most studies of QOL of post-menopause exist from developed countries. A very little information exists about this in developing countries like India (Sharma & Mahajan, 2015). A study on Arabian Qatari women conducted by Bener and Falah (2014) on the age group of 40-60 suggested lower menopausal symptoms compared with western countries and it showed that various factors were associated with menopausal symptoms and these symptoms shows negative effects on the quality of life.

The present study as to the best of our knowledge is the first community based study conducted in Wozhuro range of Wokha, Nagaland. The objective of the present study was to assess the association between the quality of life and menopausal symptoms among the adult females of Wozhuro range.
**Methods**

Cross-sectional data was collected among 202 adult females of Wozhuro range under Wokha district, Nagaland using multi-staged stratified sampling. The sample consists of age ranging from 35-60 years, where an exclusion criterion was set for selecting the sample. Those Participants who were pregnant, had undergone induced menopause and had never married were excluded from the study.

A structured proforma containing the socio-demographic profile was administered for collecting the necessary details. Out of the 202 Participants, 111 Participants were categorized under postmenopause and 91 Participants in premenopause category.

The quality of life was assessed by using the WHOQOL-BREF (WHO, 1996). The WHOQOL-BREF is an abbreviated version of WHOQOL-100 developed by WHO in 1996 and was administered for the assessment of Quality of life. Due to the lengthy questions in WHOQOL-100, WHOQOL-BREF questionnaire has been developed in order to make a reliable, valid and responsive assessment of generic quality of life that is applicable to the people living in different conditions and cultures. WHO's initiative to develop a quality of life assessment arises from a need for a genuinely international measure of quality of life and a commitment to the continued promotion of a holistic approach to health and health care (WHO, 1996).

The WHOQOL Brief consists of 26 questions of which question 1 asks about an individual’s overall perception of quality of life and question 2 asks about an individual’s overall perception of their health. Based on the remaining 24 questions, WHOQOL-Brief is divided into four domains namely, Physical, Psychological, Social and Environmental. The four domain scores denote an individual’s perception of quality of life in each particular domain. Domain scores are scaled in a positive direction i.e. higher scores denote higher quality of life. The mean score of items within each domain is used to calculate the domain score. The scores were calculated according to the standard methods than the raw scores were converted to transformation scores. The first transformation converts scores to range of 4-20 and the second transformation converts domain scores to 0-100 scale. Higher scores reflect better quality of life (WHO, 1996).

Various standardized questionnaires have also been developed to assess the menopausal symptoms. The Greene Climacteric Scale is one such scale used widely for studying the menopausal symptoms experienced by women during the onset of menopause and in some cases, continues thereafter. The Greene Climacteric Scale was developed by Greene in 1976 (Greene, 1976) which provides a brief measure of menopausal symptoms and has classified the symptoms into psychological symptoms, physical or somatic symptoms and vasomotor symptoms which can be used to assess changes in different symptoms, before and after menopause treatment. The scale consists of 21 questions with four-point rating scale based on the severity: not at all (0); a little (1); quite a bit (2); extremely (3) where it is divided into clusters and sub-clusters. The clusters consist of Psychological cluster with 11 symptoms sub-divided into anxiety sub-cluster with 6 symptoms and depression sub-cluster with 5 symptoms, Somatic cluster with 7 symptoms, Vasomotor cluster with 2 symptoms and sexual dysfunction cluster with 1 symptom.
Statistical analysis was performed using SPSS version 17. Mean, standard deviation and chi-square was used for finding out the difference between the two menopausal groups. Multi-logistic regression was used to find the risk factor for various variables. The purpose of the study was explained to each participant and a written informed consent was obtained from all the participants before starting the study and ethical clearance was taken prior to start the work from Intuitional ethical committee.

Results

The socio-demographic and health status of both premenopausal and postmenopausal females are displayed in table 1. The marital status of the participants showed that premenopausal females all married and among postmenopausal females, 77.4% were married and 22.5% were widows, the difference was found to be statistically significant. Age at marriage suggested that 43.9% of premenopausal females and 59.4% of postmenopausal females were married before 19 years and 56% of premenopausal and 40.5% of postmenopausal females were found to be married after 20 years but the difference was found to be non-significant.

Higher percentages of postmenopausal females (51.3%) were illiterate when compared with their counterpart premenopausal females (12.1%). Only 18.9% females who attained menopause got middle and higher education as compared to premenopausal women (45.1%) with significant difference (p<0.001). Self-reported health status showed that 13.6% females in postmenopause category reported their health status as unwell while 6.6% premenopausal females reported their health status as unwell.

Table 1: Socio-demographic and health status variable among premenopausal and postmenopausal females.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Premenopause</th>
<th>Postmenopause</th>
<th>Total</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
<td></td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>91(100)</td>
<td>86(77.4)</td>
<td>177(87.6)</td>
<td>23.39***</td>
</tr>
<tr>
<td>widow</td>
<td>0(0)</td>
<td>25(22.5)</td>
<td>25(12.4)</td>
<td></td>
</tr>
<tr>
<td>Age at marriage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤19</td>
<td>40(43.9)</td>
<td>66(59.4)</td>
<td>106(52.5)</td>
<td>19.90</td>
</tr>
<tr>
<td>≥20</td>
<td>51(56.0)</td>
<td>45(40.5)</td>
<td>96(47.5)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>11(12.1)</td>
<td>57(51.3)</td>
<td>68(33.6)</td>
<td>41.61***</td>
</tr>
<tr>
<td>Primary</td>
<td>39(42.8)</td>
<td>33(29.7)</td>
<td>72(35.7)</td>
<td></td>
</tr>
<tr>
<td>≥Middle</td>
<td>41(45.1)</td>
<td>21(18.9)</td>
<td>62(30.7)</td>
<td></td>
</tr>
<tr>
<td>Health status</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fit</td>
<td>11(12.1)</td>
<td>13(11.7)</td>
<td>24(11.8)</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>74(81.3)</td>
<td>83(74.7)</td>
<td>157(77.8)</td>
<td>2.58</td>
</tr>
<tr>
<td>Not well</td>
<td>6(6.6)</td>
<td>15(13.6)</td>
<td>21(10.4)</td>
<td></td>
</tr>
</tbody>
</table>

***p<0.001
Table 2: Quality of life factors among premenopausal and postmenopausal females.

<table>
<thead>
<tr>
<th>Domains</th>
<th>Mean±SD</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Premenopause</td>
<td>Postmenopause</td>
</tr>
<tr>
<td>Physical</td>
<td>52.2±11.0</td>
<td>45.2±10.3</td>
</tr>
<tr>
<td>Psychological</td>
<td>60.2±10.0</td>
<td>52.8±8.2</td>
</tr>
<tr>
<td>Social</td>
<td>66.0±12.8</td>
<td>64.9±11.3</td>
</tr>
<tr>
<td>Environmental</td>
<td>37.4±8.8</td>
<td>33.7±9.8</td>
</tr>
<tr>
<td>Total</td>
<td>78.3±9.6</td>
<td>72.2±8.1</td>
</tr>
</tbody>
</table>

The quality of life among premenopausal and postmenopausal females have been shown in table 2. Considering mean and standard deviation in all domains of quality of life, premenopausal females showed higher values which suggested better quality of life as compared to their counterpart postmenopausal females.

Table 3: Logistic regression of quality of life and menopausal symptoms

<table>
<thead>
<tr>
<th>Domains</th>
<th>Anxiety</th>
<th>p-value</th>
<th>Depression</th>
<th>p-value</th>
<th>Somatic</th>
<th>p-value</th>
<th>Vasomotor</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>3.92</td>
<td>0.00</td>
<td>4.68</td>
<td>0.00</td>
<td>3.13</td>
<td>0.02</td>
<td>4.21</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(1.53-10.05)</td>
<td></td>
<td>(1.78-12.31)</td>
<td></td>
<td>(1.18-8.30)</td>
<td></td>
<td>(1.83-9.67)</td>
<td></td>
</tr>
<tr>
<td>Psychological</td>
<td>4.25</td>
<td>0.00</td>
<td>1.17</td>
<td>0.71</td>
<td>3.87</td>
<td>0.00</td>
<td>1.63</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td>(1.75-10.30)</td>
<td></td>
<td>(0.50-2.68)</td>
<td></td>
<td>(1.64-9.14)</td>
<td></td>
<td>(0.72-3.68)</td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td>0.38</td>
<td>0.03</td>
<td>0.85</td>
<td>0.68</td>
<td>0.36</td>
<td>0.02</td>
<td>0.60</td>
<td>0.19</td>
</tr>
<tr>
<td></td>
<td>(0.15-0.94)</td>
<td></td>
<td>(0.39-1.84)</td>
<td></td>
<td>(0.15-0.88)</td>
<td></td>
<td>(0.28-1.29)</td>
<td></td>
</tr>
<tr>
<td>Environmental</td>
<td>5.04</td>
<td>0.00</td>
<td>5.13</td>
<td>0.00</td>
<td>5.15</td>
<td>0.00</td>
<td>1.23</td>
<td>0.59</td>
</tr>
<tr>
<td></td>
<td>(2.16-11.75)</td>
<td></td>
<td>(2.31-11.40)</td>
<td></td>
<td>(2.30-11.50)</td>
<td></td>
<td>(0.57-2.67)</td>
<td></td>
</tr>
<tr>
<td>Health status</td>
<td>0.52</td>
<td>0.28</td>
<td>3.22</td>
<td>0.03</td>
<td>2.02</td>
<td>0.24</td>
<td>1.53</td>
<td>0.44</td>
</tr>
<tr>
<td></td>
<td>(0.16-1.71)</td>
<td></td>
<td>(1.06-9.78)</td>
<td></td>
<td>(0.61-6.69)</td>
<td></td>
<td>(0.50-4.67)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.96</td>
<td>0.93</td>
<td>0.96</td>
<td>0.94</td>
<td>0.77</td>
<td>0.58</td>
<td>0.93</td>
<td>0.86</td>
</tr>
<tr>
<td></td>
<td>(0.39-2.37)</td>
<td></td>
<td>(0.38-2.40)</td>
<td></td>
<td>(0.30-1.97)</td>
<td></td>
<td>(0.42-2.03)</td>
<td></td>
</tr>
<tr>
<td>Menopausal status</td>
<td>0.262</td>
<td>0.00</td>
<td>1.22</td>
<td>0.61</td>
<td>0.36</td>
<td>0.01</td>
<td>0.28</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>(0.12-0.57)</td>
<td></td>
<td>(0.56-2.64)</td>
<td></td>
<td>(0.16-0.79)</td>
<td></td>
<td>(0.14-0.55)</td>
<td></td>
</tr>
</tbody>
</table>

A logistic regression analysis was performed to see the risk factor of different domain of quality of life and menopausal symptoms (Table 3). The study showed that participants with low physical domain had 3.92 times higher incidence of anxiety [Odds Ratio (OR) 3.92 95%CI (1.53-10.05)] (p<0.01), 4.68 times higher incidence of depression [Odds Ratio (OR) 4.68 95%CI (1.78-12.31)] (p<0.01), 3.13 times higher incidence of somatic symptoms [Odds Ratio (OR) 3.13 95%CI (1.18-8.30)] (p<0.05) and 4.21 times higher incidence of vasomotor symptoms [Odds Ratio (OR) 4.21 95%CI (1.83-9.67)] (p=0.001). In case of low psychological domain, the participants had 4.25 higher incidence of anxiety (p=0.001), 1.17 times higher incidence of depression (p=NS), 3.87 times higher incidence of somatic symptoms (p<0.01) and
1.63 times higher incidence of vasomotor symptoms (p=NS). Low social and environmental domains of quality of life had higher incidence of anxiety, depression, somatic and vasomotor symptoms. Poor health status, illiteracy and menopausal women was also seen to have higher incidence of anxiety, depression, somatic and vasomotor symptoms.

**Discussion**

With the advancement in overall technology and modern medicine, the life expectancy of an individual has increased and therefore, women are likely to live in an estrogen deficient state for more than two decades beyond menopause (Nisar & Sohoo, 2010). During the menopausal transition, physiological as well as morphological changes occur. A variety of physiological changes takes place in the body, some of these are a result of cessation of ovarian function and related menopausal events, others are a function of ageing process (WHO, 1996).

In our study, statistically significant difference was seen in marital status and education. In the marital status, married women were seen to be more in both premenopausal and postmenopausal group, in educational qualification, more participants had obtained primary education.

The quality of life in all domains among premenopausal females was higher than the postmenopausal females in the study and the difference was found to be statistically significant. This may be due to the severity of menopausal symptoms experienced which shows higher frequency among postmenopausal females. The findings of this study are consistent with some of the studies in Asia (Fuh et al., 1976; Chen et al., 2008). However, differences are found in other studies too. Nisar and Sohoo (2010), found significantly lower scores in physical, psychological and somatic domains for postmenopausal women as compared to pre and perimenopausal group. Ozkan et al., (2005) also found no significant difference in pre and postmenopausal women with respect to their quality of physical life, psychological, social relationships and environment scores.

Waidyasekera et al., (2009) in their study on Sri Lankan women suggested that women with menopausal symptoms had significantly lower quality-of-life scores in most of the domains compared with women without symptoms. The presence of menopausal symptoms was significantly associated with a decreased health-related quality of life in the women. López-Alegría and De Lorenzi (2011) also suggested that postmenopausal women with unhealthy lifestyle had lower quality of life and more menopausal symptoms.

In this study it was found that low quality of life domains were associated with higher incidence of anxiety, depression, somatic and vasomotor symptoms. Likewise, in a study by AlQuaiz et al (2017) several women reported severe/moderate impact of vasomotor, psychosocial, physical, and sexual symptoms and they further reported that lacking emotional support was associated with severe/moderate vasomotor, and physical symptoms.
Conclusion

The postmenopausal females of Wozhuro range had lower quality of life compared to premenopausal females. Form this study it can be concluded that menopausal symptoms play a vital role in determining the quality of life and it has an adverse effect on the severity of the symptoms. Such study will also help women to understand and create awareness so that, they may be able to cope better with the menopausal symptoms and get timely counselling and medication if needed. Therefore, there is a need to improve the quality of life to decrease the risk of severe menopausal symptoms, hence to stabilize the way of life of families of menopause women.

Acknowledgements

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References


Documented Migration from Mexico to the U.S.: Temporary Worker Programs and Its New Challenges

Martha Irene Andrade Parra, Doshisha University, Japan

Abstract

This paper discusses the ubiquitous participation of Mexicans in “legal” channels of migration to the United States, focusing on labor migration that takes place through temporary migrant worker programs (TMWPs). Although in recent years most of the academic attention has been placed on the phenomenon of irregular migration, little research has noted the presence of Mexicans who cross the border by “legal” means. The paper addresses “legal” patterns of contemporary labor migration from Mexico to the United States in the following manner. The second section sets the theoretical bases that explain the re-emergence of TMWPs and the tendency to locate migrant workers in precarious conditions of employment. The third section describes how TMWPs like the H-2A and H-2B Visa Programs operate, as well as the number of Mexicans that participate in them. The characteristics of the jobs in which Mexican migrants are employed are also discussed taking into account the author’s ethnographic research in a community in Veracruz where two cases were observed—the temporary migration of H-2B visa workers contracted to work at American fairs and carnivals and H-2A visa workers hired for the harvesting of oranges and sweet potatoes in American farms. The aim is to illustrate the limitations and challenges that TMWPs in the U.S. represent for Mexican migrants by exemplifying the precarious conditions that exist in their hiring and working conditions.

Keywords: Documented Migration, Temporary Migrant Worker Programs, Mexican Migration, Precarious Employment
Introduction

This paper analyzes the omnipresent participation of Mexicans in "legal" channels of migration to the United States, focusing on labor migration that takes place through temporary migrant worker programs (TMWPs). Although Mexico-U.S. migration has been widely studied, most of the literature has focused on the phenomenon of irregular migration. Nonetheless, Mexican migration also occurs through "legal" channels. In fact, Mexicans represent a significant labor force in the different employment-based programs that are offered by the U.S. government. In the permanent visa program and the H-1B visa program, for example, Mexico was the fourth country that provided the most significant number of skilled or specialized labor to the United States in 2015 (U.S. Department of Homeland Security 2015). The most significant percentage of Mexican migrant workers is still, however, mostly concentrated in non-immigrant programs, the H-2A and H-2B Visa Programs—TMWPs for covering the demand in low-skilled occupations. Despite their significant participation, research is still scarce on the employment and hiring conditions that Mexican migrant workers face in such programs.

The discussion below pretends to show an initial analysis of a work in progress which is being carried out with temporary migrant workers coming, mostly, from Tlapacoyan—a municipality located in the norther-central area of the state of Veracruz, Mexico. From this community, a significant number of men and women migrate every year through the H-2B visa program, contracted to work at fairs and carnivals in the United States. During fieldwork activities, interviews with H-2A visa workers who travel to Florida and North Carolina every year contracted for the harvesting of oranges and sweet potatoes have also taken place. The data presented here was obtained following a qualitative methodology and is based on the ethnographic work carried out in the community of origin—Tlapacoyan—and two carnivals in the United States during 2017 and the beginning of 2018. In total, 50 in-depth interviews with H-2B visa workers (11 women and 39 men) and four interviews with H-2A workers (only men) have been collected. Several semi-structured interviews with U.S. workers and employers who have direct contact with Mexican H-2B visa workers have also taken place.

The main objective of this paper is to analyze how external structures (e.g., globalization) that modify the labor market translate into migration controls (migration policies) that place migrant workers in precarious communities of practice. In other words, the paper aims to exemplify how Mexican workers who participate in the H-2A and H-2B visa programs are exposed to unfavorable working conditions, which are aggravated by the vulnerability imposed in their condition as temporary migrants. Considering two cases, H-2B temporary migrants contracted to work at fairs and carnivals and H-2A temporary migrants hired to harvesting oranges and sweet potatoes, the research questions are the following: 1) what kind of labor conditions Mexican workers face as a result of their temporary migration under the H-2A and H-2B Visa Programs? Also, 2) who (actors such as employers or intermediaries) or what (structures) constraints or enables H-2A and H-2B workers’ possibilities to improve their working conditions?

The present work is organized as follows. The next section sets the theoretical bases that explain the re-emergence of TMWPs and the tendency to locate migrant workers
in precarious conditions of employment. This section is followed by a description of how the H-2A and H-2B visa programs operate, as well as the number of Mexicans that participate in them. The characteristics of the jobs Mexican migrants are employed are also discussed taking into account the author’s ethnographic research in a community in Veracruz where the two case studies were observed.

**TMWPs and the double “precariousness” of temporary migrant workers**

In the last decades of the twentieth century, several political, economic and technological changes produced a new phase of economic globalization. The end of the Cold War meant a restructuring of the global political order while a new configuration of capitalism—based on neoliberal ideas—and new information and communication technologies developed (Aragonès Castañer 2000; Escobar Villanueva 2007). A major change in human mobility was the emergence of a new international division of labor (Sassen 1998). Castles (2013) argues that two characteristics of this new international division of labor are: 1) the flexibility and temporality of the labor market (which also includes new forms of recruitment intermediation) and 2) labor market segmentation in the lines of gender, race/ethnicity, legal status, and age. In industrial countries, segmented labor markets polarize labor in two main sectors (Piore 1979). On the one hand, the primary sector is constituted by nationals (citizens) who have access to permanent, well-paid, jobs. On the other hand, the secondary sector incorporates minority groups, young people, women, and migrants who are left with jobs that are temporary, low-skilled, and often characterized with low wages and poor working conditions.

In 1990 the high-tech economic boom put “in vogue” immigration policies among industrialized countries that opened the doors to the highly skilled, to cover the labor shortages that the new economy had produced (Martin, Abella and Kuptsch 2006). Along with the admission of professionals, however, TMWPs also re-emerged (Martin 2006). These “new” TMWPs served to meet the demands of low-skilled labor in traditional sectors like agriculture and construction, but also the growing demand in the service sector. TMWPs, such as the H-2A and H-2B visa programs that the U.S. government operates, tend to put migrant workers at a disadvantage position because, in addition to being conditioned by a limited period of stay, temporary migrant workers enter directly into the secondary sector of the labor market which is characterized by jobs that are precarious.

The term precarious employment has traditionally been used to refer to the changes in the quality of paid employment that industrialized countries have undergone since the mid-70s. These changes began with the end of the Fordist era, a period characterized by the creation of “standard jobs” and the growth of the welfare state. According to Kalleberg (2011), standard jobs are those that meet three norms: 1) offer high wages, which can also increase over time; 2) provide extra benefits like social security and retirement pension; 3) give some autonomy and control over work activities, schedules, and contract conditions. Precarious employment, on the contrary, involves those jobs that move from the norm of “standard jobs,” producing conditions of insecurity and instability for workers (Hualde, Guadarrama and López 2015).

Moreover, the term has also been used (see Cranford 2003; Anderson 2010; Fudge 2012) to describe the vulnerable situation migrant workers are exposed to as a result
of immigration controls that restrict migrant workers in low-skilled occupation to temporary status. A working definition that includes the double “precariousness” of temporary migrants is proposed by Vosco (2010), who defines it as:

[W]ork for remuneration characterized by uncertainty, low income, and limited social benefits and statutory entitlements. Precarious employment is shared by the relationship between employment status (i.e., self-employed or paid employment), form of employment (e.g., temporary or permanent, part-time or full time), and dimensions of labour market insecurity, as well as social context (e.g., occupation, industry, and geography) and social location (or the interaction of social relations, such as gender, and legal and political categories, such as citizenship). (Vosko 2010:2)

Vosko’s definition recognizes the objective dimensions that produce job insecurity: low wages, lack of social benefits and limited access to rights, but also accepts that these conditions are affected by the social relations of supply and demand that exist in the labor market. In other words, the definition recognizes that being a woman or a migrant, for example, can place these workers in precarious conditions because socially these groups have been marginalized to specific niches of the labor market. In the case of migrant workers in low-skilled occupations, immigration laws and policies in industrialized countries grant them only a temporary status that immediately excludes them from standard labor relations. Figure 1 shows the analytical framework used to analyze four dimensions of precarious employment among H-2A and H-2B visa workers.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Objective Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEMPORARY</td>
<td>Contract</td>
</tr>
<tr>
<td>ORGANIZACIONAL</td>
<td>Position</td>
</tr>
<tr>
<td>Degree of control</td>
<td>Shifts and working load/days</td>
</tr>
<tr>
<td>about the work</td>
<td></td>
</tr>
<tr>
<td>carried out</td>
<td></td>
</tr>
<tr>
<td>ECONOMIC</td>
<td>Wages/salaries</td>
</tr>
<tr>
<td>Income</td>
<td>Other forms of payment</td>
</tr>
<tr>
<td>SOCIAL</td>
<td>Social benefits</td>
</tr>
<tr>
<td>Legal protection</td>
<td>Labor rights</td>
</tr>
<tr>
<td>of work and</td>
<td>Housing and transportation*</td>
</tr>
<tr>
<td>workers</td>
<td></td>
</tr>
</tbody>
</table>

* "Housing and transportation" is not included in the model proposed by Guadarama, Hualde and López (2015); it was included considering that these are a kind of labor benefits which is relevant for temporary migrant workers.

**Own elaboration, adapted from the fours objective dimensions of precarious employment proposed by Guadarama, Hualde and López (2015).

Figure 1:Objective dimensions used for the analysis of precarious employment**.

**Temporary programs for non-immigrants: H-2A and H-2B visas**

The programs for low-skilled occupations operating in the United States offer short-term visas, with a duration of less than one year, and with no path to permanent residency, which is why they are classified as programs for non-immigrants. Figure 2 shows a comparative table on the four employment-based migration programs that the United States operate today. Although the H-2A and H-2B visa categories share
similar characteristics like their temporality, the programs incorporate migrant workers into different sectors. The H-2A visa program, on the one hand, is designed to meet the demand for temporary or seasonal labor in agricultural activities when the number of domestic workers is insufficient. The H-2B visa program, on the other hand, is designed for recruiting foreign workers to cover occupations that are temporary, non-agricultural in nature, mostly in the service sector. Mexicans have the largest rates of participation (91 percent and 72 percent, respectively) in both the H-2A and H-2B visa programs as illustrated in Figures 3 and 4.

<table>
<thead>
<tr>
<th>Visa Programs</th>
<th>Permanent Workers</th>
<th>Temporary Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Visa granted</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PERM (5-point preferential system) EB-1 – EB-5 visa categories</td>
<td>H-1B Visa</td>
<td>H-2A Visa</td>
</tr>
<tr>
<td><strong>Work category</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professionals, business investors, special cases.</td>
<td>Specialized workers (Highly skilled)</td>
<td>Workers for agriculture</td>
</tr>
<tr>
<td><strong>Visa Duration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent</td>
<td>3 year, can be renovated</td>
<td>10 months or less</td>
</tr>
</tbody>
</table>

**Own elaboration, data obtained from USCIS, available at [https://www.uscis.gov/working-united-states/working-us](https://www.uscis.gov/working-united-states/working-us)**

Figure 2: Four employment-based visa programs in the U.S.

**Own elaboration, data obtained from US Department of State (2016).**

Figure 3: Number of H-2A visas issued from 1998 to 2016.
Figure 4: Number of H-2B visas issued from 1998 to 2016.

* The total of H-2B visas issued for the years 2005, 2006 and 2007 include H-2R visas.
**Own elaboration, data obtained from US Department of State (2016).

Precarious conditions among H-2A and H-2B visa workers

Mexican H-2B visa workers contracted at fairs and carnivals in the United States are employed either as rides operators (mostly men), food stand attendants (women and men) or as workers at Games (no mechanical). Carnival employers contract Mexican H-2B visa workers to guarantee a “safe” workforce that stays from the beginning to the end of the season and accepts the precarious working and living conditions that are characterized of jobs in the carnival industry. Based on the interviews conducted, Table 1 shows the recurrent precarious conditions that Mexican H-2B visa workers face in American carnivals.
Table 1: Precarious working and living conditions of H-2B visa workers at carnivals

<table>
<thead>
<tr>
<th>Precarious working conditions</th>
<th>Precarious living conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excessive work schedules</td>
<td>Cramped living conditions</td>
</tr>
<tr>
<td>• Work more than the 48 hours established in the &quot;contract&quot; (60-80 hours in average)</td>
<td>• Live in trailers, rooms no bigger than 1.5m²</td>
</tr>
<tr>
<td>• Overtime work is not paid</td>
<td>• Some trailers are closed-boxes, no windows</td>
</tr>
<tr>
<td>• Some employers do not allow them to take breaks</td>
<td></td>
</tr>
<tr>
<td>Risky working conditions and health problems</td>
<td>Unsanitary living conditions</td>
</tr>
<tr>
<td>• Employers do not provide the necessary tools (helmets, gloves, etc.)</td>
<td>• Have to cook outdoors</td>
</tr>
<tr>
<td>• Work is carried out regardless of the weather.</td>
<td>• Trailers do not have toilets</td>
</tr>
<tr>
<td>• Employers do not take care of injured workers</td>
<td>• If portable toilets are provided, they only clean them once</td>
</tr>
<tr>
<td>No compensation or benefits</td>
<td>• Trailers are infested with bedbugs and ticks</td>
</tr>
<tr>
<td>• Migrants do not receive health insurance</td>
<td></td>
</tr>
<tr>
<td>• Travel expenses are not returned</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>Isolation conditions</td>
</tr>
<tr>
<td>• Physical contracts are not given, and when they are, they are written in English</td>
<td>• The parking lots of the trailers where they live are usually far from the cities; access to stores or other services is not guaranteed</td>
</tr>
<tr>
<td>• Explanation on the payment of taxes and social security is not done</td>
<td>Others</td>
</tr>
<tr>
<td>• Discounts are made, and the reason is not explained</td>
<td>• Sometimes, trailers do not have electricity nor water for two or three days</td>
</tr>
<tr>
<td></td>
<td>• Sometimes, migrants do not have a trailer to sleep</td>
</tr>
</tbody>
</table>

The precarious working and living conditions among Mexicans H-2B visa workers are not homogeneous. Working conditions vary depending on employers, the size of the company, the degree of mobility of the carnival, the length of the season. Within the carnival industry, some corporate families operate a large number of rides, food stands and games and which working season includes traveling through different states from March to November. There are also small entrepreneurs that have only one or two games or food stands engaging in a limited number of fairs for two or three months, without leaving a single state. Thus, Mexican H-2B visa workers who recursively migrate to work at carnivals might face different working and living conditions. Figure 4 shows such variation in the case of a woman who migrated for two seasons to work as a food stand attendant.
Answering the question of whether access to better employment conditions for H-2B workers is possible, qualitative data obtained through interviews and an analysis of the regulations stipulated in the programs show:

1. The guidelines of the H-2B visa program, in general, favor the interests of the employers (e.g., until 2015 American employers were not obliged to offer free housing to H-2B visa workers employed at the fairs and carnivals).
2. Even with the new regulations established in 2015—which stipulate more protections for migrant workers—the Department of Labor (DOL) does not sufficiently monitor the compliance of those regulations.
3. There is fear of retaliation among migrant workers because employers usually report workers who complain about their working and living conditions and blacklisting is a common practice.

Moreover, the agency that contracts workers in Tlapacoyan punishes with a year without applying for a visa to those workers who request a “change of company.” Thus, “conspiracy” between employers and intermediaries limits the possibilities of accessing to better job opportunities.

Unlike Mexican H-2B workers contracted at carnivals, the four H-2A visa workers interviewed did not depend on a recruitment agency to obtain their visa. Their recruitment was through friends and family members who recommended them directly to the "patron," a Mexican-American farmer owner of orange and sweet potato fields in Florida and North Carolina. Figure 6 shows the case of one of the H-2A visa workers interviewed who participates in both the harvesting of oranges and sweet potatoes. Although the information is limited, through the in-depth interviews three aspects that indicate that these migrant workers also face precarious living and working conditions are:

1. Workloads are excessive. Migrants work for long hours, and although their payment should be per hour, they are pressured to cover the quota of the day (a certain number of truckloads). If they do not fulfill their load, the foreman...
writes a report. Recurrent reports reduce the possibilities of being required the next season.
2. Employers do not provide with the necessary services such as bathrooms, proper places to rest or places to eat.
3. These migrants also live in trailers, in places far from the population. Their conditions are similar to those of the Braceros a few decades ago.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Objective Aspects</th>
<th>Harvesting of oranges in Florida</th>
<th>Harvesting of sweet potatoes in N. Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TEMPORAL</strong></td>
<td>Contract</td>
<td>Early oranges/ Valenciana oranges 7 months (November-February/March-June)</td>
<td>Sweet potato Requires a visa extension (August-October)</td>
</tr>
<tr>
<td><strong>ORGANIZATIONAL</strong></td>
<td>Occupation</td>
<td>Harvesting of oranges and sweet potatoes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Shifts/ Working load</td>
<td>Orange: $11.30 per hour (a tub per hour, at least 9 tubs a day, if workers do not meet the amount, they receive a report)</td>
<td>Sweet potato: $0.50 per bucket (240-250 buckets per day)</td>
</tr>
<tr>
<td></td>
<td>Social benefits</td>
<td>?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rights</td>
<td>Inspectors visit workers camps every year (?)</td>
<td></td>
</tr>
<tr>
<td><strong>SOCIAL</strong></td>
<td>Housing and Transportation</td>
<td>The employer offers housing (rooms in buildings and trailers) and transportations. They pay for their food (2 meals, $65 dollars, for 6 days)</td>
<td></td>
</tr>
</tbody>
</table>

Figure 6: Male H-2A visa worker contracted to harvest oranges and sweet potatoes.

**Conclusion**

The working conditions of H-2A and H-2B visa workers are far from being ideal or homogeneous. Mexican workers face different degrees of job insecurity, and migrants’ vulnerability is exacerbated due to: first, the lack of regulation by American authorities; second, favoritism toward the American employer and their labor needs; and, third, the presence of intermediaries (agencies) who punish workers who seek to improve their working conditions by complaining or trying to be recruited in a different company. The temporary migration of Mexicans to the United States through the H-2A and H-2B visa programs present significant challenges because these programs are unilateral, and thus information collected from the Mexican side is almost nonexistent. Unfortunately, the challenges posed by TMWPs such as the H-2A and H-2B visa programs are far from being solved. However, it is necessary to continue analyzing in depth the conditions of the migrant workers who participate in them and to expand the research into other occupations where Mexican H-2B and H-2A visa workers participate.

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References


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Abstract
The objectives of this research are to: 1) study the effects of existing laws on mangrove biodiversity in Thailand and 2) prepare suggestions on improving the relevant laws for relevant government agencies. The researcher used the qualitative research method and collected data by studying legislations regarding mangrove forests from different types of references including documents, textbooks, judgements and academic articles as well as interviews with local people. Research findings were that there is no law directly stipulating the protection of mangrove forest use. However, relevant laws that could probably be enforced were the National Reserved Forest Act B.E. 2507 (1964) which defines invasion as occupying, possessing, utilizing or residing in any area without permission from officials and any person in violation shall be subject to imprisonment and fine; and the Promotion of Marine and Coastal Resources Management Act B.E. 2558 (2015) in which Section 18 and Section 19 stipulate protection measures for mangrove forest areas. However, after hearing the opinions of local people, most of them thought that the problem wasn’t caused by an existing or non-existing law, but caused by law enforcement. They thought that the discretion to allow occupancy of reserved mangrove forests was improper and did not take into consideration the community’s interest. They also thought that directly responsible agencies did not seriously play their roles and local administrative organizations were the only organizations that took care of local people.

Keywords: Biodiversity, Mangroves Located, Thailand
I. Introduction

Natural resources and the environment are the key to human life because they rely on these elements, including plants, animals, microorganism, mineral, herbs, etc. So far, humans are increasingly using natural resources without realizing their true value. The usage is so excessive that limited resources are rapidly decreasing. The outcome is a shortage of natural resources. Therefore, the problem regarding loss of natural resources has received the interest of many and has become one of the most widely discussed topics. The cause of the decrease of biodiversity in Thailand is excessive use of nature, illegal trade of wildlife and wood, activities that disturb natural inhabitants and loss of shelter.

Forests in Thailand can be classified into evergreen forests and deciduous forests with 30% being evergreen forests. One of the four types of evergreen forest is mangrove forests which are located along the sea coast with mud and seawater, such as along the west coast from Rayong to Satun, Gulf of Thailand from Samut Songkhram to Trat, and from Prachuap Khiri Khan to Natathiwat. Important trees include Rhizophora apiculata Blume, Rhizophora mucronata Poir, and Aegiceras corincalamum.


Moreover, Thailand signed the Convention on Biological Diversity, 1992, on 12 June 1992 and deposited the instrument of ratification as the 188th member of the convention on 31 October 2003 effective 90 days after the submission date or 29 January 2004, whereby Thailand must follow the convention obligations in different aspects, such as obligations related to land use, conservation and sustained use, access to genetic resources, etc. The current law can be revised or added in some issues.

Convention on Biological Diversity, 1992, is an international attempt to outline the regulations on preserving and the sustained use of biodiversity, including exercising sovereign rights, promoting and preserving local wisdom, transferring technology, funding biodiversity conservation to developing countries as member of the convention. However, there are some problems in the content of the convention regarding policy and laws regulating member countries. For example, when the convention requires exercising sovereign right over biological resources, first it must be indicated whether it is a property of state, farmer, or community. It depends on the law and policy of each country. The researcher, therefore, thinks that the impact of the law relating to biodiversity of mangrove forest needs to be studied. The research will be based on the Panthainorasingha community, Khokkham sub-district, Samut Sakhon province to find opinions that lead to revising the law to be aligned with the needs of the community while not conflicting with the Convention on Biological Diversity of which Thailand is a member.
II. Research Objectives

1) To study laws related to biodiversity and mangrove forests in Thailand.
2) To study the impact of current laws towards biodiversity of the mangrove forests.

III. Research Methodology

This research uses qualitative research methodology by collecting information of Thai law in relation to mangrove forest conservation and Convention on Biological Diversity, 1992 through literature review. Then, the information will be utilized in conducting a structured interview to gather opinions of community residents about the impact they received from such law. The opinions can also be used in developing the law. The subjects are residents of Panthainorasingha community, Khokkham sub-district, Samut Sakhon province, Thailand, which is a mangrove forest area where people live. Moreover, it is also traveler’s destination and there is a learning center for local wisdom, culture, local lifestyle, and natural resources of Samut Sakhon province.

IV. Research Results

The results of the study on “Legal Impact over Biodiversity of Mangrove Forest around Panthainorasingha Community, Khokkham Sub-District, Samut Sakhon Province”, will be presented in two parts: 1) law related to biodiversity of mangrove forests and; 2) the opinions of the community residents as follows.

Part 1 Law related to biodiversity of mangrove forest


1) Convention on Biological Diversity: Nowadays, this convention consists of 193 members, with Thailand as the 171st member. The purpose of this convention is to encourage the government of every country to develop their country without ignoring the conservation of the environment and natural resources. This convention is accepted by international biologists and lawyers as the first international collaboration that covers all aspects of biodiversity, including species, genes and ecosystem conservation. The key obligations are 1) General measures for conservation and sustainable utilization 2) Classification, identification, and monitoring 3) Conservation of internal natural habitats 4) Conservation of external natural habitats 5) Sustained utilization of elements in biodiversity 6) Measures encouraging research
and training, public education and awareness building; and impact evaluation and
damage reduction 7) Information exchange and collaboration within academic and
scientific areas 8) Access to genetic resources; and access and transfer of technology
and benefit management 9) Finance resource and mechanisms 10) Report writing 11)
Conflict management.

2) Forest Act B.E. 2484 (A.D.1941): This law is utilized in managing mangrove
forests limited to mangrove areas that are considered “forest” as specified in this law
only. The content of this law covers measures on inspecting initial cycle of forestry
and forage, mowing, transferring logs and natural products, wood manufacturing,
establishing wood manufacturing factory, manufactured wood trade, invented product
trade, possessing manufactured wood or logs.

there is an international agreement to collaborate in preserving and protecting local
wildlife, which is an important global resource, Thailand, therefore, established a
measure to properly preserve and protect wildlife in accordance with international
agreement. The key content of this act is to identify wildlife preservation areas, to
prohibit hunting and possessing, ceasing, or cutting down, mowing, burning forests or
plants in preserved areas as well as establishing general regulations in prohibiting
hunting or attempting to hunt preserved and protected wildlife. Also, possessing,
breeding, and trading wildlife, body, and product from wildlife bodies are prohibited
with exceptions. Moreover, today there are various wildlife that are already extinct in
Thailand. The rest is endangered of extinction. This law classifies wildlife into two
categories: preserved wildlife and protected wildlife. The difference of the two
categories is that although protected wildlife is not allowed to be hunted or possessed
or traded just as preserved wildlife, they can be utilized by officials in studying,
researching, breeding, or nurturing in public zoos. It is because although the number
of protected wildlife are few, they are enough to study, research, breed, or nurture in
public zoos. Unlike protected wildlife, preserved wildlife is wildlife that is so near
extinct that it cannot be allowed to be studied, researched, or bred because it is
endangered of extinction. However, in A.D. 2003, Wild Animal Preservation and
Protection Act (2nd Edition) was issued because at that time there were several
individuals illegally possessing wildlife and they did not take the protected wildlife to
the officials or did not declare the breed and number of protected wildlife. Therefore,
officials could not control the individuals with proper regulations and conditions of
possessing protected wildlife. It is illegible for individuals possessing protected
wildlife illegally to declare wildlife possession and to register wildlife possession with
officials within indicated period of time without receiving punishment. Therefore, if
individuals possessed such protected wildlife and declared the species and quantity of
possessed protected wildlife within 120 days after this law was regulated, there will
be no punishment.

4) National Reserved Forest Act, B.E. 2507 (A.D.1964): The key content of this law
is to indicate that all reserved forests according to protected and reserved forest law
prior of this law become national reserved forests. The national reserved forest
committee was assigned with this responsibility. Also, it indicates that possession for
utilizing or living as well as mowing, burning, forestry, forage or any acts damaging the condition of national reserved forests are prohibited. Forestry or forage in national reserved forests are allowed only after receiving license from officials or when officials announce seasonal permission in a specified natural reserved forest. In case any national reserved forest is in decadent condition, the director-general appointed by authorized minister will assign someone to improve or regrow trees in such deteriorated forests within the specified time and condition indicated in the assignment letter. In case that the area is larger than 2,000 rai, permission from the Council of Ministers must be obtained. Mangrove forests that are included as a national reserved forest shall receive protection and be prevented from beneficial access by people from this law. Any activities deteriorating a national reserved forest such as living, building, mowing, burning, forestry, and forage are prohibited. In other words, according to this law, the National Reserved Forest Act, B.E. 2507 (A.D.1964) shall cover only mangrove forests that are included as a national reserved forest.

5) Marine and Coastal Resources Management, B.E. 2558 (A.D.2015): Due to the lack of marine and coastal management in Thailand in terms of unification, integration, and participation of local residents and community; invasion and transformation of the land for benefit causing deterioration of marine and coastal resources; and the law does not cover all areas, a new law was regulated to determine the practices in managing, maintaining, preserving and restoring marine and coastal resources and natural transformation. Also, it allows the local communities to take part in maintaining, preserving, and restoring marine and coastal resources with balance and sustainability under the responsibility of the Department of Marine and Coastal Resources. There is also a national policy committee and provincial committee which consist of representatives from relevant governmental units, senior consultants, and representatives from the locals or coastal community to participate in managing the marine and coastal resources. This law indicates that the minister with approval of the council is able to enact ministerial regulations to determine specific mangrove forest areas to become preserved mangrove forest areas in order to preserve and restore the area to maintain its fertile natural condition, environment and ecosystem. However, the area must not already be included in a national park area or wildlife sanctuary or non-hunting area or owned or possessed by anyone. In case a mangrove forest or national mangrove forest belongs to a national reserved forest or forest, it is under responsibility of the director-general.

6) Promotion and Conservation of National Environmental Quality Act, B.E. 2535 (A.D.1992) with revised version B.E. 2561 (A.D. 2018): This law serves the following purposes 1) to encourage people and private organizations to take part in promoting and preserving the quality of the environment 2) to manage the environment according to the principles of environment quality management 3) to indicate duty and responsibility of governmental authorities, state enterprise, and local authorities for collaboration and shared responsibility in promoting and maintaining environment quality and to indicate practices in areas where there is no direct responsibility of any unit 4) to indicate measures for pollution control such as treatment for air and water pollution, waste management, tools or devices in solving pollution 5) to clarify the duty and responsibility of agents relating to producing
pollution and 6) to indicate measures that support funds and help in various areas to encourage work on maintaining environment quality. This law indicates measures in protecting and managing preservation areas in relation to mangrove forests only in some sections that can be legislated such as section 42, Protecting and Managing National Park and Wildlife Preservation Areas to follow the environment quality management plan according to section 35 in which law indicates that the minister along with the approval of the national environment committee shall create environment quality management plan according to the national environment promotion and maintenance policy and plan. The plan can be short-term, medium-term, or long-term as appropriate according to section 36. Regarding the legal section in indicating an area to be a general preserved mangrove forest which does not belong to a reserved forest area nor a national park, section 43 can be applied in some cases for mangrove forest where ecosystem is endangered of damage or impact from human activities. Section 43 concludes that if a mangrove forest ecosystem becomes endangered from human activities, the minister with recommendation from the national environment committee is authorized to legislate ministerial regulation to indicate the mangrove forest to become a protected environmental area according to section 43, meaning that this section only slightly helps in preserving mangrove forests.

**Part 2 Opinion of the Community**

The researcher interviewed local residents in the study area with questions structured as follows 1) Do you know there are laws related to mangrove forests? 2) How do you control, preserve and protect the mangrove forests in your community? 3) How do you want the laws related to mangrove forests to be revised or added for the protection of mangrove forests? The researcher interviewed three population groups and received the following answers.

Mangrove trees are planted around this area every day. Each of them takes one year to grow into a strong tree. However, the growth rate is relatively low. In the local’s perception, mangrove forests are divided into four areas, namely preserved forest, conserved forest, community forest, and economical forest. When they are divided into different types, there must be different laws controlling each area. The locals do not know about the details of the law. Preserving mangrove forests in the opinion of the locals is that in the past there was no concrete practice because they have been living normal and natural lives in harmony with the mangrove forest since their ancestors, so there was no preservation or anything involved. However, they want the government to indicate the mangrove control regulations more clearly as there is already law that is legislated for each of the areas. Then, inform the local residents about such control measures, namely where is the preserved forest, where is the economical forest, and what area can be used as a community forest. It is because although the control has been announced for many years, there remains no concrete indication so the locals do not know which area belongs to which category. As a result, sometimes the locals go into the restricted areas without intention. Furthermore, they need the governmental unit to work on water management because water is important in their everyday life. The main problems for them are caused by
water. In fact, the Sub-District Administrative Organization has been working on this issue but they also need other units directly in charge to provide additional care.

V. Discussion


VI. Conclusion and Suggestion

From this study, we have found that there are laws relating to biodiversity of mangrove forests in the national and international level. In Thailand, there are five of them that are aligned with the Convention on Biological Diversity A.D 1992 in many areas. There is no conflict or opposition towards the Convention. However, there is no Thai laws covering directly and specifically to mangrove forests. The closest and the most applicable is the National Reserved Forest Act, B.E. 2507 (A.D.1964) which defines invasion as an act of ceasing, possessing, taking advantage or living without permission from officials. Anyone violating this law shall be imprisoned and fined. Marine and Coastal Resources Management, B.E. 2558 (A.D.2015) also contains measures to protect mangrove forest areas which indicates in section 18 that the minister with the approval of the council and national marine and coastal management plan is able to enact ministerial regulations to determine specific mangrove forest areas to be preserved mangrove forest areas in order to preserve and restore the area to maintain its fertile natural condition, environment and ecosystem. However, the area must not already be included in a national park area or wildlife sanctuary or non-hunting area or owned or possessed by anyone. In case a mangrove forest or national mangrove forest belongs to a national reserved forest or forest, it is under the responsibility of the director-general. These abovementioned laws are the only laws that are specified directly about mangrove forests. However, when we interviewed the local residents, most of them think that the problem is not about whether the laws
exist but it is how the laws are legislated in practice. The locals think that the consideration that allows people to possess preserved forest areas which are mangrove forests is not appropriate and benefits of the community are not counted. Moreover, governmental units with direct responsibility are not sufficiently involved in this matter.

