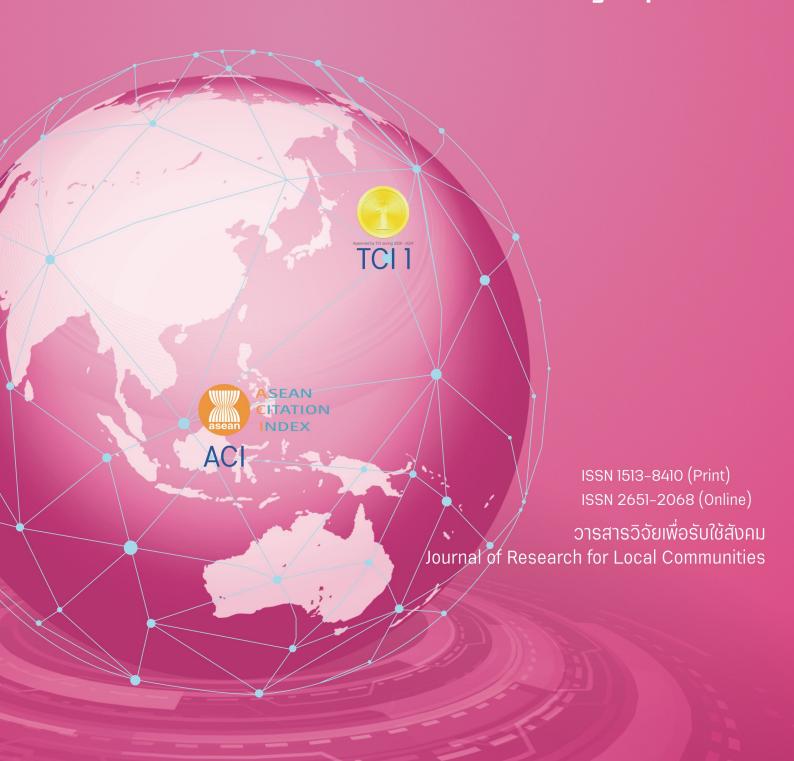
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Study on Peace-Building in Southeast Asia from the Perspective of Normative Localization —— Based on the Comparison Between Myanmar and Cambodia

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Abstract

This paper attempts to take Myanmar and Cambodia as examples to explore the consequences of constructive interaction between the international community and Southeast Asian countries after the cold war. After the end of the Cold War, Southeast Asia encountered two regional conflicts and crises of global concern. We finds that for Myanmar and Cambodia, the ability of political elites is the key to leading regional and global peace. The ability of political elites not only determines the process of external norms, but also affects the changes of regional norms. As far as Cambodia is concerned, through cooperation with the United Nations and ASEAN, it has rapidly rebuilt its political authority and effectively internalized the international community's peacebuilding norms. Therefore, Cambodia can improve its national capacity and stability after the emergence of political authority. As far as Myanmar is concerned, after the end of the cold war, the political authority still exists in Myanmar, thus maintaining a certain degree of national stability. With the outbreak of the Rohingya crisis in Myanmar in 2015, Myanmar's original national construction gradually began to collapse. On the one hand, Myanmar cannot internalize the international community's peacebuilding norms. On the other hand, due to the decline of political authority, various internal forces began to struggle with each other, which ultimately led to the failure of the country. For the dissemination of international norms, whether in Cambodia or Myanmar, the localization of external norms requires the cooperation of the political authorities to effectively prevent conflicts.

Keywords: Myanmar, Cambodia, peace-building, Southeast Asia, Normative localization

Introduction

War and peace have been long discussed in international relations. In different periods, scholars regard peace as an appropriate state of existence. However, peace is always short-lived and often accompanied by war. Whether these conflicts are caused by identity, religion, or national interests, they are easy to attract the attention of the international community in the era of globalization. After the end of the cold war, international peace-building operations have been carried out in many states just emerging from civil war. The international community hopes that this way can bring peace to these states. However, most of these states are still experiencing political instability and intensified internal conflicts. As a result, the international community has begun to reflect on peace-building.

From the perspective of the international community, as a strong norm of the international community, the nature of peace-building is mainly two; The first is the role of change, which promotes the change of the political system of the target country and forms a democratic government that can be consulted by all parties; Second, the role of legalization, hoping to change the contradictions within the country and bring peace.

Although these strong international social norms have the idea of "good governance", they are not necessarily suitable for all states. In Southeast Asia, after the end of the cold war, Cambodia accepted the peace-building of the United Nations, but Cambodia's domestic contradictions have not been significantly reduced. In Myanmar, the ethnic conflict of Rohingya broke out in 2015, and so far there is still no way to properly handle it. From the above situations of Cambodia and Myanmar, we can not help asking why there is such a big gap between the normative practice and the expectations of peace-building in Southeast Asian states.