The researcher suggests that Thailand should legislate Acts relating directly to mangrove forests and such laws shall be applicable for people to practice and aligned with ASEAN and the Convention on Biological Diversity A.D. 1992.
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Bridging the Global and Local Needs for Sustainable Maritime Future Through a Capacity Building Training

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Abstract
This paper discusses the application of innovation tools and techniques to a training course for maritime and ocean professionals who are expected to contribute to sustainable development of their countries. In 2015, the 17 sustainable development goals (SDGs) were adopted by the United Nations (UN) to facilitate collaborative partnerships in achieving the prioritised areas of worldwide development by 2030. As a specialized UN university, the mandate of World Maritime University (WMU) is capacity-building through education and research. However, there was a gap between gained knowledge and its application to practice when the graduates go back to their countries. To bridge this gap, a training course was developed to teach how to transform their knowledge to practice and focus on practical methods for capacity building in developing countries. The training was designed to localise the SDGs and practising innovative thinking. Innovation tools and techniques were used during the workshops and the grouped students demonstrated their abilities of developing a project concept and identifying necessary resources to achieve their specific objectives. Audio-visual data were collected during the workshops and two focus groups were conducted after the training course. The paper concludes that innovation workshops have benefited the majority of participants in terms of internalising the global agenda and externalising the concept in its local contexts. The process of transforming knowledge to new practical solutions by using innovation tools and techniques reflects the idea of knowledge management. The course has proven the element of innovation as an important component to design such training.

Keywords: Capacity building, Sustainable Development Goals (SDGs), Innovation tools and techniques, Teaching and learning, Knowledge management, Maritime and ocean industries
Introduction

The maritime industry is a backbone of critical economic activities to achieve sustainable development as ships carry the essential items to our life, such as food, goods, natural resources, and energy. The International Maritime Organization (IMO) is a Specialized United Nations (UN) Agency regarding ship safety, security, and environmental protection for clean oceans. By responding to the adoption of the 17 sustainable development goals (SDGs) by UN in 2015, IMO translates these goals to the maritime contexts (IMO, 2017). For example, the SDG 14 “Life below water” is relevant to marine and coastal ecosystems where IMO establishes the Particularly Sensitive Sea Areas (PSSAs) under its MARPOL convention. Other potential threats from shipping are, for instance, oil spills and untreated ballast water discharge. The IMO’s work also extends to education and training of seafarers under the STCW convention, which is relevant to SDG 4 (quality education). Climate change (SDG 13: Climate action) makes pressure on the maritime industry to mitigate CO₂ emissions from ships through energy efficiency (SDG 7: affordable and clean energy). There are more areas where the maritime industry can contribute to the SDGs, such as promoting maritime women (as Goal 5: Gender equality), port and offshore infrastructure (as Goal 9: Industry, innovation and infrastructure), global supply chains and a transition from linear to circular economy (as Goal 12: Responsible production and consumption), combating against piracy and corruption (as Goal 16: Peace, justice and strong institutions), and cooperation and knowledge management (as Goal 17: Partnerships for goals).

To achieve the SDGs, all stakeholders have a role to play. In this context, the World Maritime University (WMU), as a specialized UN university, has the mandate of capacity building through education and research in the maritime sector. WMU was established by IMO in 1982 as a postgraduate university targeting at mid-career maritime professionals in developing countries. As of 2017, it has produced 4,654 alumni from 167 countries during its 35-year history. These alumni include the world top leaders, such as Mr. Kitack Lim, the Secretary General of IMO, and H.E. Binali Yıldırım, Prime Minister of Turkey. These examples give evidence to WMU’s mission of educating future global maritime leaders. On the other hand, those who can come and study the MSc programme at the WMU Malmö campus are annually 130-140 only, representing around 50 different countries. It corresponds to approximately two students per country.

The question is how much the country can benefit from the investment of sending their mid-career employees to WMU. In other words, how much impact can such small number of alumni make and transfer their gained knowledge to their professional community? Unlike other universities where it is up to individuals who decide how their new knowledge is used after graduation, WMU has a high expectation from the maritime community to its graduates to lead a positive change in their respective countries. Nevertheless, the current MSc curriculum focuses on knowledge creation through lectures, group work, field study, and dissertations. However, more practical skills on how to build capacity by using their gained

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1 International Convention for the Prevention of Pollution from Ships as modified by the Protocol 1978 relating thereto (MARPOL 73/78).
2 Ballast water is used to stabilise a ship. The water often contains thousands of aquatic or marine microbes, plants and animals. If untreated ballast water is released at the ship's destination, it can introduce a new invasive marine species and damage the marine ecosystem. The International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM Convention) entered into force in 8 September 2017.
3 The International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978 as Amended.
knowledge in their home countries have not received sufficient attention. To bridge this gap, a training course was developed to teach the students how to transform their knowledge to practice and focus on practical methods for capacity building in developing countries. The training was designed to localise the SDGs and practising innovative thinking.

This paper discusses the application of innovation tools and techniques to a capacity building training course for maritime and ocean professionals who are expected to contribute to sustainable development of their countries. The paper is structured as follows: After the introduction, it discusses the relation between capacity building and sustainable development; To enable the effective training, the use of innovation tools and techniques is discussed; and the methods and results are presented and followed by conclusion and suggestions.

Capacity building and sustainable development

The United Nations Development Programme (UNDP) provides a definition of “capacity building” as ‘a process that supports only the initial stages of building or creating capacities and assumes that there are no existing capacities to start from’ (UNDP, 2009). The term, “capacity building” carries slightly different meanings by three levels, namely, individuals, institutions, and systems. United Nations Framework Convention on Climate Change (UNFCCC) differentiates them as follows: Individuals can be developed ‘through educational, training and awareness-raising activities’; Institutions can be strengthened by ‘fostering the development of organisations and institutions, for example, their missions, mandates, cultures, structures, competencies, and human and financial resources, as well as the cooperation between organisations, institutions and sectors’; and Systems can be designed to ‘create enabling environments through economic and regulatory policies and accountability frameworks in which institutions and individuals operate’ (UNFCCC, n.d.). Though WMU as a higher educational institution contributes to capacity building through education and research, the capacity building training mentioned in this paper refers to all the levels without limiting education and research.

Capacity building realises people’s full potential for sustainable development, hence it empowers people for their common benefit in a long-term scope. As a principle, building capacity leads development. The important thing is to find where capacity needs to be built in order not to waste time and resources but rather maximise the available resources to lead for change. The first step for capacity building is therefore to understand what the local needs are. Megee (2012) suggests the use of participatory needs assessment to explore the most wanted area for development by local people. Unlike a top-down approach, this method enables making locals involved in the process of capacity building. It is expected that local people will eventually build a sense of ownership, which has been proven to be a key for success.

To identify an appropriate and genuine need is also relevant to sustainable development. According to the World Commission on Environment and Development (1987), ‘sustainable development seeks to meet the needs and aspirations of the present without compromising the ability to meet those of the future’. Sustainable development itself envisions a long-term perspective. For example, the SDGs were developed by goal-based planning, stimulating policy coherence across government departments and agencies, reflexive and responsive policy-making to facilitate innovations with latest technologies, and multi-sectoral partnerships (UN SDSN, 2016). With the vision of what we want in our future, the goal-based planning enables us to think what we need to do today to achieve the vision. The 2030 Agenda for Sustainable Development is therefore guiding the way of transforming the world
towards the goals. It requires a new way of innovative thinking by breaking through a traditional development planning patterns which tend to be formulated for short- to medium-timelines, such as electoral cycles. But, the question is how to facilitate innovations in the process of building capacity in the community.

**Innovation tools and techniques for capacity building training**

Innovation usually takes a consecutive process of improvement. Lawson and Samson (2001) endorse this view by stating that an innovation capability is the ‘ability to continuously transform knowledge and ideas into new products, processes, and systems for the benefit of the firm and its stakeholders’. Such an innovation capability as well as the knowledge of how to put innovations into use are considered to be a learning process which is also constantly developing by itself.

Interestingly, many sustainability projects take the form of continuous learning and development. A user-centered design is known to be useful as its processes can contribute to innovation for sustainability (Davis, Öncel, & Yang, 2010). Hence, innovation is a critical component to achieve sustainability in the project. Bolmsten and Kitada (2018) acknowledge the success of using participatory design tools and techniques that focus on user-centered innovations and even a newer type of application of such tools and techniques on rapid innovation to transform from problem to solution.

UNESCO (2015) highlights that a participatory process is needed for developing training and solutions for SDGs. In this paper, the discourse of Participatory Design (Simonsen & Robertson, 2012) is used to frame the understanding of what a participatory process means. Two key considerations of a participatory process are taken into account in the capacity building workshop that is presented in this paper: inviting stakeholders with complementary perspectives is a base in a participatory process; and tools and techniques used in the participatory process advocate egalitarian principles, where it is important that all stakeholders participating are empowered in the process of developing knowledge to understand and innovate to solve the issues at hand.

In this study, the focus of the participatory process was to develop new knowledge in a workshop setting between maritime professionals with different and complementary backgrounds about practical solutions for SDGs. The participatory process implementing those solutions in practice is a topic for future research. The particular participatory tools and techniques and the design of the participatory process that were used in this research are presented in the following section.

**Methods**

The study looks into a pedagogical aspect of capacity building training among maritime professionals. In the course design, both theoretical and practical approaches were mixed to intentionally create a space for using the fresh knowledge learned in the workshop. Theories cover the topics of sustainability, capacity building, education and research, finance, and technology and innovation. Practices include two case studies from ship recycling and corporate social responsibility (CSR), and workshops on sustainability as well as writing a policy brief, concept note, and strategies. These small units (90 min) of learning in theories and practices are related with each other. A comprehensive workshop (2 days) on capacity building for sustainable development was the focus of this study. In this workshop,
innovation tools and techniques were employed to facilitate students’ ‘learning by doing’ (Dewey, 1916, 1958). Yet, whether such tools and techniques are helpful requires verification. Therefore, this exploratory study aims to understand how innovation tools and techniques help the students to develop a skill of localising the global issues and finding a solution by examining the process of collaborative training as well as the feedback from the participating students.

To examine the usefulness of innovation tools and techniques for a capacity building workshop, combined methods were used in this study. To capture the process of training, observations were conducted during the duration of the course (2 weeks), including a two-day intensive capacity building workshop, in August 2017. Observations during the workshop were particularly helpful to capture the process of students’ engagement in developing a capacity building concept and action plans. This ethnographic method enables the researchers to analyse how a community of practice (Lave and Wenger, 1991) was developed over time. In total, 46 participants enrolled the course, and of which, 38 students took part in the two-day workshop. The group was diverse, representing 6 African, 9 Asian, 2 Middle-Eastern, 2 Caribbean, 3 Central/South American countries and 1 Pacific Island state. By considering the balance of participants’ diversity in nationality and gender, students were pre-divided into seven groups. The workshop was run by two facilitators who were the observers and authors of this paper.

Among the 17 SDGs, the Goal 13: Climate action was chosen as an overall theme of the workshop. It was because the SDG 13 was relevant to all the students’ backgrounds and interests. In addition, the WMU’s new mandate is to expand its maritime focus to oceans.

The first day of the workshop began by identifying the name of their imaginative country, its features and characteristics, visions, and long-term strategy (Fig. 1). Each group was given specific minutes to complete the tasks and made informal presentations to other groups. Then, innovation tool kits were provided to the groups (Fig. 2). Groups were asked to come up with a solution to their country-specific problem related to the SDG 13 and develop a prototype in group by using an innovation tool kit. Facilitators walked around the class and, if necessary, assisted the process of capacity building exercises.
Figure 1: Discussing in group.

Figure 2: Working with an innovation tool kit.
On the second day of the workshop, all the seven groups made presentations about the prototype of their capacity building concept, action plans, and project sustainability (Fig. 3). All the presentations were filmed upon their permissions and a consent of using collected data for research was obtained from the participants. Video-documentation is one of the visual research methods and used as a descriptive tool to document social activities (Rose, 2016).

Figure 3: Presenting a prototype.

The study also adopted a participatory design approach where open innovation can be designed for the citizen of the country who are the users with ideas (Björgvinsson et al., 2010). To facilitate bottom-up and long-term collaborations among diverse stakeholders, we believe that it will be effective for young leaders to develop a way of building capacity in their home countries.

In addition to the data collection of live events, such as observations on students’ learning process and video-recording of their group presentations, two post-workshop data collections were made: focus groups and student evaluation. A focus group is useful to gain an in-depth understanding of social issues, for example, how students felt group dynamics and negotiated their roles within the group. Two focus groups were conducted approximately 10 days after the workshop. The participants were recruited through an email invitation. The first focus group included 10 students from Bangladesh, Honduras, Jamaica, Nigeria, Philippines, Samoa, and Thailand (Fig. 4). The gender balance was equal. The second focus group was much smaller with three students from Honduras, Indonesia and Philippines (2 males and 1 female). Both focus groups took approximately two hours. We showed the participants their video-recorded group presentations to recall their memories and reflect on vividly what they have experienced. With the participants’ consent, two focus groups were also filmed.
Student evaluation is part of the formal academic procedure that students can provide anonymous feedback to the lectures and course delivery. This internal information from the registry was also used as supplementary data to verify our research findings. In total, 24 responses out of 46 students were recorded in the database.

Results

Within a limited time to make the maximum effect on quickly forming the group and efficiently work towards the goal, innovation tools and techniques were found to be helpful. The usefulness of this approach can be characterised by four elements: Internalising global agendas; Externalising the concept in the local contexts; Transforming knowledge to new practical solutions; and Reflecting the idea of knowledge management.

Internalising global agendas

A scenario was given by the facilitators to the students that they need to come up with a solution to mitigate the impact of climate change as stated in the SDG 13. A relevance to this global agenda was sought after by each group to first internalise the global agenda. In fact, the innovation tools and techniques were received with confusion in the beginning. One student shared her feeling:

‘When first I saw this, I was also in some confusion. What is this? This is new. No, I cannot do this. But the way you taught us, it was simple. It is like a childish game. When we were children, we have done a lot of this type of games. Now I understand, because I have done. It is more easy compared to presentations, writing, chart... It has everything. It has every step. It is easy. You can draw some pictures. Whoever has a type of knowledge, he can understand this type of process.’

Interpretations of a global agenda can vary by person. It appears to be easier to reflect what is in one’s mind and reach a consensus as innovation tools and techniques were received as easy to use. In addition, the dimension of sustainability was emphasised from the start of the
training course. When internalising the global agenda like climate actions, students were encouraged to consider how their suggested actions will be sustainable. One student emphasised the importance of sustainability issues when internalising the global agenda and designing innovative solutions:

‘The industry can benefit. People can benefit. It is not a temporal job for them.’

It helped the students to avoid seeing their problem in a short-term perspective but rather build sustainable structure to develop capacity in the community to allow them to move forward without constant interventions.

**Externalising the concept in the local contexts**

When students were asked to develop a concept and prototype of their capacity building project, innovation tool kits created a space for them to externalise their ideas to be visible artifacts which became part of their collaborative prototype. They related each single piece of contributions from group members to their local contexts. By doing, students were able to contextualise their agreed concept. One student described as:

‘In the situation like this, you are free. You have spent so much time to your artifacts. Every time you put something on it, you know why you put it there.’

Another student also appreciated the innovation tools and techniques for externalising the concept in local contexts and found easier to describe what they have done:

‘It often takes time to absorb. But if you are working with your hands on, you know it and you can describe.’

A participant from Bangladesh noted that a kind of innovation workshop does not exist in the culture of Bangladesh where people are not expected to express much their opinions in the class. Therefore, he appreciated an interactive experience of workshop in terms of helping students out of a monotonous way of learning. A similar issue was raised by a Filipino participant who said especially junior officers in her organisation would not express their ideas in front of seniors; but in this type of innovation workshop she believes that it will encourage everyone to speak regardless of their age and rank. This cultural aspect of applying innovation tools and techniques for capacity building in some countries like Bangladesh and Philippines would be interesting to investigate in the future research.

**Transforming knowledge to new practical solutions**

The innovation workshop challenged the conventional way of students to work on their project, which is to sit down with a computer to type their thoughts and create a nice document in the end. Several students mentioned that they were trapped by this way of working, for example by saying ‘We were almost programmed to use the laptop and put the assignment on paper’. As a result, the innovation workshop itself was found to be innovative for many participants to leave away from computers. It took some time (even a day) to adopt to this new working style without computers. Participants also realised this change of behaviour within the group and said that some colleagues did not bring their laptops on the following day when finalising their project. One also described the ambulance was relaxing without computers:
'The atmosphere was kind of relaxing. With powerpoints, it is very tense. I think you can get better in as the scenario like this. (...) it really brings out what a person really has within.'

Students’ collaborative work was stimulated with innovation tools and techniques used in the workshop. Students eventually discovered what they as a group want to express and observed themselves achieving the building of the common artifact together. The workshop exercise was found to be exciting and stimulating as stated:

‘You are ready to go from the very beginning though you don’t know what the outcome would have been. Whatever you have, let’s put it down. Then we can compile and see from it. It was really good and exciting.’

The participatory tools and techniques used, furthermore, enabled the participants to combine and negotiate their perspective and knowledge to find new solutions. The workshop also helped the students to apply their theoretical and practical knowledge to find new solutions. The focus group participants agreed to the view expressed by the student who stated:

‘This is the application of theoretical and practical, demonstration of what you have learned.’

Bridging the gap between the gained knowledge and the ability to find new practical solutions seems to be largely achieved through the innovation workshop.

Reflecting the idea of knowledge management

The workshop reflected a participatory process approach to manage the development of knowledge about solutions for SDGs. To find solutions to SDGs, it is important to question old assumptions and develop new innovatory solutions. In fact, the majority of students expressed that they enjoyed “learning by doing” which was also commented during the focus group. Pedagogically, students mentioned that they felt effective learning through engaging and socialising with their colleague students.

The workshop provided an avenue for the participants to socialise with people with backgrounds and perspectives that complemented - and sometimes conflicted with - their own knowledge. Participants mentioned several times that all of them worked together even though their level of knowledge was different. The process did not exclude someone who arrived on board in the middle of the workshop or someone who is not good at expressing their views. This inclusiveness of knowledge creators was achieved by employing innovation tools and techniques. One participant explained:

‘I see a beauty of this, because some people are not good at expressing what they want, but they are more visual. (...) Some of our members were reluctant to participate, because they are good at writing. So we encourage you just do what’s in your mind. Someone made a coral reef. The other said what’s the relevance. But at the end, she was able to see the process. And that coral reef became one of the wastes. It’s still an added value. You just need to let it go. Let the process happen.’
With innovation tools and techniques, it is difficult to make a judgement on one’s contribution whether it is worth or not as nobody has seen the final figure of their prototype. Students discovered that their assumptions did not have much sense in such a situation. The concept of innovation treats all ideas equally valued. The participatory tools and techniques used, then, enabled the participants externalise their understanding about sustainability issues beyond their own implicit understanding, and put assumptions on the table for common reflection and scrutiny. One participant described:

'It is a progression like starting with knowledge management and coming to this concept make it easy for you to understand what you read in the book to structure the concept and your practical experience or real-life situations. So everybody can easily relate to it, share their ideas and experiences. In lectures, this is the way to do this. It doesn’t create a space for innovation. It was bringing our last memory (from the childhood) like I have built a ship.'

By recalling the memories of his childhood, he was able to connect his past with present and future when presenting a practical solution for sustainable development. It may be possible to address that innovation workshops potentially help participants stimulate an access to their (almost forgotten) knowledge repository and converting tacit to explicit knowledge.

Conclusion and suggestions

The element of innovation was found to be an important component to design such training. In summary, the workshop cultivated various social skills of students to innovate, for example, leadership, teamwork, and collaboration within the group. The majority of the students appreciated a participatory design approach with innovation tools and techniques to see their own progressions during the course.

While innovation was discussed as the key for sustainable development, the idea of sustainability appeared to support a capacity of the community to continue its development within the innovation process. Such a life-cycle perspective of project management is useful to train students to think in a long-term perspective when designing a project.

The research is limited to examine whether innovation tools and techniques are useful for capacity building training. Overall, it worked well but it was one time only. In the future, another study will be conducted to supplement the findings of this study and explore more on cultural aspects expressed by the participants of focus group. In addition, several students expressed their interest in implementing this participatory design approach in their home organisations. Further research ideas include a follow-up after their graduation through social media, like a facebook group which has been established.

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**Multicultural Learning in Maritime Higher Education: The Case of World Maritime University**

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**Abstract**

This paper explores how a multicultural learning environment can affect the experiences of international students and help them to equip intercultural communication skills. The World Maritime University (WMU) is a postgraduate United Nations’ (UN) specialised university in Malmö, Sweden. Its main programme is a 14-month MSc in maritime affairs in which approximately 130 international mature students from over 45 different countries enroll every year. While sharing common professional backgrounds within the maritime industry, students find this multicultural learning environment challenging yet interesting. To understand the multicultural learning impact on the students, the study was conducted by two qualitative methods: a focus group and observations. The participants emphasised the importance of shared spaces, such as a kitchen, in terms of deepening mutual understanding. Inspirations from different cultures brought some students positive experiences in intercultural communication and eventually built a sense of “family” among them. Such bonded relationships seem to be helpful to overcome various obstacles throughout the 14 months of their study. The paper concludes that the first couple of months are extremely important for international students to establish the foundation of their study. Positive experiences in intercultural communication tend to influence their proficiency in English as a common language as well as levels of satisfaction and success in their academic lives. It appears that the multicultural learning experience offered by WMU will help future maritime leaders to cultivate intercultural communication skills which can strengthen their confidence in advanced maritime technical knowledge and skills gained in the formal education.

Keywords: Multiculture, learning, Intercultural communication, Maritime industry
Introduction

International shipping is a backbone of national economies in many countries to support the supply of food, goods, energy and other resources to the country and generate revenues from exports. The maritime industry is known as one of the most globalised industries, which requires a set of skills to deal with international affairs. Communication skills are particularly important as maritime professionals handle their day-to-day business matters through various means of communication.

English is globally recognised as the common language in the maritime industry. Seafarers learn so-called ‘Maritime English’ as a working language for ship operation. This occupational command of English has been adopted as the standard communication means by the International Maritime Organization (IMO). The global nature of ship operation is also reflected by multinational crew on board ships. It is estimated that approximately 70-80% of the world’s merchant fleets are operated by multinational crews (Magano and Cellada, 2009). Misunderstanding among multinational crew will lead to marine accidents; therefore, effective communication is important for safety. Today, ship operations are largely supported by the shore, including an e-navigation systems, vessel traffic control (VTC), and shipping companies’ managing offices. Hence, intercultural communication in English is essential for maritime professionals both on board and ashore.

There are studies which have investigated the impact of multicultural crew on their communications on board. Sampson and Zhao (2003) conducted observation and interviews on board the multinational crews and found that a greater mixture of different nationalities would facilitate a mutual learning environment and seafarers tended to develop an understanding of each other’s English. According to a survey research by Alfiani (2010), the majority of respondents agreed to the need for sufficient English literacy for professionals both on board and ashore. With good command of English, seafarers are likely to find it easy to communicate and interact within the mixed social community on board (Alfiani, 2010). Berg et al. (2013) reviewed literature on multinational crews and found that a majority of the literature concerns human errors through misunderstanding among the crew.

It is evident that very little research is found regarding shore-based maritime professionals’ learning in the multicultural environment. In Québec, the maritime sector generates 12,300 direct jobs and 6,000 indirect jobs. Jobs on land (in ports and company offices) are twice as many as those on board ships (Fondation Monique-Fitz-Back and CSMOIM, n.d.). Considering that the population of shore-based maritime professionals is much larger than the one of onboard personnel, the need for training of shore-based maritime professionals for intercultural communication should not be underestimated.

This paper explores how a multicultural learning environment can affect the experiences of international students and help them to acquire intercultural communication skills. We look at the case of the World Maritime University (WMU), a postgraduate United Nations’ (UN) specialised university in Malmö, Sweden. Its main programme is a 14-month MSc in maritime affairs in which approximately 130 international mature students from over 45 different countries enroll every year. Despite sharing common professional backgrounds within the maritime industry, students find this multicultural learning environment challenging yet interesting. This exploratory case study employs both a focus group and observations. Preliminary findings are presented, followed by conclusions and suggestions for future research.
Learning in multicultural environment

International students are defined as those students who left their country of origin for another country for the purpose of study (OECD, 2017). It is estimated that about five million students were currently studying outside of their home countries in 2015. This figure is a nearly 67% increase since 2005 and the world’s population of international students is expected to reach eight million by 2025 (ICEF Monitor, 2015). As a result, a large number of international students contribute to create a multicultural learning environment in many higher educational institutions. An exposure to different cultures during the study period is becoming more common. In the future, more maritime professionals will be recruited from those graduates who study in a multicultural learning environment.

Many activities in international shipping involve communications with people from different countries where different practices and procedures may take place. Literature addresses the relationship between multicultural learning and communication skills. For example, Ochieng and Price (2009) examine how multicultural factors influence communication in a project team from Kenya and the UK and concluded that mutual trust and respect are essential. It is also noted that multicultural learning stimulates communication and enhances the motivation of learners to improve language skills, particularly English (OECD, 2017). A group of psychologists, Tadmor et al. (2012) found that multicultural exposure leads to a reduction in stereotype endorsement, symbolic racism, and discriminatory hiring decisions. These merits of learning in a multicultural environment are generally acknowledged. However, the literature also states that international students’ needs are to be supported. Malau-Aduli (2011) studied the case of international medical students in Australia and concluded the importance of interventions at the point of entry, mid-way, and end of course. These include orientation activities, survival tips, tutorials, training sessions, information sessions, and support programmes. These institutional activities are indeed helpful. But students also come up with their own support systems by themselves.

Previous studies have investigated the role of social networks in the academic experiences of international students. McDowell and Montgomery (2008) studied a group of international graduate students at a UK university and found that the academic and emotional support they provided each other during their studies, and which they later extended to newcomers, was an important factor in their learning experience. The authors suggested that the international student group formed a community of practice as coined by learning theorists Lave and Wenger (1991). McClure’s (2007) research on international graduate students’ adjustment to a new multicultural learning environment similarly identified collegial support as a key coping strategy. Such student-driven support networks would be very helpful even beyond the campus and this spirit of cooperation is a crucial attitude to cope with professional challenges at work.

Skills needed for coping with maritime challenges

Traditionally the maritime industry has shared the common challenges of ensuring ship safety, security and environmental protection on clean oceans. Maritime accidents can cause casualties and serious damage to cargo and ship. According to the European Maritime Safety Agency (EMSA), the occurrence of maritime accidents on EU waters is estimated to be around 3,200 annually. Figures from 2016 show 106 reported fatalities, 957 persons injured, 26 ships lost and 123 investigations launched (EMSA, 2017). Some accidents even cause serious oil spills over the ocean, polluting the marine environment. When an accident...
happens, it often involves two or more countries; for example, the shipowner comes from country A, the ship is registered to country B (flag state), the crew are multinational from country C, D, and E, the crewing agency is based in country F, the accident happened off the coast of country G (coastal state), and so on. It is obvious that shore-based maritime professionals have to negotiate with various stakeholders in multiple countries. A similar challenge will be encountered in maritime security issues, such as piracy and armed robbery. Piracy attacks peaked in 2010-2011, but the number of pirate attacks against ships worldwide was 180 in 2017 (Statista, 2018). To combat piracy, countries need to undertake good planning for coordination of their existing security mechanisms.

Country-to-country negotiation in maritime affairs is a daily routine in all the IMO member States. The related international conventions adopted at IMO are the instruments to regulate the industry. For example, the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978 as Amended standardises the qualifications of seafarers for safe operation of ships; the International Convention for the Safety of Life at Sea, 1974 as Amended (SOLAS) sets safety and security standards; and the International Convention for the Prevention of Pollution from Ships as modified by the Protocol 1978 relating thereto (MARPOL 73/78) aims at preventing and minimising pollution at sea from ships and offshore units.

In addition to these traditional maritime challenges, contemporary issues are also being recognised. Energy efficiency is one of the hot debates in the maritime industry, which is under pressure to take effective measures to reduce the greenhouse gas emissions (Ölçer et al., 2018). Another contemporary issue is ballast water taken by ships. For many years, it has been recognized as a problem for the marine ecosystem; In 2017, the Ballast Water Management Convention finally entered into force. Ship recycling is also an important sustainability agenda in the maritime industry. The average age of ships sent for demolition is becoming younger from 24 years in 2015 to 18 years in 2016 (Ship & Bunker, 2017). Occupational Safety and Health (OSH) issues in the yards as well as environmental issues around the sites (including beaches) in major ship recycling countries like Bangladesh show a challenging example of how maritime stakeholders should take and share their responsibilities.

It is obvious that maritime professionals, not only onboard personnel but also shore-based ones, are required to plan, discuss, and negotiate day-to-day maritime affairs with people from different cultures. A high level of intercultural communication skills as well as leadership skills needs to be cultivated before entering the industry. However, the importance of such skills for shore-based maritime professionals is not well-recognised. It is partly because the maritime industry used to have a large pool of human resources who had seafaring experience before taking a job ashore. A career path for seafarers who worked at sea for more than 10 years and became a Captain or Chief Engineer is promising even after their sea services. The maritime industry benefited from ex-seafarers who can communicate with multinational seafarers and take leadership over the crew. Today, traditional maritime nations including UK, Japan, Norway, and Germany, are commonly experiencing the decline in numbers of national seafarers as a result of international competition to reduce human costs by hiring cheaper crew from developed countries, typically Philippines and Eastern Europeans. Hence, more attention should be paid to educating and training shore-based personnel with intercultural communication skills to supply sufficiently capable human resources to deal with more complex challenges in the maritime sector.
Methods

Under-recognised needs of intercultural communication skills among shore-based maritime professionals make it difficult to understand its value by a large survey or other quantitative research methods. Hence, this exploratory study employs a case study with qualitative analysis. The case of WMU fits the purpose as it literally presents a multicultural learning environment. The annual intake of WMU MSc in Maritime Affairs at Malmö Campus is roughly 130-140 students from 45-50 countries. Many of them live in the university dormitory during their 14-month study period. As of 2017, the WMU alumni account for 4,654 from 167 countries.

To understand the multicultural learning impact on the students, the study was conducted by two qualitative methods: a focus group and observations. A focus group is useful to gain an in-depth understanding of social issues, especially how students informally interact with each other and negotiate their different cultural norms and values outside the classroom. Krueger and Casey (2000) propose the involvement of two moderators working together and playing a different role within the same focus group. In this research one moderator who taught English communications in class focused on linguistic issues during the focus group; the other focused on cultural issues. This approach helped to listen to and analyse the narratives as well as to remove the bias of insiders. Observations in the classroom were used to capture the process of developing the students’ intercultural communication skills. Such ethnographic method is particularly useful to analyse a community of learners over time.

A focus group was conducted before the WMU graduation in 2017. The participants were recruited through an email invitation. Five students originally from China, Colombia, Indonesia, Jordan, and Mozambique volunteered and all of them worked in shore-based offices in their home countries. The gender distribution was 4 males and 1 female. Observations were concentrated during the pre-sessional English and Study Skills Programme (ESSP) from mid-June to mid-September 2017 before the main MSc programme began. Further observations during the following 14 months were used as a reflection to verify the words expressed in the focus group.

The narrative data from the focus group was transcribed by the researcher. The data were coded and analysed using the qualitative research software, Nvivo. The following section presents preliminary findings.

Findings

This section presents findings, focusing on three main themes that emerged from the focus group discussion namely: forming social bonds, coping strategies and fostering leadership beyond academic responsibilities.

**Forming social bonds**

A strong theme to emerge was the formation of intercultural social bonds among WMU students, all of whom come to WMU from another country, and most of whom leave their families behind during their study period.

A number of participants noted that the classroom practices in the pre-sessional ESSP programme, notably the emphasis on collaborative learning through group work, were a
significant factor in the development of strong and lasting bonds between them. One participant noted:

_The ESSP usually makes you to work as a team. It's not only the things that you will see to improve your skills. It's usually that ESSP classmates we are the most closest friends in the university ... I think this connection will never lost._

Another participant appreciated the opportunity that the programme provided him to interact with students from different countries:

_...the system here encourage and push students to contact interact with each other ... when they divide the presentation groups, for example, you find yourself always with people from different countries._

Inspiration from different cultures, and seeking a sense of interconnectedness, brought some students positive experiences in intercultural communication and eventually built a sense of “family” among them. In fact, the participants from Indonesia, Jordan and Colombia all used the word “family” when describing relationships and interactions, including problem solving, among WMU classmates:

_I think in the ESSP we are all one family._

_We’re a family - it’s like when you have a family - you have your kids and you have to talk with them and they will express what they think, you will express what you think and those thoughts, we will achieve something all together._

_When family have a problem, we solve the problem with talking._

The concept of shared space beyond the classroom was revealed to be a significant aspect in the creation of social bonds and deepening mutual understanding among the participants and their colleagues. In particular the shared kitchen in the student residence was emphasised as a place where students could live together as a family despite possible cultural differences. One student expressed as:

_In the culture of things maybe I have some cultural demands in my culture. [participant] too, he is from Colombia, [participant] is from China we have the same things. But it doesn't mean that we can't live as one family. In the new Wing at HSR (dormitory) when we cook okay because we share the same kitchen. And this is really one of the benefits for us. Because when we cook something, there's someone from the Philippines, someone from Japan, someone from Korea, someone from Colombia. And when I cook something, we have learned by practice. When I cook something, “Okay come on come on”. And they cook something, “come on come on” and you always find a variety of foods to eat._

The shared kitchen space is seen as integral to survival away from home and evidence of the friendship bonds and emotional support among students:

_In our floor, we build one strategy to survive. When we don't see someone in the kitchen, we go to knock their door, “Are you okay?”_
Overall, participants stressed the importance of social interaction. Living and studying together in a multicultural environment, away from their families, placed the participants in this study and their colleagues in a number of shared spaces. Sharing these spaces gave them opportunities to form strong and lasting social bonds and to develop intercultural communication skills. Such bonded relationships seemed to be helpful to overcome various obstacles throughout the 14 months of their study.

**Coping Strategies**

Another significant theme to emerge from the focus group data was coping strategies. In addition to the emotional and psychological challenges associated with being away from home and family for an extended period, participants described the linguistic and academic challenges they faced in their course of studies and identified some strategies they used to cope with these problems.

Many of the academic challenges experienced by the participants were linked to language and cultural differences in academic conventions. Participants reported that, prior to arriving at WMU, they were unfamiliar with or lacked strategies for structuring academic essays, writing paragraphs, avoiding plagiarism, and citing sources. They coped with these challenges by using strategies learned and practised in the ESSP, by developing their own strategies and by helping each other, which led to further development and strengthening of social bonds. A number of participants reported using academic skills developed in the ESSP to cope with assignments in the main programme:

> It’s difficult for us to change our way of writing ... but with the ESSP, we have improved well our skills.

> For us, because we attend the ESSP class, I have to say that I have never faced any difficulties to my study after the ESSP. For the assignment I have learned a lot how to write my assignment, what the professor wants.

Some participants eventually developed their own coping strategies to succeed in their studies. One reported changing strategies mid-course after receiving poor results on assignments.

> I wrote my dissertation in Portuguese! Because thinking in English was completely problem for me (...) but No, because I used my strategy - I changed completely my strategy.

A significant aspect of the data collected suggests that helping each other cope academically is a way for students to develop and strengthen social bonds amongst themselves. One participant described helping another prepare for an oral exam:

> One of the most important things for students is how to build close relationships with some people ... For example, a beautiful thing that I’ll always have in my mind - yesterday night - I have nothing -[Colombian participant], he have oral exam - today actually - ... he come to my room and we sit, we drink tea, and he - the one who has the oral exam - and we was discussing about the information on the exam and we share it. And we always do the same thing.
New students joining the MSc programme were helped to adjust to the learning environment by ESSP students through sharing of experience, advice and learning materials:

*Overall in the culture we are just so lucky we have ESSP Program and also some of my friends who did not attend the ESSP, they ask first-time assignment, for example, how to make a good conclusion, a good introduction. I just give the material from the ESSP.*

Participants also reported asking for help from the newcomers who were more proficient in English:

*My classmate from Kenya - the official language is English - yes - so after finish my assignment, I just go to her room, “please try to help me - let’s correct this” because most of us we have bad marks not only for knowledge but grammar - the grammar itself is another problem. So she try to correct some and after that I submit. It’s another point of having friends here - being close to people here, to share.*

Relationships built on mutual support appear to be a key factor in coping with academic challenges in a multicultural environment as well as the stress of being away from home and family.

**Fostering leadership beyond academic responsibilities**

The focus group discussion for this study took place two weeks before the participants graduated from WMU. Reflecting on their 17-month study period, several participants were eager to use the experience and knowledge gained in the MSc programme to engage proactively in improving the University and the maritime field in their respective countries. The participants seemed to already view themselves as members of an international community of WMU alumni, with responsibilities and leadership roles that extend beyond graduation and into their professional lives.

An important step in becoming an active member of a community is to understand the rules of its membership. It was important to one participant that professors and students share an understanding of the University’s policies, that they “speak the same language” from the start.

*Something important that all the students might not know is the policy of the University or this is the code of honor ... which is the right thing. Everybody has to understand that. And everybody has to apply it. (...) If it is important we have to spend time on that, and to explain and to tell them what is the fact, what are the obligations of the students, of professors, and we will talk in the same language.*

Others viewed social interaction and group involvement as not only a support mechanism and coping strategy, but as a means to effect change within the university and beyond. All of the participants agreed that group discussion involving students and faculty was the best way to solve problems and work toward improvement, with two noting:

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1 Pre-sessional ESSP programme for 3 months and MSc course for 14 months.
... each two months in the auditorium ... a panel like this, you know with some professors, some staff, all the students to discuss things. It's really helpful because you know, it gives a positive environment.

...sharing with the students how you can improve better, they can give some advice, some knowledge, because they come from other countries and maybe they have bigger projects, investigation studies, so maybe something can come from their input.

Another expressed an interest in taking a more direct role in improving the university for future students by suggesting group discussion rather than the usual online questionnaire as a means of evaluating courses and faculty.

It's better the professor after the teaching give some time maybe one hour about the feedback discussion, not with the questionnaire. It's just better for us because with talking to the professor about the feedback ... it's better for the improvement in the future.

In addition to involvement within the university, participants aspired to use their knowledge and experience to solve problems in the maritime field in their own countries. The Jordanian participant described an initiative he took within his own administration to promote the involvement of women in response to a course assignment on women in maritime administration.

...and from two months they start a new strategy to announce about the scholarships especially for women to encourage them, because we have a lot of women, and they want to come, and they have a good English language. And this is one of the things that I am proud that I have done this from my study.

These suggestions and leadership initiatives by members of the focus group show a willingness and desire to lead for a positive change in the maritime industry.

**Conclusion and suggestions**

This study used a qualitative approach to explore the ways in which a multicultural learning environment can affect the learning experiences of international students and help them to acquire intercultural communication skills. The major themes identified by the study were the formation of social bonds, development of coping strategies and the fostering of leadership beyond academic responsibilities.

The ESSP was found to play a strong role in providing students with the necessary English language and academic skills to cope with the demands of the MSc programme. However, a further benefit of the program was discovered to be its facilitation of social networks among the international students through its collaborative, task-based learning approach with an emphasis on group work. The students who participated in this programme seemed to form lasting intercultural friendships, and continued to support each other emotionally and academically throughout the MSc programme. They further extended their social networks to the newly arriving students, sharing advice and coping strategies. In particular, the concept of a multi-cultural “family” away from home was found to be a significant coping factor for the participants in this study and the availability of such a support network influenced their level of satisfaction and success in their academic lives.
The research also found that as the students adjusted to the multicultural learning environment and advanced in their studies, they were eager to use their knowledge and experience to benefit future WMU students and the maritime industry in their respective countries. Particular emphasis was placed on the need to work together to solve problems and effect improvements. The leadership initiatives suggested and taken by the members of the focus group seem to indicate that the multicultural learning experience offered by WMU will help future maritime leaders to cultivate intercultural communication skills which can strengthen their confidence in advanced maritime technical knowledge and skills gained in the formal education.

This study focused on a small group of students at the end of their study period. In this sense, it was limited to their hindsight observations. Further research is suggested to take a longitudinal approach by gathering data before and after the ESSP and MSc programmes. Comparative studies between ESSP and non-ESSP students, by region and by gender are further recommended. Future research could also identify and apply methods to assess intercultural communication skills and the impact of multicultural education on their development.

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Abstract
In Bangkok, the capital and the largest city of Thailand, street food provides local with cheap and convenient access to a variety of foods and a means of making a living. Even though, Thai foods are prepared daily in the most of every Thai households, yet, trading food has been a common economic activity since the old days. The development of street food became more functioning and part of daily consumption way of urban living, especially in the city where people spend most of the time outside their houses. Its contributions to urban life go beyond their own informal employment, as it generates demand and supply for a wide range of services provided by other informal and formal workers. This article purposes to examine the relationship between urban dining culture and food varieties in spatial planning aspect with Bangkok as an area of study. Street food business in fifty districts was investigated and analyzed into three parts: street food vendor, street food character, and street food location. The initial result shows that urban dining culture relates to street food distribution, but contrasts with the government policy, which concentrates on abolition. This will lead into policy suggestion for the importance of street food in the city.

Keywords: dining culture, street food, distribution, spatial aspect
Introduction

In Bangkok, the capital and the largest city of Thailand, street food vending provided local with cheap and convenient access to a variety of foods and a means of making a living. Even though, Thai foods are prepared daily in the most of every Thai households, yet, trading food is a common economic activity since the old days. The development of street food became more functioning and part of daily consumption way of urban living, especially in the city where people spend most of the time outside their houses.

The Times (18 April 2017) stated, “in 2016, Bangkok was voted as the world’s best destination for street food” for 2 consecutive years. It shows that street food is very popular among both local and international tourist, as it is delicious, easy access, and cheap. Most street foods are cheaper on average than restaurant meals. From the study of Food and Agriculture Organization (FAO), 2.5 billion people eat street food every day\(^1\). Its contributions to urban life go beyond their own informal employment, as it generates demand and supply for a wide range of services provided by other informal and formal workers: (1) as a source of food for low to middle income workers, (2) as an economic activity, which generates income for urban poor, and (3) as a social connector due to the variety of its customers\(^2\).

Accordingly, the aim of this article is to analyze Bangkok street food by examining the relationship between urban dining culture and food varieties in spatial planning aspect. With the conclusion of this article, the Bangkok Metropolitan Administration (BMA) can use it as database for street food management and think of it in policy terms as economic assets to cities, while endure in the city within the contemporary urban context. Because street food is one of the important part of the city, which captures and responds to Bangkok’s urban life.


Research methodology

As previously mentioned, this is an empirical study that purposes to examine the relationship between urban dining culture and food variety in spatial planning aspect with Bangkok as an area of study. From the site survey and secondary data analysis in 50 districts of Bangkok, researcher analyzed this street food study into three parts, which are: 1) Street food vendor, this data analysis contains number of street food vendor, gender, hometown, and rights. 2) Street food character contains data analysis of size of food stall, operation time, and food types. And 3) street food location contains data analysis of temporarily permitted areas, location and existing land use, accessibility, and urban functions and distribution.

The variety of street food vendor in Bangkok

The variety of street food vendor can be analyzed into four parts. The first one is the number of street food vendor. From site survey and secondary data analysis, the total number of registered street vendor is 21,383 vendors, in which 13,006 are street food vendors (60.8%) and 8,377 are other street vendors (39.2%). These numbers show that street food vendors are more than half of total street vendor in Bangkok and is one of primate jobs for the informal sectors here.

The second one is the gender of street food vendor. The result shows that women are occupying the street as 6,986 street vendors (32.67%) are men, while 14,397 street vendors (67.33%) are women, which is two times higher than men. This result matches with the study by Yasmeen (1996) on Bangkok’s Foodscape: Public Eating, Gender Relations and Urban Change that showed the street side of Bangkok was conquered by women behind street stalls.

Figure 2: Percentage of Male and Female Street Vendor in Each District.
The third one is their rights of selling street food. These rights do not mean legal but the rights to sell food in the temporarily permitted areas in Bangkok, which is the compromising way between BMA and street food vendors. From site survey and secondary data analysis, the registered number of street vendor in Bangkok is 18,615 vendors (87.06%), unregistered for 1,644 vendors (7.69%), and unidentified for 1,124 vendors (5.26%). The latter one came from the result of disappearance during the site survey as some vendors elevated their status to sell food in supermarket’s food court or rent a townhouse for their own operation. Some vendor changed to another job or died already.

Figure 3: An example of street food that upgraded to be a local restaurant in Bangkok

And the last one is their hometown. From secondary data analysis, most of street vendors have their home registered in Bangkok, but some moved from rural areas since their ancestors. However, it can be considered that they are Bangkok citizens nowadays. The total number of street vendor that has Bangkok as their hometown is 14,307 vendors (66.91%), which is more than a half of total number. So, the other 33.09% or 7,076 vendors are from other provinces. In these 7,706 vendors, they can be categorized into six regions, which are 1) Northern Thailand – 430 vendors (6.08%), 2) Northeastern Thailand – 2,339 vendors (33.06%), 3) Eastern Thailand – 298 vendors (4.21%), 4) Western Thailand – 307 vendors (4.34%), 5) Central Thailand – 3,381 vendors (47.78%), and 6) Southern Thailand – 321 vendors (4.54%).
Figure 4: Percentage of Street Vendor’s Hometown

However, there are some notes on the issues of street vendor’s hometown, which are:

1) Central Thailand has the second largest number of street vendor’s hometown behind Bangkok, which means central Thailand houses street vendor more than northeastern Thailand. However, this number includes Bangkok’s perimeter (Pathum Thani, Samut Prakan, Samut Sakhon, Nakhon Pathom, and Nonthaburi) as central Thailand, and if we look closely, the ratio of street vendor’s hometown between Bangkok’s perimeter and central Thailand is 1:1. So, the number of street vendor’s hometown in central Thailand is around 1,600 vendors, which is less than northeastern Thailand. This note is leading to the next one.

2) Northeastern Thailand is the major hometown for street vendor. According to many previous researches (Sereerat, 2014, Maneepong, 2012, Nirathon, 2005, and Tepwongsrirat, 2005), they said about the majority of street vendor is from northeastern part of Thailand. Due to the urban development context in 1960s, a lot of farmers migrated from northeastern part of Thailand to find better opportunities in the capital. The result of this migration also shows in the menu of street food as there are a lot of Papaya salad stalls in Bangkok and this menu became one of signature dish of Thailand.

3) Street vendors from southern Thailand are mostly located in Bang Kapi district as 111 from 321 are there alone. This number conforms to the demand and supply of this
area as there are a lot of southern cuisine stalls in Bang Kapi district, closes to Ramkhamhaeng University, which is very popular among southern people.

The variety of street food character in Bangkok

The variety of street food character can be analyzed into three parts. The first one is the size of stall, which is categorized into four types. 1) There are 1,193 stalls (5.58%) that use space smaller than 1 sq.m. for operation. Mostly, this size is not for food stall. 2) The size between 1-2 sq.m. This size has the largest number of stall, which is 17,448 stalls (81.60%). 3) The size between 3-5 sq.m. This size contains 2,336 stalls (10.92%). And 4) 406 stalls (1.90%) has the area larger than 5 sq.m., which mostly are food stall.

![Figure 5: Percentage of Street Stall Size](image)

The second one is operation time. According to the site observation, there are many stalls that operates over 12 hours per day. The total number is 10,326 stalls (48.29%). These food stalls often sell all-day meals rice and curry menu that customer can eat anytime in a day. They often have dining area in their stalls like 2-3 tables for dining. For normal working hours per day like 8-12 hours per day, there are 7,783 stalls (36.40%). This type of food stall often sells fast food like noodle soup, rice with chicken, and other ready-to-eat meals. And last, food stall that works less than 8 hours per day, has the total number of 3,274 stalls (15.31%). This type of stall often sells drinks, sweets, or meatballs.
However, there are some notes on the issue of “sharing working space”. As some plots have the same street food vendor, but this vendor sells different foods during the day, like boat vending in the early establishment of Bangkok. The second note is a same plot with different street food vendors. Like in crowded area, some plots have three different vendors during a day. In the early morning from 5 a.m. to 9 a.m., the first vendor sells sticky rice with fried pork as a breakfast to many white collars. Then, around 11 a.m. to 2 p.m., lunch is sold by the second vendor in the same plot. Before the office time out, another vendor comes to sell take away food for dinner. This is one of the example of sharing working space by street food vendor that will be investigated in the future.

The third one is food types. From literature review, Bangkok street food means both meat dish and dessert, which is sold in a simple kiosk, especially fast food or ready to eat meal. Most of all dishes were seasoned in Thai’s style, including international dish. As it is easy to prepare and cook, most of the owners are the chefs themselves. Its mobility could be variety starting from rattan basket to food truck in public spaces. Ministry of Commerce (2009) categorized the level of restaurant by decoration measurement into four levels as follow: 1) fine dining, 2) casual dining, 3) fast dining, and 4) kiosk. Although, Sanpraserth and Boonnamma (1994) categorized street food into two types; meat dish and dessert. While, Rodsiri (1995) divided street food by timing, which categorized into three types; breakfast, lunch, and dinner.

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From the site survey, dining behavior, and literature review, researcher categorized street food in Bangkok into six food types, which are: 1) Appetizer (dark blue in figure 7) are foods that can be eaten everywhere, every time, especially during walking from point to point, for example; fried meatball, grilled squid, dumplings, fried insects, etc. The total number of food stall that sells appetizer is 2,061 stalls (15.80%). 2) Main course (orange) are foods that will be served during meal time, customer needs to dine-at-place or take home for dining. There are many famous Thai main course dish such as Tom Yum Kung (spicy shrimp soup), Pad Thai (stir-fried rice noodle), etc. It has the largest number in food stall as the total number of food stall that sells main course is 4,617 stalls (35.50%). 3) Dessert (grey) are everything that sweets such as ice cream, Thai desserts, shave ice, etc. The total number of food stall that sells dessert is 1,648 stalls (12.70%). 4) Fruit (yellow) are both fresh and compote. The total number of food stall that sells fruit is 1,896 stalls (14.60%). 5) Drink (light blue) are everything that is liquid and drinkable, ranged from drinking water to milkshake. The total number of food stall that sells drink is 994 stalls (7.6%). And 6) raw ingredient (green) are cooking materials including raw meat, fish, vegetables, spicy, etc. The total number of food stall that sells raw ingredient is 1,790 stalls (13.80%). This type of food stall often extends from fresh market in every district.
When looks closely into the detail of each district in figure 8, there are some notes about the differentiated percentage of food types. First, for the appetizer and main course food stalls, there are both of these food types in every district as the meat dish for most of Thai households. The number can be fluctuated, depends on building use in each district. Mostly, main course often gets a large number than other food types, especially in residential area like Bang Bon, Bang Khun Thian, Bang Na, Bueng Kum, Ratchathewi, etc. This note conforms with the daily life activity of urban citizen as they consume street food for breakfast, lunch, and dinner. Second, dessert food stall. Another note is raw ingredient food stall that usually less than other food types but has a large number in some district like Min Buri, Nong Chok, and Wang Thonglang. From site observation, researcher founded that these raw ingredient food stalls are the extension of many fresh markets in these districts. It conforms with the lifestyle of residential area of outer Bangkok as they buy these raw ingredients to cook for their family instead of buying ready-to-eat meals.

The variety of street food location in Bangkok

The variety of street food location can be analyzed into four parts. The first one is the attributes of location. The total number of temporarily permitted areas is 658 areas in Bangkok. Six districts have temporarily permitted areas more than 30 areas in each district, which are Pom Prap Sattru Phai (52 areas), Ratchathewi (43 areas), Watthana (40 areas), Dusit (38 areas), Thonburi (33 areas), and Phayathai (32 areas). For total distance of temporarily permitted areas, the total number is 113,133 meters (113 km. – almost the same distance from Bangkok to Pattaya). In detail, districts that have the longest distance of temporarily permitted areas are Watthana (11,260 m.), Phayathai (11,248 m.) Bang Bon (9,800 m.), Khlong San (7,410 m.), Thonburi (6,484 m.), and Dusit (5,599 m.). However, when combining the total number of street vendor and the distance of temporarily permitted areas, the result shows the average of every five meters of temporarily permitted areas will have one street stall. It means
that there will be ten street stalls in every 50 meters, and six out of ten street stalls are street food stalls like the diagram in figure 9.

![Diagram of street food stalls](image)

Figure 9: The Average of Temporarily Permitted Distance and the Number of Street Vendor

The second one is accessibility. From site survey, street stalls are located along the main road or the road that wider than 10 meters with the total number of 14,948 stalls (69.91%). While, in the secondary road or narrower than 10 meters, there are 6,435 stalls (30.09%). It shows that accessibility is one of the main factors for street food vending to operate.

The third one is the relationship between location and existing land use map. Street vending mostly locates in commercial area for 8,558 vendors (40.02%), then, in high-density residential area for 6,954 vendors (32.52%). However, when combining all the three types residential area (low-density, medium-density, high-density), the number will surpass commercial area as the total number will be 10,003 vendors (46.78%). For other land uses, the total number is 2,822 vendors (13.20%), which distributes in conservative area for 1,585 (7.41%), public utility area for 885 (4.14%), agricultural area for 307 (1.44%), and industrial area for 45 vendors (0.21%).

<table>
<thead>
<tr>
<th>Zone</th>
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<th>Land Use</th>
<th>Percentage</th>
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<tbody>
<tr>
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<tr>
<td>Commercial</td>
<td>40.02</td>
<td>Commercial</td>
<td>40.02</td>
</tr>
<tr>
<td>Others</td>
<td>13.20</td>
<td>Conservation</td>
<td>7.41</td>
</tr>
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<td>Government</td>
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</tr>
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<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Industrial</td>
<td>0.21</td>
</tr>
</tbody>
</table>

Table 1: Percentage of street food location in each land use type

And the last one is the relationship between urban function and street food distribution. For urban function, it can be divided into seven types, which are 1) shop house or row house that contains commercial area on the ground floor. Street vending distributes close to this type of urban function for 5,611 vendors (26.24%). 2) Community area, both low-rise and high-rise community, has the total number of 3,297 vendors (15.42%). 3) Public utility such as school, hospital, district office, police station, fire station, etc. has the number of street vending for 2,098 vendors (9.81%). 4) Office has the number of street vending for 1,443 vendors (6.75%). 5) Religious building such as Buddhist temple, church, and mosque has the number of street vending for 763 vendors (3.57%). 6) Fresh market has the number of street vending for 6,278 vendors (29.36%). And 7) shopping mall, ranges from community mall to shopping complex, has the number of street vending for 1,893 vendors (8.85%).
When combining commercial activities together (shop house, office, fresh market, and shopping mall), the total number of street vending near commercial activities will be 15,225 vendors (71.20%), which is more than the previous analysis by land use map. It shows that most of street vending activities are connected to other commercial activities of the city.

**Conclusion**

The conclusions of the article “Bangkok Street Food Variety and Its Relationship in Spatial Aspect” are as follows:

1) ‘Street food vendor and their hometown’. Most of street vendors are considered that themselves as citizens of Bangkok nowadays, due to the migration of their ancestry during 1960s. The total number of street vendor that has Bangkok as their hometown is more than 66.91%, while the other part of Thailand is just 33.09%. If we excluded the number of street vendor’s hometown in Bangkok’s perimeter, the total number of street vendor from northeastern Thailand will be the second largest to Bangkok and reflects in the street food menu as one of the most famous menu of street food is Papaya salad. Another example of relationship between street food vendor and their hometown is the southern street food vendor as they are mostly located in Bang Kapi district, which is reflecting in a lot of southern cuisine stalls for Thai southern people.

2) ‘Street food character and urban dining culture’, this topic focuses on the supply side of street food as the researcher categorized street food in Bangkok into six food types, which are: 1) appetizer, 2) main course, 3) dessert, 4) fruit, 5) drink, and 6) raw ingredient. The appetizer and main course food stalls have the highest number as 51% of street food stalls are these two types. They are served as main meal, in which everyone can eat it like breakfast, lunch, or dinner. However, appetizer also can be included in the category of foods that can be eaten everywhere, every time, especially...
during walking from point to point, together with dessert, fruit, and drink. These types of food reflect the lifestyle of Thai people as it is very comfortable to eat at any time, or anywhere.

3) ‘Street food location and urban functions’, this topic focuses on the distribution of street food in each urban function as it mostly locates in commercial area (40.02%) and residential area (46.78%) in land use map. But in detail of building use map, the distribution ratio changes to 71.20% on commercial building use. It can be considered that street food is a part of commercial activities as it is mostly connected to other commercial building and areas.

In conclusion, street food is one of the most visible urban elements that connected to other urban activities in Bangkok as the previously mentioned that there are 10 street stalls in every 50 meters, and 6 out of 10 are street food stalls. Even though, Street food stalls are an informal-temporal urban element, it co-exists with other urban elements and activities in Thai public space through social and physical connection. This is why the BMA and Thai government should take it into account in place making and integrate it to urban management for the future inclusive planning and sustainable development of the city of Bangkok.
References


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Moving Beyond the Mill: Application of the Eclectic Approach to Improve Teaching English as a Second Language for Tertiary Level Learners

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Abstract
Teaching English as a second language has been among the few persistent failures in the Sri Lankan education system nearly for six decades. The dogmatic devotion to limited approaches, inadequacy at theoretical, creative and practical expertise of teachers and learner isolation have been negatively affected the scenario, where tertiary level learners are at a dire stake, against the exceptionally competitive employment market. Hence, the need of a complementary holistic approach is a demand of the time, to compensate the gap and to empower the intellectual youth of the island. Thus this study endeavoured to investigate the effect of the application of eclectic approach as a teaching pedagogy on the performance of the tertiary level learners following English as a second language in Sri Lanka. Experimental research design was utilized having based on the theoretical principles of Kumaravadivelu’s Macro Strategic Framework of Post Method Pedagogy, Input Hypothesis and Affective Filter Hypothesis of Krashan’s Theory of Second Language Acquisition. The simple random sampling method was used to select 100 first year students from the University of Sri Jayewardenepura Sri Lanka, and divided into control and experimental groups having 50 in each. The study was conducted for 15 weeks and Pretest Posttest Equivalent Group Design was used to collected data. Both descriptive statistical tools, i.e., mean, standard deviation, inferential statistics, i.e., t test were used to analyze the collected data. The results of the study indicated that the eclectic approach has a significant effect on the learner performance against the traditional method of teaching.

Keywords: Eclectic Approach, Effective Teaching Pedagogy, Second Language Teaching, Tertiary Level Learners
Introduction

Teaching English as a second language was one of the constitutionalized policies, since the liberation from the colonial manacles in Sri Lanka (Perera, 2010). Irrespective of numerous amendments implemented to make each and every individual in the country to be equally empowered with the language, it has been among the few persistent failures in the Sri Lankan education system, nearly for six decades. The dogmatic devotion to limited teaching and learning approaches, inadequacy at theoretical, creative and practical expertise of teachers, unequal distribution of human resources, especially to the schools in the rural areas and learner isolation have been negatively affected the scenario, where tertiary level learners are at a dire stake, against the exceptionally competitive employment market. According to the statistics, nearly a 20% of the university entrants have achieved the minimum qualification in the subject of General English at the G.C.E. Advanced Level Examination after thirteen years of school education having been taught English as a second language. Though the university education stands as the third circle of education in the country, majority of the fresh undergraduates are at the beginners’ level in their English language competency. Securing a pass grade for English in the University Test of English Language (UTEL) has been made as a mandatory requirement to be a successful graduate in the country and the very step to promote the importance of English language competency in the tertiary level learners has become a hindrance for many to achieve the dream of being a graduate, irrespective of their high grades scored for selected subject. Hence, the need of a complementary holistic approach is a demand of the time, to compensate the gap and to empower the intellectual youth of the island.

With respect to the evolution of teaching English as a second language, a number of different teaching and learning methods and strategies have been experimented by language scholars in education (Ajere and Omolu, 2010). Though most of them have been successful in the conduction of the language teaching process and productive language reception contexts against the traditional methods of teaching, (Agboghorom, 2014; Adeyemo and Babajide, 2014) none of them have been fully successful to produce a competent language learner (Perera 2010). The intention of utilizing the eclectic method is to link experiences derive from the real life situations with language teaching and learning process to make a more hospitable nexus between the language learner and the target language (Kumar 2013).

This study endeavoured to investigate the effects of the application of eclectic approach as a teaching pedagogy on the language learning performance of the of the tertiary level learners following English as a second language in Sri Lanka . The sample of the research was selected from the largest public university in the country. A sample of 100 undergraduates are exposed to 150 hours of English language teaching and pretest posttest equivalent group design was utilized to collect data in a form of a skills assessment paper carrying 100 marks conducted before and after the experiment.
Background Literature

A theoretical landscape to the study

Language learning is a purposeful cognitive performance that requires multiple biological, psychological, sociological strengths. Perfection of language learning is not a result after a rigorous drill or a laborious mission. The general assumption of the language learning in mid 90s was first to learn the structure, then to practice the structure and finally to achieve accuracy and fluency through practice. Dashing these common attitudes of language learning, the Input Hypothesis of Krashen (1985) explained that, the complete reverse of the existing believes of the actual language learning route was the way to achieve successful second language acquisition. According to Krashen (1982) “we acquire by going for meaning first and as a result we acquire structures” (p 20). Therefore, comprehensive input is essential to understand the target language, which is empowered by the extra linguistics knowledge and once it is acquired through successful communication, (i + 1) is automatically achieved. (Gass, Susan M. & Selinker, 2008). On the contrary, learner’s ability to understand and contextualize what he/she learns would bring him/her further in the stages of language learning process. And to cater for this comprehensive input, four intrinsic psychological factors were introduced as Affective Filter Hypothesis, that manipulated the language learning process in an individual. The levels of motivation, anxiety, fear and self-confidence accordingly contribute to the language learning process, (Krafsen 1985, Ellis 1994). And According to Du (2009) “Teachers can find out the effective teaching tactics which can cultivate the students’ active learning through the analysis on the inner connection between the students’ affective factors and L2 learning” (p164). Therefore, second language teaching and learning process should have more focus on comprehensibility of the input, exposed to the learner than the traditional explicit drilling of structures one after the other with no authentic touch of the contexts in which it could occur. Apart from that, teachers, educators should have equal emphasis on the affective factors that are individually unique to learners and design teaching techniques to combat with these psychological barricades.

During 1990 many researches on language studies and teachers of second language teaching realized that there is no single method or study conducted that eventually lead for a successful second language teaching or learning accomplishment (Brown 2002). And this eventual realization gave rise to the Post Method Era, which explored for an alternative to method. According to Kumaravadivelu (2003), teacher autonomy and principled pragmatism were observed as salient features of this post method condition while drawing three pedagogic parameters as Particularity, Practicality and Possibility. The essence of the triplet of parameters was language teaching should be a conscious and pragmatic combination of theory and practice, which must be enveloped with higher levels of flexibility to accept, respect and operate according to the demands of the learner and teacher’s spacious role in exploring methods and strategies to bring out a productive teaching process that ultimately gift the learner with a rich sense of language learning experience (Kumaravadivelu 2006). The ten macro strategic framework of post method pedagogy drew general guiding principles that suited for a classroom atmosphere (Kumaravadivelu 2003) amply provided with micro strategies to boost learner performance with an animated sense of interaction with the target language and a sustainable level of language retention.
**Rationale for the selection of eclectic method**

The genesis of the eclectic method was a counter response to the “profusion” of language teaching strategies proliferated in 1970s and 1980s, most of which were either not flexible or singularly less productive (Suleman & Hussain 2016). Eclecticism is a teaching mechanism escorting the teacher beyond the borders of one particular strategy in order to integrate a number of different methodologies, principles with respect to the needs of the learners. (Lazarus & Beutler, 1993). According to Kumar (2013) “language should not be separated into chunks like pronunciation, grammar and vocabulary (p 1)”. Rivers (1981) believed that eclectic method “absorbed the best technique of all the well-known language teaching methods” (quoted by Stern 2003) to fulfill the fullest sense of accomplishment of the language competency (Hammerly 1985, Drozdzial- Szelest & Pawlak 2013). Palmer (1964) was one of the exponents of the eclectic approach, illustrated its operation as “find the right stone to kill the right bird and it is advisable to kill one bird with more than one stone” (Drozdzial- Szelest & Pawlak 2013). This aspect of the method can be further understood according to Rivers (1981) as it generates an enthusiastic learning atmosphere which is devoid of fear and deliberate practice, students are animatedly persuaded to exchange and interact with the target language more lively through the activities, intentionally selected by the teacher understanding the need and the talent of the students. The variety of activities, elevated amount of students interaction and active learning, objective correlative and quick results are the predominant features of the method (Kumar 2013) bring out not only academic achievement, but also the trust, attention and positive attitudes of students regarding the language learning process (Yapici 2016).

The application of the eclectic method to the context of adult learning is timely appropriate as motivation, language retention and participation have become continuously observed as low in operation in most of the occasions irrespective of their geographical and demographic situations. Usefulness of the target language is a key factor in this regard and utilization of eclectic method is so vital to maintain sustainable level of motivation among adult learners as the method can accommodate the requirements of the users in a more time effective manner(Baker & Jones 1998). Unlike the traditional teaching methods uniformly treat all learners alike in a group, the eclectic approach is more flexible towards the individual differences among students, allowing teacher to have a “one-on-one dialogue” with students (Akdeniz 2016). Since learning a foreign language demands a learner to produce the target language verbally, make sense of what he or she listens and reads and finally to produce language which is grammatically and pragmatically accurate(Iscan 2017) because the application of the eclectic approach is much more influential than the application of methods which are limited within their own limits.

According to Biloon (2016) eclectic method is the best mechanism to teach English as second language to tertiary level classrooms with fairly large number of students against the ideal of 15 students in a class, having given fewer face to face teaching opportunities. It gives a tremendous scope to “personalize” the lessons according to the “needs of the students. In other words eclectism enables students to learn, practice, engage, understand and finally acquire a satisfactory level of competence because eclectic method favorably caters to “internalize, use and remember” the target language with its varied sequence of activities on par with their needs. Further
eclectic method is not just a “concrete” method but a productive combination of methods or strategies to address listening, speaking, reading and writing skills all together in to a harmonious whole (Kumar 2013, Hammerly 1985, Sharma 2008). The five successful features demonstrated by Luo, He & Yang (2001) (cited in Lianli 2011) as 1) determine the purpose of the each individual method, 2) be flexible in the selection and application of each method, 3) make each method effective, 4) consider the appropriateness of the each method, 5) maintain the continuity and the process are further arranged into a three stage process as first stage of “ teacher centered at the input stage, second stage of “learner centered at the practice stage and third stage of “ learner centered at the production stage”. This showcases a more student centered, “logical, and pluralistic” ( Mellow 2002) scope of this language teaching strategy, allowing language practitioners to carefully select, plan and implement activities to boost the enthusiasm, interaction and language competency of learners.

Application of the salient features of eclectic method

Situational approach was favoured by British linguists, and it focused on the “close relationship” between the structure of the target language and the context/situations in which it occurred. Because they viewed language learning as a “purposeful activity” that demanded authenticity (Richards & Rodgers 2001). As Halliday, McIntosh & Stevens (1964) explained “the emphasis is now on the description of language activity as a part of the whole complex of events which together with the participants and the relevant objects and make up actual situations”. Most importantly, these scholars emphasized more to the development of an approach which is more communicative in its operation than being structural. The focus was more on vocabulary and grammatical structures because they directly related to the improvement of the reading skills (Christison & Murray 2014).

Communicative language teaching approach is another salient feature of eclectic method and in other words it was considered as the “most influential language teaching methodology” in the world (Canale & Swain 1980). The demand for communicative competence has grown more widely than ever before (Ahmad & Rao 2013) because the primary objective behind this approach is to improve the communicative competency of its learners because proficiency at the language is more regarded than him/her adherence to the structure of the target language. The flexibility and the immense freedom within communicative language teaching to adopt language teaching process to the needs and the ability level of the learners are commendable (Li 2012).

Participatory approach or Freirean approach demonstrates content based instructions to make language learning scenario more of a natural activity. It allows language learners to engage with day to day practical problems they meet in life and use the target language to solve them. According to “The Pedagogy of the Oppressed” (1970) Paolo Freire explained that a learner should be given a choice about what they learn and how they learn it. On the other hand, it is the responsibility of the teachers to loosen the grip of the teacher centered teaching methods and encourage the learner to have a complete control of the target language fully, with minimum involvement of the teacher. The function of the teacher is to be responsive to the needs of the learners.
and make amicable atmosphere to interact with the language. As (Berns, 2010, Phipps & Guilherme 2004)

Most of the researches conducted on eclectic method, were either about the evaluation on the practicality of the approach in a theoretical perspective or its effects on the improvement of language skills individually. However, according to the literature, language teaching need not to be “chunked” (Kumar 2013) because there is an intricate nexus among the skills. Therefore, observation of the contribution of eclectic method to the second language teaching and learning process should be done holistically.

Statement of the Problem

Teaching English as a second language has been in the country’s teaching practice nearly for six decades with mild improvements against the set national goal of empowering each and every individual in the country with equal level of language competency. Irrespective of the number of initiatives taken by the succeeding governments to make a progress in the competency levels of the English language of the nation, a very thin population has acquired the needed level of competency whereas majority of the learner population strive to survive with poor second language aptitude. This aspect of the problem is quite visible among the tertiary level learners, who performed well in the most competitive G.C.E Advanced Level examination to secure a seat in few public universities in the country. Though they are representatives of the averagely intellectual young learners of the country, nearly 80% of them suffer from lack of second language proficiency to combat with the excessively competitive employment market. Having based on this scenario the research problem of this study is “How does the application of eclectic method improve the language skills of tertiary level learners following English as a second language?”

Research Hypothesis

With respect to the aforesaid research question a research hypothesis was formed as: H1: Application of eclectic method improves the performance of the language skills of tertiary level learners following English as second language. Following null hypothesis was also tested: H0: Application of eclectic method does not improve the performance of the language skills of tertiary level learners following English as second language.

Methodology

Research Design

Participants
Two classes carrying 50 first year students in each, out of 18 Compulsory English classes in the University of Sri Jayewardenepura, Sri Lanka were randomly selected for the study and their consent for the study was taken prior to the conduction of the experiment. The sample of the participants were homogeneous that as a whole all most all of them share nearly equal levels of education, exposure to the native and the second language, socio political atmosphere and age. Equivalent nature of these
variables will then contributively assist to measure the effects of the experimental group against the control group when they are approximately identical in physical attributes.

**Instruments**

Main instruments used in the study were pretest and post-test. Each test involved four skill assessment questions to represent four language skills. The pretest carried 100 marks which included 10 questions approximately covering four language skills as an ordinary language competency evaluation test. 25 marks were allocated for each skill though the questions scattered without having a skill specific categorization. Marks were allocated according to the correct number of responses in both reading and listening and grammar based objective questions and two separate marking formulas were used for the question on essay writing and questions appeared to evaluate speaking on a written basis. The posttest also consisted with ten questions, similar to the pretest, was administered at the end of the experiment and same marking formula were used for the evaluation process.

**Procedure**

The duration of the study was a period of 15 weeks (Three months and three weeks). The second semester of the first year compulsory English course was selected for the study and two lesson unites were prescribed to this semester (Lesson 03 – Places and Lesson 04- Forces of Nature). The lesson layout of the two lessons were drawn and activities were carefully selected to assimilate the four language skills on par with the needs of the students. A number of teaching techniques were selected under participatory approach, communicative approach and situational approach as language games, pair group activities, group presentations and discussions, documentary and mute videos, dramatization and role plays, news reading sessions, competitive mind mapping, listening incorporated reading activities, problem solving activities, peer correction, emailing and posting letters and mirror wall were the teaching activities selected to teach the two lesson units along with the text book reference. All the aforesaid teaching techniques were utilized to deliver teaching to the experimental group while no such activities were especially incorporated into the teaching of the control group.

**Data Analysis**

Data collected from the pretest and the post-test was analyzed using Statistical Package for Social Statistics (SPSS) version 22. Descriptive statistical tools, i.e., mean, standard deviation, inferential statistics, i.e., t test were utilized to measure the collected data.

**Results and Discussion**

The purpose of the study was to investigate the impact of the application of eclectic method to the improvement of language skills of the tertiary level learners who follow English as second language. Pre-test post-test equivalent groups design was employed to tally with the experimental nature of the study. Raw data was classified, organized, tabulated and analyzed on the basis of descriptive statistics i.e., mean, standard
deviation and inferential statistics i.e., t-test and the interpretation of the data as follows.

<table>
<thead>
<tr>
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<th>N</th>
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<th>St.Dev</th>
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Table 1, showcases the computed t value was recorded to be -14.92 which is considered as statistically significant (p<0.05) because this computed t value is greater than the tabulated value of t at 0.05 level of significance. Therefore, the null hypothesis of “Application of eclectic method does not improve the language skills of tertiary level learners following English as second language” was rejected. Descriptive and inferential analysis associated to the language improvement of students in the control group (Mean = 37.42, SD = 5.50) and experimental group (Mean = 57.39, SD = 7.73) shows the variance in the student performance in post-test approving the alternative hypothesis of “Application of eclectic method improves the language skills of tertiary level learners following English as second language”.

Graph 1: Comparison between the mean scores of the pretest and the posttest

Graph 1 depicts a visual description between the pretest and post-test mean scores that eventually contributed to accept the alternative hypothesis in the study that there is a positive effect of the application of eclectic method on the improvement of language competency of the tertiary level learners following English as a second language.
According to descriptive statistics, the mean score of the pre-test of the control group (39.32) is less than the mean score of the post-test as (37.42) showing a decrease in the performance of students who were exposed to traditional teaching strategies. Though there is a slight difference between the mean score values of the pre-test as (39.32) of the control and the experimental group (39.02), the mean score values of the post-test of the experimental group is greater than the postest as (57.39 > 37.42), highlighting the statistical significance of the application of eclectic method.

Table 2: Skewness and Kurtosis measures of the posttest of the control group and the experimental group

<table>
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<th>n</th>
<th>Statistic</th>
<th>SE</th>
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<tbody>
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<td>0.057</td>
<td>0.337</td>
<td>0.16</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>50</td>
<td>-0.375</td>
<td>0.662</td>
<td>-0.56</td>
</tr>
</tbody>
</table>

A Shapiro Wilk’s test (p>0.05) (Shapiro & Wilk,1965) and a visual inspection of their histograms, normal Q-Q plots and box plots showed that the test scores were normally distributed for both control and experimental group with a skewness of 0.057 (SE = 0.337) and a kurtosis of -0.375 (SE=0.662) for the control group and a skewness of 0.362 (SE = 0.333) and a Kurtosis of 0.075 (SE=0.656) for the experimental group (Cramer & Howitt,2004).

These findings are further illustrated using the composition of the skill assessment paper used as the pretest and the post test for the control and experimental groups. The distribution of the 100 marks were approximately sectioned to the four skills carrying 25 marks at each section. The speaking variety even addressed using a written medium as students were asked to write an informal and a formal interview at a given context.

Graph 2: Skill based performance between the pretest and the post-test in the control group
According to the depiction of graph 2, it is clearly visible that the variation between the pretest and the post-test mean scores is not remarkable and apart from reading (10.8>9.95), all the other skills have recorded less than the pretest in listening, speaking and writing based questions as (9.35>9.25), (10.65>10.4), (9.77>6.97) respectively.

![Graph 2: Skill based performance between the pretest and the post-test in the experimental group](image)

Graph 3: Skill based performance between the pretest and the post-test in the experimental group

As per the description of graph 3, it vividly illustrates the variation of performance before and after the experiment in the experimental group. The mean score of the posttest at four skill areas are greater than the pretest mean scores as Listening (14.6>9.01), Speaking (15.66>9.38), Reading (13.86>10.8) and Writing (13.25>9.81).

This categorization of questions in the pretest and the posttest into four skills might arouse a curiosity about the practicality of the procedure of the experiment. This approximate composition of skills is much more or less similar to the composition of an ordinary paper which is in use in the country to evaluate the language competency of students. Though the study was not conducted to examine the language improvement of a single skill, this numerical description was utilized to illustrate how each skill was optimistically affected with no intentional skill specific instruction by the holistic exposure of language through the application of eclectic method.

These findings in the study confirmed that most of the traditional teaching strategies were unable to address the multitude of issues experienced by the second language learners because according to (Kumaravadivelu,2006) second language classrooms consisted of “such a large variety of language learners, with such divergent learning needs and aptitudes, that the teacher has to employ a fit-for-all teaching technique”.

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Application of eclectic method boosted the student participation in language activities steadily in the experimental group and improved the leadership qualities fused with competency and confidence at language due to large range of activities which were selected by the teacher considering the context appropriateness.

Another unique effect that was observed during the experiment and finally proven by the results was that the application of eclectic method further confirmed the operation of the vast intricate integrated network of language skills which are highly interdependent and the teaching of the aforesaid skills indiscriminately brought a conscious awareness of language to the learner because the distance between the content and the form was minimized. This observation is further confirmed by Biloon (2016) because according to his study, the application of eclectic method was the best strategy to teach a classroom with a large number of young adult learners within a shorter duration of time covering all the four language skills simultaneously.

Personalizing the content in a lesson according to the needs of a learner (Biloon, 2016) is a highly academic and an democratic way of instruction (Tzu Min – 2009) which demands the teacher to select the best technique to address the correct need is a tricky task. Therefore all the selected language teaching techniques in the study, were carefully selected under the auspicious of the three salient approaches of eclectic method, the situational, communicative and participatory approach to minimize the common criticism on eclectic method of vastness of choice and need of selection. The intension of the application of eclectic method to the said sample, was to examine how the experiment would be pragmatic and instrumental grounds befitting the learners’ career aspirations, the ultimate goal.

The significance of the findings of this study is further confirmed by the need of the application of an influential teaching strategy to cope up with the current circumstance of the English language proficiency among the young adults in the country. The sample of the study was selected from the first year undergraduates of the largest university in the country. Graph 4 showcases the performance levels of the General English at the G.C.E. Advanced Level examination which they faced just before the university entrance.
The graph 4 demonstrates the summary of the performance level of students at General English at the G.C.E. Advanced Level examination for the last five years. It clearly indicates that the overall performance of passing grades have not even touched the limit of 50% even after spending 60 years of formal education having taught English as a second language. The results displayed in the above graph and the scores of the pretest of both control and experimental groups showed that the average of a student in the English paper is between 37-39. This is the grave reality of the English language competency in the country, which the study investigated to find a positive and a sustainable solution/option which could bring about a prospective hope.

**Limitations**

The findings of the study should be cautiously followed at this stage, since the study was not devoid of limitations. The size of the sample, the selection of the population of the sample, the limited duration of the study were the limitations that demand the study to be exploited at a larger range to observe its true big picture of the effects of the application. Delayed effects of the application of the eclectic method were not observed in the study which should also need an emphasis. On the contrary the findings of the study were presented through statistical data and only a quantitative analysis would not provide an accurate image about the effects of the application without a qualitative analysis. Regardless of some limitations, the findings of this study positively contributed to the domain of the second language teaching pedagogy.
Conclusion

The results of the study suggest the productive scope of the application of eclectic method to combat with the hindrances so far plagued the overall improvement of the second language competency of young adults in the country. Further it emphases the significance of eclectic method as a holistic approach which combines the teacher, language learner, language learning strategies and language skills into a meaningful whole which interdepends on each other pragmatically. The egalitarian conduct of eclectic method, having an ability of comprehension about the learner’s learning context which is filtered through a need based analysis prior to the application of the approach is commendable because it is what most of those traditional teaching pedagogies lack.
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The Stalemate of “Solutions” in the Palestinian-Israeli Conflict: Through the Perspective of Palestinian Intellectuals

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Abstract
In the peace talks on the Palestinian-Israeli conflict, the two-state solution has been assumed as a premise. However, the Oslo Accords have, de facto, failed, and the peace talks have not progressed since the 2000s. As such, some academics are now pointing out the impossibility of the two-state solution. Meanwhile, the one-state solution has attracted attention, mainly from intellectuals in Europe and the United States. Nonetheless, there is no growing support for the one-state solution in the occupied Palestinian territories, Jordan, Lebanon, or Israel. Even now, the two-state solution remains the main premise of the discussion. Many previous studies on these suggested solutions (especially the two-state and one-state solutions) are based on a political perspective. These mainly focus on the issue’s theoretical aspect and have not dealt with the social aspect: how Palestinian society reacts to the propositions. This research therefore mainly adopts a sociological approach. This paper pays particular attention to the awareness of Palestinians about these solutions. For this, qualitative interviews with several Palestinian intellectuals in Jordan were conducted. As a consequence, this paper reveals why the two-state solution continues to be a premise in peace talks and describes the defects of each solution. In addition, this study suggests the necessity of rebuilding an idea of governance in the future by reconsidering premised values like “sovereign states” and “national self-determination.”

Keywords: Palestinian-Israeli Conflict, Solution, Intellectual, Diaspora
Introduction

The suggested “solutions” (or peace plans) in the Palestinian-Israeli conflict, such as the two-state solution (2SS) and the one-state solution (1SS), are mainly composed of ideas about what Israel and Palestine should be in the future. The discussion has been held for a long time as to which solution describes a more rational or ethical answer. Among the solutions that have been studied so far are 2SS and 1SS. Generally, 2SS is an idea of establishing two countries, namely Israel and Palestine, independently and in parallel. On the other hand, 1SS is the idea of merging the two entities to establish an independent single state inhabited by both Palestinians and Israelis.

Many intellectuals are now skeptical of 2SS, as it is no longer practical, and discussion about 1SS as an alternative has become active. But in a political context, 2SS continues to be mainstream. This paper will focus on this contradictory situation and will elaborate on the development of the discussion and society’s acceptance of the options rather than each solution’s content in itself.

Previous Studies

Previous studies on solutions take a political perspective. These have discussed the logic and content of the existing solutions in terms of the reality on the ground and the political context, exploring their rationality and feasibility. As well, there have been studies in recent years that focus on the historical process of such discussions. These have been particularly active since the beginning of the 2000s, after the de facto failure of 2SS in the form of the Oslo Accords and the Roadmap for Peace. In particular, considering the current situation, including the increase of Israeli settlements and the subsequent fragmentation of Palestinian territories, there is an argument that it is impossible to implement 2SS. At the same time, there are many discussions pointing out the rationality of 1SS as an alternative (e.g., Abunimah, 2007; Ghanem, 2007; Hilal, 2007; Karmi, 2008; Tilley, 2010; Faris, 2012; Farsakh, 2013; Habib, 2016). Yet regarding the issue of idealism, critical consideration is also given to Zionism and the concept of the “Jewish state,” which is a barrier to the realization of 1SS (e.g., Judt, 2003; Warschawski, 2004).

However, there are still negative views of 1SS, and part of those support 2SS. There is little support in public opinion for 1SS, argued by some to be because the majority sees its implementation as simply unrealistic and because of fear of further collision between the two peoples (e.g. Avnery, 1999; Tamari, 2000; Unger, 2002; Arnaud, 2003; Roi, 2013; Schenker, 2014). In addition, it is thought to be difficult and unrealistic to deny Zionism, which aims to realize the Jewish state, and the dominant view that both sides have to realize self-determination through 2SS is deeply rooted. Previous studies have pointed out that 2SS was the only solution that has been on the table at peace talks (Liel, 2017). However, there is no definitive argument nowadays regarding which proposal is most appropriate.

Analysis Viewpoint and Research Method

Previous studies on solutions directly analyze the logic of each solution and mainly pay attention to their respective effectiveness and feasibility. As far as these studies have found, both 2SS and 1SS seem to be legitimate to some extent. But in the
political context, 2SS continues to be mainstream. In addition, as a poll (discussed later) shows, 2SS is supported only by half of the Palestinian population, and support of 1SS is also sluggish.

Why does 1SS not gain broad support in Israeli and Palestinian public opinion, why does 2SS continue to be a premise for peace, and why is 1SS not discussed at the level of political negotiations? In order to understand this situation, it is necessary to comprehensively clarify from a sociological perspective how each solution is accepted by people. As some of the previous studies are conducted by Palestinians or Israelis, their intentions may be partly biased. Moreover, there appear to be several tendencies for supporters of each solution. For example, much of the research favorable toward 1SS is attributed to Palestinians and Jews in the diaspora or foreigners residing outside of the Middle East.

On the other hand, the situation in the Occupied Palestinian Territory (OPT) is different. For example, in a poll conducted in the OPT in April 2006, the support for 2SS was 51 percent with opposition at 48 percent, while support for 1SS was 29 percent with opposition at 70 percent (PCPSR, 2016). Thus, the support for 2SS is significantly greater than the support for 1SS. Even in the intellectual strata, this is the case. For example, Khalil Shikaki, based in the West Bank, and Mohammad Baraka, a Palestinian Israeli citizen and a Knesset (Israeli parliament) member, both point out 1SS’s impossibility while arguing for the necessity of implementing 2SS (Shikaki, 2012; Baraka, 2005).

Despite the few exceptions, this trend suggests the impact of differences in social and political situations in each residential area. In the diaspora and the occupied land, there are major differences in terms of living conditions, freedom of speech, opportunities for exchange of views, etc.

However, in these trends, the responses of the Palestinians of the diaspora, especially the residents living in Jordan and Lebanon who have a large presence in the population, have been overlooked. In addition, in these areas, there is relatively little research on solutions and no polls treating Palestinians particularly as the subject. In order to examine the future of the solutions, it is urgent to comprehensively grasp the awareness of the Palestinian people, paying attention to each position regarding the residential area.

For example, in Jordan, about 70 percent of the population is said to be of Palestinian descent (it is the largest Palestinian community in the world). There is no hostile relationship with Israel because of the peace treaty, and the Jordanian citizens have not suffered substantive oppression by Israel. Jordan has also established commercial and trade relations with Israel. However, when we look at the fact that anti-Israeli demonstrations are regularly conducted in Jordan, it is cannot be said that Israel is favored in the national sentiment. As a result of these circumstances, it seems that they have a different view from OPT residents, diaspora Palestinians in Western countries, and refugee camps.

As such, this paper focus on Palestinian intellectuals living in Jordan, since they have direct or indirect effects on the various decision-making processes concerning the conflict. In addition, the respondents dealt with in this paper are widely
recognized in Jordan as debaters on the conflict, since they have had many appearances on broadcast programs and in publications. Based on the above traits, this paper considers them central actors in the discussion of the development of solutions and considers them to have a certain representation in the Palestinian public opinion in Jordan. In addition, this research utilized a sociological method. The subjects of the survey are three distinguished intellectuals: scholars, politicians, and experts. The survey was carried out as semi-structured interviews in Arabic. From the results, this paper will analyze how each solution is viewed among Palestinian intellectuals and look at the future of such discussions.

Awareness Toward 2SS

Although many previous studies are skeptical of its realization, 2SS continues to be mainstream in the political context even after the collapse of the Oslo Accords. How do Palestinian intellectuals living in Jordan view this situation? The most important point that can be seen from the interviews is that they do not support 2SS, but, as described later, they do not support 1SS either. In reality, they do not have positive expectations for any of the existing solutions, and there is no alternative idea. First, regarding 2SS, the political science professor Dr. Ahmad Nofal\(^2\) said the following:

I was staying in Palestine for two months [just before the interview]. Before I went, I thought that the idea of establishing a sovereign Palestinian state with Jerusalem as the capital [2SS] would be preferable. However, when I saw the reality, I noticed that this was impossible. Because of the settlements scattered in the West Bank district, Palestine lost geographical contiguity, so it became impossible to establish it as a state.

As in the remarks above, it was hard to find a view that proactively recognized the effectiveness of 2SS. A director of a research institute, Dr. Jawad al-Hamad,\(^3\) likewise felt the 2SS was not possible:

First, Israel doesn’t allow as its strategy the idea of the independence of a Palestinian state, even if it is disarmed. Second, as a result of the expansion of Israeli settlements, Palestine has been dismembered into cantons like South Africa. With that comprehensive interference by such settlers in the West Bank and Jerusalem, the establishment of the Palestinian state, that is 2SS, is impossible as it stands.

Two reasons were raised in common for their skeptical view of 2SS: first, the settlements, and second, the status of Jerusalem. Regarding the settlements, all the respondents mentioned that the OPT cannot become an independent state while it loses geographical contiguity due to Israeli settlements located in the West Bank. It was also pointed out that there is no solution unless Israel changes its attitude to the settlement-building. Dr. Ghazi as-Saadi,\(^4\) who is the director and the founder of a research institute in Amman and member of the Palestinian National Council (PNC), mentioned the settlement policy while evaluating the possibility of 2SS:

The Israeli side did not stop the requisition of the land in the West Bank and the construction of settlements. This made it impossible to build a Palestinian state and thereby 2SS. Netanyahu says that settlements are built on the land of Israel.
As a result, they ignored international legitimacy, international law, all of them. In my opinion, the policy of the Israeli government has caused the possibility of 2SS to become very small.

It was also suggested that opposition to 2SS by diaspora Palestinians and refugee camp residents would be relatively high. This is because when 2SS is realized, the possibility of returning to a hometown located in Israeli territory decreases, and also because these populations cannot psychologically accept being “Israeli citizens” as a result of 2SS. Dr. Nofal said the following:

The establishment of the Palestinian state that sacrifices the refugee problem has been refused. I support the establishment of the Palestinian state, but I do not want refugees to be sacrificed and camps to remain in Lebanon, Syria, and Jordan. The solution to the refugee problem is directly linked to the solution of the whole problem. Even if a state is established without refugees, it is only a provisional solution.

A problem related to this is that the influence of the residents of the OPT has become greater than that of the refugees or diaspora Palestinians, who are based in the Palestinian Liberation Organization (PLO), after the Palestinian Authority (PA) was established in the OPT and its electoral system considered only the residents of the OPT to be voters. As a result, refugee problems are a lesser priority, and the establishment of the state has been prioritized (Nūfal, 2011, pp. 831-862). As the respondents are of the diaspora, they are reluctant to accept 2SS that would dismiss a response to the refugee problems.

Furthermore, it is also important that 2SS itself has “degenerated” as time passed. For example, in 1948, the conflict was composed of two issues of dispute: land takeover and the return of refugees. At this time, the disputed land was the whole of historical Palestine. However, this primary issue has gradually become smaller, with the refugee problem now almost ignored and the “land” disputed in negotiations gradually narrowing. Now, problems that did not exist before, such as occupation and settlement-building, continue to grow. Thus, the Palestinians are threatened by the humanitarian crisis before they can tackle the core issues of rights and freedom. Dr. Hamad spoke clearly on this point: “Today, the issue on the negotiation is the end of the occupation, and it is not a matter of nationalism or the need for rights, and that sort of discussion has effectively collapsed.” In other words, the Palestinian cause for the Palestinians has been transformed from “struggle for rights and freedom” to “resistance to survive tomorrow.”

For the above reasons, respondents were commonly skeptical about 2SS. At the same time, however, Dr. Saadi and Dr. Hamad chose the execution of UN Security Council Resolution No. 242 (2SS) when asked what a desirable solution would be. (Dr. Nofal did not choose either plan). As Dr. Hamad said, “From historical experience and a detailed examination, the last option left is 2SS.” This opinion was derived from the fact that 2SS is the only solution put on the table at peace negotiations. Nevertheless, considering their skeptical view of whether that solution can be realized or not, they are not “supporting” 2SS; rather, they are very reluctantly saying that “there is nothing else to cling to.”
The Reality of 1SS

Then, what about 1SS, which is currently being actively discussed as an alternative to 2SS? 1SS, at least for the Palestinian side, can be considered a reasonable solution, as pointed out in previous studies. However, the respondents mentioned that the realization of 1SS was even more unrealistic than that of 2SS. The most significant reason is the view that Israel will absolutely reject it. Dr. Nofal made the following point:

Israel is now refusing and will continue to refuse it [1SS]. They understand the demographic situation and know that the Palestinians will be able to realize justice in the future, as happened in South Africa. Therefore, the Netanyahu regime is rejecting the Palestinian state [2SS] and the bi-national state [1SS] at the same time.

The most important reason for Israel’s rejection of 1SS is attributed to the problem of the demographic situation and the “Jewishness” of the state. Today, comparing the populations of each ethnic group throughout historical Palestine, the population of Jews and Palestinians is about the same. But according to the forecast of the Palestinian Central Bureau of Statistics, the number of Palestinians, who have a high birthrate, will exceed the number of Jews by 2020 (PCBS, 2015). If 1SS is realized under these circumstances, there is a risk that Israel will be democratically overtaken by non-Jews, and Jews will become a minority. Therefore, it is argued that Israel absolutely will not accept 1SS. As Dr. Saadi says, “1SS is thought to be a threat to the Jewish nature of Israel.” Thus, there is a deep-rooted belief that Israel will not accept the idea.

Furthermore, there is a view that 1SS has had no presence in peace talks, and therefore it is a utopian theory and an armchair plan. According to Dr. Hamad, “1SS is not a concrete plan but a mere idea and very elitist.” Indeed, in Israeli and Palestinian parliaments, 1SS is unlikely to be discussed seriously, and public opinion also has a glacial attitude toward it. Another important point that can be seen in the discussion so far is that the respondents’ views on 1SS are developed from the question of “whether Israel accepts it or not” rather than “whether it will benefit the Palestinians.” Mr. Saadi also said on this point, “Why is 1SS unrealistic? Because most Israelis do not want it, since this completely contradicts the principle of Zionism.”