It seems that for Southeast Asian states, "good governance" is of course an ideal that they continue to pursue, but more importantly, it is "suitable" for the norms of Southeast Asian states. Therefore, this paper will focus on the adaptation of Southeast Asian states to the strong norms of the international community. The problems in this paper can be roughly divided into two aspects to examine; One is to standardize the study of localization and whether it has been approved by Southeast Asian states. All these are closely related to peace-building in Southeast Asia, so we need to discuss peace-building in Southeast Asia.

Literature review

In terms of the localization of norms, different from the general research on norms, the localization of norms pays more attention to the capabilities and roles of local actors. In this respect, the academic circles of international relations talk less about it, and scholars regard the localization of norms as "normative agency". As Colin Wight said, international relations has not yet systematically grasped this concept, and it is difficult for us to understand what is "Activism". What does it mean? Who would do that? (Douglas Porpora, 2015) as a representative of the British School, Barry Buzan defined this as the state of action or the use of power (Buzan, 1994). Wendt, the representative of constructivism, regards the state as an

enlarged individual, and normative activism is thus defined as building each other into a collective with interests and fears through practice (Wendt, 1999). Bhaskar believes that the implementation of norms can change and can promote the change of certain things (Roy, 2020). Antje Wiener discusses the perspective of normative competition. She believes that the enforcement of norms is caused by normative competition (Wiener, 2015). Kazushige Kobayashi and others investigated the localization of norms from the perspective of national behavior. They distinguished the internalization of the dominant norms and the surface behavior adjustment (such as "rhetorical behavior" and "tactical imitation") in the process of national socialization. The latter usually does not lead to a deep change in the preferences and identities of actors. At the same time, the diffusion of dominant norms does not necessarily strengthen the existing hierarchical power relations, because secondary actors may also seek more equal power relations by internalizing dominant norms (Kobayashi & Herbert, 2021).

Amitav Acharya is the first scholar to systematically study the implementation of norms, which has greatly inspiration for this paper. Achaya believes that in the process of the localization of norms, foreign concepts must be consistent with the existing cognition of the local people, so it needs to be supported by an auxiliary norm. Auxiliary norms and local actors determine whether the norms can be accepted. Therefore, there are four situations, namely, local actors accept and auxiliary norms accept; Accepted by local actors, but not by auxiliary norms; Local actors do not accept, and auxiliary norms accept; The four situations are not accepted by local actors and auxiliary norms. At the same time, Acharya further explained the process of normative circulation. He pointed out that normative circulation proves that the creation and dissemination of norms is a two-way process, in which the global norms provided by transnational moral actors will undergo debate and localization, After localization, the norms will be fed back to other created norms (Acharya, 1995).

However, Acharya neglected several properties of the specification. First, the specification itself is not homogeneous. In the international community, norms are different from strong norms and weak norms. They have different effects on the localization of norms. Secondly, Acharya also neglected that in the localization of norms, both auxiliary norms and local actors are related to the consent of political authorities. In short, if an international norm tries to be localized in a certain country, it needs the consent of the highest political authority of the country, because whether it is a subsidiary norm or a local actor, it needs the endorsement of the internal authority of the country to be effective. On the whole, the research on the localization of norms still seldom considers the adaptability of the local country, nor does it examine the role of political authority in the process of the localization of norms.

In the aspect of Chinese scholars, there are still few discussions. Du Juan believes that the emergence of the localization of norms is whether a country recognizes the nature of international norms. In other words, if a country identifies with the collective identity represented by the advocates of international norms, it will have more power to internalize international norms; On the contrary, if a country does not recognize the collective identity of the international norm advocates, it will violate the international norms (Du Juan, 2008) Zhang Lei inspected the localization of health governance norms in Southeast Asia from the perspective of national capabilities. He believes that the localization of norms is the positive

construction of foreign norms by local actors through discourse, framework, grafting, and cultural selection (Acharya, 2009).

The reason why Southeast Asian states can effectively improve health governance norms is that the localization of norms is a process of regulating and empowering national initiative, and conversely, the exertion of national initiative is a process of promoting or restricting the localization of norms. Specifically, the localization of norms combines the core characteristics and regional characteristics of international norms, while the national initiative is divided into standard practice and creative practice. International norms have standardized guidance, regulation, and constraint on the practice process of giving play to a national initiative. The regional characteristics are the basis for homogenizing the creative practice process of giving play to the national initiative, and in turn, the creative practice process reinterprets and transforms the international norms in a heterogeneous way (Zhang, 2020).