The respondents see that it is difficult to realize 2SS, but 1SS is also unrealistic. The reason that 2SS continues to be mainstream is that it is relatively realistic and has been negotiated before. However, the respondents do not have an image of an alternative solution in the current situation. Dr. Saadi, who is a PNC member, said, “In the near future, there won’t be a solution.” These pessimistic perspectives can also be read from polls conducted in the Arab countries (Zogby Research Services, 2017). Indeed, in Lebanon, Jordan, and the OPT, where there is a large Palestinian population among the Arab countries, the number of respondents saying “I do not think any solution is possible” exceeds 40 percent, more than doubling in other countries. What these perspectives have in common is the belief that it is almost impossible to achieve any of the proposed solutions and the suggestion of a necessity of some sort of alternative.
Awareness about the Political Actors

A pessimistic view on solutions did not only come from the logical difficulties of the solution itself. A strong distrust of the major political actors was behind this pessimism. In the survey, the current Israeli government, the Israeli leftist blocs, the Palestinian leadership (mainly the PA and the PLO), and Islamist organizations including Hamas were all presented as subjects. When the survey was conducted, basically all actors were accepting of 2SS, but there were actors that refused negotiation itself depending on the timing.

Under these circumstances, the respondents are particularly critical of the Israeli government. According to Dr. Nofal’s view, the Israeli government has no will to achieve peace. The reason is that Israel officially encourages settlement building, which contradicts peace. It is his analysis that Israel will implement this policy as a “strategy” to eventually extinguish Palestine. Dr. Saadi’s remarks also strongly show such a view:

So far, there have been several agreements between the PLO and the Israeli government. Has Israel respected them? They didn’t. In other words, Israel closed the door to all solutions. Israel’s position is not in accordance with international law, nor does it conform to other internationally valid resolutions. The Security Council has adopted a resolution against Israeli settlements. But did Israel listen to this? Of course not.

As Israel continues to occupy the land and abandon existing agreements, the Palestinian side grows angry and falls into a further quagmire. It is also believed that this situation is to the benefit of Israel. Dr. Hamad pointed out that “many things cannot be realized without Israel’s agreement.” And in Dr. Nofal’s remarks, we can read a strong distrust of Israel and awareness that Israel holds the initiative. In these remarks, Dr. Nofal strongly recognizes that no solution can be expected unless the attitude of Israel changes:

If Israel agrees, the establishment of a Palestinian state is possible, but I do not think it will. It is Israel that holds the decisive power. And I do not think that Israel will support peace in any way in the coming years. Israel has betrayed us over and over again. There is no pressure on Israel. Is Israel suddenly changing its attitude under such circumstances? They are satisfied with this situation.

Regarding Israel’s leftist blocs, too, the respondents mentioned that they do not have enough influence to change this stalemate. Dr. Nofal mentioned, “There is no influence from leftist blocs; it is obvious if you look at the elections. Israeli society chooses Bennett, Lieberman, Netanyahu, etc. There’s no one who wants peace.”

Then what about the PA and the PLO, which cannot take effective measures against this situation? In recent years, as a result of the PA qualifying as an observer state in the United Nations, PA’s presence may be seen favorably, but as can be seen in the following remarks from Dr. Nofal, the respondents’ analysis is pessimistic:

The PA is not a government. The West Bank is conveniently divided into the A, B and C area, and the Israeli army can enter whenever they want. There is no
state there. Who is the ruler? For example, what do you need when you go to Ramallah from Jerusalem? It is the permission of Israel. Even the Prime Minister of Palestine requires permission from Israel to come. What is the condition of a state? Citizenship, territory, government, and sovereignty. We have no territory, government, or sovereignty.

Even Dr. Saadi, a PNC member, showed a skeptical opinion on the abilities of the PA. According to him, as a matter of fact, the PA cannot be said to have a governmental function, and it has no power to change this situation. Indeed, the PA has limited or no military power, administrative functions, or other governmental abilities. As for the PLO, its influence has been declining after the Oslo Accords, and it has been noted that while it is significant as a framework that includes all Palestinians around the world, it is not possible to expect actual influence. Regarding Hamas and other Islamist organizations, Dr. Hamad, for instance, mentioned that they are losing power with the entire Gaza society under siege. As he points out, “Even if Hamas eventually declines, people will only create something new.” The importance or specificity of being Islamist was not evaluated positively.

**Meaning of “Resolution”**

With no expectations for the proposed solutions or actors, the intellectuals are dominated by distrust and indignation, but it seems they are not giving up. On the other hand, what they emphasize in common is expressions regarding the “struggle for rights.” Dr. Nofal put it as below:

> If you were forced to leave my country, would you live outside as a minority with limited rights or resist? Why did we have to be kicked out of the place where you lived and forced to look at it enviously from the outside as a refugee? This is not reasonable. Of course, to return is not easy. The current situation does not allow it, but my sons and grandsons will continue fighting for it. Jews were exiled two thousand years ago and came back. We are only about fifty years or seventy years. We must not forget the return. This is a matter of our existence.

As already quoted, Dr. Hamad also mentioned that they must remember “to emphasize rights of return always and stick to it.” At the same time, “resistance” and “establishment of a state” are described as a means or process for achieving rights and are not the purpose in themselves. The “Palestinian cause” they see is only a matter of freedom and rights in the end. And abandoning those means that Palestinians are no longer Palestinians, and Palestine is no longer Palestine. The specific contents of the “rights” are the right of refugees to return and the right of land use. However, these essential issues have become gradually less important, as mentioned above.

The fact that there is no expectation for the resumption of peace negotiations is strongly related to the fact that the peace process in recent years does not present a final vision for such essential issues. For example, the Oslo Accords, based on 2SS, had postponed the most important issues of the refugees’ right to return and the final status of Palestine. From the results, Palestine only gained limited administrative authority in a small piece of land. On the contrary, the “facts on the ground” institutionalized the occupation. Furthermore, authority of the leadership expanded with the establishment of the PA, which lead to corruption while diaspora Palestinians...
and refugees lost their voices. In recent years, it has become more difficult for both sides to sit at the table in peace talks, while Israel accumulates even more by facts on the ground.

As Dr. Saadi said, “What we are seeking from a Palestinian standpoint is a complete solution, not a partial solution.” Partial or stepwise negotiations have always functioned as a cover for the Israeli settlement policy. In order to overcome this situation, as Dr. Nofal pointed out in his own book, we basically have to recognize that “[t]his dispute will not end without the realization of the full rights of the Palestinians” (Nūfal, 2011, p. 834), and all parties have to prepare a comprehensive framework for peace, including the final status of Palestine. At the same time, as can be seen from the respondents’ opinions, we must recognize that existing frameworks such as 2SS and 1SS already contain clear obstacles and that there is a high possibility that they will not function as they are.

**Conclusion: The Future of “Solutions”**

To summarize the opinions of the respondents, first, they do not expect the realization of the existing proposed solutions. Secondly, even with this skepticism toward current solutions, they have no image of a new alternative. As a result, there is no choice but to cling to 2SS, which is relatively realistic and has been on the table before. This can be interpreted as the reason why 2SS has been mainstream in the political context. Third, distrust and a lack of expectations are directed toward almost all political actors. If we look only at these points, there seems to be no hope. But these respondents have not given up, and they clearly emphasize that what they are insisting on is the recovery of their rights.

However, looking back at history, what the Palestinians aimed for in terms of restoring their rights was two points: independence as a completely sovereign state and the realization of ethnic self-determination. The respondents frequently mentioned these two points and have no doubts about their necessity. However, it is natural to locate the rights of self-determination and the sovereign state as the goal of nationalism in general and, in this case, of “Palestinian nationalism” specifically. On the other hand, the respondents do not recognize that at least they are aiming at exclusive land control and acquisition of absolutely superior status to Jews (Israelis). If it is assumed that the essence of the Palestinian cause is “restoration of deprived rights,” the need is generally more universal than the aims of nationalism. From a different point of view, it can be said that the intellectuals stick to these two points and have turned these means into the purposes. As a result, they lack the flexibility to think about alternatives toward the recovery of rights. Removing this insistence and looking at another possibility is important for future governance building.

Considering the premise that the sovereignty of one ethnic group does not dominate the other and that physical division is not relevant here, there emerges the possibility of sharing sovereignty over the territory. If applied to the existing form of governance, the condominium system where two or more countries have sovereignty in the same region is similar to this. However, given the gap in current military and economic power, there is a possibility that unilateral rule will be accomplished in the name of “joint rule” if equivalent sovereignty between the two entities were realized. Therefore, restrictions or the abolishment of existing military capabilities and a joint-
sovereignty system under international control, such as monitoring by the stationing of multinational forces, could be possible.

Nonetheless, it is difficult to present a more concrete plan from only the content of this paper. In addition, of course, it is unlikely that this argument would be acceptable for all Palestinians and Israelis. Discussions are also needed regarding whether both ethnic groups can accept any specific solution. The aim of this paper, however, was simply to withdraw from the deadlocked situation regarding the discussion of solutions and to encourage reconsideration of future directions. The Palestinian intellectuals living in Jordan with which this article dealt had little expectation for either 2SS or 1SS, unlike the trends indicated by the previous studies. Their position of “neither 2SS nor 1SS” suggests that there is no way out of the question of “one or two.”

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1 This paper refers the definition of Palestinian set by the Palestinian National Charter (1968): “The Palestinians are those Arab nationals who, until 1947, normally resided in Palestine regardless of whether they were evicted from it or have stayed there. Anyone born, after that date, of a Palestinian father—whether inside Palestine or outside it—is also a Palestinian.”

2 With a doctorate in political science from the Université Paris 1 Panthéon-Sorbonne and Cairo University, he serves as a professor of political science at Yarmouk University in Jordan. He has many publications on the Palestinian-Israeli conflict and many TV appearances as a commentator on political problems.

3 He served as Director of the Middle East Study Center (MESC) in Amman since 1994. He received a master’s degree from Durham University in the United Kingdom. He has many publications about the Palestinian-Israeli conflict and international relations in the Middle East region and has made many TV appearances.

4 Founder of "Dar al-Jalil" in Amman and director until his death in 2017. The institution was founded in 1978, and since then it has conducted activities such as research and investigation into the Palestinian-Israeli conflict and the publication of related books. Before his death, he was also active as a PNC member.
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Strategy for Increasing the Placement of Indonesian Migrant Workers in the Formal Sector

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Abstract
The Government of Indonesia keeps trying to improve the protection of Indonesian Migrant Workers. One of the efforts undertaken is to reduce the sending of migrant workers in the informal sector who more vulnerable and lack of protection, and to increase the placement of migrant workers in the formal sector which more fully protected. For the research methods, in-depth interviews of government and non-governmental agencies directly related to the policy of migrant workers in the formal sector are conducted in each sample area. From the research results, it can be concluded that to increase the placement of Indonesian Migrant Workers in the formal sector, the Indonesian government must make some efforts in order to improve the system and mechanism of Indonesian Migrant Workers placement in the formal sector as well as the education and skills of prospective Indonesian Migrant Workers; so that, they can compete in the global job market.

Keywords: Placement, Migrant Workers, Formal Sector
Introduction

Indonesia is currently the largest labor-sending country in the world. Unfortunately, most of the workforce from Indonesia works in the informal sector. It is undoubtedly that the workforce working in the informal sector will always cause problems such as torture, ill-treatment and many others. Moreover, in terms of providing protection, it will be more difficult for Indonesian workers to be protected if they working in overseas illegally. (Simanjuntak, Payman J, 2004). Their occupations are vary, among others: as Helper, Baby Sitter, Nursing Nurse, Gardener, Driver and so on. In addition, sometimes they are employed by individuals; so that, these informal Indonesian Migrant Workers are vulnerable to face many cases because it is impossible for either the government or Indonesian Migrant Workers Company (PPTKIS) to monitor them. Whilst, the cases that occur in the Indonesian Migrants Workers who work in the formal sector is less than in the informal sector. It can be happen because the monitoring procedures are easily monitored by the government and PPTKIS because they are not employed by individuals, but by the company.

Facing this situation, then the Government of Indonesia plans and estimates that at one time, there will be a hyperbolic placement trend in which more formal sector placements rather than the informal sector. Therefore, The Ministry of Manpower together with National Board for the Placement and Protection of Overseas Workers (BNP2TKI/Badan Nasional Penempatan dan Perlindungan Tenaga Kerja Indonesia) and also other stakeholders continue to make improvements on all fronts; because actually sending Indonesian Migrant Workers to work overseas is posing a dilemma for the Indonesian Government and for the prospective Indonesian Migrant Workers as well. On the one hand, it is beneficial not only to reduce the burden of unemployment, but also to create remittances which brings into Indonesia. On the other hand, it can create adverse effects to the Indonesian Migrant Workers themselves, such as torture, acts of violence and sexual harassment.

Based on the conditions of Indonesian Migrant Workers placement as described above, it can be formulated some issues raised in this study such as follows:

1. What are the efforts made by the Indonesian Government and other parties in order to increase the program of Indonesian Migrant Workers placement in the formal sector from the perspective of Supply (education level, skills, and competence of Indonesian Migrants Workers) and Demand (market intelligence, promotion, labor market information system) side, and also from the placement side itself?
2. What kind of strategy that should be developed to improve the formal migrant placement program?

Based on the above problems, this paper try to formulate research objectives as follows:

1. To evaluate and analyze the efforts made by the Indonesian Government and other parties in order to increase the program of Indonesian Migrants Workers placement in the formal sector from the perspective of Supply and Demand side, and also from the placement side itself.
2. To formulate some strategies in improving the formal migrant workers placement program.

Methodology

The method used in this research is to take some Indonesian Migrant Workers sending areas, namely, Central Java and East Java Provinces to be used as research samples. In each sample area, in-depth interviews of government and non-governmental agencies directly related to policy making and placement operations for migrant workers are conducted to find out the problems and explore strategies that can be applied to improve the placement of labor migrants in the formal sector. All in all, whole data collected then would be analyzed using descriptive qualitative analysis method.

Results and Analysis

The Development of Indonesian Migrant Workers in Placement in Formal Sector

Formal Indonesian Migrant Workers placement in this study was conducted on two periods under different conditions, such as the period before and after the moratorium between the Indonesian government and the government of Saudi Arabia and also other Middle East countries. Prior moratorium, the number of formal workers in Indonesia in 2006 - 2010 was much smaller (less than 30%) compared with non-formal workers, where informal Indonesian Migrant Workers in this period were dominated by occupations as Domestic Helper/Domestic Worker in Middle East countries. This is due to the low level of education and skills of the labor migrants; so that, they can only fill vacancies in the non-formal sector. The comparison of formal and informal Indonesian Migrant Workers placement before the moratorium can be seen in the following table:

Table 1: The Number of Formal and Informal Indonesian Migrant Workers Placement Prior Moratorium (BNP2TKI, 2018)

<table>
<thead>
<tr>
<th>No.</th>
<th>Year</th>
<th>Formal Indonesian Migrant Workers</th>
<th>%</th>
<th>Informal Indonesian Migrant Workers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2006</td>
<td>177,495</td>
<td>26</td>
<td>502,505</td>
<td>74</td>
</tr>
<tr>
<td>2.</td>
<td>2007</td>
<td>196,191</td>
<td>28</td>
<td>500,555</td>
<td>72</td>
</tr>
<tr>
<td>3.</td>
<td>2008</td>
<td>182,439</td>
<td>29</td>
<td>462,292</td>
<td>71</td>
</tr>
<tr>
<td>4.</td>
<td>2009</td>
<td>103,918</td>
<td>17</td>
<td>528,254</td>
<td>83</td>
</tr>
<tr>
<td>5.</td>
<td>2010</td>
<td>124,683</td>
<td>27</td>
<td>451,121</td>
<td>73</td>
</tr>
</tbody>
</table>

The discourse on the moratorium on migrant workers to Saudi Arabia has long been becomes the concern of the Indonesian government. With the occurrence of abuse case of Indonesian Migrant Worker named Sumiyati in Medina informed by the mass media at the end of 2010, then the Indonesian government did the Indonesian Migrant Workers soft moratorium or semi moratorium to Saudi Arabia since January 2011. Transient moratorium policy for migrant workers to Saudi Arabia finally set since August 1, 2011, after the mass media heavily reported about the imposition of death
sentence against Indonesian Migrant Worker named Ruyati in Mecca. The case of the beheading of Ruyati was newly known by the Indonesian Government the day after the procession was carried out; therefore, the Indonesian government through the Ministry of Foreign Affairs sent a protest to the Kingdom Government of Saudi Arabia and issued a policy of moratorium above which then responded by the Kingdom of Saudi Arabia by issuing. Furthermore, they make a decision to stop the issuance of visas for informal workers from Indonesia and the Philippines since July 2, 2011. (https://nasional.kompas.com/read/2017/09/16/06573551/bnp2tki-rumuskan-format-baru-pengiriman-tki-to-timur-tengah.: Indra Akutono)

The moratorium (suspension of shipments) of migrant workers is carried out in two stages. First moratorium is limited to Saudi Arabia in 2012-2015, then the moratorium extends to 19 countries in the Middle East in 2015-2017. With the existence of the moratorium, there was a significant decrease in non-formal shipment of migrant workers. Since 2011 the placement of formal sector workers tends to increase. The percentage comparison between the placement of formal and informal sector workers is closer to the balance or 50:50. The government continues to reduce the placement of informal Indonesian Migrant Workers by encouraging more placement of Formal Indonesian Migrant Workers to increase protection by placing Indonesian Migrant Workers with better skill and competence. The development of informal and formal migrant worker shipments since 2011 can be seen in the table below:

Table 2: The Number of Formal and Informal Indonesian Migrant Workers Placement Post Moratorium (BNP2TKI, 2018)

<table>
<thead>
<tr>
<th>No.</th>
<th>Year</th>
<th>Formal Indonesian Migrant Workers</th>
<th>%</th>
<th>Informal Indonesian Migrant Workers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2011</td>
<td>266,191</td>
<td>45</td>
<td>320,611</td>
<td>55</td>
</tr>
<tr>
<td>2.</td>
<td>2012</td>
<td>258,411</td>
<td>52</td>
<td>236,198</td>
<td>48</td>
</tr>
<tr>
<td>3.</td>
<td>2013</td>
<td>285,297</td>
<td>56</td>
<td>226,871</td>
<td>44</td>
</tr>
<tr>
<td>4.</td>
<td>2014</td>
<td>247,610</td>
<td>58</td>
<td>182,262</td>
<td>42</td>
</tr>
<tr>
<td>5.</td>
<td>2015</td>
<td>152,394</td>
<td>55</td>
<td>123,342</td>
<td>45</td>
</tr>
<tr>
<td>6.</td>
<td>2016</td>
<td>125,176</td>
<td>53</td>
<td>109,275</td>
<td>47</td>
</tr>
<tr>
<td>7.</td>
<td>2017</td>
<td>118,830</td>
<td>45</td>
<td>142,990</td>
<td>55</td>
</tr>
</tbody>
</table>

In the delivery of formal labor migrants belonging to the category of semi-skilled and skilled workers, the main issue is no longer related to their protection because almost in all the recipient countries of formal labor migrants, the protection of formal labor migrants is regulated by the employment law of the recipient country. There are several main issues in the placement of formal Indonesian Migrant Workers which must be considered by the Indonesian government, namely:

1. The inadequacy of labor market information system in foreign countries makes the supply and demand of Indonesian Migrant Workers become unequal;
2. The low level of prospective migrant workers education and skills;
3. Various limitation that occur in education and training institutions;
4. Indonesian Migrant Workers placement procedure is still considered less effective and efficient.
The Jobs Market of Indonesian Migrant Workers in Formal Sector

Indonesian workers, especially in the formal sector, are well-liked overseas. During this time, the types of vacancies and job opportunities for formal workers are available in various placement countries such as construction, petroleum, mining, transportation, services, hospitality and tourism, nurses, supermarket servants, plantation workers, agriculture and fisheries. Based on data from BNP2TKI there are 5 priority sectors of formal Indonesian Migrant Workers employment opportunities as follows:

1. Health: Kuwait, Qatar, Taiwan, UAE, Japan;
2. Hospitality: Singapore, Macau, UAE, Bahrain;
3. Oil and Gas: Qatar, Australia, Kuwait, Malaysia;
4. Construction: Macau, Malaysia;
5. Manufacturing: Taiwan, South Korea, Malaysia, Qatar, Canada.

In addition, there are some countries that become potential targets for expansion of the formal labor market for migrant workers. For example, several countries in Eastern Europe, such as Czechoslovakia and Russia, have asked many Indonesians to work there primarily as health-care massages at spas and therapists. These employment opportunities of labor migrants in Eastern Europe, especially for these two areas are fairly new, following the large number of workers in Eastern Europe absorbed by Western Europe and the United States; so that, these countries begin to look for labor into the Asian region. Beside in Eastern Europe, the absorption of formal labor migrants for the Middle East region is also considerable, to be placed in the construction, mechanical, and oil engineering sectors (Elia Rosalina, 2018).
The data placement of Indonesian Migrant Workers based on Job Title can be seen in the following figure:

![Figure 1: The Placement of Indonesian Migrant Workers Based on Job Title (BNP2TKI, 2018)](image)

From the data displayed above, the three-most number of formal Indonesian Migrant Workers occupy on the position of Care giver, Operator and Plantation Worker. From the data of supply and demand of formal Indonesian Migrant Workers in 2017, it can be concluded that the demand of Oil and Gas Mining and Hospitality sectors is still much higher than supply, so there is still open employment in both sectors.

![Figure 2: The Number of Supply and Demand of Formal Indonesian Migrant Workers in 2017 (BNP2TKI, 2018)](image)
This circumstance needs to be continuously pursued and encouraged in order to produce Indonesian Migrant Workers who have work skills, competence and professionalism; therefore, it can fulfill the vacant jobs available abroad. Job opportunities in the formal sector available in the international labor market are still wide open for the labor migrants. However, to fill that job opportunities in the formal sector, the quality of Indonesian Migrant Workers should be improved optimally through job training. Both government and private institutions have to work closely together in order to develop the expansion of the labor market for Indonesian labor migrants, and continue to make sure that the placement of formal Indonesian Migrant Workers in line with the strategic plan for the elimination of Indonesian Migrant Workers who work as domestic workers.

The Condition of Labor Market Information System of Indonesian Migrant Workers in Formal Sector

To protect and empower the prospective Indonesian Migrant Workers, government build the labor market information system that consists of the data of migrant workers, labor agencies, employers and destination country policies. In Indonesia, APJATI (stands for Asosiasi Perusahaan Jasa Tenaga Kerja Indonesia/Indonesian Manpower Services Association) has started to create an electronic data center of all migrant workers along with employment agencies and employers in the destination country. In addition, government agencies should act as leaders in this regard to ensure that the information given is independent and accurate.

Then, BNP2TKI (stands for Badan Nasional Penempatan dan Perlindungan Tenaga Kerja Indonesia/National Board for the Placement and Protection of Overseas Workers) pioneered to build the Overseas Employment Information Service (Jobs Info) which is a service for the community/job seekers who want to work abroad. The services provided include overseas employment information, online registration through http://jobsinfo.bnp2tki.go.id, consultations and more. This information system in the future is expected to be developed into an integrated information system containing information supply and demand of foreign job market. The foreign job market application which has been built and operated by the BNP2TKI can be seen at the picture below:
Whilst, there are still many weaknesses of the application system in jobsinfo.bnp2tki which is now running, such as:

1. The supply information has not yet entered into the application, so that new job info can only display from the demand side especially job vacancy in the formal sector;
2. The system of job information has not been integrated either in between related institutions themselves or between the central and regional governments.

**Formal Indonesian Migrant Workers Education and Skills Level**

The availability of overseas employment opportunities in abroad should be accompanied with the readiness and availability of prospective Indonesian Migrant Workers with skills and competencies in accordance with the needs of the labor market. From the point of view of Indonesian Migrant Workers education level, based on data obtained from BNP2TKI, it is illustrated how their education level are low and still dominated by elementary and junior high school, as shown in the following picture:
Figure 4: The Placement of Indonesian Migrant Workers Based on Education Level (BNP2TKI, 2018)

By looking at the above data, it is clear that the majority of migrant workers graduate from elementary, junior high and high school. Therefore, the Indonesian government, in cooperation with the private sector concerned, should make any efforts to provide education and training facilities for migrant workers to meet the level of education, skills and competencies that are accepted by the destination countries.

The Availability of Education and Training Institutions for Formal Migrant Workers

Increasing the education and skills of labor migrants through formal education institutions and training institutions should be the concern of all stakeholders. Both government and private sector who will dispatch the migrant workers in abroad, have to ensure the skills possessed by prospective migrant workers. Education and job training for prospective Indonesian Migrant Workers, Education and Job Training for Prospective Indonesian Migrant Workers are defined as a job training process to give, gain, improve and develop work competence, productivity, discipline, attitude and work ethic, at certain skill and skill level according to the level and qualification of the job title. Education and training for prospective Indonesian Migrant Workers are intended to:

1. Equip, allocate and develop the competence of prospective migrant workers;
2. Give some knowledge and understanding of the situation, condition, customs, culture, religion, and risk of working abroad;
3. Provide the ability to communicate in the language of the destination country;
4. Give some knowledge and understanding about rights and obligations of prospective Indonesian Migrant Workers.
After they get the proper education and training, then the Prospective Indonesian Migrant Workers are required to have job competency certificates in accordance with the requirements of the position. Certificates of competence are obtained through a competency test issued by professional certification bodies licensed namely the National Agency for Certification of Professions (BNSP). In the process of formal Indonesian Migrant Workers placement, PPTKIS (literally Indonesian Migrant Workers Company) parties generally do not provide adequate skills before the migrant workers depart because PPTKIS only rely on their skills gained at school. This condition certainly creates misunderstanding when the user ask them to complete their task given. There are some education and training institutions that play the roles in improving the competence of prospective migrant workers, as follows:

a. BNSP

There is a requirement that requires for every Indonesian Migrant Workers who will work abroad must follow a competence test. Therefore, it is a must for all who work in abroad to have a competence certificate. This certificate can make Indonesian workers able to compete in the international community. Competence certification aims to ensure that people who will work overseas are already competent in their field. If they are competent enough, then will able to do work and get proper remuneration. Thus, this competence certification would become such a protection for Indonesian Migrant Workers since they can do work properly and get paid adequately.

To tackle this function, then government formed National Board for Profession Certification (BNSP/ Badan Nasional Sertifikasi Profesi). The duty of this agency is to perform the certification of work competence for all professions. BNSP is an independent body which responsible directly to the President. In order to fulfill the job competence certification task, BNSP may grant licenses to professional certification bodies - named LSP (Lembaga Sertifikasi Profesi/Professional Certification Bodies) - that meet the requirements stipulated to implement the certification of work competency.

There are approximately 200 certification bodies that exist in Indonesia. The sector of Profession certification bodies is divided into five main sectors: agriculture, manufacturing, mining, transportation and services. Almost all economic sectors already have certification institutions. However, each sector applies the competence certification process in different way. For example, in the banking services sector, all the bankers are required to have a certificate of competence in the field of list management, then there is LSP in that field.

The implementation of competence certification previously has been focused and limited to domestic workers only, better known as informal Indonesian Migrant Workers. It is because these informal workers work for individuals that make the government feels that this segment is must be protected first, whereas formal workers who usually work in industry and companies are already considered to have clear procedures and guarantees. With the existence of global competition, especially in the field of labor, the Minister of Manpower mandates that now it is time for this certification to be developed not only for informal overseas workers, but also for the formal ones.
b. PPTKIS and BLKLN

PPTKIS (Pelaksana Penempatan Tenaga Kerja Indonesia Swasta/Indonesian Migrant Workers Company) is legal entities that have obtained written permission from the Government to organize overseas workers placement services. Since all prospective Indonesian Migrant Workers should get job training before placement process; therefore, there is another institute used to train prospective migrant workers before departing abroad called BLKLN (Balai Latihan Kerja Luar Negeri/The Overseas Work Training Center). BLKLN can be organized by government, private, and corporate training institutions.

In each Province in Indonesia, there are PPTKIS and BLKLN that play a direct role in the process of formal and informal Indonesian Migrant Workers placement. This study conducted an observation in East Java and Central Java Provinces. Based on data collected from LP3TKI Surabaya, until 2016 there are 71 PPTKIS in which branch offices spread in various districts/cities of East Java Province; while in Central Java Province, there are 25 PPTKIS whose branch offices are spread in various regencies/municipalities.

There are also PPTKIS as well as BLKLN included in private education institutions and participate in the formal placement program of migrant workers. However, many of the existing BLKLN train more informal Indonesian Migrant Workers while for formal Indonesian Migrant Workers relies more on competency test certificates owned by prospective Indonesian Migrant Workers previously, without be given further education and training by BLKLN. This circumstance could be occurs because it is assumed that those who working in the formal sector are considered to have possessed the skills so that it does not need to be trained again.

c. Institute of Formal Education

Besides those two previous institutions, there is another institution that has an important role also called SMK (Sekolah Menengah Kejuruan/Vocational High School). It becomes important because some PPTKIS in Central Java Province has recruited Indonesian Migrant Workers Candidates from SMK graduates/alumni. In conducting the training, PPTKIS then sometimes cooperates with Vocational High School through some ways like:

1. Collect and organize alumni or prospective alumni to convey information about employment abroad;
2. Provide counseling, assisting and delivering those who are interested in enrolling to complete the required documentation requirements.

Moreover, in East Java Province, there is a SMK Mini (Mini Vocational High School) mini which means private education institutions that play a role in the placement of formal migrant workers inspite of teaching the usual lecturer. SMK mini is one of the East Java Governor program which is attempted to overcome the huge number of unemployment especially those who are graduates from Islamic Boarding School (Ponpes/Pondok Pesantren) in East Java Province. Facing the fact that this Ponpes has already have facilities as an education institution, then the East Java Provincial
Government only provides assistances to various SMK Mini which consist of 70% for training facilities, and 30% for facilitating entrepreneurship training in remote areas.

**Placement Mechanisms of Formal Migrant Workers**

The three major obstacles faced by the government in processing the placement of Formal Indonesian Migrant Workers are as follows:

1. Lack of coordination among related institutions so that there is no integration between both central and local government policy. As an adverse impacts, the data related to the Formal Indonesian Migrant Workers becomes unintegrated also. This situation creates lack of integration between its supply and demand sides.

2. Some PPTKIS does not undertake the stages of training or competence certification tests for the formal Indonesian Migrant Workers, because they assume that these formal Indonesian Migrant Workers candidates are already have the competence obtained from their formal and informal education. In addition, government-owned BLKLN is also generally intended only to provide training for prospective informal Indonesian Migrant Workers or to provide training in language skills only. Competency tests for formal Indonesian Migrant Workers are generally only done for the Government to Government (G to G) placement system.

3. The number of government agencies that perform the function of "Market Intelligence" are very limited. There is only BNP2TKI that has been intensively performing as market intelligence in cooperation with the Ministry of Foreign Affairs, Ministry of Trade and Ministry of Health. However, market intelligence activities are not broad enough socialized to the provincial and district levels. The PPTKIS as a non-governmental institution gets information on formal sector employment opportunities directly from their business partners in every recipient country or from labor attaches. Unfortunately, both the Ministry of Foreign Affairs and the Ministry of Manpower have not been able to maximize the role of the Employment Attaches in carrying out the "Market Intelligence" function.

To face those obstacles, the Government made some efforts to improve the profile of Indonesian Migrant Workers by upgrading the education, skills and competence of Indonesian Migrant Workers as well as the implementation of an accelerated market intelligence. Besides that, for processing the migrant workers documents, there are many steps that must be passed and involve many different agencies. To simplify this process, then One-Stop Integrated Service (LTSA/Layanan Terpadu Satu Atap) has been implemented, for example in Nusa Tenggara Barat (NTB) Province. The LTSA involves all elements both private and government, such as to what happen in NTB Province, all related affairs from some institutions such as Disnakertrans NTB (Nusa Tenggara Barat), BP3TKI, Immigration Mataram, Health Facility, Bank Program Participant (BRI), Insurance Consortium, Tax Service BFLN and Airline (Merpati) can be taken care of at the same place.

The aims of establishing LTSA as a center for information are to provide services easily, quickly, cheaply and appropriately to Indonesian Migrant Workers who will work abroad in order to reduce the number of migrant workers problem. Furthermore, this place is also built to provide the easiness in managing the departure
administration of overseas workers. Results achieved after the establishment of LTSA are:

- An 7.7% increase of Indonesian Migrant Workers placement from as many as 49,884 people in 2008 becomes as many as 53,731 in 2009;
- The return of Indonesian Migrant Workers through deportation in 2009 decreased by 24.5% or accounted as many as 4,222 people, compared to 2008 as many as 5,592 people;
- The total remittance in 2009 rose by 21% compared to 2008;
- The number of PPTKIS offices both Central and Branches in NTB Province raised from as many as 224 units in 2008 to as many as 352 units in 2009.

Last but not least, this LTSA system in NTB Province can be a good lesson learned to be developed in other provinces. Therefore, in order to improve the formal placement program for Indonesian Migrant Workers, it is necessary to build an integrated system through coordination mechanisms between related institutions, both government institutions and non-government institutions. Their respective functions then shown in the figure below:

![Diagram](image)

Figure 5: The Integration of Formal Indonesian Migrant Workers Placement Development Program (BNP2TKI, 2018)

**Conclusion**

Many countries in the world need formal migrant workers especially originally from Indonesia; however, it is still difficult for people to know what the work field demanded and the competencies required. There are still many weaknesses towards implementing better formal Indonesian Migrant Workers placement program. All in all, it is necessary to improve and develop the current system, especially related to the following issues:
1. The condition where there is no clear jurisdiction division among all involved state institutions in term of Indonesian Migrant Workers placement program at the national, provincial and district levels, resulted in very minim coordination and cooperation or duplication of work among government agencies in performing their functions regarding to formal Indonesian Migrant Workers placement programs.

2. The low level of education and skills of prospective formal Indonesian Migrant Workers makes it difficult for them to meet all competences required by the user. Therefore, the government needs to make some efforts to increase their competence in order they can compete in the global job market.

3. There is no accurate and integrated labor market information system of Indonesian Migrant Workers which can match between supply and demand.

**Suggestion**

The availability of overseas employment opportunities in the formal sector should be accompanied with the readiness and availability of skilled and qualified Prospective Indonesian Migrant Workers in accordance with the needs of the labor market. Some strategies that can be taken by the Indonesian government to improve the formal migrant placement programs are as follows:

1. Increase the placement of formal sector workers by using policy that creates by design (means well prepared and planned earlier) not by accident (when there is a new demand from overseas then seeking its workforce);
2. Improve the implementation of market intelligence and do road shows to potential countries;
3. Doing up skilling, up grading, and adjustment training (link, train, and match);
4. Encourage the enhancement of BLKLN, LPK, LKS, BNSP and LSP roles to be more proactive in preparing prospective formal Indonesian Migrant Workers in accordance with the required competency standard
5. Organize multilateral and bilateral diplomacy
6. Cooperate the job training with the center of excellence in the country (universities, polytechnics, vocational high schools, vocational training centers and so on)
7. Develop a labor market information system of Indonesian Migrant Workers in particular to the formal sector that its utilization are integrated and socialized utilization
8. Conduct cross sectorial cooperation in order to develop the Indonesian Migrant Workers placement program.

**Acknowledgements**

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Resources

“Decision to Stop the Issuance of Visas for Informal Workers from Indonesia and the Philippines since July 2, 2011” by Indra Akunonto:

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**Confidence is a Plant of Slow Growth: The Relationship between Team Trust and Voice Behavior in Nursing Career**

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**Abstract**

This study explores how voice behavior in the nursing workplace relate to changes in team based self-esteem and trust. According to the social identity theory and Chinese cultural influences, power distance orientation may play an important role in this relationship. The examined model investigated the mediating role of team based self-esteem relations between voice behavior on team trust. Power distance level in this process were also examined to test moderated mediation in these linkages. The final participants were 247 registered nurses with convenient sampling from a medical center in Northern Taiwan. SEM analysis indicated all model fit were acceptable, suggesting that team based self-esteem has partial mediation between team trust and voice behavior. Power distance orientation moderate the indirect effect of team trust to self-esteem, such that the relationship will be stronger among those who is perceived high power distance. Practical implications are discussed.

Keywords: nurse, power distance orientation, team trust, team based self-esteem, voice behavior
1. Introduction

Voice refers to a promotive behavior that people use to propose innovative suggestion for change and informing the original procedure even when others oppose (Linn, & LePine, 1998). In work setting, voice behavior represents the motivation to express about work-related issue, idea, information and opinion (Linn, Ang, & Botero, 2003). Mostly, nurses or numerous health care personnel incline to contribute voice for preventing negative outcomes, such as patients’ safety and error action (Carney, West, Neily, Mills, & Bagian, 2010). Nurses has been known as a profession with mixed skill, medical knowledge, emotion intelligence, and teamwork needed around the patients, peers and other health workers (Curtin, 1998; Gardner, Thomas-Hawkins, Fogg, & Latham, 2007). Trusting each other plays an important role of keeping better teamwork from safe and stable requirement of human’s instinct (Breitbach, Reeves, & Fletcher, 2017; Eppich, 2015; Krueger, Ernstmeyer, & Kirking, 2017). Yet, the culture of emphasizing guanxi, collectivism, and Confucianism let the relationships becoming more complex in Taiwan (Gong, He, & Hsu, 2013). We hope to clarify this trust-voice relationship in this study and propose the presented model in figure 1.

2. Theoretical Background and Hypotheses

Social identity theory has been conceptualized and operationalized in a wide variety of ways. There is consensus in the literature about its overarching focus, which is how individuals make sense of themselves and other people in the social environment, such as organization or company (Joshi, & Goyal, 2015; Karakaya, Yannopoulos, & Kefalaki, 2016; Schmidts, & Shepherd, 2015). The more individuals feel like members in these group, the more likely for them to act the attitude and behaviors belonging to that group (Daan, & Els C M van, 2000). In hospital, the professional identity of health care professionals may lead to crack the relationship between different departments, intra- or inter-group, if it is stronger than organizational identity (van Os, de Gilder, van Dyck, & Groenewegen, 2015). This crack would cause competition, inter- or intra-groups polarization, lower job satisfaction or difficulties in improving patient care (Topa, Guglielmi, & Depolo, 2014).

To prove the nurses’ organizational identity, voice behavior as a powerful predictor of belonging had been reported in the workplace with high degree of teamwork demand (Schwappach, & Gehring, 2014). Voice behavior as a “seed corn” challenge the status quo with constructive suggestions or opinion for own benefits, even in dissenting situation (Fuller, Barnett, Hester, Relyea, & Frey, 2007; Wu, Tang, Dong, & Liu, 2015). Its potential importance, which has been verified related to teamwork and job performance (Eppich, 2015; Shih, & Wijaya, 2017), in closed nursing profession has far received little empirical attention.
2.1. Team trust and voice behavior

In this article, team trust, which had been found that would affect not only colleagues’ but also patients’ overall satisfaction and other career outcomes, will be saw as an indispensable character of social identity process in nursing profession (Velez, & Strom, 2012). Team trust refers to “the positive expectations about the intent and behaviors between among individual, other members and organization” (Huff, & Lane, 2003). Greenwood and Van Buren III (2010) also suggested that trust with organization should contain three components: predictability, benevolence, and integrity. Namely, it could explain the essence of employee engagement including environment, perception, and the interactive process between individuals and organization (Hough, Green, & Plumlee, 2015). This is important to nursing profession because trust is crucial in confidence of internal perceptions and external expectation about colleague’s abilities and behaviors that increase nurses’ working state and promote teamwork (Altuntas, & Baykal, 2010; Huff, & Lane, 2003). Thus, we suggest that experiencing more trust environment with coworkers, supervisors, or even organizations tends to improve individuals’ voice behavior, and propose the following.

Hypothesis 1: Team trust is positively related to voice behavior.

2.2. Team based self-esteem as a mediator

Having a social identity satisfies the individuals’ simultaneous needs for inclusion and differentiation. In other words, we need to simultaneously fill the need to belong to a social group while maintaining our distinction from another group (Shinnar, 2008, p. 554). Above content means that the relationship between employees and organization is a giving process from both to each other. Employees accept something (e.g. organizational support) from the company and internalize what they feel or perceive to integrate fuse in self-esteem (Ghosh, 2016). Similarly, employees with satisfying self-esteem show low level of turnover intention (Norman, Gardner, & Pierce, 2015).

Self-esteem is defined as “a term that reflects a person’s overall evaluation or appraisal of her or his own worth (Sharma, & Agarwala, 2014, p. 21)” . According to social identity theory, organizational based self-esteem comprises one side of identification process between individual and organization that allow employees to feel their contribution being valued and perceive satisfaction from the job (Hunter, 2001; Khattak, Inderyas, Hassan, & Raza, 2014). In contrast, employees who have low level of team based self-esteem are expected to perform organizational citizen behavior without motivation (Meng-Hsiang, & Feng-Yang, 2003). This is why we argue that team based self-esteem mediates between team trust and voice behavior though the interaction of giving process and propose the following:

Hypothesis 2: Team based self-esteem mediates the relationship between team trust and voice behavior. Much stronger the team trust will be positively related to team based self-esteem and have more voice behavior.
2.3. Power distance orientation as a moderated mediator

We further propose that higher power distance orientation will weaken the positive impact of voice behavior on team trust via team based self-esteem. Power distance reflects that authority in institutions and organizations is distributed unequally, especially the relationship between employees and their supervisor in Chinese culture, a collectivistic culture. (Polsa, Fuxiang, Sääksjärvi, & Shuyuan, 2013; Zhao, Liu, & Gao, 2016). Moreover, power distance orientation emphasizes a personal tendency to highlight capability, individual difference, hierarchical gap, low level of relationship and team support (Alice H.Y. Hon, Yang, & Lu, 2011). When power distance orientation is high, nurses’ supervisors or seniority nurses may view themselves at the top that are expected to control everything and to give orders (Drach-Zahavy, 2004). Because of the high tolerance with petty tyranny belonging to supervisors or seniority nurses, other inferior or disadvantaged nurses will show less protests and suggestions that benefit their departments (Akhtar, & Shaukat, 2016). Therefore, when these nurses sense more distance in their organizations or departments, they are more likely to be conservative in work attitude and performance between them and organizations, leading to lower voice behavior (Duan, Kwan, & Ling, 2014).

On the other hand, people with the individual level of high power distance may not tend to rely on reciprocity norm with peers in the workplace (Farh, Hackett, & Liang, 2007). Employees would believe that power holders are capable to gain privilege and provide benefit than those lower which are lack of resource (Landau, 2009). Furthermore, some empirical studies also found that power distance orientation is associated with pursuit of individual value, attention of status difference and lack of interpersonal trust (Shane, 1992; Costigan, Instinga, Berman, Kranas, & Kureshov, 2011). Taken together, when the level of power distance orientation is stronger, employees will show lower influence through the team trust-self-esteem chain, and then decrease their voice behavior more easily than those with weaker in organizations belonging to them. Thus, we propose the following:

Hypothesis 3: Power distance orientation moderates the indirect effect of voice behavior on team trust via team based self-esteem, such that the indirect effect will be weak or null among the nurses who tend to be higher power distance orientation, and stronger among those who are lower.

3. Method

3.1. Participants and procedures

A total of 258 Taiwanese registered nurses working at anesthesiology (41%), acute wards (25%), operation room (23%), and other departments were recruited with convenient sampling from a medical center in Northern Taiwan. Nurses received envelopes including self-report questionnaires from researchers, and immediately sealed after completing face to face.

In the final sample (n = 247; total response rate of 96%), nurses were mostly female (96%), unmarried (58%), and university graduates (72%), with an average age of
35.57 years (standard deviation = 9.37). On average, respondents reported having over 6 years of experience as a nurse, and they had also been in their current job beyond 6 years. Descriptive statistics for these sociological variables are shown in Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>35.57</td>
<td>9.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>236</td>
<td>95.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>10</td>
<td>4.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marital</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unmarried</td>
<td>141</td>
<td>57.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>104</td>
<td>42.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school and associate degree</td>
<td>62</td>
<td>25.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>177</td>
<td>72.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Master’s degree or higher</td>
<td>7</td>
<td>2.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower than 1 year</td>
<td>6</td>
<td>2.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2 year</td>
<td>23</td>
<td>9.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4 year</td>
<td>30</td>
<td>12.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-6 year</td>
<td>31</td>
<td>12.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher than 6 year</td>
<td>157</td>
<td>63.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current tenure</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower than 1 year</td>
<td>32</td>
<td>13.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2 year</td>
<td>54</td>
<td>21.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4 year</td>
<td>33</td>
<td>13.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-6 year</td>
<td>17</td>
<td>6.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher than 6 year</td>
<td>111</td>
<td>44.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>100</td>
<td>40.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute ward and intensive unit</td>
<td>62</td>
<td>25.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation room</td>
<td>57</td>
<td>23.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>27</td>
<td>11.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Descriptive statistic of sociological variables.

### 3.2. Measures

The data used for this study were part of a wider data collection effort, and this was the first study using this series. Chinese versions were established for all measures following the commonly used translation–back translation procedure (Brislin, 1970). All measures used the same response scale, ranging from 1 (strongly disagree) to 6 (strongly agree). The measures presented in the following sections were the focus of this study’s research question and its associated analyses.

**Team Based Self-esteem**

The Organizational Based Self-esteem Scale was assessed with ten-item measure developed by Pierce, Gardner, Cummings, and Dunham (1989). Sample items include “I am important around here” and “There is faith in me around here.” Cronbach’s
alpha for the scale was .91.

**Team Trust**

The *Team Trust Scale* was assessed with a twelve-item measure developed by McAllister (1995). One item was reversed scored in the analysis to indicate low scores equal high trust. Sample items include “Management can be trusted to make sensible decisions for the firm’s future” and “I can trust the people I work with to lend me a hand if I needed it.” Cronbach’s alpha for the scale was .93.

**Voice Behavior**

The *Voice Behavior Scale* was assessed with a six-item measure developed by Linn and LePine (1998). Sample items include “I develop and make recommendations to my supervisor concerning issues that affect my work” and “I keep well informed about issues at work where my opinion can be useful.” Cronbach’s alpha for the scale was .92.

**Power Orientation Distance**

The *Power Orientation Distance Scale* was assessed with a six-item measure developed by Dorfman and Howell (1988). Sample items include “Managers should make most decisions without consulting subordinates” and “Managers should avoid off-the-job social contacts with employees.” Cronbach’s alpha for the scale was .81.

3.3. Data analyses

To test confirmatory factor analysis conducted on our hypothesized measurement model with four factors (i.e., team based self-esteem, team trust, voice behavior, and power orientation distance), we used structural equation modeling (SEM) and bootstrap in Mplus 8.0 (Muthen, & Muthen, 2017) to assess direct, indirect and moderating effect, due to structural equation modeling (SEM) being found to be superior to regression analysis (Hayes, 2009). Preacher and Hayes (2008) suggested that bootstrap results for indirect effects of independent variable on dependent variable through proposed mediator and accompanying percentile and bias corrected 95% confidence intervals, and the estimate of an indirect effect is significantly by containing zero.

4. Results

4.1. Measurement model

Discriminant validity and intercorrelations for the study are shown in Table 2. The four psychological variables (team trust, team based self-esteem, voice behavior, and power distance orientation) were all significantly to each other (all p < .05), except power distance orientation with team based self-esteem (r = .12, p = .07). We tested for the discriminant validity of the four psychological variables following procedures recommended by Fornell and Larcker (1981). The average of variance extracted estimates (voice behavior = .72, team based self-esteem = .66, team trust = .63, power distance orientation = .52) were greater than the square of correlations between voice behavior and team base self-esteem (r² = .54), between voice behavior and team trust (r² = .59), between voice behavior and power distance orientation (r² = .18), between team based self-esteem and team trust (r² = .48), between team based self-esteem and power distance orientation (r² = .11), and between team trust and power distance orientation (r² = .16) providing support for discriminant validity of these measures. The range of standardized factor loadings for the indicators onto the latent variables
were between 0.69 and 0.95, and all values of \( p < .01 \). These results demonstrate that the four variables were distinct from each other.

\[
\begin{array}{lcccc}
\text{AVE} & 1 & 2 & 3 & 4 \\
\hline
\text{Team based self-esteem} & .662 & & & \\
\text{Team trust} & .631 & .478** & & \\
\text{Voice behavior} & .721 & .538** & .589** & .849 \\
\text{Power distance orientation} & .517 & .110 & .159* & .175** \\
\end{array}
\]

Note. AVE, average of variance extracted; ** \( p < .01 \); * \( p < .05 \).

Table 2: Discriminant validity and intercorrelations of psychological variables.

### 4.2. Structural model

The moderated mediation structural equation modeling (SEM) models included an additional interaction term to the measurement model: power distance orientation \( \times \) team trust, and resulted in an acceptable fit to the data (Hooper, Coughlan, & Mullen, 2008): \( \chi^2(147) = 819.08 \), \( \chi^2/df = 2.79 \), CFI = .88, TLI = .87, RMSEA = .08, SRMR = .08, GFI = .90, AGFI = .79, NFI = .83.

According to the recommendations of Grace and Bollen (2005), unstandardized regression coefficients are presented in Table 3. In support of Hypotheses 1 and 2, results show that voice behavior was associated with team trust (\( \beta = .66, p < .01 \), CI \( [.350, .994] \), bias-correct CI \( [.252, .624] \)), and the indirect effect of voice behavior on team trust via team based self-esteem was significant (\( \beta = .25, p < .01 \), CI \( [.106, .476] \), bias-correct CI \( [.079, .305] \)). In support of Hypotheses 3a and 3b, results show that power distance orientation moderates the indirect effect of the relationship in stage 1 (\( \beta = .33, p = .04 \)), but not in stage 2 (\( \beta = .03, p = .73 \)). That is, the relationship between team based self-esteem and team trust will be stronger under high levels of power distance than low levels.

<table>
<thead>
<tr>
<th>Point Estimates</th>
<th>Product of Coefficients</th>
<th>Bootstrapping</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SE</td>
<td>Z</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.907</td>
<td>.153</td>
</tr>
<tr>
<td>Indirect effect</td>
<td>.249</td>
<td>.091</td>
</tr>
<tr>
<td>Direct effect</td>
<td>.658</td>
<td>.165</td>
</tr>
<tr>
<td>PDO × TT</td>
<td>.326</td>
<td>.156</td>
</tr>
<tr>
<td>PDO × TBSE</td>
<td>.028</td>
<td>.148</td>
</tr>
</tbody>
</table>

Note. PDO, power distance orientation; TT, team trust; TBSE, team based self-esteem; SE, standard error; CI, confidence interval; BC, bias corrected.

Table 3: Mediation of indirect effect of team based self-esteem between voice behavior on team trust, and moderated mediation of power distance orientation.
5. Discussion

5.1. Theoretical and practical implications

The present study makes two contributions about what psychological mechanism works in the relationship between team trust and voice behavior. First, team based self-esteem provides nurses mental resource for exchanging or expressing benefit-behavior to peers, managers and organizations. Greenwald and Banaji (1995) pointed out some proofs of features about self-esteem like automatic, intuitive process, unconscious, implicit and affective associated with self. In other words, employees, especially nurses, explain either friendly or aggressive attitude or behavior from other colleagues and make feedbacks to them by self-esteem (Kundu, & Rani, 2007). In the process of shaping self-esteem, social identity plays an important role to weaken the negative effect of peers or manager’s aggressive attitude and behaviors, workplace phenomenon, and even organizational culture (Kim, & Glomb, 2014).

Second, when employees experience either positive or negative feelings about job context and personal role in the workplace, motivation would be aroused and various cognitive strategies, such as imitation, personal experience, self-regulation and self-efficacy, conduct employees adjusting their behavior or belief to fit for their job environment (George, & Brief, 1996; Vito, Schafer, Higgins, Marcum, & Ricketts, 2015). As such, because of the feature with neglect interpersonal trust, attentive status difference and focusing on self, nurses with vigorous power distance orientation would confront cognitive dissonance in such a teamwork required profession (Havyer et al., 2014; Pronovost et al., 2008). Thus, nurses must regulate their posture to suit working ambience. Yet the role of power distance orientation as moderator between social/interpersonal support (e.g., perceived organization support, leader-member exchange) and work outcomes (e.g., job performance, voice) is uncertain, due to past studies have difference results (Costigan, Instinga, Berman, Kranas, & Kureshov, 2011; Farh, Hackett, & Liang, 2007). We suggest that the path of power distance orientation must be clarified in the future research, because of the significance in the Chinese culture.

In summary, this study suggests that managers can increase benefit-behavior, such as voice behavior, to facilitate team healthy development by promoting nurses’ team identification. To growing identification, managers can provide experience focusing on the team and profession, like regular social gatherings, professional training sessions, emphasizing on cooperative context of job, and building reasonable reciprocity institution or rules on job. Particularly, elevating team trust may be more influence factor of team based self-esteem than personal factor, such as personality trait and professional ability in such a cooperation needed medical profession. Luckily,
we found that power distance orientation, which maybe sculpt from ethnic culture of collectivism, career culture, and family, will not impair the identical process of team based self-esteem on trust, but strengthen it. Overall, we can daringly infer that personal tendency and ability are not far more important than team factor, such as team trust and social identity.

5.2. Limitations

This study has several limitations. First, we use cross-sectional design to examine the relationship among research variables in this article. Because the process of identification may be dynamic, we can’t certainly discriminate that power distance orientation is a personality trait or a state affected trough environment and explore the change effect of present model over time, especially in the sample of nurses who are fresh graduate or job transfer. Second, in this article, we use convenience sampling to collect participants from just one medical center in Northern Taiwan. The results may not represent the whole Taiwanese nurses, and just do so for that medical center. In light of this, future researchers should replicate this study with difference group using hierarchical linear modeling to clearly understand the relationship between these psychological variables. Third, the simplified model can provide a clear, obvious and evident construct, which make researcher easier realizing, but restrict the further cognition with present model, such that team trust can compose by affect-based and cognition-based from peers, managers and organization (McAllister, 1995). Finally, we conducted this study in Taiwan. Because of the national health insurance system, medical personnel may have cultural effect, for example, working values, professional identify, management styles, etc.

5.3. Conclusion

Our results indicate that when nurses increase their own team based self-esteem, a predictor perceives more team trust, which improve his or her motivation or confident to engage in voice behavior that maybe a risky behavior in his or her group. This association is stronger when the nurses have higher power distance orientation. This article thus highlights the usefulness of continued research into how nurses display benefit behavior through team based self-esteem with distinct level of power distance orientation under the difference source of team trust from peers, managers, and organization, and how nurses, especially fresh graduate and job transfer, shape their social identity through psychological factor in sense-making process.
6. Reference


Usability Problems and Design Solutions of LEGO Duplo, Including Bricks and Instructions

Chun-Juei Chou, National Cheng Kung University, Taiwan
Wei-Chun Huang, National Cheng Kung University, Taiwan

Abstract
LEGO Duplo is an excellent educational product especially for children between 1.5 and 5 years old. However, there are several usability problems which occur when a child is playing with it. Therefore, this study applies graphic design and augmented reality (AR) to solve these problems. Research Process is composed of five steps: 1. Analyzing LEGO Duplo and its instructions 2. Observing how a child is playing with LEGO Duplo and discovering usability problems 3. Developing prototypes for a better design 4. Analyzing and improving the prototypes 5. Verification of the research results. Usability problems discovered include (1) incomplete instructions; (2) confused information; (3) blind angles; (4) vague outline; (5) wrong distance; (6) wrong direction; (7) uneven height; (8) loose assembly. Then, design solutions are prototyped as bricks, instructions, and AR simulations. Graphic pattern on bricks includes “arrow, alignment, and minimum height markers”. They deal with problems including wrong direction, loose assembly, and uneven height, respectively. In addition to ordinary instructions, more instruction cards are prototyped. They show completely assembled bricks which is difficult to complete for the child. Each card also works as an AR marker that activates an animated simulation. Each animation with 360 degrees of view helps the child to solve the rest of problems as well as to accomplish brick assembly. According to test results, the authors conclude that AR absolutely can solve or reduce most of Duplo’s usability problems. However, no acceptable solution to the “loose assembly” problem is found and, unexpectedly, the markers on bricks has limited effectiveness.

Keywords: LEGO Duplo, Usability Problems, Design Solutions, Augmented Reality, AR, Brick Instructions
Introduction

LEGO Duplo is an excellent educational product especially for children between 1.5 and 5 years old. However, there are several usability problems which occur when a child is playing with it. Therefore, this study applies graphic design and augmented reality (AR) to propose several ways to solve these problems. This project lasted for one year and it is a part of a Master’s thesis.

Background

The background of this research are three-fold:

(1) Traditional instructions with paper-based text, symbols, and graphics are the most common and inexpensive way to show operation procedure but the deficiencies such as misunderstanding are clear.
(2) The popularization of augmented reality and smart devices help people to select and deal with information difficult to demonstrate or understand.
(3) The happening trend of E-learning makes it possible that all people including children are able to learn and therefore to acquire knowledge through connected devices.

Motivation

Due to the impact of the baby bust, an increasing number of parents are willing to spend more time and money on their children. This spend is particularly unstinting with regard to education. Duplo, produced by LEGO, has always been one of the best choices for parents. However, usability problems frequently occur when children are playing with the bricks. For example, one child may build mistakenly even if trying hard to follow the instruction step by step. These problems reduce the functionality of LEGO Duplo. If Duplo’s problems can be analyzed and discussed, Duplo’s educational effectiveness will be enhanced and it must further enrich the learning of children who are playing with it.

Literature Review

Literature review include three categories: prior studies about children, augmented reality, and instruction manual. The categories and references are briefly shown in table 1.

Research Methods and Process

The process of this research includes five stages, each of which is extended below.

1. Analyzing LEGO Duplo and its instructions
2. Observing how a child is playing with LEGO Duplo and discovering usability problems
3. Developing prototypes for a better design
4. Analyzing and improving the prototypes
5. Verifying the research results
1. Analyzing LEGO Duplo and its instructions

Duplo instructions can be divided into three categories, as shown in figure 1:

(1) 46% are general instructions;
(2) 38% are packing instructions;
(3) 15% are cartoon instructions.

General instructions are booklets, each of which shows how a certain brick set is built step by step with consecutive perspective pictures in detail. Packing instructions are simple scenario pictures printed on packages, each of which shows how a certain brick set looks like and/or how it is played or displayed after completely assembled. Last, cartoon instructions are cartoonish pictures printed on sheets, each of which usually shows how a brick set looks like or how it is displayed after completely assembled. With just single set and simple cartoon pictures, it is easy to be understood by children.

Table 1: The categories and references of literature review.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Sub-categories</th>
<th>Author name(s) (Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Children</td>
<td>1-1 Definition of Children</td>
<td>Huang (1999)</td>
</tr>
<tr>
<td></td>
<td>1-2 Cognitive development of Children</td>
<td>Tseng (2012)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Li (2010)</td>
</tr>
<tr>
<td></td>
<td>1-3 Reading motivation and improvement of learning effect</td>
<td>Lefever-Davis &amp; Pearman (2005)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lee (2015)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Liao (2011)</td>
</tr>
<tr>
<td></td>
<td>1-4 Digital Multi-media aided Learning</td>
<td>Mayer (2005)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lai (2013)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Azuma et al. (2001)</td>
</tr>
<tr>
<td></td>
<td>2-2 History of AR</td>
<td>Feiner, MacIntyre, Haupt, &amp; Solomon (1993)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sutherland (1968)</td>
</tr>
<tr>
<td></td>
<td>2-3 Principle of AR</td>
<td>Wagner &amp; Schmalstieg (2007)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wagner, Langlotz, &amp; Schmalstieg (2008)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zhang, Fronz, &amp; Navab (2002)</td>
</tr>
<tr>
<td>3. Instruction Manual</td>
<td>3-1 Common problems of instructions</td>
<td>Li (1999)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wu (2012)</td>
</tr>
<tr>
<td></td>
<td>3-2 Ways to write an effective manual</td>
<td>Norman (2005)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Huang (2011)</td>
</tr>
</tbody>
</table>
2. Discovering usability problems

Eight different types of usability problems, as indicated in figure 2, are discovered based on observing how a child is playing with LEGO Duplo.

(1) Incomplete instructions: most of LEGO Duplo’s instructions are merely one or several sheets of assembled pictures with or without cartoon scenario. They are not perfect for children to understand dynamic building process.

(2) Confused information: confused information is what makes the child subject hesitate or misunderstand. Usually, it is a step, a picture, a symbol, or an icon that results in confusion.

(3) Blind angles: blind angles are what the child subject needs to see or read but he cannot do it or cannot find it. They make the subject temporarily stop assembling bricks.

(4) Vague outline: if two adjacent bricks have the same color, it is difficult for the child subject to identify the joining edge between bricks in the instruction. Therefore, the subject must spend more time for completing the assembly.

(5) Wrong distance: the child subject often mistakenly measure lengths. For example, as shown in figure 2, the distance between the two blue bricks is longer than the length of the red arch brick in the picture. It results in the pause and repetition of building steps.

(6) Wrong direction: due to the standard modular design of LEGO Duplo, direction is the key for correct assembly and great fun. However, some bricks with similar shape
but different direction may mislead the child subject to be confused with wrong direction and wrong assembly.

(7) Uneven height: the child subject often miscount or ignore the height of any two bricks. It results in the temporary failure of bridging and/or assembly.

(8) Loose assembly: the child subject often ignore the tightness of bricks. It results in the falling of the bricks.

Figure 2: Eight different types of usability problems.

3. Developing prototypes

Based on each of the eight usability problems, eight prototypes or solutions are developed.

(1) Incomplete instructions: incomplete instructions do not reach a balance between “accurate information” and “children’s reading interest.” Therefore, the authors propose a new type of LEGO Duplo instructions in order to keep children interested in reading and keep instructions as clear as possible. First, instruction cards are adopted. Each of the cards shows a graph of completely assembled bricks and it works as an Augmented Reality (AR) marker. Second, AR simulation is developed for clearly demonstrating how difficult steps are completed.

(2) Confused information: the animated AR simulation with audio not only replaces the confused information such as picture, symbol, and text description but also makes the child subject understand the instruction.
(3) Blind angles: to minimize this problem, AR is applied to display 360 degrees of 3D models of bricks without blind angles.

(4) Vague outline: with 360 degrees of 3D simulation, AR simulations can clearly display the outline of two bricks with the same color.

(5) Wrong distance: based on usability tests, the authors figure out that the child subject relies on counting bulges on bricks to measure distance during assembly. So, AR simulation must show numbers that indicate the distance between bricks whenever it is necessary.

(6) Wrong direction: usability tests help to figure out that the child subject assembles bricks in a correct direction if a cartoon bear image printed on the brick, as shown in figure 3. On the other hand, according to literature review, arrow markers printed on bricks may have a strong sense of direction for children, although he does not know why they are there. Thus, the authors apply cartoon image and arrow markers to help children subject to recognize the direction of bricks.

(7) Uneven height: the authors apply “minimum height markers” and “rulers on bricks” to solve the problem of uneven height. All bricks are marked with minimum height (9.6mm) markers to make the child subject understand the concept of height. In addition, the subject can see cartoon animals, ruler indicators printed on bricks, as a visual tool for measuring heights of any two bricks to be compared, bridged, or assembled.

(8) Loose assembly: to make the child subject assemble LEGO Duplo tightly, the authors propose two solutions: “alignment markers” and “luminous splices”. Simple but aligned markers are printed on each brick so that bricks assembled loosely causes visually deflective gaps between patterns on bricks. These patterns may remind children of the looseness problem. Differently, luminous splices means painting luminous pigment on bulges on bricks. When there are gaps between bricks, gleam emitting from the gap may remind the child that bricks are not assembled tightly.
4. Analyzing and improving the prototypes

Because the child subject’s hands take bricks at all times when playing with LEGO Duplo, it is very difficult to carry out any operation such as AR simulation on mobile devices. Consequently, this research uses an All-In-One PC with a larger size of touchscreen instead of a tablet or smart phone. During tests, the child is playing with LEGO Duplo bricks and facing the PC touchscreen that is placed behind the Duplo set. When each assembly problem occurs, what the child needs to do is to place instruction cards (AR markers) under the camera lens to activate the AR simulation. It makes the problem-solving process more convenient.

Each AR marker conventionally is a square with abstractive shape in black and white. They are too odd to be used in LEGO Duplo’s instruction. Thus, this research applies Vuforia to develop the AR system. Vuforia makes it possible that any graphic instruction of LEGO Duplo can be used as an AR marker. That is, each instruction card is an AR marker for a better animated instruction. To redesign LEGO Duplo bricks as less as possible, this research integrates “arrow, alignment, and minimum height markers” together as “comprehensive pattern” without cartoon animals, as shown in figure 4.

5. Verifying the research results

The verification include the test of (1) paper-based instruction cards, (2) animated AR simulation as additional instructions, and (3) graphic comprehensive patterns, as
shown in table 2, 3, and 4, respectively. On the other hand, additional devices and operation necessary for verification are described below:

(1) LEGO Duplo bricks: for each test, LEGO Duplo bricks with comprehensive patterns are placed in a box produced by LEGO. Based on most Duplo instructions, the first step always starts with a floor brick. So, the child is provided with a big floor brick in each test.

(2) Instruction cards: in addition to AR system, more instruction cards are prototyped. They show completely assembled bricks which is difficult to complete for the child. Each card also works as an AR marker.

(3) Augmented reality system: as the user of the AR system is a child, the way to run this system must be quite easy. When the child encounters any assembly problem, he just needs to place the instruction card under the camera lens and then the AR instruction initiates immediately.

Table 2: Verification of paper-based instruction cards.

<table>
<thead>
<tr>
<th>Problem 01</th>
<th>Assembly instruction is not complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solution 01</td>
<td>(1) New paper-based instruction cards</td>
</tr>
<tr>
<td></td>
<td>(2) AR system</td>
</tr>
<tr>
<td>Description of Solution</td>
<td>Two types of instruction cards are applied: one shows completely assembled bricks which is difficult to complete for the child. Each card also works as an AR marker that</td>
</tr>
</tbody>
</table>
activates an animated simulation. The other type shows what the whole set looks like after completing that step. The AR system also shows the animated simulation of the first type.

<table>
<thead>
<tr>
<th>Result</th>
<th>Instruction cards and AR system help the child subject to assemble bricks better.</th>
</tr>
</thead>
</table>

**Photo Demonstration**

Table 3: Verification of AR instructions.

<table>
<thead>
<tr>
<th>Problem 02</th>
<th>Confused information, instructions with blind angles, vague outline, and wrong distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solution 02</td>
<td>AR system</td>
</tr>
<tr>
<td>Description of Solution</td>
<td>AR system shows the animation of how LEGO Duplo bricks assembled without blind angles. It clearly demonstrates the movement of parts in distance and visual difference of completing each step of assembly. There is also a sound effect indicating the assembly. This AR system makes the instruction complete and vivid.</td>
</tr>
<tr>
<td>Result</td>
<td>Each animation with 360 degrees of view helps the child to solve the rest of problems as well as to accomplish brick assembly.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Problem 03</th>
<th>Wrong direction, uneven height, loose assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solution 03</td>
<td>Graphic comprehensive patterns</td>
</tr>
<tr>
<td>Description of Solution</td>
<td>The graphic comprehensive pattern on bricks includes “arrow, alignment, and minimum height markers”. They deal...</td>
</tr>
</tbody>
</table>
with problems including wrong direction, loose assembly, and uneven height, respectively. For verification, the graphic patterns are actually color-printed transparent stickers on LEGO Duplo bricks.

<table>
<thead>
<tr>
<th>Result</th>
<th>Comprehensive patterns do not help the child subject to better assemble LEGO Duplo bricks.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Photo Demonstration</th>
</tr>
</thead>
</table>

Table 5: The result of verification.

<table>
<thead>
<tr>
<th>How problems are discovered?</th>
<th>Problems</th>
<th>Solution</th>
<th>Problem solved or not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of instructions</td>
<td>Incomplete instructions</td>
<td>New paper-based instruction cards &amp; AR</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Blind angles</td>
<td>AR</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Confused information</td>
<td>AR</td>
<td>Yes</td>
</tr>
<tr>
<td>Observation</td>
<td>Wrong direction</td>
<td>Comprehensive patterns</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AR</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Loose assembly</td>
<td>Comprehensive patterns</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Uneven height</td>
<td>Comprehensive patterns</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AR</td>
<td>Yes</td>
</tr>
<tr>
<td>Verification</td>
<td>Vague outline</td>
<td>AR</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Wrong distance</td>
<td>Numbers in AR</td>
<td>Yes</td>
</tr>
</tbody>
</table>

The result of verification indicates that both new paper-based instruction cards and AR system work well for helping the child subject to better play with the LEGO Duplo bricks, as shown in Table 5. That is, the subject encounters no/less difficulties and makes no/less mistakes. However, the graphic comprehensive patters does not help to solve the corresponding problems.

**Conclusion**

This research finds out usability problems and proposes design solutions of LEGO Duplo, including bricks and instructions. According to the test results, it is clear that the AR system functioning as instructions helps to solve most of the usability problems except the “loose assembly”. However, the "comprehensive pattern" has limited effect on all problems. Based on the child subject's feedback to the AR simulation and playing behavior in the tests, this research asserts that the looseness problem may be mitigated if the child subject watches an educational video about tightness every time right before playing with LEGO Duplo. Furthermore, as technology advances, intelligent light wearable devices that will not negatively
influence children’s action may be used as the carriers of AR system. In this way, the application of AR simulation can make instructions smoother and more intuitive.
References


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Enriching the Voice of Non-Musical Students (Diploma in Theatre) Through the Use of the Suzuki Method

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Sumathi Maniam, Universiti Pendidikan Sultan Idris, Malaysia

Abstract
An educator is responsible in transmitting knowledge, technology and values to the community through the process of teaching and learning. Credit hours are accumulated based on the current curriculum while transformation take place during lectures. Teknik Nyanyian or rather singing technique is one of the minor course available to the diplomas of the theatre course in UPSI. This course is vital in shaping the talent, mindset and the disposition of the students. Singing technique is a minor subject that is offered to the undergraduates of diploma in theatre in line with the education curriculum in UPSI. In order to produce accurate singing techniques, a singer needs to focus on breathing techniques, notation/melody, tempo, rhythm and articulation. Based on the data collected, the students have never been exposed to music notation and introduction to formation of sound / phrasering. 35 students were selected from the theatre department for the purpose of this study. Qualitative and quantitative methods were used to collect data in which the Suzuki method was used to teach singing technique. The findings of the study show that the Suzuki method was instrumental in teaching singing technique.

Keywords: singing technique, Phrasering, Suzuki method, sound, melody
Introduction

Teaching and learning is fundamentally a process of conversion of science, technology and value systems that is passed on to a society of learners. The lecture hall becomes the medium whereby the transformation process takes place whereby a number of courses is organized within the curriculum. Students who learn in formal situations are mainly structured by the curriculum of the conservatoire and controlled by the teacher. Students plan their own learning in informal learning situations (Mark, Kors, Reanshaw, 2007: 21) As such, in order to make students independent learners, they are required to perform informal tasks in formal situations. As a whole, the formal and informal learning can be understood as a process whereby teachers (lecturers) and learners (students) are both actively participating in a positive environment.

According to Paparo (2016: 489), musical understanding is established through singing. Keeping this in mind, a singing technique course is included as one of the minor subjects for students of theater major at Universiti Pendidikan Sultan Idris. The development of talent, attitude, intelligence, and personality of learners is further advanced in hymn technique classes. Students of theater studies in semester two are students who take a technical course of singing where the student has never studied music theory or is less familiar with the notation. In singing, there are several things to note which are related to the technique of singing, namely: breathing, articulation, vibration, resonance, and intonation, where it also concerns the vocal technique. According to Rudy (2008: 46), 'forming vocal technique' is a basic technique in singing and when compared with a 'building technique' vocals are the foundation. To produce a good vocal technique then, a singer should pay attention to several techniques of mastery which includes: mastery of breathing techniques, the mastery of notation / melody, mastery of tempo, rhythm and mastery of articulation. This study is conducted using the Suzuki Method\(^1\) (2008: 4).

Methodology

The Suzuki method is applied, whereby the students are taught to sing by recording the melody and rhythm of songs and then students are made to listen to the recordings repetitively through the WhatsApp application before they learn to sing. The students are required to memorize the melody and rhythm of songs as they are unfamiliar with music notations. The researcher applied qualitative and quantitative methods to analyze the data. Qualitative method is divided into three parts. Data collection (orientation level), Data Reduction and Data selection. In quantitative method, tabulation analysis was conducted. Data was arranged in a tabulation format in accordance to the importance of the data analyzed. The tabulation was a summarized version of the analyzed data (Aedi, 2010: 11). The tabulation analysis process was essential in ensuring the accuracy of the data collected. 35 students participated in the Singing Technique course whereby 21 were female and 14 were male of which almost all students have never learned the technique of singing directly. Questionnaires were distributed to the students and data was collected based on their answers. Data was collected through interviews with 5 students representatives and conclusions were drawn whereby it can be said that they are able to sing by often listening to songs on

\(^{1}\) Suzuki Method is a method popularised by Shinichi Suzuki( a Japanese), a music educationist, violinist, who believed that musical talent is not inborn but instead it can be developed through practice.
you tube, radio, CD and cassette. Based on the questionnaires, the level of the students' understanding on the technique of singing can be observed. The researcher collected data through field notes and reflective journals as well as through observations, recordings and interviews.

Conclusions/Findings

Sound/Phrasering formations

Sound/Phrasering is a set of beheading sentence correctly and properly, so that it is easy to be understood and suitable with the rule of the song provided. The study would look into the formation of sound/phrasering, where the breathing consists of 8 parts which are divided as follows in the table and diagram below.

Table 1. Sound/Phrasering formations

<table>
<thead>
<tr>
<th>NO</th>
<th>Sound/Phrasering formation</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sound organs that have close contact with sound production: vocal cords, lungs, abdominal muscles, resonant cavities</td>
<td>69</td>
</tr>
<tr>
<td>2</td>
<td>Resonant cavities consist of chest cavity, throat cavity, nasal cavity, oral cavity, head cavity,</td>
<td>71</td>
</tr>
<tr>
<td>3</td>
<td>The mouth is open to a width of three fingers by pulling down the lower jaw,</td>
<td>86</td>
</tr>
<tr>
<td>4</td>
<td>lips function as loudspeaker,</td>
<td>94</td>
</tr>
<tr>
<td>5</td>
<td>tongue position, is not in a curved position and does not stretch beyond the teeth</td>
<td>86</td>
</tr>
<tr>
<td>6</td>
<td>Positive impact with the formation of the sound and I am happy to do it.</td>
<td>80</td>
</tr>
</tbody>
</table>

Figure 1. Diagram of Sound formation Technique

The study conducted examines the percentage of students’ understanding of body posture in singing technique from highest to lowest value whereby it is deduced that 94% of students agree that lips function as loudspeaker, while 89% understand the position of tongue, curved position and does not stretch beyond the teeth. 86% of
students realize that the mouth can be opened about 3 inches in width by pulling the lower jaw. 80% of the students claim that they are happy to sing due to the positive effect of the sound. Students understand that the resonant cavity consists of chest cavity, throat cavity, nose, mouth cavity, head cavity at 71%. The least percentage is scored on the understanding that sound organs that have close contact with sound production: vocal cords, lungs, abdominal muscles, resonance cavity is at 69%. The analysis of these results show that students’ understanding of sound organs (1) is still less due to the need for adequate teaching time to study the anatomy of the human sound so that there is a balance between theory and practice.

**Resonance & Articulation / Pronunciation**

Students’ understanding on Resonance & Articulation / Pronunciation, which is divided into four parts: 1) Good and clear speech, will give a clear understanding of every word that is sung, 2) Vowel vocal A, U, E, O is one of the techniques of resonance, 3) The word ma-mi-mo-mo is the practice of letters for the lips, 4) The word na-ne-ni-no-is a practice exercise for the teeth. Presentation of students who expressly agree and agree with the understanding of sound / phrasing formation following the application of the Suzuki method can be seen in the table and diagram below.

<table>
<thead>
<tr>
<th>NO</th>
<th>SPEECH/ARTICULATION/RESONANCE</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Good and clear speech, will give a clear understanding of every word that is sung</td>
<td>77</td>
</tr>
<tr>
<td>2.</td>
<td>A, U, E, I, O vocal pronunciation as being one of the resonance techniques</td>
<td>80</td>
</tr>
<tr>
<td>3.</td>
<td>The words ma-mi-mo-mo practice exercise for lips</td>
<td>74</td>
</tr>
<tr>
<td>4.</td>
<td>The words na-ne-ni-no- is accepted as a practice exercise for teeth.</td>
<td>63</td>
</tr>
</tbody>
</table>

Figure 2. Diagram of Speech/Articulation/Resonance

![Diagram of Speech/Articulation/Resonance](image-url)
Based on the answers to the questionnaires, it can be deduced that the percentage of students' understanding of speech / articulation / resonance in the singing technique from the highest to the lowest is 80% of students show an understanding of A, U, E, I, O vocal pronunciation as being one of the resonance techniques. 77% agree that good and clear speech, will give a clear understanding of every word that is sung. The words ma-mi-mo-mo is accepted by 74% as a practice exercise for lips. The words na-ne-ni-no- is accepted by 63% as a practice exercise for teeth. As for category number 4, the Suzuki method was implemented to the students but the students' understanding is still very poor in this part because the alphabetization method does not follow the procedure in the Malay language but rather follows the way in which the English version is Malayised. An example in the mention of the letter 'i' becomes 'ai', the letter 'a' becomes 'ei' so that when na-ne-ni-no-na is a stutter in the way it is pronounced.

**Rhythm**

Furthermore the section is the teaching and learning process of singing technique by introducing rhythm. In this case, the questionnaire for the rhythm is divided into 7 parts, namely: 1) rhythm learning through notation reading, 2) learning through imitation teacher helps my learning, 3) Retail learning using piano instruments helps in my learning, 4) friends help me understand more quickly, 5) Observational retail learning helps me understand faster, 6) The use of communication through the WhatsApp group really helps me to listen to the sound of the rhythm, and 7) By doing the own scene and adjusting to the making rhythm I understand the technique of singing in the theater. Based on the data gathered from the students', 86% strongly agreed, on numbers 1, 2 and 3 while 80% of student agree that friends help them to understand better. The number of students who understand the rhythm after following the application of the Suzuki method can be seen in the table and diagram below.

<table>
<thead>
<tr>
<th>NO</th>
<th>TEACHING AND LEARNING OF RHYTHM</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Happy to learn rhythm through notation readings</td>
<td>86</td>
</tr>
<tr>
<td>2.</td>
<td>Learning through imitating teacher helps my learning</td>
<td>86</td>
</tr>
<tr>
<td>3.</td>
<td>Learning rhythm with the assistance of the piano</td>
<td>86</td>
</tr>
<tr>
<td>4.</td>
<td>Learning through imitating teacher helps in learning</td>
<td>86</td>
</tr>
<tr>
<td>5.</td>
<td>Learning rhythm with friends helps me to understand faster</td>
<td>80</td>
</tr>
<tr>
<td>6.</td>
<td>Learning through observation helps me to understand faster</td>
<td>77</td>
</tr>
<tr>
<td>7.</td>
<td>Learning through WhatsApp group communication helps me to understand rhythm</td>
<td>74</td>
</tr>
<tr>
<td>8.</td>
<td>Enacting own scene and adjusting rhythm enables me to understand rhythm</td>
<td>63</td>
</tr>
</tbody>
</table>
The percentage of students' understanding of teaching and learning of rhythm in singing technique from the highest to the lowest is 86% students are happy to learn rhythm through notations readings while learning rhythm with the assistance of the piano is also at 86%. Learning through imitating teacher helps in their learning is also at 86%. 80% of students believe that learning rhythm with friends helps them to understand faster. 77% of students prefer observational learning as it helps them to understand faster. 74% prefer the use of communication through WhatsApp group as it really helps them to listen to the sounds and only 63% agree that by enacting their own scene and adjusting to the rhythm makes them understand rhythm in singing technique in theater. In this case there are some students who are experimenting with creating their own scene and adjusting the scene based on the rules determined by the instructor. From the results of observations there are only a few students who prefer to learn in this way because the students are very creative in experimenting with new ideas that are tailored to the rhythm. Some students are less creative and prefer to only use short sentences and they take more than 3 hours of learning time. In addition most students just want to learn simple things. As a result their understanding of questionnaire number 7 is limited.

**Melody**

The sixth part is the melody, which consists of 7 parts: 1) The melodic learning through notation readings is fun; 2) Melody learning through teacher imitation helps in my learning, 3) Melody learning using piano helps in my learning, 4) learning melody with friends helps me to understand more quickly, 5) Learning melody through observation helps me understand faster, 6) The use of communication through WhatsApp group really helps me to listen to melodic sounds, and 7) By enacting the scenes themselves and adjusting with the melody makes me understand the singing techniques in the theater.
Table 4. Teaching and Learning of Melody

<table>
<thead>
<tr>
<th>NO</th>
<th>TEACHING AND LEARNING OF MELODY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Melodic learning through notation readings is fun</td>
<td>89</td>
</tr>
<tr>
<td>2.</td>
<td>Melody learning through teacher imitation helps them</td>
<td>80</td>
</tr>
<tr>
<td>3.</td>
<td>Melody learning using piano instruments helps in my learning</td>
<td>80</td>
</tr>
<tr>
<td>4.</td>
<td>Learning melody with friends helps me to understand more quickly</td>
<td>80</td>
</tr>
<tr>
<td>5.</td>
<td>Learning melody through observation helps me understand faster</td>
<td>80</td>
</tr>
<tr>
<td>6.</td>
<td>The use of communication through WhatsApp group really helps me to listen to melodic sounds</td>
<td>77</td>
</tr>
<tr>
<td>7.</td>
<td>By enacting their own scene and adjusting to the melodies makes me understand the singing techniques in the theater</td>
<td>63</td>
</tr>
</tbody>
</table>

As observed in the table and diagram above, the percentage of students' understanding of teaching and learning of melody in singing technique from the highest to the lowest, 89% are happy with melodic learning through notation reading, while 80% feel that melody learning through teacher imitation helps them. 80% of the students also agree that melody learning with friends also helps them to understand faster. 80% say that melodic learning by observation helps them to understand faster. 77% feel that communication through WhatsApp group really helps them to listen to melody sounds and 63% believe that when they are given the liberty to perform their own scene and tune it with the melodies, it makes them understand the singing technique in theater. In this case there are some students who are doing experiments by creating their own scene and adjusting the scene with the melody determined by the instructor. From the observation, only a few students prefer this style of learning.
Conclusion

From the statistical data obtained, it can be concluded that the design of learning the technique of singing through the method of Suzuki with the use of WhatsApp as a learning medium is effective to be applied in lectures especially on the material introduction of breathing technique and posture. Learning through the use of WhatsApp for theater students who are not familiar with singing techniques is very helpful in doing repetition of material to be heard and practiced in accordance with the scene that comes from the students themselves.

Suggestions for Lecturers and Students

To optimize the practice of student song technique, it is advisable to increase the training given continuously according to the student ability to absorb the learning material. Students are advised to do the exercises with this instructional media so as to obtain optimal results in the development of singing songs in the world.
References


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Venit Vanit: A Thai Translation of the Merchant of Venice as a Force for Racial and Cultural Justice

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Abstract
This paper is a study on Venit Vanit, a Thai translation of William Shakespeare’s The Merchant of Venice. It attempts to deconstruct a tendency among Thai critics and theatre practitioners to regard Venit Vanit as a story about the “greedy” Jew and the “merciful” Christians. This paper argues that this reading is part of a political project to promote a unified, exclusive identity for the nation. By emphasizing and exaggerating the evil of Shylock and the virtues of Christian characters, the translated play is used to construct a misleading image of “the others” who are trouble makers and deserve to be discriminated and punished. In turn, this perception justifies discriminatory treatments and injustice that people from minority groups are facing in reality. The paper then demonstrates that it is possible to read Venit Vanit in another way and use the play to encourage social justice for people from different backgrounds.

Keywords: social justice, translated plays, the Merchant of Venice

This is part of the research project entitled “Translated Plays as a Force for Social Justice” sponsored by the Thailand Research Fund. The views and opinions expressed in this article are those of the author only, and do not necessarily represent the views and opinions of the Thailand Research Fund.
Introduction

The word “justice” refers to not only fairness but also the system of laws established to judge and punish people, and it is a truism that the legal system does not necessarily go hand in hand with fairness.

Thomas Paine was one of early thinkers on social justice. For Paine, God endowed this fertile earth for every human being. Hence, it is an injustice to let anyone live in poverty. The state should distribute an adequate amount of wealth to everyone not as an act of charity but because it is people’s inalienable rights (Paine, 1995). John Rawls is another thinker who helped to develop the concept of social justice. According to Rawls (1999), justice is achieved when everyone has basic rights, and social and economic inequality is managed for everyone’s benefit. Inequality is acceptable if it is for the benefit of the most disadvantaged members in society.

To sum up, social justice is a condition in which everyone has equal rights and opportunities. People are entitled to receive help from the state and every social management should be conducted for the benefit of the most disadvantaged people.

This paper focuses on social justice in terms of culture and race. Tariq Modood (1999) maintains that inequality between cultures and races is a form of injustice. This injustice is manifested in many forms, including verbal abuse, discrimination and forced assimilation. Racial discrimination restrains people from achieving their full potential and creates a sense of alienation. It undermines respect that people have towards one another and thwarts political participation. To achieve cultural justice, everyone should be allowed to participate in every important activity and have a right to decide whether to retain their cultural identity or to assimilate to the mainstream culture. Iris Marion Young (1990) believes that, in order to create a fairer society, we need a cultural revolution which questions cultural hegemony, accepts the diversity of cultures and deconstructs negative stereotypes of people from different cultural backgrounds. Raising people’s awareness, and recognizing the suffering of people from minority groups in a discriminatory society, are ways to achieve cultural justice. In this paper, racial and cultural justice means a condition in which one is free from cultural and racial discrimination, and when one gains equal rights and opportunities regardless of one’s religion or cultural heritage.

This paper studies the issues of racial and cultural justice represented in Venit Vanit, a Thai translation of William Shakespeare’s The Merchant of Venice and, by using Thailand as a case study. It suggests how academics and theatre practitioners should use Venit Vanit to promote racial and cultural justice in society. I review how Thai academics, educators and theatre practitioners usually interpret Venit Vanit and argue that most of the interpretations are within the framework of mainstream Thai ideology and, as a result, they often discriminate minority figures like Shylock. This paper then suggests ways that one can use Venit Vanit to promote cultural and racial justice.

The Merchant of Venice: An Anti-Semitic Play?

Before discussing the racial issues in Venit Vanit, it is useful to briefly explore what The Merchant of Venice has to offer concerning these issues. History brutally confirms the fact that The Merchant of Venice can be used to advocate antisemitic peace.
In 1775, Georg Christoph, a German intellectual, came to London and attended a production of *The Merchant of Venice* in which Charles Macklin played Shylock as a cunning and malicious man. Christoph admits that “the sight of this Jew suffices to awaken at once, in the best regulated mind, all the prejudices of childhood against this people” (quoted in Shapiro, 2019, p. 89). Nazi Germany used productions of *The Merchant of Venice* to propagate the discriminatory idea that Jews are inhumane (Bonnell, 2008).

Nevertheless, there are also a number of critics and theatre practitioners who present Shylock positively. By about 1900, character studies started to portray Shylock as a tragic hero (Mahood, 2003). In the early twentieth century, as Westfall (2008, p. 134) maintains, sympathy for Shylock increased:

> Directorial concepts that increase audience sympathy for Shylock seem to have increased markedly after the turn of the twentieth century, when public outcry against Jewish stereotyping began to emerge, and certainly after the Second World War, when the Holocaust forever changed the historicity of *The Merchant of Venice*. [...] Thereafter, every director who mounts Shakespeare’s *The Merchant of Venice* and every spectator who views it have to choose an interpretation that acknowledges power negotiations between dominant and subjugated populations.

One of the most influential Shylocks was presented by Henry Irving, a famous Victorian actor. Ellen Terry, who played Portia for Irving, writes that “Henry’s Shylock was quiet. [...] His Heroic saint was splendid” (1908, p. 179). William Winter (2000, pp. 124-126) describes Irving’s performance as follows:

> In making his exit from the Court Shylock moved slowly and with difficulty, as if he had been stricken by fatal weakness and were opposing it by inveterate will. At the door he nearly fell, but at once recovered himself, and with a long, heavy sigh he disappeared. The spectacle was intensely pathetic, awakening that pity which naturally attends upon despoiled greatness of character and broken, ruined power.

Irving’s performance was very successful. He played this role 250 times until his retirement (Hughes, 1972). The last time that he played Shylock to Terry’s Portia was on 19 July 1902 at the Lyceum in London (Hartnoll, 1983).

One of the playgoers who witnessed that farewell performance was Vajiravudh, the future King Rama VI of Siam. According to Pin Malakula (1996), a former page to King Vajiravudh, the future King was in London and attended a production of *The Merchant of Venice* on 19 July 1902. That production must have made a good impression on the King since, in 1916, the King translated *The Merchant of Venice* and published it under the name *Venit Vanit*.

**Venit Vanit in the Time of King Vajiravudh**

The King gave a reason for translating *The Merchant of Venice* as follows:
Considering that Shakespeare’s plays have already been translated into most European languages, even in Japanese, I feel a bit ashamed for the fact that we have not yet had any translated texts (of Shakespeare’s works) in Thai. (Paradee Tungtang’s translation, 2011)

It is quite clear that the King did not do it merely to entertain himself. His writings often contain political agendas. Patama Chancharoensuk (2011) believes that translating Shakespeare was the King’s attempt to advocate his role as a ruler who civilizes the country and makes it equal to the West. Thep Boonanthong (2016) argues that, under the disguise of being fictional, the King often wrote plays to satirize and criticize people who were not on his side.

The Chinese living in Siam were a minority group that the King constantly criticized at the time before the publication of Venit Vanit, since some of them were advocating for republicanism (Saichon Sattayanurak, 2008). Moreover, the existence of a large number of Chinese people in Siam was in contradiction with the King’s imagination of the “Thai” nation, which consisted of people who came down from the same ancestors. The King’s imaginary “nation” was part of his project to have his subjects embrace the concept of “Thainess”.

In his pamphlet, The Jew of the Orient, Asvabhahu (the King’s penname) expresses his concerns about the Chinese in Siam by comparing them to Jewish people. For him, both Jews and Chinese were not trustworthy companions because they were too proud of their ancestors. Like Jews, the Chinese regarded people from different cultural and racial backgrounds as “uncivilized”. They would never be honest when dealing with “Thai” people (Asvabhahu, 1985).

It does not look like a coincidence that the first play of Shakespare that the King translated has a Jewish character who tries to harm people from the majority group. It also seems reasonable to assume that the Shylock that the King wants to present might be different from the one he saw on the stage in London. Although the King never performed Venit Vanit in his lifetime, the play and, undoubtedly, the King’s ideology have been widely passed on to the public, since Venit Vanit is part of the Thai curriculum in a compulsory reading list for Thai language and literature subjects.

**Venit Vanit as a Means to Discriminate Minority Group**

As mentioned, Venit Vanit was part of a project to construct “Thainess”. This ideology usually propagates a narrative that Thais are peaceful and independent. It is always non-Thais who create problems but, eventually, a virtuous, meritorious and merciful ruler emerges and Thai people live in unity and independence again (Thongchai Winichakul, 2003). This is the ideology that Thai education tirelessly indoctrinates its students. Thus, it is not surprising that Thai people often read Venit Vanit as a play about the mercy of people in power and the untrustworthiness of a person from the minority group. For example, Nawaporn Rungsakul (2017) says that, after reading Venit Vanit as a young student, she was impressed by Portia’s cleverness and appalled by the “Jewness” of a loan shark like Shylock. Nawaporn wrongly uses the word “Jew” to describe a character’s personality. Another example can be found in Yuporn Sangtaksin’s discussion on the lessons in Venit Vanit. According to Yuporn (2005), the play teaches us that adhering to one’s race and religion too firmly is a
factor which might disturb social harmony. Since Christian characters insult Jews too severely, they are in constant conflict. Hence, the lesson to be learnt is that we should not insult other people too severely because they will seek revenge. It is noteworthy that the critic clearly takes the side of the “we” who insults “other” people. She seems to suggest that insulting Jews can be acceptable if it does not cross the line and bring on revenge. Reading the play under the ideology that customarily labels “the other” as a threat can easily lead to racial bias.

A number of criticisms on *Venit Vanit* unwittingly reproduce the image of evil “others” and rightful “us”. As Yuporn (2005) maintains, the play ends as most Thais expect. In the end, the good man is rescued and emerges victorious and the bad man is defeated and punished. There is no doubt that the good man here means Antonio and the bad man is Shylock, whose unpleasant characteristics are highlighted by many critics. Nawaporn (2017) says that Shylock is wealthy but behaves as if he was penniless. He lives a frugal life. *Nang Sue An Kawi Niphan Rueang Venit Vanit* (Department of Curriculum and Instruction Development, 1984)² [Handbook for Reading Venit Vanit], created for Thai students, describes Shylock as a greedy and stingy man who values money higher than anything.

These critics reproduce a greedy Shylock by ignoring information which does not fit with their perception. *Nang Sue An Kawi Niphan* (1984) condemns Shylock for valuing money over his own daughter, who takes his money and elopes with Lorenzo, her Christian lover. It is true that Shylock has said that he would see her dead rather than lose his money, but he says this terrible thing when he is “madly outragoues” [ฉุนฉิวราวกับบ้า] (2. 8. 91).³ It is not reasonable to take what a person, who is in a disturbed state of mind, says as an indubitable indication of that person’s true nature.

Shylock is often accused of being hateful. The synopsis provided in *Nang Sue An Kawi Niphan* (1984) says that Shylock hates Antonio because the latter is a free interest lender who ruins his business, and Antonio hates Shylock because he is a loan shark, an aspect of Shylock which is emphasized in the translated play. By merely stating that Shylock hates Antonio because Antonio always “insults and scolds him” [หยุดหัวเราะและต่ำแหน่งต่างนานาแล่นอ] without giving any other details, the synopsis downplays the fact that what Antonio commits is actually a hate crime. Antonio repeatedly insults Shylock in public by calling him a dog, spitting on his beard and kicking him (1. 3. 43). Spitting on the beard is a serious insult for Jews since they consider growing a beard as a way to demonstrate their unique identity according to teaching in the Old Testament (Peterkin, 2001).

Another grave criticism against Shylock is that he is merciless. This is an accusation which Thai academics sometimes use to convince people not to sympathize with Shylock. *Nang Sue An Kawi Niphan* (1984, p. 11) states: “As Shylock shows no mercy [during the trial scene], we lose our sympathy for him. Hence, when Shylock is punished, we feel that such a heartless man deserves to be fully punished” [My

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1. After this, the handbook is referred to only by its title and publication year.
2. Vajiravudh, King of Siam. (2005). *Venit Vanit [The Merchant of Venice]*. Bangkok: Aksancharoenthat. All subsequent quotations from or references to the translated play will be to this edition and will be referenced parenthetically.
In the same way, Yuporn (2005) insists that the reader’s sympathy for Shylock should not outweigh his hateful and cruel nature.

It is noticeable that critics, who insist that Shylock deserves the punishment, often refuse to discuss in detail what his punishment actually is. Yuporn (2005, p. 220) merely says that Shylock “loses everything except his life” [สูญเสียทุกสิ่งทุกอย่างยกเว้นชีวิต]. Even though Nang Sue An Kawi Niphan (1984) mentions the fact that Shylock is forced to convert to Christianity, some details of this punishment are inaccurate. Nang Sue An Kawi Niphan states that Shylock consents to convert so the Duke would not confiscate half of his property. In fact, Shylock consents not to save his property but to save his life, since the Duke declares that if he does not, he would be executed.

When Nang Sue An Kawi Niphan (1984, p. 13) writes that, in the end of the play, “eventually everyone is happy” [ในที่สุดทุกคนก็มีความสุข], “everyone” here excludes not only Shylock, who leaves the stage defeated and sick at heart, but also, perhaps, Jessica, Shylock’s daughter. Jessica expresses her anguish while living with Shylock as follows:

I am deeply ashamed
To be a daughter of his, what a shame!
Although I am a daughter of his blood,
My heart is unlike his.
Lorenzo, my beloved,
If your love is true,
My fate would change
Since I will become a Christian.

[My translation]

Jessica obviously does not want to be a Jew and tries to lose that identity by conversion. However, losing one’s identity is not as easy as changing clothes. After her conversion, Gratiano still calls her “the Jewess” [นางยิว] (3. 2. 127). Launcelot also insists that although she is married to a Christian, she still has to “go to Hell” [ตกนรก] if her father is a Jew (3. 5. 145). For the Christian characters, Jessica is always an outsider. In a society which does not value multiculturalism, the members of minority groups, whether they are rebellious like Shylock or compliant like Jessica, suffer from injustice, and a criticism on Venit Vanit which does not recognize this fact regrettably fails to redress that injustice.

Productions of Venit Vanit in Thailand Today

Michael Radford’s film in 2004 was one of the most well-known and far-reaching productions of Shakespeare’s The Merchant of Venice in the early 21st century. In this film, Christians were clearly unjust. The first scene showed a large group of Christians breaking into Jewish houses, destroying their property and hurting the residents. Al Pacino’s Shylock was portrayed as a dignified, much wronged, old man. The image of him crying his heart out and holding a necklace in the form of a sanctuary lamp, when being forced to convert to Christianity, was unequivocal in its
condemnation of anti-Semitism. This interpretation was in line with John Sichel’s *The Merchant of Venice* (1970) in which the trial scene ended with a pitiful howl of Laurence Olivier’s Shylock which moved every Christian character. After the Second World War, people in the West became noticeably more sensitive to the injustice that Jews suffered in the long and difficult history of their religion.

Unfortunately, mainstream media in Thailand are less sensitive to racial and religious conflicts in *Venit Vanit*. In 2006, only two years after Radford’s heart-moving film, Broadcast Thai Television presented the trial scene of *Venit Vanit* as a play within a play in *Jan Aey Jan Jao*, a Thai drama series. In this series, *Venit Vanit* was presented as a didactic play. Worathep, Jan Jao’s grandfather, told her that the play shows the danger of being vengeful and how vengeful people like Shylock are inevitably punished. As the story was taken out of context, the series unintentionally created the image of Shylock as “the other” who is unreasonably evil.

The status of Shylock as “the other” was emphasized again when Jan Jao and her schoolmates performed the trial scene in a school production. Without a proper introduction to the racial intension and discrimination against Jews, Shylock became a blood-thirsty monster and the punishment that he suffered was justified. The reactions of actors, who acted as spectators in the school production, indicated that they took Portia’s side. They applauded when Jan Jao’s Portia delivered the famous “mercy speech”, and did that again to show their approval when Shylock was defeated and went to his knees. These reactions might have had an impact on the audiences at home and persuaded them to identify with the Christian characters and condemn Shylock.

Stage productions in Thailand also often ignore the issues of racial conflicts and discrimination in *Venit Vanit*. In 2015, students at the College of Dramatic Arts, Bunditpatanasilpa Institute, performed the trial scene. Before the performance, a summary of the story was narrated through audio. This narration emphasized Shylock’s hateful nature and cruelty without explaining that he hates Antonio because the racist Antonio often abuses him verbally and physically.

This summary would have made spectators take the Christians’ side. In this production, the “otherness” of Shylock was emphasized through his costumes and gestures. Shylock was a hunch-backed, strange man who wore a blond wig and a witch-like nose. He was an alien to other characters and the spectators. During the performance, he usually stood apart from the other characters. This characterization is traditional in Thailand:

The role of Shylock in particular, when performed by a Thai actor trained in the dance drama tradition, becomes something very different from the original script. The Thai interpretation of the role of Shylock originated when the play was performed in the early twentieth century by court dance dramatists. There is a story that circulated within a circle of traditional dance dramatists that the role of the Thai Shylock was firstly performed by a local dance drama master who based the character of Shylock on the famous character of Jujaka, a greedy old Brahmin beggar from *Vessantara Jataka* – the story of Buddha’s past life (which is very well-known to most Buddhist Thai audiences). Shakespeare’s Shylock who was a rich but mean Jewish moneylender, therefore became a guileful, ill-mannered and disgusting villain. When
performed by a student from the Thai Dance Academy by getting into the habit of scratching his body (his bottom, his neck, his head, etc.) while conversing with other characters, to give an impression to the audiences that he was a discourteous, filthy old man. (Tungtang, 2011, pp. xxvi-xxvii)

In this case, the localization of Shakespeare is problematic. The identification of Shylock to Jujaka makes it difficult to deconstruct the stereotype of Jews as greedy people, and to portray Shylock as a man with dignity as Irving did.

The audiences who attended the College of Dramatic Arts’ production unsurprisingly took the Christians’ side against the Jujaka-like Shylock. The spectators laughed when Gratiano mocked Shylock, when it was clear that the law was not on the Jew’s side. Laughter could still be heard even for a harsh and offensive statement like Gratiano’s “You, pagan, your time is up” [เจาะปีกหาฤทธิ์ มิ่งกังทกี].

Shylock was also portrayed as a villain in a production of *Venit Vanit* by the Phaya Thai Palace Preservation Foundation and Women’s Professional Association at the Phaya Thai Palace, Bangkok, in 27 February 2016. In this production, Shylock entered the stage with an ominous sound effect usually used in Thailand to signal the approach of evil beings. His entry changed the blue background into a red one, signifying blood, violence and danger. He dressed and walked like a villain. These elements were enough to confirm to the audiences that this being was an alien who could not be trusted. As a result, for the audiences, it might have seemed justifiable that, after being forced to converse, every character yelled at the alien and forced him to leave the stage. In this performance, racial discrimination was hardly questioned.

**Venit Vanit as a Force for Racial and Cultural Justice**

Reading *Venit Vanit* through the ideology which harbours suspicions of “the other” often leads to the reproduction of the evil “other” and the virtuous “us”. *Nang Sue An Kawi Niphan* (1984, p. 22) maintains that Portia and Shylock are totally different and their differences highlight each other “like a white spot in a black cloth” [ดุจเดียวกับสีขาวเด่นอยู่บนพื้นดำฉะนั้น]. This perception produces a biased reading which, by ignoring information which does not fit with the reading framework, idealizes the virtuous “us” and justifies an aggressive act against that evil “other”. To create social justice, it is necessary to deconstruct this binary opposition and recognizes that, in fact, “we” and the “other” are not that different.

There are many pieces of information in *Venit Vanit* which support this approach. Shylock is often accused of being mercenary like Jews allegedly are. Nevertheless, in this play, Christians are also apparently mercenary. *Nang Sue An Kawi Niphan* (1984) justifies Bassanio’s motivation for going to Belmont as an act of love. In fact, Bassanio never says that he loves Portia. On the contrary, he accepts quite bluntly that he wants to marry Portia because she has “a large heritage” [มรดกมากมวลสิน] (1. 1. 23) which is enough to pay his debts. It is not easy to judge, between a man who makes a living by taking interest from loans and a man who marries in order to get rich, who is more mercenary.
A number of Thai critics condemn Shylock as a vengeful and merciless man when he refuses to drop his case against Antonio, but characterize Gratiano, who threatens to hang and behead Shylock in the trial scene, as merely a “funny” [ตลก] man (Yuporn, 2005, p. 224). It is not hard to imagine that if Gratiano was Shylock and had a chance to take a revenge, he would do exactly what Shylock does. Moreover, to take Gratiano’s verbal abuses as only “funny” jokes might mislead the readers into thinking that it is acceptable to use dehumanizing language, such as “you, dog” and “you, Jewish devil”, against a person from a different culture.

A dividing line between merciful Christians and heartless Jews becomes blurry when one thinks of Shylock’s accusation in the trial scene:

Your Grace, please listen.  
These men own slaves  
That they buy from the market, and shave their heads,  
Use as dogs or mules,  
Without any shed of mercy  
As these slaves have prices.  

[My translation, 4.1.157]  
The will to sacrifice mercy for economic interests is certainly present in every human being, regardless of his or her race.

To regard Portia as an impeccably virtuous lady is an exaggeration. If one condemns Shylock of being too proud of his race, one also needs to condemn Portia. This is her response to the news of the Prince of Morocco who comes to attend the three casket ceremony in which the person who chooses the right casket will get Portia as his wife: “Even if he is a saintly man but has this mean complexion of the devil, I would rather he gives his blessing and makes me a nun than to marry him” [ถ้าเขามีคุณสมบัติเป็นสัตบุรุษนักบุญ แต่ผิวพรรณทารุณเหมือนหน้าผี ฉันก็เห็นจะต้องการให้เขาให้ศีลให้ฉันบวช ดีกว่าที่จะให้เป็นภรรยา] (2.2.33). After the Prince has chosen a wrong casket, Portia says the following statement in relief: “If people of this kind come again, I wish them to choose the same” [คนพรรค์นี้มาอีกครั้งใด ขอจงให้เลือกสรรเช่นวันนี้] (2.7.89). She is undeniably racist.

Furthermore, as Portia is the one who delivers the “mercy speech”, Nang Sue An Kawi Niphan (1984) claims that she is merciful and, in the trial scene, tries her best to persuade Shylock to show mercy. Nawaporn (2017) states that she learnt at a very young age from Portia about a sense of justice and a due respect to law. However, the law that Portia practices is blatantly unjust and discriminatory against Jews. Moreover, it is interesting that, before delivering the “mercy speech”, she assures Shylock that his case is lawful and Antonio is in a disadvantageous situation (4.1.163). After this, she reassures him again that if he presses his case, Antonio will inevitably lose (4.1.166). This assurance naturally encourages Shylock to press his case because he believes he is going to win. Thus, it is reasonable to regard her speech as a trap. Portia knows perfectly well that, no matter what Shylock decides, he would not get it his way. What she does in the trial scene is far from being merciful, just and
honest. The play shows that the Jew and Christians do what they do not because they have ‘inherent’ nature which sets them apart from other people. The examples above demonstrate that when difficult situations arise, people, no matter what their races are, can do terrible things. All of them can be mercenary, deceitful and unforgiving.

When one emphasizes this message, *Venit Vanit* can be a means to advocate a perception which is helpful in making people from different races or cultures live with dignity and in harmony. People sometimes act and see things differently from what we do because of their particular socially constructed experiences. When society changes, these shared experiences change as well. The potential of using *Venit Vanit* to change people’s attitudes towards “the other” was well illustrated in the production of this play by the students of the College of Dramatic Arts. As mentioned above, the synopsis provided before the performance was unfair for Shylock and, at the beginning, the spectators evidently took the Christians’ side. However, their feelings seemed to change when Shylock was really in trouble and everyone else seemed to enjoy his pain. The audiences’ laughter was perceptibly quieter when Gratiano’s threat sounded more and more serious. And they went into complete silence when Gratiano called for an executioner to hang “this damned” [ไ้ห้]. This production ended with an image of a heart-broken old man collapsing at the center of the stage, being surrounded by hostile, powerful Christians who were supposed to be impartial law enforcers. It is impossible to know whether this pitiful image was enough to make the spectators redress their prejudice against “the other”, but it evidently moved their sympathy. I agree with Pachee Yuvajita (2009) who believes that the trial scene often makes the readers/spectators sympathize with the loser and this feeling is a first step in creating a compassionate society.

To achieve cultural and racial justice, we need to encourage a reading and performance of *Venit Vanit* which values the complexity of human beings and appreciate the seriousness of racial discrimination. We need to acknowledge the “evil” in us and understand “the others” and the situations that they are facing. It is only when we have real social justice that people from different backgrounds can find a peaceful solution of any conflicts they might have. Unlike the characters in this play, we know that we need a change.
References

In Thai


In English


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Enhancing Media Literacy Through Content Analysis: A Comparison of Historic Speeches by Franklin D. Roosevelt and Implications for the Present

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Abstract
In the contemporary global era of false or misleading news spread rapidly by online social media, the need for enhanced media literacy and advanced critical thinking skills has become increasingly urgent. Responsible and accountable political leadership based on reliable and consistent facts and reporting is essential for the development of national and international policies which promote and support a sustainable world. Content analysis can be employed as a useful tool to enhance media literacy by systematically analyzing, evaluating, and comparing media reports and speeches by public officials. Researchers can use a coding procedure to identify and group various units of text to detect key patterns and themes. Content analysis is an objective, systematic, and effective method to improve media literacy and critical thinking skills by combining quantitative and qualitative research approaches. Factors such as the frequency of various vocabulary items and the lexical density of a written text can be measured by content analysis (Creswell, 2005). This presentation demonstrates the practical use of content analysis by examining the first and third inaugural addresses of Franklin D. Roosevelt and uses both manifest and latent coding to detect stylistic and thematic similarities between the two different texts from the same source. Manifest coding involves the surface level features of a text that are clearly visible to the reader, while latent coding is used to detect deeper, underlying levels of meaning and major themes (Neuman, 2003). Implications for analyzing and understanding contemporary media reports and political discourse are also addressed.

Keywords: media literacy, content analysis, presidential speeches
Introduction: Content Analysis

The content analysis examines the first and third inaugural addresses of Franklin D. Roosevelt and employs both manifest and latent coding to detect stylistic and thematic similarities between the two texts from the same source. Neuman (2003) asserts content analysis involves “objective and systematic counting and recording procedures to produce a quantitative description of the symbolic content of a text” (p. 311). A researcher can employ content analysis to examine textual and visual material. Content analysis can measure such factors as the frequency of various items and the lexical density of a written text (Creswell, 2005). The four dimensions of frequency, direction, intensity, and space in written or transcribed texts can be analyzed, contrasted, and compared (Neuman, 2003). Researchers use a coding procedure to identify and group various units of text to detect patterns and themes. Manifest coding involves the surface level features of a text that are visible to the reader, while latent coding is used to detect deeper, underlying levels of meaning and themes. Latent coding is more subjective in nature and may be influenced by the coder’s own cultural background, life experience, and linguistic knowledge, training, and abilities (Neuman, 2003). Researchers must guard against personal bias when analyzing a text. Content analysis can reveal cultural characteristics and values in detail and can show unexpected patterns of thought and trends in society (Imada, 2010). Text analysis can provide multiple perspectives on changes in society and culture expressed in written form. Content analysis and text mining techniques contain many quantitative elements but are also qualitative in nature and can significantly enhance qualitative research (Yu, Jannasch-Pennell & DiGangi, 2011). The results of content analysis can be viewed and interpreted through a qualitative lens.

Manifest Coding: Units of Analysis

The basic textual units of words, paragraphs, and lines were counted by highlighting each text and using the word count function in Microsoft Word. The length of each spoken text was automatically calculated by the mp3 audio file and Real Player software. The average number of words per sentence, the lexical density, and the Gunning Fog Readability Index were calculated using the Content Analysis Tool (Using English, n.d.), a free software tool available at www.usingenglish.com.

Frequency

Franklin D. Roosevelt’s first inaugural speech contains 1,875 words, 24 paragraphs, and 129 lines, while the third inaugural speech contains 1,336 words, 37 paragraphs, and 101 lines. The actual spoken text of the first inaugural speech, downloaded from the University of Virginia, Miller Center of Public Affairs, Scripps Library and Multimedia Archive Web site as an mp3 audio file, is 17 minutes and 17 seconds in length. The third inaugural speech is 14 minutes and 49 seconds in duration. The frequency of visible, basic surface level textual features is similar in both speeches. The length of the spoken text of each speech is also similar. Although the overall word and line count decreased in the third inaugural speech in comparison with the
first speech, the number of paragraphs increased. The larger number of paragraphs may be attributed to the larger number of subtopics contained in the second speech. The results are summarized and compared in Table 1 below.

<table>
<thead>
<tr>
<th></th>
<th>Word Count</th>
<th>Paragraphs</th>
<th>Lines</th>
<th>Minutes/Seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Inaugural Speech (1933)</strong></td>
<td>1,875</td>
<td>24</td>
<td>129</td>
<td>17.17</td>
</tr>
<tr>
<td><strong>Third Inaugural Speech (1941)</strong></td>
<td>1,336</td>
<td>37</td>
<td>101</td>
<td>14.49</td>
</tr>
</tbody>
</table>

The spoken text was delivered with the same, relatively slow, measured tone and enunciated with the same clarity and precision in each speech. Each sentence was clearly separated by a short pause of one second or longer in each speech, and one or more major keywords were emphasized in each sentence. The keywords that received the greatest word stress were primarily nouns but also included verbs. At regular intervals of approximately one minute, longer pauses of several seconds occurred in both speeches due to applause from the audience. Applause was more frequent during the first speech. At regular intervals of several minutes, entire key sentences in both speeches were emphasized with a significantly louder, deeper voice, and serious tone. In the first text, the first entire sentence to be emphasized in this manner reads, “This Nation asks for action, and action now” (Roosevelt, 1933, para.8). In the second text, the first entire sentence to be stressed in the same way, in reference to claims made by America’s enemies, reads, “But we Americans know that this is not true” (Roosevelt, 1941, para.8). The occurrence of the first entirely stressed sentence in the eighth paragraph of both speeches is further evidence of a nearly identical structure in both texts.

The researcher used the Content Analysis Tool, a free software tool, to calculate the lexical density, average words per sentence, and the Gunning Fog Readability Index for both texts. Lexical density is calculated by dividing the number of different words by the total number of words and multiplying by one hundred. The Fog Index expresses the reading level or years of education that may be required by a reader to understand a text. The reading level or grade equals the average number of words per sentence plus the percentage of words of three or more syllables multiplied by 0.4. The Fog Index for most texts appearing in *Time* magazine is approximately 11 (Using English, n.d.). The Content Analysis Tool results are shown in Table 2 below.

<table>
<thead>
<tr>
<th></th>
<th>Lexical Density</th>
<th>Avg. No. Words/Sentence</th>
<th>Gunning Fog Index</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Text 1 (1933)</strong></td>
<td>39.41%</td>
<td>23.64</td>
<td>13.59</td>
</tr>
<tr>
<td><strong>Text 2 (1941)</strong></td>
<td>36.23%</td>
<td>18.14</td>
<td>10.63</td>
</tr>
</tbody>
</table>
The lower lexical density, average number of words per sentence, and lower Gunning Fog Readability Index for the second speech may be attributed to the greater seriousness of the crisis in 1941 and the even greater need for the speech to be clearly understood by the vast majority of the population. In 1933, the president was addressing his inaugural speech to the failed business elite as much as to the common person, and so employed a higher general level of language in his speech. In 1941, the speech was intended for all citizens of the nation, and so the level of language was simplified slightly to be intelligible to a greater segment of the population, including students and citizens with a relatively low level of formal education.

Table 3  
*The Fifteen Highest Frequency Words in Each Written Text (Words in Bold Occur in Both Texts)*

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<table>
<thead>
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<tbody>
<tr>
<td>1.</td>
<td><em>because</em></td>
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<td>2.</td>
<td>democracy</td>
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<tr>
<td>3.</td>
<td>spirit</td>
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<tr>
<td>4.</td>
<td><em>because</em></td>
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<td>5.</td>
<td>America</td>
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<td>6.</td>
<td>freedom</td>
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<td>7.</td>
<td>years</td>
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<td>8.</td>
<td>speaks</td>
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<tr>
<td>9.</td>
<td>something</td>
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<tr>
<td>10.</td>
<td>government</td>
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<tr>
<td>11.</td>
<td>faith</td>
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<td>12.</td>
<td>into</td>
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<tr>
<td>13.</td>
<td><em>task</em></td>
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<tr>
<td>14.</td>
<td>united</td>
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<tr>
<td>15.</td>
<td>destiny</td>
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</table>

Direction

The words with the highest frequency in both texts are essentially positive or neutral in nature, with the exception of the relatively negative word “emergency” in the first text, ranked number twelve in terms of frequency. The majority of the highest frequency words in both texts, the inaugural speeches of a president, are related to the theme of government/leadership. The words “task” and “because” occur in both texts with high frequency. The lack of words with negative connotations is conspicuous given the gravity of the crisis facing the nation in each case. In both speeches, Roosevelt explained his vision of the future and the necessary tasks that lay ahead. By choosing such positive, value-laden words as “values,” “duty,” “spirit,” “faith,” “freedom,” and “destiny,” Roosevelt, speaking in a confident, determined tone, led the nation by example, creating the impression that a positive outcome was inevitable in each case.

Intensity

Some of the highest frequency words employed by Roosevelt possess a major level of intensity. “Emergency” in the first speech, and “destiny” in the second speech, carry intense meanings. Roosevelt managed to convey a sense of urgency while remaining
calm. He did not overuse high intensity words, despite the enormity of the national crisis being addressed in each speech.

Space
The largest amount of space in each text is devoted to the theme of government/leadership. The second largest amount of space is dedicated to the theme of religion/values, while the theme of action/work occupies the least amount of space in each text. The percentage of space devoted to each theme is nearly identical in each text, as revealed by latent coding.

Latent Coding: Units of Analysis
Content analysis can identify major themes and subthemes in a text (Luque, Bowers, Kabore & Stewart, 2013). The manifest coding results revealed the fifteen highest frequency words in each speech. The researcher grouped the fifteen highest frequency words from each text into three major categories or common themes. The common themes in both speeches, separated by eight years, are government/leadership, action/work, and religion/values. The researcher analyzed each paragraph in each text, assigning a thematic code to each paragraph based on the presence of one or more key words or phrases related to one theme: 1. government/leadership. 2. action/work. 3. religion/values.

17 of the 24 paragraphs or 71% of the text in the first speech (1933) contained the theme of government/leadership. 2 of the 24 paragraphs or 8% of the text contained the theme of action/work, and 5 of the 24 paragraphs or 21% of the text was devoted to the theme of religion/values. In the second speech (1941), 25 of the 37 paragraphs or 68% of the text contained the theme of government/leadership, and 3 of the 37 paragraphs or 8% of the text contained the theme of action/work. 9 of the 37 paragraphs or 24% of the text in the second speech was dedicated to the major theme of religion/values. The percentage of text devoted to each of the three major themes identified by the researcher is nearly identical in both speeches. Government/Leadership was not simply the largest theme because the texts in question were presidential inaugural speeches; Roosevelt recognized that decisive leadership, clear direction and vision were urgently required to deal with the national crisis in each case.

The theme of religion/values also played a major role in each speech since Roosevelt was a religious man and believed in the need for people to turn to core moral and spiritual values for support in times of deep national crisis, whether the threat was internal or external. The spiritual element of Roosevelt’s speeches caused them to resemble sermons to a certain extent. In both speeches, Roosevelt partly assumed the role of a national spiritual leader, leading the nation on a type of crusade from chaos to the promise of order and safety. The percentage of text containing the themes of Government/Leadership and Religion/Values is nearly identical in both speeches. The percentage of text related to the theme of Action/Work (8%) is identical in the two speeches. Paragraphs were the units of analysis for the latent coding.
Implications and Conclusion

The results of manifest coding conducted using a software tool reveal that the surface level features of the text are similar in both speeches. The lower lexical density, lower average number of words per sentence, and lower Gunning Fog Readability Index of the second text may be explained by the greater seriousness of the crisis in 1941 and the even greater need for the speech to be clearly understood by as many citizens as possible. The frequency of textual units (words, lines, paragraphs) is similar in both speeches. The direction of the highest frequency words in both cases is largely positive to neutral and high intensity words are present but are not used excessively. The results of latent coding reveal that the largest amount of space in each text is devoted to the theme of government/leadership, followed by religion/values, and action/work.

At the time of each speech, America was faced by a grave crisis. In 1933, during the Great Depression, the financial system and free market economy were paralyzed. The future of capitalism itself was in doubt. Mass unemployment, growing poverty and despair posed a potential threat not only to the economy but also to the unity of the nation. In 1941, America once again faced a grave and serious threat to its continued existence as a nation. The nation was confronted by a growing external threat posed by aggressive, expansionist military dictatorships around the world. In his historic speeches, President Roosevelt demonstrated strong leadership and a clear vision that was both practical and optimistic in nature. President Roosevelt’s style of speech writing, delivery, and amount of emphasis on key themes was nearly identical in each inaugural speech. In each case, America was faced with a grave threat to its existence, and the president’s carefully measured words of confidence and resolve helped to guide the nation to a more prosperous and secure future.

In the current era of globalization, a growing number of Internet-based, social media platforms are competing with traditional news sources, and it is not always clear which information is being provided by professional journalists (Kamerer, 2013). The ease and speed with which false or deliberately misleading news can spread poses a challenge to democratic institutions and to international organizations which are based on trust and mutual cooperation. Citizens require a minimum amount of critical thinking skills and media literacy to avoid being influenced by false or misleading information during elections and other important events which require reliable information. A growing number of educators have recognized the need to teach media literacy across disciplines and to ensure that students and citizens are able to evaluate the authenticity of news sources and to compare and contrast textual content and images (Flamiano & Ostermiller, 2017). Content analysis methods and software can be used by students and citizens to analyze, compare, and contrast media stories and political speeches to identify information which may not originate from an authentic source and to detect and highlight major trends, patterns, and changes in authentic news stories and official policy statements.
References


Parallel Importation and Intellectual Property Law in Thailand

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Abstract
Parallel importation normally occurs when goods produced under the protection of intellectual property (IP) laws are placed in one country, and then imported into another country without authorization of the IP owners. The unclear laws and the lack of harmonization on laws related to parallel importation in ASEAN countries make it possible for right holders to rely on their IP rights to prohibit parallel importation of IP products. This can be an obstacle in achieving the objective of the ASEAN Economic Community (AEC) which is to create ASEAN single market with the core element of promoting free movement of goods. Such unclear laws can be seen in the Thai Trademark Act 1991 which does not contain any provision relating to parallel importation and exhaustion doctrine. Likewise, although the Thai Patent Act 1979 and Copyright Act 1994 contain the exhaustion provisions which can be applied to parallel importation, such provisions are unclear as to whether they should be applied as national exhaustion or international exhaustion. Hence, this research proposes that these laws should be reformed in order to make them clear and certain. Also, the harmonization of laws relating to parallel importation among ASEAN countries is necessary in order to promote free movement of goods within the Southeast Asia region. This research also contends that the regional exhaustion approach should be the appropriate approach for Thailand and ASEAN, and this regional exhaustion approach should be applied in all areas of IP laws in order to ensure the consistency of these laws.

Keywords: Parallel importation, exhaustion of intellectual property rights, Thai intellectual property law, ASEAN Economic Community
**Introduction**

The parallel importation is the importation of a product legally manufactured under the protection of intellectual property (IP) laws from one country into another country for sale without the authorization of IP owner. In some circumstances, the IP owners may rely on their exclusive rights provided under the IP laws to prevent parallel importation of goods protected under the IP laws from other countries. This seems to be inconsistent with the objective of the ASEAN Economic Community (hereinafter called AEC), which is to promote the single market and the free movement of goods within the Southeast Asia region (Association of Southeast Asian Nations, 2018). This objective of the AEC is based on Article 1(5) of the Charter of the Association of Southeast Asian Nations, which stipulates that the purpose of ASEAN is to create a single market which is stable, prosperous, highly competitive and economically integrated with effective facilitation for trade and investment in which there is free flow of goods (Supasiripongchai, 2017). Further, Article 41 of the ASEAN Trade in Goods Agreement (ATIGA) provides that each Member State must not adopt or maintain any prohibition or quantitative restriction on the importation of any goods of the other Member States (Supasiripongchai, 2017). These provisions of ASEAN promote the single market and free movement of goods among the ASEAN countries for the public interest. In contrast, the national intellectual property laws emphasize on the protection of IP rights for the economic interest of IP owners. By taking into account of different interests on both sides, this research proposed that the appropriate approach for Thailand and other ASEAN countries should be able to maintain a balance between the promotion of the free movement of goods for the public interest and the protection of the IP rights for the economic interest of IP owners. Such approach should take into account the objective of ASEAN Framework Agreement on Intellectual Property Cooperation (AFAIPC), which is to develop and harmonise the IP systems and promote the protection of IP rights in the ASEAN countries (European Commission, 2008).

This main objective of this research is to identify the problems relating to parallel importation of goods produced under the protection of IP laws such as copyright law, patent law and trademark law in Thailand and then make the recommendations on how Thailand should develop its IP laws and the legal approach on parallel importation in accordance with the objective of the AEC. The scope of this research is limited to the study and research on parallel importation of goods protected under the Thai IP laws in three areas: copyright law, patent law, and trademark law. The research methodology largely involved studying and researching all relevant laws, documents, and other materials related to parallel importation and IP laws of Thailand, ASEAN, European Union and United States of America. Then, it discussed and analyzed the idea, concepts, arguments, and current legal approaches from these laws, documents and materials in order to formulate the appropriate legal approach for Thailand and ASEAN in the light of the AEC.

**1) Background to the exhaustion doctrine**

Many countries rely on the exhaustion doctrine to solve the problem of parallel importation of goods protected under the IP laws, but there are three different approaches on the exhaustion of IP rights: national exhaustion approach, international exhaustion approach and regional exhaustion approach. Firstly, the national
exhaustion approach allows the IP owners to rely on their IP rights to prevent parallel importation of goods protected under the IP laws from other countries, but it prohibits the IP owners from preventing the sale and resale of goods that the purchasers brought from a domestic market within a country. Under this approach, the IP rights are exhausted only after the goods are placed or sold in the domestic market within the country by the IP owners or with their consent. Secondly, the international exhaustion approach ensures that the IP rights are exhausted and the IP owners cannot prevent parallel importation of goods protected under the IP laws once the goods have been sold or placed on the market anywhere in the world by the IP owners or with their consent. This means that the rights are exhausted irrespective of the place where the goods are first put for sale. Finally, the regional exhaustion approach, which is also known as a community-wide exhaustion approach in the European Union, ensures that once the goods are placed or sold in any country within the specified region by the IP owners or with their consent, the IP rights are exhausted and the IP owners cannot prevent parallel importation of goods protected under the IP laws from the countries within such specified region. But, this approach still allows the IP owners to prevent parallel importation of goods from the countries outside the specified region. The research contends that the regional exhaustion approach is more appropriate for Thailand and other ASEAN countries in achieving the AEC objective of promoting the free movement of goods than both the international and national exhaustion approaches. This issue will be discussed in section 4.

2) Recognizing the problems in Thailand

There are very few laws and regulations relating to parallel importation and exhaustion of IP rights in Thailand, but such laws and regulations are often unclear and can be interpreted in a way to prevent the free flow of the goods. In the area of trademark law, the Trademark Act 1991 (the TMA 1991) does not contain any provision relating to parallel importation and exhaustion doctrine. The lack of such provisions makes it difficult to determine whether parallel importation of genuine goods protected under the TMA 1991 can be done. Most provisions in the TMA 1991 only emphasize on the prohibition of the sale, importation, or distribution of the goods bearing a counterfeited trademark or an imitated trademark, but they do not mention about parallel importation of genuine goods legally produced under the trademark law. Previously, the Thai Supreme Court made clear that parallel importation of genuine goods bearing the trademark registered in Thailand cannot be done under the TMA 1991. This approach can be seen in several decisions of the Supreme Court such as the Decision No. 657/2499; Decision No. 1271-1273/2508; Decision No. 1669-1672/2523; Decision No. 4603/2533 and so on. However, the Supreme Court had later changed its approach in the Decision No. 2817/2543 by allowing parallel importation of genuine goods protected under the TMA 1991. In this decision, the hair clipper bearing a trademark ‘WAHL’ had been registered in Thailand, but the defendant imported hair clipper ‘WAHL’ from Singapore, where the products were placed and sold by the trademark owner (Supreme Court Decision No. 2817/2543, 2000). The Supreme Court referred to section 44, which stipulates that a person who is registered as an owner of a trademark has the exclusive right to use it for the goods for which it is registered and then held that parallel importation of such genuine products should be allowed when such products were placed on the market with the consent of the trademark owner (Supreme Court Decision No. 2817/2543, 2000). It found that there was no infringement of trademark since parallel importation of hair
clipper ‘WAHL’ by the parallel importer or the distributor was not illegal (Supreme Court Decision No. 2817/2543, 2000). This approach relied on exhaustion doctrine to allow the parallel importer or distributor to import the products that had been legally marketed in another country and then resell them in Thailand even without the consent of the owner of trademark registered in Thailand. The Supreme Court in the Decision No. 297/2546 had also adopted this same approach. (Supreme Court Decision No. 297/2546, 2003). Nevertheless, even if the Supreme Court allowed parallel importation of genuine products under its current approach, there is a possibility that the Court may change its approach again since Thailand used a civil law system, so the Court is not formally bound by its previous decisions, but can interpret the provision at their discretion. With the nature of civil law system and the lack of trademark exhaustion provision, it is still uncertain whether parallel importation of genuine products bearing the trademark registered in Thailand will be allowed in every circumstance. In order to make it more certain, the introduction of a clear provision on exhaustion of trademark right seems to be unavoidable.

In the area of patent law, the Patent Act 1979 (hereinafter called the PA 1979) contains the provision on exhaustion of patent right, but such provision is unclear. In this instance, paragraph 1 of section 36 of the PA 1979 guarantees that where the subject matter of a patent is a product, the patent owner has the right to produce, use, sell, have in the possession for sale, offer for sale or import the patented product into Thailand (Supasiripongchai, 2017). However, this patent right is subject to the patent exhaustion provision in subsection 7 of paragraph 2 of section 36 of the Thai PA 1979 (hereinafter called section 36(7)), which provides that the patent right will not apply to the use, sale, having in possession for sale, offering for sale or importation of a patented product into Thailand when it has been produced or sold with the authorization or consent of the patent owner (Supasiripongchai, 2017). It is unclear as to whether this provision should be interpreted to mean the authorization by the Thai patent owner for the sale of the patented products in Thailand or it should be extended to cover the authorization by the foreign patent owner for the sale of the products in other countries (Supasiripongchai, 2017). In other words, the scope of patent exhaustion provision in section 36(7) is clear as to whether it should be applied as national exhaustion or international exhaustion (Supasiripongchai, 2017). Kuanpoth argued that the provision in section 36(7) should be interpreted in the light of international exhaustion approach to allow parallel importation of patented goods into Thailand and in such case the patent right is exhausted once the patented goods are placed on the market anywhere in the world by the patent owner or with his consent (Kuanpoth, 2012). However, this argument seems to be inconsistent with the wording of section 36(7) and some relevant definitions in section 3 of the PA 1979 which seem to be in favour of national exhaustion approach. In this vein, the definition of the term ‘patent’ is defined by section 3 as a document issued to grant protection for an invention or a design under the provisions in Chapter 2 and Chapter 3 of the Thai PA 1979 (Supasiripongchai, 2017). This definition ensures that the term ‘patent’ is only limited to the patent issued in Thailand under the PA 1979 and such meaning does not extends to the patents granted by foreign laws in other countries (Supasiripongchai, 2017). The wording of section 36(7) clearly requires the consent of patent owner before the patent exhaustion provision can be applied and also section 3 of the Thai PA 1979 defines the term ‘patent owner’ to include the transferee of patent (Supasiripongchai, 2017). This means that if the patent owner or transferee of patent who holds patent right in Thailand does not give his consent to the importation of
patented products from other countries for sale in Thailand, then such importation of patented products cannot be done under section 36(7) (Supasiripongchaisri, 2017).

This problem can be seen clearly in case of parallel patent. The difficulty might arise when one specific product has two different patent owners in different countries (Supasiripongchaisri, 2017). For example, a Japanese inventor may create a new product and apply for patent protection for such product in Japan and Thailand. After obtaining such patent protection, he becomes the patent owner in both Japan and Thailand. If he assigns or transfers his patent right in Thailand to a Thai transferee, then such transferee is also considered as a patent owner in Thailand under section 3 of the PA 1979. The problem occurs when the Japanese patent owner sell his patented products in Japan, but such product are imported by the third party into Thailand where the transferee of patent hold patent right over such products. In such case, the PA 1979 requires the patent owner or transferee of patent in Thailand to give their consent before parallel importation of such products can be done under section 36(7). This seems to favour national exhaustion approach, so the application of international or regional exhaustion approaches might be inconsistent with the relevant definitions and wording of section 36(7) (Supasiripongchaisri, 2017). If Thailand is going to apply regional exhaustion approach, such provisions need to be reformed in order to limit the scope of these provisions to regional level (Supasiripongchaisri, 2017).

Another problem with the patent exhaustion provision in section 36(7) is that it cannot apply to the design patent since section 65 of the Thai PA 1979 stipulates that the provisions of sections 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22, 27, 28, 29, 31, 32, 33, 34, 37, 38, 39, 40, 41, 42, 43, 44, and 53 in Chapter 2 concerning patents for inventions shall apply, mutatis mutandis, to patents for designs in Chapter 3 (Hemaratchata, 2010; Supasiripongchaisri, 2017). Section 65 does not allow section 36 including the patent exhaustion provision in section 36(7) to apply to the design patent since section 36 is not included in the list of provisions which can apply, mutatis mutandis, to the design patent (Hemaratchata, 2010; Supasiripongchaisri, 2017). At present, the petty patent or the patent for invention might be subject to the patent exhaustion provision in section 36(7), while the design patent is not, so the design patent owner is the only one who has the right to prevent parallel importation of the products embodying the registered design from other countries into Thailand (Supasiripongchaisri, 2017).

In the area of copyright law, the Copyright Act 1994 (hereinafter called the CA 1994) contains the copyright exhaustion provision in section 32/1, but such provision is also unclear. Section 32/1 limits the exclusive right of the copyright owner by allowing the individual to sell his legally purchased copyright works to other persons since it stipulates that any distribution of an original copyright work or a copy of copyright work by a person who has lawfully obtained ownership of the original copyright work or the copy of such copyright work shall not be deemed an infringement of copyright (Supasiripongchaisri, 2016). In other words, when a material object in which a copyright work is embodied is lawfully sold and the ownership of such material object is transferred to a purchaser who buys it, the exclusive right of copyright owner in such material object is exhausted under section 32/1 and such purchaser can resell it to another person (Supasiripongchaisri, 2016). However, the scope of copyright exhaustion provision in section 32/1 is unclear as to whether it should be applied as national exhaustion or international exhaustion. Netayasupha and Arreewittayalerd explained...
that such ambiguity arises from the question of whether section 32 should be applied to the sale of copyright work in Thailand only or it should be extended to cover the sale of copyright works in other countries and importation of such works from other countries into Thailand (Netayasupha and Arreewittayalerd, 2015). They were of the view that this issue needs to be clarified by the Thai Court in the future in order to make it easier to enforce copyright law (Netayasupha and Arreewittayalerd, 2015). Another problem is that there is no requirement of consent of the copyright owner for the distribution of copyright works in the copyright exhaustion provision of section 32/1, and therefore it is difficult to ensure that this provision will be applied to exhaust the exclusive right only when the copyright work has been distributed or sold with the authorization or consent of the copyright owner.

3) Recommendations on the appropriate approach for Thailand

This research recommends that the regional exhaustion approach like the community-wide exhaustion approach of the European Union should be more appropriate for Thailand and other ASEAN countries than national and international exhaustion approaches. In this instance, this research contends that the national exhaustion approach is not suitable for Thailand and other ASEAN countries since it does not support the AEC objective of promoting the free movement of goods within the Southeast Asia region. This is because it allows the IP owners to prevent parallel importation of goods protected under the IP laws from other ASEAN countries and therefore the AEC objective of promoting the free movement of goods cannot be achieved under this approach. This research also contends that international exhaustion approach is not appropriate for Thailand and other ASEAN countries because the application of such approach would lead to less investment in research and development of new products and less expansion into new market (International Trademark Association, 2007; European Commission, 2000). Importantly, the application of international exhaustion approach would make it more difficult to enforce the safety standard of products and the product-based environmental standards, while at the same time it reduces the competitive ability of the IP owners and the ability of the consumers in determining the quality of such products (National Economic Research Associates, 1999; International Association for the Protection of Intellectual Property, 1999). Further, the application of international exhaustion approach which allows parallel importation of goods protected under the IP laws from every country or anywhere in the world without any limitation, would make it more difficult to prevent importation of infringing products into Thailand since such infringing products are often mixed with parallel imported products (Hemaratchata, 2010; International Trademark Association, 2007). Under international exhaustion approach, it would be necessary for the IP owners to prove that the parallel imported products are the infringing goods in order to prevent such importation. This is different from the regional exhaustion approach which allows the IP owners to prevent parallel importation of products from the countries outside specified region without the need to prove prove that the imported products are the infringing products. The absence of barrier to parallel importations under international exhaustion approach would reduce the ability to detect and prevent the importation of infringing products into Thailand and other ASEAN countries (International Trademark Association, 2007; National Economic Research Associates, 1999). This could potentially undermine the efforts to stop counterfeits and piracy of Thailand and other ASEAN countries.
In contrast, regional exhaustion approach allows parallel importation of goods protected under the IP laws once such goods are placed on the markets in other ASEAN countries, so it can promote the single market and free movement of goods within the Southeast Asia region. Importantly, the AEC objective of promoting the free movement of goods can be achieved under regional exhaustion approach with little impact on investment and economic interest of the IP owners. Therefore, there is no need for Thailand and other ASEAN countries to apply international exhaustion approach which might have more severe impacts on investment in research and development of new products and existing local products. Further, the regional exhaustion approach is better than international exhaustion approach in term of compromising the different positions among ASEAN countries since it is a combination between international and national exhaustion approaches, so it can be applied in the ASEAN countries that still adhere to either international exhaustion or national exhaustion with fewer changes needed (Fink and Maskus, 2005; Veron, 2011). It is also better in term of maintaining a balance between the promotion of free movement of goods for the public interest and the protection of the IP rights for the economic interest of the IP owners. By allowing parallel importation of goods from other ASEAN countries, regional exhaustion approach can increase the availability of goods for the benefit of consumers in Thailand. At the same time, it still provides better protection for the economic interest of the IP owner by allowing the IP owners in Thailand and other ASEAN countries to prevent parallel importation of goods from the countries outside the Southeast Asia region and this provides better incentives for creativity than international exhaustion approach.

The research proposes that the same exhaustion approach should be applied in the area of trademark law, patent law and copyright law. This means that if Thailand is going to apply regional exhaustion approach, then the application of such approach should be carried out in all these areas of the IP laws. This is because the application of regional exhaustion approach in one area of the IP laws would not be very effective since many products are not only protected by one law, but they are often protected by multiple sets of the IP laws such as trademark law, patent law and copyright law. For instance, the introduction of regional exhaustion approach in the area of trademark law alone would still allow the manufacturers of such products, which are often protected by several IP laws, to rely on other IP laws such copyright law and patent law to prevent parallel importation of such products into Thailand.

In the area of trademark law, this research contends that the application of regional exhaustion approach is not contrary to the current approach of the Thai Supreme Court in the Decision No. 2817/2543 and Decision No. 297/2546. Although this current approach allowed parallel importation of genuine goods protected under the trademark law from other ASEAN countries and seem to favour international exhaustion approach, it does not prevent the application of regional exhaustion approach. However, at present there is no provision on exhaustion of trademark right in the Thai TMA 1991 and without such provision, the Thai Court can change its approach back to the previous approach which favoured national exhaustion approach in the future since the Thai legal system is civil law system where the previous cases are not binding on later Courts, so the insertion of the trademark exhaustion provision is necessary. Therefore, this research recommends that the trademark exhaustion provision with the clear scope of application should be inserted into the Thai TMA.
1991. Especially, if Thailand is going to apply regional exhaustion approach, it is important to ensure that the proposed trademark exhaustion provision should be regulated in accordance with regional exhaustion approach which can guarantee that parallel importation of genuine goods from other ASEAN countries can be done and the trademark owner is allowed to prevent parallel importation of goods from the countries outside the Southeast Asia region or the AEC. Further, this research suggests that the proposed trademark exhaustion provision should contain the requirement of consent of trademark owner in order to ensure that such consent of trademark owner in Thailand should be obtained before parallel importation of goods protected under the trademark law from other countries into Thailand for resale can take place. The proposed provision which contains the requirement of consent should indicate that the burden of proof on the issue of whether trademark owner in Thailand has given his consent for parallel importation of such goods into Thailand should be on the defendant or parallel importer.

In the area of patent law, the patent exhaustion provision in section 36(7) of the Thai PA 1979 also needs to be reformed if Thailand is going to apply regional exhaustion approach. In this instance, the changes to the wording of section 36(7) and definition of the term ‘patent owner’ and term ‘petty patent owner’ in section 3 of the Thai PA 1979 should be made in order to ensure that the patent exhaustion provision is only applied as regional exhaustion. This means that the scope of the proposed patent exhaustion provision should be limited and interpreted in the context of regional base, while at the same time the scope of such proposed provision should be extended to cover the design patent. This is because at present the petty patent and the patent for invention are subject to the patent exhaustion provision in section 36(7), but the design patent is not subject to such provision. Consequently, the design patent owner has the right to prevent parallel importation of products embodying the design registered in Thailand even though such products were imported from other ASEAN countries. This can be an obstacle to achieve the AEC objective of promoting the free movement of goods within the Southeast Asia region, so the proposed patent exhaustion provision should be able to apply to design patent. Such change would make it consistent with the provisions of the petty patent and the patent for invention which have already been subject to the patent exhaustion provision, while at the same time such change would guarantee that parallel importation of goods embodying such registered design from other ASEAN countries can be done.

In the area of copyright law, changes should be made to the copyright exhaustion provision in section 32/1 of the Thai CA 1994 in order to make the scope of this provision clear and certain. At present, there is no judicial decision where the Thai Court has interpreted the copyright exhaustion provision in section 32/1, so the scope of such provision is still unclear as to whether it should be applied as national exhaustion or international exhaustion. If Thailand is going to apply the regional exhaustion approach, then changes should be made to the wording of the provision in section 32/1 in order to ensure that parallel importation of goods protected under copyright law from other ASEAN countries into Thailand can be done, while the proposed changes should allow the copyright owner to prevent parallel importation of goods from the countries outside the Southeast Asia region. In addition, the requirement of consent of the copyright owner should be inserted into the copyright exhaustion provision in section 32/1 in order to ensure that the consent of copyright owner should be obtained before distribution or parallel importation of goods
protected under copyright law can take place. The insertion of requirement of consent into section 32/1 would help to safeguard the economic interest of the copyright owner since it can guarantee that this provision would be applied to exhaust the exclusive right of copyright owner only when goods protected under copyright law have been distributed or imported by the copyright owner or with his consent. With this proposed change, if the copyright owner authorizes or gives his consent to the distribution, sale or importation of his goods in an ASEAN country, then such exclusive right is exhausted and the copyright owner cannot prevent parallel importation of such goods from that ASEAN country into Thailand for sale.

Conclusion

This research argues that the regional exhaustion approach like the community-wide exhaustion approach of the European Union is better than national exhaustion approach because it allows Thailand and other ASEAN countries to achieve the objective of creating single market and promoting the free movement within the Southeast Asia region. Such regional exhaustion approach is also better than international exhaustion approach since it provides the IP owners with the possibility to prevent parallel importation of goods protected under the IP laws from the countries outside of the Southeast Asia region, and also it has less impact on investment in research and development of new products than that of international exhaustion approach. However, if Thailand is going to apply regional exhaustion approach, this research proposes that such regional exhaustion approach should be applied in the area of trademark law, patent law and copyright law. In this instance, the wording in the exhaustion provisions of the PA 1979 and the CA 1994, as it currently stands, is not suitable for the application of regional exhaustion approach. Therefore, changes should be made to the copyright exhaustion provision in section 32/1 of the CA 1994 and the patent exhaustion provision in section 36(7) of the PA 1979 in order to ensure that these provisions would be applied as regional exhaustion. This is different from the TMA 1991 which contains no exhaustion provision at all, so this research proposes that the trademark exhaustion provision which is based on regional exhaustion approach should be inserted into the TMA 1991.

Acknowledgements

This study is part of my research project entitled ‘Parallel importation and intellectual property law in Thailand: What should be developed and reformed in order to make the Thai Intellectual property laws relating to parallel importation compatible with the objectives of the ASEAN Economic Community (AEC)?’ which is supported by the research grants from the Office of the Higher Education Commission (OHEC), the Thailand Research Fund (TRF), and the University of Phayao (UP) under the Research Grant for New Scholar Program: Contract No. MRG5680100. The opinions expressed in this research are those of the author and do not necessarily represent the views of the Office of the Higher Education Commission (OHEC) and the Thailand Research Fund (TRF). I deeply thank Professor Hector MacQueen for recommending useful research materials that I used in this research project. I am alone responsible for any error of fact, law and opinion contained within it.
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Resources


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Abstract
This study had four purposes: 1) to evaluate the water quality of the Saen Saeb Canal according to five parameters (i.e. biochemical oxygen demand (BOD), dissolved oxygen (DO), positive potential of the hydrogen ions (pH), suspended solids (SS), and phosphate (PO\textsubscript{4}\textsuperscript{3-})), 2) to compare such water quality parameters with the water quality standards in surface water types, announced by National Environment Board No. 8 (1994), 3) to compare such water quality parameters with the water quality in the same period last year, and 4) to investigate the attitude of residents living along the canal toward Saen Saeb Canal conservation. The results were as follows: 1) the quality of water in the Saen Saeb Canal was assessed by analysing the mean values of BOD, DO, pH, SS and PO\textsubscript{4}\textsuperscript{3-}, which were 10.50 mg/l, 2.25 mg/l, 6.25 mg/l, 25.40 mg/l, and 0.48 mg/l, respectively, 2) these figures corresponded to the standard values, except those of BOD and DO, which were lower than the standards, 3) comparison of current water quality to that in the same period last year showed that the average BOD value had decreased and the average DO had increased. With regard to SS and PO\textsubscript{4}\textsuperscript{3-}, averages did not exceed the standard in either time period, and 4) the attitudes of residents living along the Saen Saeb Canal toward conservation of the Saen Saeb Canal were designated as being at a “good level”.

Keywords: water quality of the Saen Saeb canal; attitude toward conservation of the Saen Saeb Canal.
Introduction

The Saen Saeb canal was built on the order of King Rama III during the conflict between Siam and Annam over Cambodia, in order to establish water transport for taking soldiers and weapons to Cambodia. Construction started in 1837 and was completed three years after. [1] The Saen Saeb Canal was once filled with an abundance of lotus; King Rama IV, as the fourth monarch of Siam (1851-1868), built Sra Pathum Palace (Lotus Pond Palace) in the Siam district. The Saen Saeb starts at Mahanak Canal (or Khlong Mahanak), near Mahakan Fort in Bangkok, and terminates into the Bang Pakong River in Chachoengsao province. [1]

The Saen Saeb Canal in 1890

In the past, canals in Bangkok played an important role in boat transport, commerce, agriculture and domestic consumption, and there were many communities along the canals. At present, the current social and economic situations are changing as the urban society is expanding from the inner areas to the outer areas. In the metropolitan area, buildings are packed closely together along the canals, which have become residential and business areas as well as key routes for water transportation. Such rapid changes have made the water quality poor in all canals, including the Saen Saeb Canal. [2]

The Saen Saeb Canal in 2016

There are various factors affecting the water quality in the Saen Saeb Canal, and the following factors contribute to the problems: 1) excessive organic inputs from tributaries, households, businesses and industries, from both point- and non-point sources; 2) too much sediment in the water and at the bottom of the canal, which generates a high oxygen demand for the water; 3) resuspended sediments due to the
shallow depth of the canal and turbulence from boats; and 4) waves from the boats which are not dissipated due to the fast speed of the boats and the vertical nature of the canal walls, which as a result, last for an excessively long time and exacerbate the resuspension of sediment. [1]

The poor condition of the water in the Saen Saeb Canal has a great impact on the people who live along the canal and those who do not, in terms of health and economic problems which can be summarized as follows. 1) Health problems: Besides the strong odors which the Saen Saeb Canal produces, it has a very high level of coliform bacteria, which can cause diarrhea, and many other types of bacteria and microorganism. This is due to its very low oxygen levels, which can cause many other diseases. Moreover, regular water transport also causes noise and air pollution for both the residents along the canal and the commuters. In addition, the government has to tackle the health problems caused by the water pollution by allocating a large budget. 2) Economic problems: The Saen Saeb Canal has a lot of potential to generate more income for the local communities as well as the whole country, such as the potential to turn the canal into a recreation area or ecotourist attraction such as a floating market. 3) Thailand’s reputation: This water problem could also cause the country to gain a bad reputation due to the negligence in maintaining people’s quality of life and environment. [2]

Therefore, there are two ways to solve the problems and reduce their impact: 1) encourage all office buildings in Bangkok to effectively operate sewage systems in the entire area; and 2) educate people, residents and students about maintaining the water quality in the canal, generating enthusiasm for long-term canal conservation. [3] [4]

Due to the problems, Srinakharinwirot University has highlighted the importance of doing activities that encourage people to participate in the conservation of the Saen Saeb Canal, by organizing the “SWU Joint Conservation of the Saen Saeb Canal as a Good Model for the Community” project. The project aims to encourage the people living along the Saen Saeb Canal to conserve their environment so that the quality of the canal is improved. [5] Therefore, the following activities have been performed:

1) Creating awareness of the Saen Saeb Canal, conducted by the university.

Lecturers, students and people along the canal have joined our boat to put microorganisms into wastewater and microorganisms into the sludge in the canal, departing from the pier of Srinakharinwirot University and terminating at the pier of Vijitwittaya School. Additionally, there has been a campaign to encourage water conservation among the public, where microorganisms were distributed to the communities along the canal every month for putting in the latrines and grease traps.
Fig. 3 Assoc. Prof. Dr. Chanwit Tiamboonprasert, president of the project, speaks at the opening of the campaign for the conservation of the Saen Saeb canal.

Fig. 4 Lecturers, students and people along the canal join our boat to put microorganisms into wastewater and microorganisms into the sludge in the canal.

2) Awareness of conserving the Saen Saeb Canal was increased by displaying a monthly report on the Saen Saeb Canal water quality at the pier so that people would know the water quality and its impact on the community.

Fig. 5 The report on water quality in the Saen Saeb Canal at the pier

3) Creation of the Saen Saeb Canal conservation network, which is a selection of organizations located along the Saen Saeb Canal, consisting of schools, hotels, and dormitories in Wattana District. In order to reduce waste in the Saen Saeb Canal,
these 15 organizations have put microorganisms into sewage, latrines, drains, grease traps and wastewater treatment systems.

4) Training on how to measure oxygen dissolved in water (DO) has been conducted. This training involved teaching students in five schools located along the Saen Saeb Canal how to measure dissolved oxygen correctly, in order to monitor water quality in canals. [6]

Fig. 6 Training on how to measure oxygen dissolved in water

5) Training on how to make microorganisms used in waste treatment was carried out to educate people in five communities along the Saen Saeb Canal how to prepare microorganisms used in household wastewater treatment and perform proper waste management.

6) Training on "The Basics of Wastewater Management for Students Along the Saeb Canal" provided knowledge on basic household wastewater treatment to students in five schools located along the Saen Saeb Canal, in order to reduce the amount of wastewater discharged into the canal.

Fig. 7 Training how to make microorganisms used in waste treatment

In doing so, the "SWU Joint Conservation of the Saen Saeb Canal to be a Good Model for the Community" project is of importance. It can serve as ……. for the environment in the area along the canal, and also encourage the public and young people to be enthusiastic about keeping the Saen Saeb Canal in a state of equilibrium. [7] This will lead to sustainable development in the future.
Research objectives

This study had of four purposes:

1) To evaluate the water quality in the Sean Saeb Canal according to five parameters (i.e. biochemical oxygen demand (BOD), dissolved oxygen (DO), positive potential of the hydrogen ions (pH), suspended solids (SS), and phosphate (PO$_4^{3-}$)),

2) To compare such water quality parameters with the water quality standards in surface water types.3, announced by the National Environment Board No. 8 (1994),

3) To compare such water quality parameters with the water quality in the same period last year, and

4) To investigate the attitude of residents living along the canal toward Saen Saeb Canal conservation.

Method

The research was conducted by carrying out the following steps:

1) The quality of water in the Saen Saeb canal was evaluated by sampling the water at a total of five piers: 1) Prasarnmit Pier; 2) Italthai Pier; 3) Bann Don Mosque Pier; 4) Thonglor Pier; and 5) Vijitwittaya School Pier, all located within a total distance of 6.8 kilometers. The samples were collected 28 times (once a week) from December 2016 to June 2017.

2) The water quality in the Sean Saeb Canal, according to the five parameters (i.e. biochemical oxygen demand (BOD), dissolved oxygen (DO), positive potential of the hydrogen ions (pH), suspended solids (SS); and phosphate (PO$_4^{3-}$), was analyzed by using standard methods for the examination of water. [8]

3) The researcher analyzed water quality values according to the five parameter value sets and compared them to the water quality standards in surface water types.3, announced by the National Environment Board No. 8 B.E. 2537 (1994). [9]

4) Then, such water quality parameters were compared with the water quality in the same period last year.

5) A total of 200 people living along the Saen Saeb Canal were randomly selected to investigate attitudes toward Saen Saeb Canal conservation.

6) The investigation of the attitudes of residents living along the canal toward Saen Saeb Canal conservation was conducted. In the survey on their attitudes, the evaluation criteria consisted of three levels as follows: 0 = bad; 1 = average; and 2 = good. [10]
Results

The key findings of the study were as follows:

1. The average water quality of the Saen Saeb Canal samples from the five piers compared to the water quality standards in surface water types, announced by the National Environment Board No. 8 B.E. 2537 (1994), is shown in Table 1.

<table>
<thead>
<tr>
<th>Water quality</th>
<th>BOD (mg/l)</th>
<th>DO (mg/l)</th>
<th>pH</th>
<th>SS (mg/l)</th>
<th>PO₄³⁻ (mg/l)</th>
<th>at the various piers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prasarnmit Pier</td>
<td>9.24</td>
<td>2.50</td>
<td>6.34</td>
<td>23.30</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>Italthai Pier</td>
<td>10.78</td>
<td>2.24</td>
<td>6.39</td>
<td>26.50</td>
<td>0.42</td>
<td></td>
</tr>
<tr>
<td>Baan Don</td>
<td>9.84</td>
<td>2.43</td>
<td>6.21</td>
<td>23.30</td>
<td>0.44</td>
<td></td>
</tr>
<tr>
<td>Mosque Pier</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thonglor Pier</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vijitwittaya</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>10.50</td>
<td>2.25</td>
<td>6.25</td>
<td>25.40</td>
<td>0.48</td>
<td></td>
</tr>
<tr>
<td>Standard</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Results from the comparison</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Notes
1. >>> = higher than 2. << = lower than 3. St. = standard
Table 1 shows the water quality of Saen Saeb Canal water samples taken at the five piers, with details as follows:

1) The BOD, DO, pH, (SS) and (PO₄³⁻) of water samples collected at Prasarnmit Pier were 9.24 mg / l, 2.50 mg / l, 6.34 mg / l, 23.30 mg / l, and 0.38 mg / l, respectively. The figures corresponded to the standard values, except those of BOD and DO, which were lower than the standards of surface water quality types.3, announced by the National Environment Board No. 8 B.E. 2537 (1994).

2) The BOD, DO, pH, (SS) and (PO₄³⁻) of water samples collected at Italthai Pier were 10.78 mg / l, 2.24 mg / l, 6.39 mg / l, 26.50 mg / l, and 0.42 mg / l, respectively. The figures corresponded to the standard values, except those of BOD and DO, which were lower than the standards of surface water quality types.3, announced by the National Environment Board No. 8 B.E. 2537 (1994).

3) The BOD, DO, pH, (SS) and (PO₄³⁻) of water samples collected at Baan Don Mosque Pier were 9.84 mg / l, 2.43 mg / l, 6.21 mg / l, 23.30 mg / l, and 0.44 mg / l, respectively. The figures corresponded to the standard values, except those of BOD and DO, which were lower than the standards of surface water quality types.3, announced by the National Environment Board No. 8 B.E. 2537 (1994).

4) The BOD, DO, pH, (SS) and (PO₄³⁻) of water samples collected at Thonglor Pier were 12.28 mg / l, 1.94 mg / l, 6.13 mg / l, 28.60 mg / l, and 0.62 mg / l, respectively. The figures corresponded to the standard values, except those of BOD and DO, which were lower than the standards of surface water quality types.3, announced by the National Environment Board No. 8 B.E. 2537 (1994).

5) The BOD, DO, pH, (SS) and (PO₄³⁻) of water samples collected at Vijitwittaya School Pier were 10.40 mg / l, 2.14 mg / l, 6.18 mg / l, 25.30 mg / l, and 0.54 mg / l. The figures corresponded to the standard values, except those of BOD and DO, which were lower than the standards of surface water quality types.3, announced by the National Environment Board No. 8 B.E. 2537 (1994).

6) As for the total average quality of the water samples from the Saen Saeb Canal, the mean values of BOD, DO, pH, (SS) and (PO₄³⁻) were 10.50 mg / l, 2.25 mg / l, 6.25 mg / l, 25.40 mg / l, and 0.48. mg / l, respectively. The figures corresponded to the standard values, except those of BOD and DO, which were lower than the standards of surface water quality types.3, announced by the National Environment Board No. 8 B.E. 2537 (1994).

2. The comparison of such parameters of the current average water quality of the Saen Saeb Canal with the water quality in the same period last year is shown in Table 2.
Table 2 shows the comparison of parameters of the current average water quality of the Saen Saeb Canal with the water quality in the same period last year.

1) With regard to the total average quality of the water sampled in 2016 from the Saen Saeb Canal, the mean values of BOD, DO, pH, (SS) and (PO$_4^{3-}$) were 15.90 mg/l, 1.26 mg/l, 6.26 mg/l, 30.70 mg/l, and 0.65 mg/l, respectively. The figures did not correspond to the standard values, which were lower than the standards of surface water quality types.3, announced by the National Environment Board No. 8 B.E. 2537 (1994).

2) With regard to the total average quality of water sampled in 2017 from the Saen Saeb Canal, the mean values of BOD, DO, pH, (SS) and (PO$_4^{3-}$) were 10.50 mg/l, 2.25 mg/l, 6.25 mg/l, 25.40 mg/l, and 0.48 mg/l, respectively. The figures followed the standard values, except those of BOD and DO, which were lower than the standards of surface water quality types.3, announced by the National Environment Board No. 8 B.E. 2537 (1994). However, the comparison with the water
quality in the same period last year showed that the average BOD had decreased and the average DO had increased. With regard to SS and PO₄³⁻, averages did not exceed the standard in either time period.

3. Results of the investigation into attitudes of residents living along the canal toward Saen Saeb Canal conservation is shown in Table 3.

<table>
<thead>
<tr>
<th>Table 3</th>
</tr>
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<tbody>
<tr>
<td>average score</td>
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<tr>
<td>post-test</td>
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</table>

Table 3 shows the average post-test score of attitudes of residents living along the canal toward Saen Saeb Canal conservation. The average value was 2.89 (good level).

Conclusions

The results were as follows:

1) The results of this study indicated that the quality of water sampled from the Saen Saeb Canal was assessed by analysing the mean values of BOD, DO, pH, SS and PO₄³⁻, which were 10.50 mg/l, 2.25 mg/l, 6.25, 25.40 mg/l, and 0.48 mg/l, respectively.

2) The figures corresponded to the standard values, except those of BOD and DO, which were lower than the standards.

3) Comparison of the current water quality with water quality in the same period last year showed that the average BOD had decreased and the average DO had increased. With regard to SS and PO₄³⁻, averages did not exceed the standard in either time period.

4) The attitudes of residents living along the Saen Saeb Canal toward conservation of the Saen Saeb Canal were designated as at a “good level”.

Discussion

Overall, the average BOD of the Saen Saeb Canal water samples from the five piers did not meet the required standards. This may be due to the amount of oxygen dissolved in the water used in the microbial decomposition of organic matter in the water. This shows that there is plenty of such organic matter which accumulates in the water at the collection points, leading to high BOD and dirty water. Therefore, BOD values indicate contamination of water, and are an important factor in highlighting the pollution of water sources. The analysis revealed that the BOD of each point where water was collected was higher than the set standard, and differed greatly from it due to the dumping of sewage into the water. This caused the microbes in the water to
remain untreated and meant the water was unable to return to a normal state [11], especially at Thonglor Pier, where BOD went up to 12.28 mg/l. Also, the water was very black and many dissolved solids were found in the water, so the turbidity pretty much hindered the diffusion of oxygen into the water. This may be the reason why the BOD of the water in the Saen Saeb canal was unable to meet the required standards. However, comparison with the water quality in the same period last year showed that the average BOD had decreased because people had been encouraged to participate in the conservation of the Saen Saeb Canal through the organization of the “SWU Joint Conservation of the Saen Saeb Canal to be a Good Model for the Community” project.

Overall, the average DO of the Saen Saeb Canal water sampled from five piers did not meet the required standards. This may be due to organic compounds such as proteins, fats and carbohydrates released into the canal, of which a large quantity of such substances are a result of household and community activities, such as cooking, washing, dumping trash and releasing sewage. The large amount of organic matter in the water exceeded the amount of microorganisms which consume dissolved oxygen in the water to decompose organic matter and reduce waste water problems. [12] This may be the reason why the DO levels of the water in the Saen Saeb canal did not meet the required standards. However, the comparison of water quality with that in the same period last year showed that the average levels of DO had increased. Due to the decreasing BOD value, the oxygen consumption of organisms which decompose organic matter has decreased, resulting in a higher DO level in the water. In addition, the activities of the “SWU Joint Conservation of the Saen Saeb Canal to be a Good Model for the Community” project had also had an effect on the DO level in the water.

Overall, the average pH of the Saen Saeb Canal water, sampled at five points along the canal, met the required standards. This may be due to the decomposition of organic matter to carbon dioxide by microorganisms in the water. The gas reacts with the water to produce carbonic acid (H$_2$CO$_3$), which made the water in the Saen Saeb Canal soft [13] with a pH equal to 6.25. Another factor that affected the water’s pH was the presence of matter which led to alkaline soluble contaminants in the water, such as those from chemicals, soaps and detergents. This was able to lessen the impact of the harsh acid conditions and as a result, the pH of the water in the canal met the standards set.

The average level of suspended solids (SS) in the Saen Saeb Canal water, sampled at five points along the canal, met the required standards. This may have been due to communities located along the Saen Saeb Canal treating wastewater prior to discharge into the canal. Additionally, according to “SWU Joint Conservation of the Saen Saeb Canal to be a Good Model for the Community” project, the amount of sludge had been reduced, resulting in a reduced amount of SS. As a result, the level of SS in the canal water met the standards set.

The attitudes of residents living along the Saen Saeb Canal toward canal conservation were designated as being at a “good level”. This may be because people who live...
along the canal were very keen to find out the results of water quality analysis, which the public could see at piers while they were waiting for boats from December 2015 to June 2017. Another reason is the activities of the “SWU Joint Conservation of the Saen Saeb Canal to be a Good Model for the Community” project. [14]

Also, most of them had probably been affected by putrid odor, and as such, they had positive attitudes toward Saen Saeb Canal conservation. Thus, the results revealed their attitudes toward such conservation were at a “good level”.
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Abstract
This study aims to identify the key elements of the Arab food security gap, and analyses the indicators of treatment, which repeatedly re-focus on agricultural development and related policies. The current focus in the development of Arab agricultural capacity is on experience of Iraq and Algeria being of resource-rich economies and poor in food production. The Arab region is suffering decades of serious food dependency and rely on a deepening imports despite the abundance of material, financial and water resources, needed to achieve self-sufficiency. It assumes that the problem is institutional rather than real development and suggests scurrying to address the root of the problem on the relationships that can be estimated from a mathematical model for investment in technological sectors for quench, irrigation, and mass production and in the use of agricultural land.

Keywords: Arab Food Security, Arab Food Gap, Agricultural Development Policies
Introduction

The purposes of the study is to set a contribution into a deterministic policies in the Arab agricultural development. Arab economies had occupied detectable levels of low agricultural productivity and performance for ten years ago, compared with AGRO global averages, as the 1st report on Arab Human Development 2002 (UNDP 2003). The Arab region remained with the largest food deficit in the world along the last decade (Solh et al 2017). The only region organized with lower level, beyond the sub-Saharan Africa’ countries. The global food markets do not bode well (Lin 2012). An increasing dependency on food imports by the Arab countries has been continued for decades.

A growing phenomenon has deeply contributed in Arab food insecurity, led to political insecurity, besides risks on society and future. Less than one third of the Arab agricultural lands, counts about 160 million hectares are neglected and unused. In both, Algeria and Iraq it amount a half of the total national land. The agricultural sector contributes about 10% of GDP, and uses 25% of the whole local workforce (Kubursi 2012; Turral and Marc 2011).

There are abundant local resources, but a serious and unfortunately increasing reliance on the imports. The question is where does the problem potent? Is it in: the agricultural land property? Inside the water sector? On the finance aspect? The regulation of the market? The awareness of the agricultural knowledge? Basic type of the scientific R&D? Or in the rural development?

This work aims at analysing the main factors of “the Arab food gap and drop of the most important indicators of agricultural development with the policies to be adopted, focusing on the Iraqi and Algerian experiments, resource-rich economies, suffering and, intimately seeking development and Growth”.

On problematic core the study considers the availability of financial resources, i.e. it hypothesise that ‘the problem is an institutional, scientific, and systematic one more than a real developmental, in nature’. In this case it is convenient to suggest the possibility of providing support and cooperation to other economies as an experiment, not to resolve it as a chronic problem in some difficult of nature.

Nature of the problem: food gap in the Arab countries has been evaluated and amounted $12 billion in 2000 (AMF 2000). The continued increase in demand for food commodities and the decline in growth in agricultural production have contributed to the continued widening of the food gap to about $ 33.8 billion by 2015, while about 71.2% of the total value of the gap is in cereals (AMF 2017). Population were account 260 million in 2000, grew to 310 million (AL Sharhan 2010), and to about 370 million people in 2018.

Numbers of hunders have doubled ten years later. These countries include large numbers of hungry people in the word, and also doubled from 16.5 million in
1990 to 33 million in 2016 (FAO 2015). The situation has become a massive concern and begun worsen since the mid-nineties of the past century (AMF 2001).

In order to fill the food gap it is supposed that the Arab agricultural output for 2010 to amount twice of the value for 2001, and double in 2020, plus the needs of fifty million people of population growth, that equivalent to \((260 \times 2 + 50 = 570)\) five million dollars. Fit for Iraq, specifically at Nineveh Governorate, which has been called the breadbasket of Iraq (a second larger district of population beyond Baghdad). The food gap where up to 75-80% of the overall needs of the Iraqi population, in a relative sense (Ould Abdel Dayem 2003).

The same think fits for other Arab economies, i.e. for Syria, Algeria, Sudan, Yemen etc. The situation for Egypt, most pressing. One of the dramatic factors the Arab economies face in the era of globalization. The problem is not new stretch; it is of ten years ago (Houari 2007). The problem still of adverse effects when developed countries asked developing ones to drop their support to the agricultural sector, while they inturn didn't commit with. It is expected to have negative impacts, will be doubled more and more for the Arab countries in case the developed countries reduce their supports to the agricultural products (Ali 2007). It may benefit from the higher world prices and transition to cover the entire food needs locally, by encouraging the Arab agricultural investments. The Algeria's economic growth is still driven by the growth of hydrocarbon revenues.

**Elements of Food Gap**

Iraq, as an agricultural country, the rainwater land basically depends on rainfall in North. However, the situation has become critic more and more. Mostly locates in Nineveh Province in major, ideals of the Levant, i.e. Syria. Basing on the rates of the annual rainfall as it has classified: high rainfall; almost guaranteed rained; limited rainfall; and natural pastures areas, as shown in (map 1).

More than two thirds of the agricultural areas of Nineveh compound of limited rainfall areas and natural pastures. It doesn’t conducive to ensure a sustainability capacity of agricultural output, between latitudes 36 and 37 only. In this case it has to rely on the supplementary irrigation techniques in the east and south Island draft irrigation. Although the area of Nineveh constitutes about 10% of the total area of Iraq it provides 70% of the total output of wheat in Iraq.
For the overall Arab countries, the total area occupies more than 1400 million hectares (14 million square kilometres) equivalent to 10% of land area in the world, the estimated area of the agricultural land is about 26% of the total, while the exploited area does not exceed one third of that rate. The ratio is half in Algeria and Iraq, for instance at best, and it is a noticeable essential restricting factor.

In 2000 the Arab cultivated area was 70 out of 197 million hectares, and roughly remained eighteen years later. That’s about one-third and this issue is one of the most diagnosed causes of food shortages that’s non-farmed land to be used as required, as well as the prevailing reality of exploitation of cultivated land.

What was a reform in the fifties and sixties of the last century, now become in need for reform steps totally in the opposite direction, just on new basis, to be built on the state's strategy in constructing modern agricultural sector with sophisticated technology and a balance of urban and rural growth. It requires encouraging the reform and distribution of agricultural land to large farmers, those peasants who are really adopt Mass Production. With them is the hope
Maghreb countries, i.e. Libya, Tunisia, Algeria, Morocco and Mauritania capturing one fifth of the available surface resources water, in front of more than one third for the Middle East district for Syria, Iraq, Lebanon, Jordan and Palestine, and the Mediterranean Territory: Egypt, Sudan, Djibouti and Somalia. The remaining is up to 5% of the territory of the Arab semi-island. There is a relative scarcity of water in Algeria as well as the rest of the Maghreb countries and a lack of use in Iraq while the scarcity of strong in Jordan, Kuwait, Saudi Arabia. This sector alone, consumes 87% of available water resources in the relative scarcity in the world, letting the rest for the industrial use, residential, service and others uses, while still less than 10% of the total Arab population working in.

Arab food gap has quantitatively determined by the proportional difference between what is really produced and the overall need, e.g. the self-sufficiency sealing, which cover the society needs. Its dimensions are: 50% for cereals, especially wheat, worth six billion dollars, and a same ratio -and value- of oil about two-thirds of requirement of sugar, 1999 figure (AMF 2001).

There are: (1) a relatively high rate of population growth, which a given exogenous variable being dealt with, as a reality for granted; (2) the relative
improvement in the overall levels of incomes, by developments of contemporary life and water consumption style, besides, the nature of nutrition in the Arab region; and (3) a high extensively rate of consuming cereals, sugar and oils. These three aspects -demography, incomes, and the evolution of tastes- are external variables for the demand elasticity for food, and therefore cannot considered an influential sources for use in the economic policies to some extent.

The low levels of the Arab agricultural production for the three strategic goods I.e. cereals, oils and sugars, to see to two factors, (I): the lack of production volume; and (II): the deterioration of agricultural productivity. The first is due to a lower contribution of cultivated land and to actual production techniques followed. The second is due to the non-correct large dependence on rain-fed agriculture associated with climate change and the absent expansion of novelist -of gravity-agriculture to achieve levels of necessary production to reduce the food gap. A trial step for model building and assessment will be later in section 5.

Agricultural Experience of Iraq

Demonstrating the likelihood of self-reliance for each Arab economy instead of joint teamwork, can stand at the Iraqi situation in a time of economic blockade, where required self-reliance on local agriculture coverage of the needs from basic food crops. It has achieved highest rates of self-sufficiency in cereals, oils and re-cultivation of beet and sugar production besides operating plants associated with this crop as producing yeasts, which was parked off work for years. In Al Najaf Province, at the mid and south of the Iraqi land, the farming of 'Unber' Rice was famous production in the past decades, until the nineties of the twenty century. But now there is nothing, but the imported types (Figure 1). Throughout that decade efforts were also doing well in the other agricultural programs. Those were being stimulated the growth of the agricultural sector and of productivity, in spite of the continuing low proportion of the people working in agriculture.

Agricultural efficiency recorded metrics numbers, evolved Iraq in 1980, 1989, 2000 from (0.15) to (0.62), and to (2.54). It is despite low agricultural labour proportion of total employmen,t from 30.44% to 21.92%. Then decreased to 12.61% respectively. Note that these numbers have been recorded while the Arab agricultural rates of efficiency being estimated at (0.55). The reason beyond the Iraqi numbers was the increasing contribution of agricultural output in GDP from 5.69% to 13.71%, and to 32.1% respectively as well (Na'osh 2004). “Per capita share of the Iraqi agricultural GDP equalized more than four times of Tunisian and Syrian, and eight times for Moroccan, while the three mentioned countries were not experiencing lack of nutrition like Iraq. Never the less, they were respectively occupied the three first ranks in Arab agricultural exports” (Na'osh 2004). Arabs could not assist Iraq in those circumstances, while many economists considered it as an economic miracle. Causes suggested due to the use of modern scientific techniques and appropriate materials for production stages as well as improving the agricultural work productivity, in the light of limited financial resources at that time. One of main Iraqi products was 'Unber' rice.
Figure No. 1: 'Unber' Rice farming

Note: Was produced in the past decades in mid the of Iraq land, Al Najaf Province

The experiment remembers with the Saudi experience in achieving self-sufficiency in cereals production, especially wheat. It clearly demonstrates the potential to bridge the AFS gap despite the large support by government that provided to fertilizer and the incentive prices for crops, not to make them compete global production but enough to solve the dilemma and overcome the gap, under the Arab will to abroad (Ould Abdel Dayem 2003).

Agricultural Experience of Algeria

Development Reports call for a renewed focus on agriculture that to increase investments in agriculture for transition economies to a market system, stresses a great importance in improving welfare and reducing the numbers of millions of poor people living in rural areas (World Bank 2008). At the same time warns that the reduction of their numbers by the year 2015 cannot be met unless it is overridden low investments in agriculture and rural areas infrastructures during the next two decades.

According to conditions of poverty in Algeria, specifically the proportion of people living on less than one dollar per day, about 2% of the population counted 25.3 million in 1990. They were almost representing 506 thousand people. The third millennium goals has identified the need to reduce the ratio of poor to half by 2015 in general, which will lift 253 thousand people plus, 160 thousand more, representing half of the resulting increase from population growth at the end of 2006 of $ 8 million. What is needed today is to reduce poverty from 0.8 to 0.4 million people.

In late 2006 Algerian population exceeded 33 million, with Gross National Income exceeding a hundred billion dollars, while Gross Domestic Product had recorded about 114.7 billion dollars, growing at a rate of 3%, lower than the rate for a year before, at (5.3%), despite the decline in the inflation rate from 15.6% to 9.1%. 
The agricultural land percentage didn’t exceed 17% of the total Algerian area - compared with 26% for Iraq- and $ 2.4 million km², (See Map 2). But the contribution of agriculture, represented by the value added to GDP, 8.5% for 2005. For comparison, the Arab agricultural output was 6.4%, compared with 61.5% for industry and 30.1% for the services sector. Agricultural efficiency in Algeria Amounted, 0.37 which is equals 8.5/23, according to the definition been explained previously, and the coupling of 1.13 for Iraq (= -8.9/7.9) for the same year, 2005. This, necessarily requires doubling the contribution of the agricultural sector more than twice at least. This increase can be achieved to intensify the using modern and introducing advanced technology in agriculture as long as Algeria, as well as Morocco and Egypt spending between 20% through 30% of their budgets on the water (World Bank 2011).

Map 3: Rainfall distribution lines in Algeria


For as long as weak public sectors associated with the weak departments there, therefore the balance don’t tend to the interests of efficiency for the private sector than do for other developing societies. The development of domestic agricultural market in each Arab country requires recreating the way for private sector participation to impose export to the world markets with stages of self-sufficiency.

The current conduction considers that expansion of public agricultural sector to be limit on development of government investment in infrastructure and irrigation, fertilizers, agricultural machines, land reclamation and expansion, as well as its role in the reforms and appropriate transformations that represent the foundations of: agriculture investment climate, development of local and international private competitiveness.
In oil countries, such as Iraq, Algeria and Libya, there is a need to establish a stock exchange, especially for grain, and the raising of product markets of crops, agricultural infrastructure, particularly grains and oils, produced by the private agricultural sector on grounds of technical sophisticated communications, and offer incentive prices for farmers in front of the received amounts above the level of world prices.

There is a great need to raise the sailings of individual ownership of agricultural land, rehabilitation and reform agricultural production on the basis of mass production which to be controlled by systems of tax revenues and adapted to the realities of each Arab country (Al Amin 2010).
Simple Model for Food Security Policy

More efficient land uses and better consuming for surface & groundwater's as well as the adoption of advanced agricultural technology-you-go (for the agricultural equipment, pesticides and natural organic) are the real concern of urgent agricultural policies.

Consequently, Arab agricultural production, must meets the self-sufficiency and eliminates chronic and worsening food gap in an opened word markets. The production is a function of the needy to: doubling the already exploited agricultural land; upgrading irrigation agricultural techniques; and catching up all fields of agricultural technology, serving mass production. This relationship can be expressed as follows with a mathematic module.

\[
Y = f(L, S, W, T)
\]

As: \( Y \): Agriculture Production, \( L \): labour, \( S \): Land space, use, \( W \): Water usage, \( T \): Embodied Technology.

It has suggested that production value is the product of global technology for the three explanatory factors.

\[
Y = F(L, 2S, WI, MT)
\]

I: stands for investment, M: method of mass production. Supposing that production function with Cobb-Douglas one:
\[ Y = Ae^{rt} \cdot L^\alpha \cdot S^\pi \cdot WI^\beta \cdot MT^\Omega \]

As, A: stand to Exogenous disembodied Technology; e: natural base; r: rate of growth with the time; I: gross Investment in the water irrigation improvement; M: net embedded Investment in agricultural production techniques.

Then the linear interpretation for it postulate:

\[ \log Y = r \cdot \log A + \alpha \cdot \log L + \pi \cdot \log S + \beta \cdot \log WI + \Omega \cdot \log MT \]

The current production function relation (i.e. in period 1):

\[ \log Y_1 = r \cdot \log A + \alpha \cdot \log L_1 + \pi \cdot I \cdot \log S + \beta \cdot I \cdot \log WI_1 + \Omega \cdot I \cdot \log MT_1 \]

After achieving three agricultural Investments, production relation:

\[ Y = r \cdot \Delta A + \Delta \alpha \cdot I \cdot L + \pi \cdot I \cdot S + \Delta \beta \cdot I \cdot WI + \Delta \Omega \cdot I \cdot MT \]

\[ \log A: \log \text{of constant, I}: \text{new net investments.} \]

\[ Y = r \cdot \Delta A + \alpha \cdot L + I \cdot (\pi \cdot S + \beta \cdot WI + \Omega \cdot MT) \]

**Empirical Findings**

Using MATLAB Programming with the three variables and solving main steps of both Iraq and Syria data for investment in three factors: X1, X2, and X3, gives the estimated relation of agriculture measures. Values of Xs, (S, WI, MT) and take a virtual matrix of 6 lines, the values would be a great store in excel and import them, while here the procedure took in principle:

\[ Y = -29.1412 + 0.3615 \cdot S + 0.6346 \cdot WI + 0.7958 \cdot MT \]

These elements pose three basis reservoirs to address the AFS gap with avoidance of competing with less expense foreign imports at any stage of openness-up to the global markets. The only one subscript factor between land reform, irrigation improvements, and production techniques is the investments in the new and recent technologies. It would be in shapes of machines, equipment, tools, and professional skills for training and agricultural guidance in the use and maintenance as well as protection of agricultural products. The later will benefit from knowledge including investments in mankind and human capital. The pace of introducing new technologies would be considered the rate of technological change, in the case. The process with this view may take double dimensions: finance, i.e. the abundance of the essential factor of the natural wealth revenues; and the investments climate with which rules and legislative infrastructures relating lands use and the introducing of new technology besides using.
However, all of the investment types would depend on the public policy that deals with the state investment in the sophisticated technology at the beginning and the investment climate that has to be for private investments to deal with, in later stages. The model would be up to the promotion of the approach for experimental data estimation within due course of analytical debates.

At the same time the Arab agriculture to be stand upon urgent fact, long been overtaken by the literature and policies concerned with the problem of the agricultural sector. It can be summarised by thoughts of the direct Arabic jump to the economic integration and cooperation policies between Arab countries, when coming to held workshop sessions, passing all the already mentioned properties, those obstacles all unique and assemble works. This omission has continued for more than two generations in Iraq as well as many other Arab counties, while policies were working on placing hopes on the Arab common treatments.

In other words, all concepts of the gaps caused in food and agricultural output, the policies and strategies for the agricultural sector do not portrayed, but only the common denominators and the great distinctive aspects, but not solutions. Those policies cannot accept the division into joint solutions, neither close nor far, or supports it. What reveal with this fact is that exacerbate of the problem of food security, as well as the Arab economic reality, useless developments in various aspects for the past three decades or more. Hereby, each country must have self-reliance with endogenous development and there is nothing wrong for a later benefit from some of the successful experiences and excellent for others.

This does not include the diagnosis, relevance with this fact areas of financial and technical cooperation, financial and employment potential among Arab countries, but stressed the necessity of any idea of the direction of integration in any field is a form of dependence and reliability and is a well establishing for all existing Arab gaps, particularly the gap of AFS.

**Conclusion**

The public agricultural policies in both of Iraq and Algeria couldn’t succeed to overcome natural constrains and to reduce food gap during the eighties of the last century. The estimated equarion suggests increases of three factors by percents of parameters for both countries.

The same trend sounds to drive for Syria, Egypt, and Sudan (Abdel Salam 1982). The objectives have been studied and examined in-depth many decades ago while researches focused on policy attention (al-Najafi 1993) but did not produce something or success in raising the economic efficiency to ensure verification inadequate production or modernization of the agriculture sector on the basis of modern technology. It is obvious for reasons related the government departments
and state farms besides cooperatives, while the administrative policies were political rather than economic, or agricultural (Al Amin 2010).

Half of the agricultural land in Iraq were not exploited while more than half in Algeria as well. The policies of distribution have to stimulate the exploitation of unused land and to be effective up to doubling the levels of agricultural production for each types of the staple crops, particularly grains.

The following options are possible and plausible, particularly for wealthy countries with abundance of finance natural resources such as Iraq and Algeria, whereas the necessity refers to doubling the production levels to much more than twice with (Ould Al Sheikh 2007):

Intensive use of advanced agricultural technology, such as modern irrigation systems;
Developed sensor equipment that reaching irrigation water to areas by symmetric and equal distribution;
Least expensive techniques and most efficient Technologies such as desalination of sea water and groundwater substitute for the watering of land near the rain.

With the following factors as certain essential technologies in doubling output:
Provision of organic fertilizers policies (non-chemical) with tax exceptions and seeds subsidies in the early stages of agricultural investment;
Supported prices of energy products involved in the extraction, transfer, and pumping of groundwater; and
Terrestrial distribution stations.

It is essential for the investors to be encouraged by new agricultural lending for ease farming, tax-deductible in land reclamation and ownership of modern equipment machines in achieving mass production.

ASAP the outlet of the above strategy, Arab food deficit remains a voluntarily one but not imposed. It can get benefit from several past experiences to focus on the productive efficiency, on the other hand to keep development to access external competitiveness as soon as possible. The main remedy view includes the following:

The state has to encourage agricultural investment to exploit all the available agricultural land.
Development of agricultural technology in the foundations of modern and sophisticated natural fertilizers uses, mechanization, equipment, and irrigation methods, "which included raising the economic efficiency and increase agricultural productivity. Increasing of banks branches for agricultural lending by ease policies stand soft with zero interest rates, Consistent with the purposes of Islamic Sharee’a and the general orientations of an Islamic resource rich country.
Doubling the agricultural credit with the possible extent of expanding credits by the peasants and farmers, especially large farmers. Providing customs exemptions as possible for procurement of technical equipment, land reclamation, and stations & equipment of extraction, desalination, and irrigation distribution, of groundwater. Expansion of infrastructure networks and basic services for rural development that enable the resettlement of the intensive farming families in the new lands that can be added and distributed to the new investors.

If the case of integration of these policies with each other and coordinate the functions of financial, commercial and industrial sectors with the agricultural & irrigational activity sector by responsible, the optimistic beginnings to be confirmed the possibility of final eliminating on AFS gap. With the reduction in the cost of the product and the achievement of agricultural surplus, country to be eligible to enter the abroad market competitiveness with efficiency of the ripe conditions for the other economic sectors and desired stages of development.

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Addressing Social Needs Through Remote Based Design Thinking

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Shuichi Takao, Toyku Land Corporation, Japan

Abstract
With ageing as the coming and increasing phenomenon in Japan, there is a need for innovative solutions for seniors to lead active lives in their residing communities. Little research has been conducted on the use of design thinking as a means to develop social innovations, especially with the designers not being present on-site from a distance. This paper reports the study on the effectiveness of employing a remote based design thinking in a university course with the goal for participants to develop social innovations that elderly, as stakeholders, would be engage to adopt and implement. The study involved two cohorts of participants in a design thinking course at the Nagoya University of Commerce and Business, where the participants were asked to employ design thinking to develop social innovations for two regional communities in Japan without them visiting. Findings from the comparison of the two cohorts show that higher social innovation occurs if the participants have clearly identified target users and addressed the needs of seniors. Future research is needed to better understand how cultural differences enhance or hindered the design process especially as the users come from a Japanese culture while most of the designers are international.

Keywords: Design Thinking, Social innovation, Aging
1. Introduction

There is a growing trend of aging population in Japan that requires innovative solutions for seniors to lead active lives in their residing communities. International student teams who are located in Nagoya prefecture, have been tasked to create the solutions for the seniors who resides in Tokyo area to make them active, in a distance environment with the given context.

Design Thinking method has been applied to resolve social problems and create solution as applied in many fields. The method has the characteristics of being user centric, process oriented due to its ethnographic richness in deriving empathy of end users through face-to-face observation and direct interview. However, there is a lack of understanding on how design thinking can be effective to develop solution for seniors to lead active lives in their communities under the distance environment. Furthermore, there is little empirical research on the effects of design thinking as a means to measure social impacts. Thus, the study has 2 research questions: Can design thinking method be used to develop solution to encourage active aging amongst residents? How to overcome distance barriers between student teams and the residents?

The research employs case approach and field research as research methodology. The traditional classroom approach has been applied on one cohort of students, while a remote based approach has been applied on another cohort of students in the following semester for a 14-week course. Observation, report and interview with student teams and community stakeholders are used as means of data collection. The study applies comparative analysis on 4 project cases undertaken by 4 student teams to describe and analyse the process of creating the innovative solutions and collaboration between student teams and residents of the 2 selected residential towns.

The study shows important findings that contribute to design thinking method through communal practice. Firstly, international students teams from university can develop creative solution that encourage active aging through design thinking method. Secondly, embedding a two-way communication, solution iteration, and interface of intermediate agents into existing design thinking process as a remote based approach can overcome distance barrier that results in a social impact.

The paper is divided into 4 sections. Firstly, section 1 provides background and research question. Section 2 is the current research on design thinking. Section 3 highlights the research design and methodology. Section 4 describes the 4 cases. Section 5 is the research findings. Finally, section 6 is the conclusion with future research.

2. Literature Review

There is increasing attention on design thinking as an effective methodology as a practice towards innovation since originated by IDEO (Brown 2008). Current literatures have discussed design thinking as a scientific method, beyond just a practice.
The current literature provides many discourses and approaches for the understanding of Design Thinking (Johansson-Sköldberg et al, 2013). In the management science field, design thinking is grounded in experience for working with design and innovation (Kelley, 2001, 2005; Brown, 2008, 2009) and management theoretical perspective (Boland & Collopy, 2004a). Grounded in cognitive science, design thinking has been an approach used in different areas, such as a problem-solving activity (Buchanan, 1992 based on Rittel and Webber, 1973), or a necessary skill managers (Dunne & Martin, 2006; Martin, 2009). Design thinking has also been introduced as education and teaching into the Academy of Management, with examples of company successes (Dunne & Martin, 2006; Martin, 2009). However, there is a lack of understanding on how design thinking can be effective to develop solution that provides social impact, whereby the innovators are unable to fully employ the ethnographic approach to study the problem faced by the end user under a distance environment. Thus, the purpose of the research is to study the effectiveness of employing a remote based design thinking in education with the goal for participants to develop social innovations for end users to adopt and implement.

3. Research Design and Methodology

3.1 Case approach and field research

The research employs research methodology of case approach and field research. The study involves a tripartite collaboration amongst university, local community and industrial partners. International students from Nagoya University of Business and Commerce (NUCB) represents the innovation teams from academic institution. Tokyu Land Corporation, which is one of the largest real estate corporation, represents as the industrial partners. Two towns, namely Kiminomori town and Kugenuma town are selected to represent as local community respectively.

3.2 Context of regional projects for Design Thinking practice

The two selected towns, namely Kugenuma Town (KUG), in Kanagawa Prefecture and Kiminomori (KIMI) town, in Chiba prefecture, are developed by Tokyu Land Corporation in 1980s. Both towns have similar characteristics of a “fading” town with abled, financially independent, skillful but retired residents. The 2 towns have good infrastructure, however less accessible to big city, such as Tokyo. With the above conditions, both towns are selected as “experimental town” for regional revitalization.

The targeted students consisted of 2 cohorts of international students, which include local Japanese student, are 27 students in cohort one and 24 students in cohort two. In each cohort, 5 innovative teams were formed. The students were mainly business background, undergraduates, however with a few master level and engineering background. They were mostly not able to speak Japanese, unfamiliar with the Japanese local communities and new to design thinking approach. They were tasked to develop solution that promote active living by the elderly communities in Tokyo area as their course project.
Table 1: Makeup of 2 cohorts of students

<table>
<thead>
<tr>
<th>Town</th>
<th>KUG</th>
<th>KIMI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Batch</td>
<td>Cohort 1</td>
<td>Cohort 2</td>
</tr>
<tr>
<td>Period of participation</td>
<td>April – July 2017</td>
<td>Aug- Dec 2017</td>
</tr>
<tr>
<td>Background</td>
<td>Mainly Business and Finance background</td>
<td>From faculty of business or management</td>
</tr>
<tr>
<td>Level</td>
<td>Mainly undergraduates</td>
<td></td>
</tr>
<tr>
<td>No of Team</td>
<td>5 teams, each about 4-7 students,</td>
<td></td>
</tr>
<tr>
<td>Experience in Design Thinking</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

### 3.3 Implementation

Design thinking course was designed to select a local city as a real case to practice design thinking approach. The aim was for student team to form as design thinking team to create innovative solutions to encourage active participation amongst local residents. The designed structure of education system has two phases. In phase 1, students learnt about the theory of design thinking within the classroom environment. In phase 2, students proposed their ideas through some form of communication with local residents and made real solution as project requirement.

A similar team of guest speakers, made up of researcher, corporate representatives and residents’ representative presented the facts, problem faces, current activities, and future goals in the town at the lectures respectively. There were two session of feedback and evaluation, the mid-term and final presentation, whereby students obtained direct feedback from remote partner team to improve the idea and prototype. A post mortem session was carried out between the researcher and the residents directly act the end.

Table 2: Schedule for implementation of design thinking using 2 approaches

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Month (2017)</th>
<th>Activity</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Feb</td>
<td>Planning for Action Research</td>
<td>Formalization of joint research</td>
</tr>
<tr>
<td></td>
<td>Mar</td>
<td>Design of content and system for &quot;Design Thinking course-Kugenuma Project&quot;-(KUG)</td>
<td>Formalization of content and system</td>
</tr>
<tr>
<td></td>
<td>April - July</td>
<td>Implementation of &quot;Design Thinking course-Kugenuma Project&quot;(KUG)</td>
<td>5 solutions and prototypes were created</td>
</tr>
<tr>
<td></td>
<td>July</td>
<td>Presentation of outcome to Kugenuma residents</td>
<td>Resident has no intention to continue</td>
</tr>
<tr>
<td></td>
<td>July</td>
<td>Post mortem lesson discussion</td>
<td>Feedback</td>
</tr>
</tbody>
</table>
### 3.4 Classroom based versus remote based approach

In the research, the study constructed and tested two approaches: traditional classroom approach and remote based approach. In the practice of design thinking, ethnographic or fieldwork research could not be applied as student teams were restricted to create the solution with the classroom environment.

#### 3.4.1 Classroom based approach

For the classroom based approach, there were 3 steps to the process. Firstly, resident leaders and community stakeholders were invited to class as guest speakers to share the background, problem face and current activities undertaken by them respectively.

Student teams had to utilize the data to create empathy, formulate their ideas and prototype and received the evaluation by the end. At the evaluation phase, the panel were invited to access the proposed solution. Thereafter, the solution was forwarded to the residents for feedback and consideration for implementation.

Under the classroom room approach, all lessons were conducted in classroom. Resident leaders were appointed and invited by project coordinator to be guest speakers. Their communication was via online communication software.

#### 3.4.2 Remote based approach

For the remote based approach, the researcher constructed and embedded 3 components within the design thinking process. The 3 components included the following: (I) Face to face and Online Communication (FOC), (II) Design Iteration Mechanism (DIM) and (III) Interface of Intermediate Agent (IIA).

The Face to Face and Online Communication (FOC) functioned as a structure design to provide a 2-way communication with the purpose of enabling great information exchange between both the student teams and the participating residents who were distance away. The communication was done via face to face lecture, with additional
application using social media, such as Messenger software and Facebook web base platform.

Design Iteration Mechanism (DIM) functioned as a process design to enable smooth and chronological solution between student teams and residents through the iteration of ideas, prototyping and even evaluation. The two-way iteration were employed at the exploratory phase of forming empathy and idea; feedback phase when creating the prototyping and evaluation phase when received final assessment of the final solution.

Interface of Intermediate Agent (IIA) functioned as a network design with the purpose to enable the spanning of spatial boundary due to the distance and weak ties and increase information flow between the student team and residents. There were 3 roles for the IA. Firstly, IA was the primary data provider to enable a two-way information in tripartite relationship. Next, they acted as the innovation validator to create empathy by aligning values and emotions with student teams and end users. In addition, they were the bridge to strengthened weak ties between student teams and end users.

In summary, remote based approach was differentiated from traditional classroom based approach in 3 aspects, namely structure, process and human network design, with the 3 respective components being embedded into the design thinking methodology to be used under a distance environment between student teams and residents.

<table>
<thead>
<tr>
<th>3 Dimensions</th>
<th>Classroom based approach</th>
<th>Remote Collaborative based approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td>Only online classroom lecture</td>
<td>Interactive lecture and out of classroom communication</td>
</tr>
<tr>
<td>Process</td>
<td>One-way presentation by student team</td>
<td>Two-way solution iteration between student team and residents at intermittent stages</td>
</tr>
<tr>
<td>Network</td>
<td>Resident as guest speaker</td>
<td>Residents and Intermediate Agents (3rd party) as collaborators</td>
</tr>
</tbody>
</table>

4. Case studies

Based on the observation, the 4 cases of project collaboration with the highest score were compared and contrasted. However, both CO2 Hunter (CO2) and Friendly Reminder (FR) from KUG had different responses as compared to Mori Design (MORI) and Human in Kimi (HUMAN) from KIMI. The cases are selected with the criteria that they are the best proposals evaluated by stakeholders, researchers, corporates and resident representatives, based on innovativeness, applicability to community and high team motivation.

4.1 Case I: “Friendly Reminder (FR) project

FR team was made up of 6 undergraduate students who embarked in the project using design thinking from April to July 2017. Friend defined their wicked problem to be “lacking in communication between residential organizer and residents”. Thus, FR
was proposed as the idea to create a leaf design instrument as a portable hardware with sensor that provided sound and light signals to residents on community event as friendly reminder. It served as a communication platform to advertise community activities and made residents more active.

Throughout the design thinking process using the classroom approach, there were minimum contact and interaction between the student team and the residents. At the exploration phase, the student team collected primary and secondary data through the lecture to create their initiate proposal. By the midterm presentation, judges feedback that the idea was innovative. However, there was a lacking in the validity of the prototype and data. At the iteration phase, student team continued to collect data through secondary sources. In terms of prototype, member used some of the class tools to configure into their idea. The iteration was drive by creating the prototype. There was no specific persona for contact between FRIEND and residents.

The final solution had created interests amongst evaluation panel. However, when the final proposal was briefly presented to residents at a separate session by local researcher on behalf of FR team, residents did not indicate their interest to the proposal due to the idea being too abstract, lack of personal motivation and lack of know how to initiate the project by themselves.

4.2 Case II: CO2 Hunter (CO2) project

CO2 Hunter project was made up of 5 undergraduate students who embarked in the project using design thinking from April to July 2017. They identified 2 wicked problem as lacking of green with respect to limited land, and inactiveness of increasing retirees in local community. Thus, CO2 hunter was proposed as the idea of planting species which can absorb more carbon dioxide from the air and can produce more oxygen. In this way, they can not only achieve a greener Kugenuma but also make residents more active.

Throughout the design thinking process using the classroom approach, there were minimum contact and interaction between the student team and the residents. At the exploration phase, the student team received data of local community. Then they combine the hardware and software tools that were taught in class into create their prototype. By the mid-term, CO2 had created idea using powerpoint slide as the concept of their prototype. It was feedback that the idea was innovative. However, the solution lacked proven outcome of the prototype and sufficient data to explain the problem. The iteration phase was accessed to be driven by ability of student team to create the prototype rather than feedback from residents.

The final proposal had created interest amongst evaluation panel. However, when the proposal was briefly presented to residents at a separate session by local researcher, on behalf of them team, the residents did not respond to the proposal due lack of motivation and lack of know how to initiate the project.

4.3 Case III: Human in Kiminomori (HUMAN) project

HUMAN project was made up of 4 members who have participated in the process of design thinking from Aug- Dec 2017. They identified the wicked problem as “lacking
in understanding the residents’ experience”. Their proposal was to create a publication with narratives of individual life stories of residents in Kimnomori town.

Throughout the design thinking process using the remote based approach, there were intermittent direct contact and interaction between the student team and the residents. The student team received the first-hand data of Kiminomori from the researcher, resident leaders and corporate representative through the lecture series via face to face and online system. By the mid-term presentation, the student team could only propose a fictitious character to be the project persona for their solution. At iteration phase, in order to make the solution more relevant, the student team contacted their intermediate agent, named Ms Mayo, who was a related partner with close relationship to Ms Kita, one of the residents via communication tools, such as Facebook and SKYPE, in order to conduct interview. After completing the English version, the other members assisted to translate it into a Japanese version. The final prototype was a 15-page magazine in both English and Japanese version.

The final proposal had created interests amongst evaluation panel. Some residents were pleased a new possibility of paper calling people sitting back into Kiminomori communal practices. The other needed wider marketing tool, such as instant messages of FB and totally structured information of HP. This idea satisfied both needs and the prototype.

One of resident leaders said “we are ready to adopt the idea”. The student leader also said “Our team was motivated to make real the prototype. Even though we could not interview Ms Kita or even speak Japanese. We hope our proposal is a contribution to the community. So, we did our best to complete it as a prototype”.

4.4 Case IV: Mori Design (MORI) Project

MORI Project was created by 5 undergraduate students who embarked in the process design thinking for 3 months from Aug till December 2017. They identified 2 wicked problems. Firstly, extensive destruction of natural habitat, in order to build affordable residential areas. The second wicked problem was the non-existence of central communication platform has led to infrequent interaction among retirees. The community service matching website served as a communication platform to foster exchange of expertise and resources amongst residents, and to create participation within the community in Kiminomori.

Throughout the design thinking process using the remote based approach, there were intermittent direct contact and interaction between the student team and the residents. The student team identified 3 residents as their solution personas to be their targeted end user for behavior change based on event matching. At the iteration phase, MORI identified their real project persona, Mr HARA as the direct contact in this project. Through Mr HARA. Student team received the exact data on the members of the community (picture, email, telephone) to add on the website. This information will also be utilized to contact the KIMI citizens. Students completed to create proposal and prototype with updated and sampling of activities in KIMI in 2017. A mockup up of wooden recycling and workshop was also included.
The final proposal had created interests amongst evaluation panel. The proposal had big potential to connect potential participant into the communal practices from outside and inside of KIMI. Such matching mechanism was not yet successful in other regions in Japan.

5. Findings

5.1 Creativity and motivate by student teams

Design Thinking can be applied to develop solution to encourage active aging, even if residents are distance apart. Using either “classroom based” or “remote based” approach. Students felt “motivated and meaningful” to deal with real life cases, rather than textbook cases. All solution were evaluated to be “creative and innovative” that addressed active aging needs at a great extent by resident leaders and stakeholders. International students could gain ability to develop creative solution that encouraged active aging through design thinking method.

5.2 Social Impact through remote based approach.

There were high social impacts observed with higher level of engaging between students and residents for HUMAN project and Mori Design Project through remote based approach, as compared to Friendly Project and Co2 Project under the traditional classroom based approach.

Firstly, through FOC component, there was an increase in rate of information and interaction exchange. It helped establish ties between students and stakeholders through the classroom and online platform. Next, DIM component resulted in increased design iteration and better quality of solutions that met users’ needs and increased inclination for adoption. We created 2 evaluation and feedback sessions by aligning mid and final presentations with residential committee meetings. Thirdly, IIA component produced feasible solutions after the idea and the prototype were customized to meet the users’ needs and community in large. The student teams leveraged on individual stakeholders as their IAs to connect with residents as real persona and address specific environmental conditions. There was an increase in level of “self-help” spirit and ownership amongst residents to directly influence the solution creation. The solutions were accepted with intention for future implementation by residents.

On the other hand, Friendly Project and Co2 Project under the classroom based approach, there were little or no direct engaging between students and residents. Secondly, there was lesser satisfaction amongst the students. Thirdly, the solutions were well appraised, but no intention for implementation by residents.

6. Conclusion

This paper reports the study on the effectiveness of employing a remote based design thinking in a university course with the goal for participants to develop social innovations that elderly, as stakeholders, would be engage to adopt and implement. There are several important findings. Firstly, under either classroom based or remote based approach, student teams can feel the great sense of motivation and relevance in
direct contribution to community by dealing with real case practice through design thinking process. All solutions are evaluated to be creative and innovative proposals that address active aging needs. Thus, we conclude that design thinking method applied under a distance environment is effective to develop solution to encourage active aging amongst residents. The second important finding shows that by embedding a two-way communication, solution iteration, and interface of intermediate agents as a remote based model into design thinking process, the approach can overcome distance barriers and result in a higher social impact. However, improvements can be made in training of pre-identified intermediate agents to enable greater information sharing in the tripartite relationships with student teams and the residents in future.

The limitation of the study is that there is a lack of control on the influence of cultural background of international students that may affect the creativity of solution and the interest on the residents. Thus, future study may address both limitations. Future research may also focus on cultural factors that enhance or hinder the design process especially as the users come from a Japanese culture while most of the designers are international.

Secondly, the identification of resident as the “end users” is random and difficult due to their commitment to participate throughout the process. Another study may focus on the effects of “proxy end users” on student team effectiveness and solution quality.
References


Applying Logistic Regression Analysis to Determine the Service Quality Factors Affecting on Consumer Satisfaction Toward Domestic Low Cost Airlines in Thailand

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Titida Nochai, Assumption University, Thailand

Abstract
In recent years, Thai low cost airline market has been significantly growing. Because of the rebound of Thai economy and economic policy of government to stimulate people consumption and tourism increasing more holidays, the amount of sales in Thai low cost airline were increased dramatically. Thailand has 3 major low cost airline providers, namely Thai Air Asia, Nok Air and Thai Lion Air. Each airline has been trying to be lower the costs and good service in order to meet consumer’s need. This research studies about the factors affecting on consumer satisfaction toward domestic low cost airlines in Thailand. A sample survey is conducted during December 2016 to January 2017 at Don-Mueang International Airport. Convenience sampling with questionnaires are used to collect data from 450 Thai passengers who have ever used those low cost airlines for domestic flight to travel within 6 months ago. Data was analyzed by using Multinomial Logistic Regression Analysis at 0.10 level of significance, and the results of the study shown that four of five dimensions of service quality as assurance (safety flight), responsiveness (Speed in managing the ticket, Convenience in reserving the seats, Carefulness in transmitting the luggage), empathy (Crews are always willing to serve customers), and reliability (Crews completely communicate all information to customers) were the important factors that have the impact on customer satisfaction.

Keywords: Customer Satisfaction, Low Cost Airline, Logistic Regression Analysis.
Introduction

In recent years, the growth rate of Thai low cost airline (LCA) market has been significantly growing. Because of the rebound of Thai economy and economic policy of government with returning of tax refund for people who spend money in tourism that stimulate people consumption and tourism increasing more holidays. The amounts of sales in Thai low cost airline was increased dramatically. Moreover, compared with ground travelling, low cost airline takes lower time for transportation, but similar price influencing people select to use low cost airline travelling more and more. Though full service airlines currently dominate the market, LCA are growing rapidly in market share. In 2013, low cost airlines held 46% of Thai airline market share (calculated from revenue received from domestic routes), while full service airlines held 54%. Thai Airways, a full service airline, still leads the market with the highest domestic market share at 31.6%, followed by Thai Air Asia and Nok Air, Thai low cost airlines, at 23.2% and 22.7%. From a market share growth perspective, during 2011-2013 low cost airlines' market share growth was 9%, while full service airlines' market share growth dropped by 6% (Srisumran and Sintanabodee, 2014). Moreover, New Airport Insider (2017) reported that the domestic low cost route in Bangkok region has grown from 40% in 2011 to 67% in 2016. According to Table 1, low cost airline market in Thailand consisted on big three brands; Thai Air Asia, Nok Air, and Thai Lion Air ordering by the size respectively. Thai AirAsia is one of the famous brands in Thai low cost airline market which takes the average 40.52% of the whole market shares, following with Nok Air and Thai Lion Air which possess the market 40.16% and 15.44%, respectively. Theirs base are in Don Mueang International Airport.

Table 1: The Number of Domestic Passengers Traffic and Market Shares in Percentage at Don Mueang International Airport by Airlines

<table>
<thead>
<tr>
<th>Airlines</th>
<th>Fiscal Year</th>
<th>Average of Market Shares Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2013</td>
<td>2014</td>
</tr>
<tr>
<td>1. Thai Air Asia</td>
<td>5,338,600</td>
<td>6,293,328</td>
</tr>
<tr>
<td>2. Nok Air</td>
<td>5,337,815</td>
<td>7,028,018</td>
</tr>
<tr>
<td>3. Thai Lion Air</td>
<td>32,288</td>
<td>1,766,917</td>
</tr>
<tr>
<td>4. Others</td>
<td>482,080</td>
<td>468,364</td>
</tr>
<tr>
<td>Total</td>
<td>11,190,783</td>
<td>15,556,627</td>
</tr>
</tbody>
</table>


Over the past decades, domestic flight has become one of the most important sectors in terms of bringing revenue to LCA. Therefore, it is important to study how to increase customer satisfaction during the low seasons and with high competition. The
ability to achieve sustainable growth during hard times guarantees steady revenues in the future. The domestic flights’ revenues can be increased in two ways. First is to increase new customers and second is to make sure that the old customers repurchase the products and service again and again. Service quality is widely accepted as one of the most important factors for customers to make a decision to repurchase. Service quality is an important factor whenever its uniqueness encourages purchase and repurchase by customers. The more customers repurchase the same products and service, the higher the probability will be that customers have loyalty to that particular brand. Service quality has been increasingly accepted as a key factor in differentiating and building a competitive edge in the modern airline business. Service quality is satisfaction based on customer’s experience. Positive experience from customers leads to highly satisfied customers and a willingness to repurchase or recommend the particular products and services to others customers (Techarattanased, N., 2014).

LCA become strategic move of airline business as companies reduce irrelevant expenses such as crew uniform and in-flight catering so tickets can be offered at competitive price. Moreover, tickets can be sold in advance via internet so company can efficiently manage flight schedules and minimize risk of empty seats. Low cost airlines have always changed marketing strategies to survive in the business and fulfill customers’ needs (Charoensettasilp and Wu, 2013).

Since low cost airline business in Thailand grows continuously and has a great impact on Thai economy in the future, this business obviously has high competition among carriers because there is a positive trend in this business. However, airline business is mostly concerned with services provided to customer to make them satisfied and repurchase the product again. Each airline has been trying to be lower the costs and good service in order to meet consumer’s need. Hence, it is increasingly necessary to find out the influential factors in service quality which have an influence on customer satisfaction among top three low cost airlines in Thailand as Thai Air Asia, Nok Air, and Thai Lion Air. Therefore, this research aims to study the factors affecting on consumer satisfaction toward Thai domestic low cost airlines in Thailand. The obtained results will be helpful for marketer to improve service quality and create marketing strategy for airlines in order to increase customer satisfaction in the future.

**Research Objective**

1. To study the general behaviors of consumer who use Thai domestic low cost airlines of Thai Air Asia, Nok Air, and Thai Lion Air.

2. To study the important factors in five dimensions of service quality that has the effect on consumer satisfaction toward Thai domestic low cost airlines of Thai Air Asia, Nok Air, and Thai Lion Air.
Literature Review

Theories Related to the Independent Variable

Service

Service can be defined in many ways depending on which area the term is being used. An author defines service as “any intangible act or performance that one party offers to another that does not result in the ownership of anything” (Kotler & Keller, 2009, p. 789). In all, service can also be defined as an intangible offer by one party to another in exchange of money for pleasure. (Jenet Manyi Agbor, 2011). Investor’s word defines service as a type of economic activity that is intangible, is not stored and does not result in ownership. A service is consumed at the point of sale. Services are one of the two key components of economics, the other being goods.

Service Quality

According to Parasuraman et al. (1988), service quality can be defined as an overall judgment similar to attitude towards the service and generally accepted as an antecedent of overall customer satisfaction. According to Asubonteng et al., (1996), due to intense competition and the hostility of environmental factors, service quality has become a cornerstone marketing strategy for companies. This highlights how important improving service quality is to organizations for their survival and growth since it could help them tackle these challenges they face in the competitive markets. Quality in a service business has become a measure of the extent to which the service provided meets the customer’s expectations. Companies have found that in order to increase profits and market share, they should pay much attention to service quality.

SERVQUAL Model

To facilitate the assessment and measurement of service quality, it is called SERVQUAL (Service Quality) model. SERVQUAL model was also chosen because it is valuable when it is used periodically to track the service quality trends, and when it is used in conjunction with other forms of service quality measurement. Parasuraman et al. (1988) included that the SERVQUAL model was made of five dimensions of service quality as (1) Tangibles- physical facilities, equipments, and staff appearance; (2) Assurance- knowledge and courtesy of employees and their ability to inspire trust and confidence; (3) Responsiveness- willingness to help customers and provide prompt service; (4) Empathy- caring, individual attention the firm provides its customers; and (5) Reliability- ability to perform the promised service dependably and accurately.

1. Tangible (Direct Evidence)

Tangible (Direct Evidence) can be defined as the appearance and quality of the tools used for physical, employee performance and communication equipment. This is direct evidence that the service will be assessed to determine the respondents in selecting items. This is because the quality of the physical tools and the appearance of a good employee will automatically be able to attract respondents to buy the products that they offer (Zeithaml and Bitner, 2003). Tangible can also be defined as
appearance of physical facilities, equipment, personnel, and communication materials. Include all physical products that are involved in service delivery, and even other customers (Parasuraman et al., 1988).

2. Assurance

Assurance can be defined as the level of knowledge and level of courtesy of employees, in addition to their ability to give confidence to the customers (Zeithaml and Bitner, 2003). Assurance can also be defined as knowledge and courtesy of employees and their ability to convey trust and confidence (Parasuraman et al., 1988).

3. Responsiveness

Responsiveness can be defined as the desire of the staff and employees to help customers, provide service with responsive and able to handle customer complaints quickly (Zeithaml and Bitner, 2003). Responsiveness can also be defined as willingness to help customers, provide prompt service and how fast the service is provided customers (Parasuraman et al., 1988). In this research, responsiveness is concerned with only staff; for instance, the willingness of staff to help consumers and the response of staff to provide services required by consumers quickly. Thus, in order to clarify the variable, the researcher renamed it as staff’s responsiveness.

4. Empathy

Empathy can be defined as the special attention given to each customer individually by an employee. For corporate service organizations, all characteristics of service quality should be measured and adjusted relative to the quality requirements (Zeithaml and Bitner, 2003). Empathy can also be defined as the firm provides care and individualized attention to its customers (Parasuraman et al., 1988).

5. Reliability

Reliability can be defined as the ability to deliver the promised services with immediate, accurate and satisfying (Zeithaml and Bitner, 2003). Reliability can also be defined as ability to perform the promised service dependably and accurately service is performed with high accuracy and thoroughness every time customers (Parasuraman et al., 1988). In this research, as the researcher reviewed based on the definition of reliability, the researcher found that another promise that airline should provide to customers is the good management in case of emergency; such as delay of flight or luggage problem. This can be considered as reliability of the airline. Therefore, it is separated from reliability, so this is called “well-managed of emergency case”.

Service Quality in Airline Business

Airline service quality is different from services in other industries. An airline service comprises are tangible and intangible attributes. Airlines carry passengers to the destination using aircraft, and passengers experience diverse intangible services from airlines such as on time performance, inflight service, service frequency and so on. Many researchers define a number of key service quality attributes in airline industry.
that affect customer’s perception of a service delivered and thus create the image of a carrier. The attributes are summarized in Table 2 (Ekaterina Tolpa, 2012).

Table 2: Service Quality in Airline Aspects

<table>
<thead>
<tr>
<th>Service Quality Aspects</th>
<th>Researcher(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavior – Performance, Price, Tangibility</td>
<td>David J. Snyder, Canisius College, USA Pham Anh Tai</td>
</tr>
<tr>
<td>Caring and tangible, reliability, responsiveness, affordability, visual attractiveness</td>
<td>Ahmad Azmi M. Ariffin, Aliah Hanim M. Salleh, Norzalita A. Aziz and Astuti Agustina Asbudin</td>
</tr>
<tr>
<td>Service environment</td>
<td>Kalaippiriya Kalaiarasan, Santhi Appannan and Barathy Doraisamy</td>
</tr>
<tr>
<td>Tangibles and responsiveness</td>
<td>Kim, Yu Kyoung and Hyung Ryong Lee</td>
</tr>
<tr>
<td>Assurance, then reliability, responsiveness, empathy, and tangibles</td>
<td>K. Ravichandran, B. Tamil Mani, S. Arun Kumar, and S. Prabhakaran</td>
</tr>
<tr>
<td>Willingness to correct errors, task proficiency, courtesy, friendliness, tolerance</td>
<td>Mersha &amp; Adlakha (1992)</td>
</tr>
<tr>
<td>Airline brand, price, sleep comfort</td>
<td>Boetsch et al. (2001)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service Quality Aspects</th>
<th>Researcher(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency and timings, punctuality, airport location and access, seat accessibility/ticket flexibility, frequent flyer benefits, airport services, in-flight services</td>
<td>Shaw (2007)</td>
</tr>
<tr>
<td>Employee’s service, safety &amp; reliability, on board service, schedule, on time performance, frequent flyer program</td>
<td>Liou &amp; Tzeng (2007)</td>
</tr>
<tr>
<td>Flight schedule, total fare, flexibility, frequent flyer program, punctuality, catering, ground services</td>
<td>Teichert et al. (2008)</td>
</tr>
<tr>
<td>Level of concern and civility, listening and understanding, individual attention, cheerfulness, friendliness, courtesy</td>
<td>Babbar &amp; Koufteros (2008)</td>
</tr>
<tr>
<td>On-time performance, overbooking, mishandled baggage, customer complaints</td>
<td>Tiernan et al. (2008/2)</td>
</tr>
</tbody>
</table>

Source: Ekaterina Tolpa, 2012

Theories Related to Dependent Variable

Satisfaction

Kotler & Keller (2009) defined satisfaction can be a person’s feelings of pleasure or disappointment that results from comparing a product’s perceived performance or outcome with their expectations. Satisfaction could be the pleasure derived from someone from the consumption of goods or services offered by another person or group of people. Satisfaction was defined as an overall evaluation dependent on the total purchase and consumption experience of the target product or service performance compared with repurchase expectations over time. While satisfaction is
sometimes equated with performance, it implies compensation or substitution whereas performance denotes doing what was actually promised. See also accord and satisfaction

Customer Satisfaction

Kotler (2000) defined satisfaction as: “a person’s feelings of pleasure or disappointment resulting from comparing a product perceived performance (or outcome) in relation to his or her expectations”. According to Hansemark and Albinsson (2004) defined that “satisfaction is an overall customer attitude towards a service provider, or an emotional reaction to the difference between what customers anticipate and what they receive, regarding the fulfillment of some need, goal or desire”. Oliver (1981) defined satisfaction “as a summary of psychological state resulting when the emotion surrounding disconfirmed expectations is coupled with the consumer's prior feelings about the consumption experience”.

Relationship of Service Quality and Customer Satisfaction

In this logic they are separate, where quality is something the company is responsible for and satisfaction is an experience in the customer’s domain. However, the concepts are clearly related since we might use customer reaction (satisfaction/dissatisfaction) as means of evaluating whether the right quality has been delivered. When a customer recognizes quality, it is reflected in customer satisfaction. To achieve a high level of customer satisfaction, most researchers suggest that a high level of service quality should be delivered by the service provider as service quality is normally considered an antecedent of customer satisfaction (Cronin, Brady, & Hult, 2000; Anderson et al., 1994; Cronin & Taylor, 1992). Since customer satisfaction has been considered to be based on the customer’s experience on a particular service encounter, (Cronin & Taylor, 1992) it is in line with the fact that service quality is a determinant of customer satisfaction, because service quality comes from outcome of the services from service providers in organizations.

In relating customer satisfaction and service quality, researchers have been more precise about the meaning and measurements of satisfaction and service quality. Satisfaction and service quality have certain things in common, but satisfaction generally is a broader concept, whereas service quality focuses specifically on dimensions of service (Wilson et al., 2008).

Research Model

According to the Literature Review, the research model consists of two major variables:

1. .......................................................... dependent variable is customers’ satisfaction toward the service quality in domestic low cost airlines in Thailand among three brands Thai Air Asia, Nok Air and Thai Lion Air
2. .......................................................... independent variables are five dimensions of service quality
   - Tangibility
   - Boarding pass and system are modern
- The airline’s seat is comfortable
- Restrooms are clean
- Cabin’s air pressure is comfortable
- Modernity of airplane

Assurance
- Safety flight
- Capacity of airplane
- It is convenient to communicate to the airline.
- Experience and Ability of crews
- Serving customers appropriately

Responsiveness
- Speed in managing the ticket
- Speed in checking in at the counter
- Convenience in reserving the seats
- Carefulness in transmitting the luggage
- Taking small time from entrance to the plane
- Speed of crew’s response to employee’s need

Empathy
- Friendliness airline
- Crews always try to explain customers with easy words
- Crews always try to understand customers’ need
- Crews are always willing to serve customers

Reliability
- Airline follows the words in advertisement
- Airline is an expert in aero business
- Reliability of employees
- Crews completely communicate all information to customers.
- Crews have got professional experience in service
- Accuracy of recorded information
- Well solving when problems occurred

Research Hypotheses

According to the literature review and the research model, the twenty seven alternative hypotheses are as follows:

$H_{a1i}$: Tangibility has the effect on customers’ satisfaction toward the service quality in the domestic low cost airline, $i = 1, 2, 3, 4, 5$

$H_{a2i}$: Assurance has the effect on customers’ satisfaction toward the service quality in the domestic low cost airline, $i = 1, 2, 3, 4, 5$

$H_{a3i}$: Responsiveness has the effect on customers’ satisfaction toward the service quality in the domestic low cost airline, $i = 1, 2, 3, 4, 5, 6$

$H_{a4i}$: Empathy has the effect on customers’ satisfaction toward the service quality in the domestic low cost airline, $i = 1, 2, 3, 4$
Reliability has the effect on customers’ satisfaction toward the service quality in the domestic low cost airline, \( i = 1, 2, 3, 4, 5, 6, 7 \)

**Logistic Regression Analysis**

Logistic regression really is a specialized form of regression that is formulated to predict when the dependent is a categorical variable and the independents are of any type (David et. al., 2008). Logistic regression analysis can be further divided into two types, which are binomial and multinomial logistic regression. Multinomial Logistic Regression exists to handle the case of dependents with more classes than two do. This type of regression is similar to binary logistic, but it is more general because the dependent variable is not restricted to two categories. (Hair, 1988). Generally, the dependent variable in logistic regression is categorical variable. Logistic regression estimates the odds of a certain event occurring (Garson, 2009). Logistic regression makes no assumption about the distribution of the independent variables. The relationship between the independents and dependent variable is not a linear function. The logistic response function is

\[
P(Y = 1) = \frac{e^{\beta_0 + \beta_1 X_1 + \cdots + \beta_p X_p}}{1 + e^{\beta_0 + \beta_1 X_1 + \cdots + \beta_p X_p}}, \text{ where}
\]

\( \beta_i \) are logistic coefficients to be estimated; \( i = 1, 2, \ldots, p \)

For logistic regression, the "parameter estimate" is the B coefficient used to predict the log odds (logit) of the dependent variable. The B coefficients with 0 indicate that the given explanatory variable does not affect the logit (that is, makes no difference in the probability of the dependent value equaling the value of the event, usually 1); positive or negative B coefficients indicate the explanatory variable increases or decreases the logit of the dependent. Exp (B) is the odds ratio for the explanatory variable. The odds ratio for a given independent variable represents the factor by which the odds (event) change for a one-unit change in the independent variable. An Exp (B) > 1 means the independent variable increases odds (event). An Exp (B) < 1, then the independent variable decreases odds (event).

Thus, the suggestion for considering the influential factor that has the effect on the dependent variable is the influential factor(s) which has the statistically significance at the level of significance (\( \alpha \)) with the value of Exp (B) > 1 (Garson, 2009) should be considered in the first priority and so on.

**Research Methodology**

This research is a survey research; convenience sampling was used in collecting the sample data. A sample survey was conducted during December 2016 to January 2017 at the Don Mueang International Airport. The respondents were Thai passengers who had ever used those three low cost airlines for domestic flight to travel within 6 months ago. A total of 450 respondents were participated in this research. Pre-test was conducted and measures the reliability with the overall Cronbach’s Alpha coefficient of this survey instrument is 0.98. The questionnaires are distributed to Thai
passengers who have ever used the low cost airlines for domestic flight to travel within 6 months ago among top three LCA--- Thai Air Asia, Nok Air and Thai Lion Air. A statistical package for the social science and multinomial logistic regression analysis were employed to obtain the important factors in five dimensions of service quality that has the effect on consumer satisfaction toward Thai LCA.

The Findings

Demographic Factors of Respondents

For Thai Air Asia

The majority of the respondents (66.0%) are female, 62.6% of respondents were from 18-35 years age group, and 70.0% has education level in Bachelor degree. In addition, the group of occupation is government officer and students are about 34.7% and 30.0% with income per month is not more than 30,000 baht is about 75.4%. For the behavior of Thai Air Asia respondents, the main objective of using low cost airline is “Tourism” at 42.5% and the main reason of using is “Low price of ticket” around 23.0% and 66.0% of respondents make the decision by themselves. Moreover, their preferred channel of purchasing tickets is “Airline’s website” at 76.7% and 45.7% will pay for tickets by “Credit card”. Additionally, 27.7% of respondents prefer time for travelling during “12:01-15:00” and 65.7% of them travel by LCA once a month.

For Nok Air

The majority of the respondents (70.0%) are female, 60.0% of respondents were from 18-35 years age group, and 64.0% has education level in Bachelor degree. In addition, the group of occupation is government officer and students are about 29.3% and 30.7% with income per month is not more than 30,000 baht is about 67.4%. For the behavior of Nok Air respondents, the main objective of using low cost airline is “Back to home town” at 40.2% and the main reason of using is “Low price of ticket” around 19.0% and 76.1% of respondents make the decision by “Themselves”. Moreover, their preferred channel of purchasing tickets is “Airline’s website” at 76.7% and 53.8% will pay for tickets by “Counter service”. Additionally, 29.7% of respondents prefer time for travelling during “15:01-18:00” and 55.3% of them travel by LCA once a month.

For Thai Lion Air

The majority of the respondents (68.0%) are female, 67.4% of respondents were from 18-35 years age group, and 63.3% has education level in Bachelor degree. In addition, the group of occupation is government officer and students are about 35.3% and 36.7% with income per month is not more than 30,000 baht is about 72.6%. For the behavior of Thai Lion Air respondents, the main objective of using low cost airline is “Back to home town” at 40.2% and the main reason of using is “Low price of ticket” around 22.0% and 73.5% of respondents make the decision by “Themselves”. Moreover, their preferred channel of purchasing tickets is “Airline’s website” at 75.0% and 46.5% will pay for tickets by “Counter service”. Additionally, 25.8% of respondents prefer time for travelling during “15:01-18:00” and 55.3% of them travel by LCA once a month.
Results of Multinomial Logistic Regression Analysis

Regarding to multinomial logistic regression, it can be obtained the important factors in five dimensions of service quality that has the effect on consumers’ satisfaction toward Thai domestic low cost airlines presented as follows:

Table 3: Summaries of parameter estimates of Multinomial Logistic Regression for comparing the factors between Thai Air Asia and Nok Air

<table>
<thead>
<tr>
<th>Dimension of service quality</th>
<th>Thai Air Asia</th>
<th>Nok Air</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Sig.</td>
</tr>
<tr>
<td>Assurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety flight</td>
<td>0.386*</td>
<td>0.089</td>
</tr>
<tr>
<td>Responsiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convenience in reserving the seats</td>
<td>-0.439**</td>
<td>0.015</td>
</tr>
</tbody>
</table>

Remarks: 1. * it has the significant at 0.10 level of significance  
2. ** it has the significant at 0.05 level of significance

From Table 3, it found that there are two factors in two dimensions of service quality as follows: assurance --- factor “Safety flight”; responsiveness --- “Convenience in reserving the seats”. Comparing the Exp (B) value between Thai Air Asia and Nok Air, indicate that for factors “Safety flight”, Thai Air Asia has the greater value of Exp (B) of 1.472 than Nok Air of 0.680. It states that this factor is more likely influence on consumers’ satisfaction toward Thai Air Asia than Nok Air. While, for factors “Convenience in reserving the seats”, Nok Air has the greater value of Exp (B) of 1.551 than Thai Air Asia of 0.645. It states that this factor is more likely influence on consumers’ satisfaction toward Nok Air than Thai Air Asia.

Table 4: Summaries of parameter estimates of Multinomial Logistic Regression for comparing factors between Thai Air Asia and Thai Lion Air

<table>
<thead>
<tr>
<th>Dimension of service quality</th>
<th>Thai Air Asia</th>
<th>Thai Lion Air</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Sig.</td>
</tr>
<tr>
<td>Responsiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speed in managing the ticket</td>
<td>0.481**</td>
<td>0.016</td>
</tr>
<tr>
<td>Carefulness in transmitting the luggage</td>
<td>0.409**</td>
<td>0.032</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crews are always willing to serve customers</td>
<td>0.487**</td>
<td>0.021</td>
</tr>
<tr>
<td>Reliability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crews completely communicate all information to customers</td>
<td>-0.725**</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Remarks: 1. * it has the significant at 0.10 level of significance  
2. ** it has the significant at 0.05 level of significance
From Table 4, it found that there are four factors in three dimensions of service quality as follows: responsiveness --- “Speed in managing the ticket” and “Carefulness in transmitting the luggage”, empathy --- “Crews are always willing to serve customers”, and reliability --- “Crews completely communicate all information to customers”. Comparing the Exp (B) value between Thai Air Asia and Thai Lion Air, indicate that for factors “Speed in managing the ticket (1.618)”, “Carefulness in transmitting the luggage (1.505)”, and “Crews are always willing to serve customers (1.628)”, Thai Air Asia has the greater value of Exp (B) than Nok Air. It states that these factors are more likely influence on consumers’ satisfaction toward Thai Air Asia than Thai Lion Air. While, for factor “Crews completely communicate all information to customers”, Thai Lion Air has the greater value of Exp (B) of 2.065 than Thai Air Asia of 0.484. It states that this factor is more likely influence on consumers’ satisfaction toward Thai Lion Air than Thai Air Asia.

Table 5: Summaries of parameter estimates of Multinomial Logistic Regression for comparing factors between Nok Air and Thai Lion Air

<table>
<thead>
<tr>
<th>Dimension of service quality</th>
<th>Nok Air</th>
<th>Thai Lion Air</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Sig.</td>
</tr>
<tr>
<td>Assurance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Safety flight</td>
<td>-0.441*</td>
<td>0.062</td>
</tr>
<tr>
<td>Responsiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speed in managing the ticket</td>
<td>0.369*</td>
<td>0.064</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crews are always willing to serve customers</td>
<td>0.411*</td>
<td>0.053</td>
</tr>
<tr>
<td>Reliability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crews completely communicate all information to customers</td>
<td>-0.692**</td>
<td>0.004</td>
</tr>
</tbody>
</table>

Remarks: 1. * it has the significant at 0.10 level of significance  
2. ** it has the significant at 0.05 level of significance

From Table 5, it found that there are four factors in four dimensions of service quality as follows: assurance --- factor “Safety flight”, responsiveness --- “Speed in managing the ticket”, empathy --- “Crews are always willing to serve customers”, and reliability --- “Crews completely communicate all information to customers”. Comparing the Exp (B) value between Nok Air and Thai Lion Air, indicate that for factors “Speed in managing the ticket (1.447)”, and “Crews are always willing to serve customers (1.508)”, Nok Air has the greater value of Exp (B) than Thai Lion Air. It states that these factors are more likely influence on consumers’ satisfaction toward Nok Air than Thai Lion Air. While, for factors “Safety flight (1.554)” and “Crews completely communicate all information to customers (1.998)”, Thai Lion Air has the greater value of Exp (B) than Nok Air. It states that these factors are more likely influence on consumers’ satisfaction toward Thai Lion Air than Nok.
Conclusions

By applying multinomial logistic regression analysis, the results shown that the important factors in four dimensions of service quality will have the effect on consumers’ satisfaction toward Thai domestic low cost airlines presented as follows:

- Assurance --- Safety flight
- Responsiveness --- Speed in managing the ticket, Convenience in reserving the seats,
  and Carefulness in transmitting the luggage
- Empathy --- Crews are always willing to serve customers
- Reliability --- Crews completely communicate all information to customers

LCA in the study should focus on these dimensions of service quality in order to increase the customer base and make more market share in this segmentation as follow.

For Thai Air Asia, factors “Safety flight”, “Speed in managing the ticket”, “Carefulness in transmitting the luggage”, and “Crews are always willing to serve customers” are factors which customers feel satisfied the most. This means that Thai Air Asia can provide these factors well. Therefore Thai Air Asia should maintain and provide good services to customers in these factors. For factors “Convenience in reserving the seats” and “Crews completely communicates all information to customers” are factors which customers feel satisfied the least. This means that Thai Air Asia should set training program for their staff in providing good service/information and friendly with passengers in order to increase the impressive of passengers in the future.

For Nok Air, factors “Speed in managing the ticket”, “Convenience in reserving the seats”, “Crews are always willing to serve customers” are factors which customers feel satisfied the most. Therefore Nok Air should maintain and provide good services to customers in these factors. For factors “Safety flight” and “Crews completely communicate all information to customers” are factors which customers feel satisfied the least. This means that Nok Air should has new modern aircraft more and more in order to make customers trust in the airline including should set training program for their staff in providing good service/information and friendly with passengers in order to increase the customers’ reliability in the future continuously.

For Thai Lion Air, factors “Safety flight” and “Crews completely communicate all information to customers” are factors which customers feel satisfied the most. This means that Thai Lion Air can provide these factors well. Therefore Thai Lion Air should maintain and provide good services to customers in these factors. For factors “Speed in managing the ticket”, “Carefulness in transmitting the luggage”, “Crews are always willing to serve customers” are factors which customers feel satisfied the least. This means that Thai Lion Air should immediately improve these factors to satisfy customers increasing sales and set training program for their staff providing good service. Crews should be always willing to serve customers and friendly with passengers in order to increase the impressive of passengers in the future.
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References


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