From the perspective of ASEAN preventive diplomacy, Wu Lin emphasized the issues of the standardization process, standardization internalization, and standardization localization. He believes that the generation of the localization of norms does not necessarily lead to the internalization of norms, and the adoption of some norms is only "cosmetic". Through the introduction of a rationalized formal structure derived from the hegemonic global discourse, the legitimacy of local traditional practices is recognized by the outside (Finnemore, 1996). Therefore, he believes that there is a problem of "incomplete internalization" in the process of internalizing the new specification. From this point, he further discussed the institutionalized and non-institutionalized processes in the normative process (Wu, 2019). Wu Lin's article has a great inspiration to the author, but he pointed out that there is a problem of "incomplete internalization" in the localization process, which I think is normal. From another point of view, no country can completely internalize or localize foreign norms. Most states do not have the same degree of localization or internalization of foreign norms. Norms are like morality. Everyone has a different understanding of them, so there will be deviations in adaptation.

On the whole, neither foreign nor Chinese scholars have answered the question of the role of political authority in the practice of normative localization. In the process of the dissemination and localization of norms, the nature of norms is not invariable. The strength or weakness of norms is based on the nature of norms. It can be judged from three perspectives. The first is whether the code has "authority". If it has sufficient "authority", it indicates that the code is easily accepted by members of the international community; On the contrary, it is difficult to be a kind of disseminated norm. (Liu, 2009; Li, Zhu & Zheng, 2022) Secondly, whether the norms can punish the violators is the common supervision of the international community. Moreover, whether the norms can promote the survival of members of the international community, that is the ability to provide public goods. In short, a strong norm must have authority, and there are consequences logic (punishment mechanism) and adaptive logic (providing public goods) of the norm.

In terms of peace-building in Southeast Asia, this paper focuses on mediating civil wars and reorganizing states in Southeast Asia. Therefore, other peace-building theories and strategies are not included in this paper. Joakim Ö Jendal and Sivhuoch Ou analyzed the peace-building in Cambodia and believed that although peace-building promoted the deepening of

progressive peace, However, there are still deep-rooted tensions hindering the progress and development of the country (Öjendal & Ou, 2013) Sungyong Lee and wookbeom Park analyzed the Democratic situation in Cambodia from the perspective of local transformation of peace-building. First, they pointed out that the change of local political structure in post-war peace-building may be faster and more radical than the peace-building envisaged by academic researchers. Secondly, local actors (including political elites and citizens) promote social change. This dynamic process may be created in various ways. Cambodian social actors put forward different democratization procedures, and this stage determines different situations of interaction (Lee & Park, 2020)

Dahlia Simangan compared peace-building in Cambodia, Kosovo, and East Timor. He pointed out that in Cambodia, local political elites use the legitimacy and justice of political institutions to pursue their political interests (Simangan, 2017). In Kosovo, the dominant local actors use the judiciary as a tool to retaliate against minorities. In East Timor, the local leadership abandoned the pursuit of justice and reconciled with the Indonesian government. In all cases, justice is either deprived or the expectations of local people are ignored for short-term interests (Dahlia, 2017).

Therefore, some scholars emphasize the localization and adaptation of norms and challenge mainstream peace-building that only emphasizes external norms. Both emphasize the important role of wisdom, courage, and compassionate non-violent principles in building a stable peace process (Curle, 1994) However, the difference between the two is how to find the balance point between foreign norms and localization of norms, To achieve lasting peace (Lopes & Theisohn, 2003; Shinoda, 2008; Boonpunth, & Saheem, 2022)

Before the analysis of this paper, it is necessary to clarify the definition of some concepts. First, about political authority. According to Max Weber, the formation, governance, and domination of any organization are based on a certain authority. Proper authority can eliminate chaos and bring order; An organization without authority will not be able to achieve its organizational goals. He proposed three formal forms of political domination and authority, namely, traditional authority, charismatic authority, and rational-legal authority.

This paper will take Acharya's normative circulation theory as the analysis basis and extend it. The traditional peace-building programs emphasize the dominance of external norms but often neglect the role of reflection on locality. This paper defines the three types of comprehensive authority and defines political authority as the identification of the legitimacy of political power. It is usually backed by political power, and based on the appeal of justice or personality, it produces a highly stable and reliable political influence and a power relationship of domination and obedience. It is the most effective expression of political power (Weber, 1997) Secondly, on the norms of peace-building. Peace usually refers to a state in which there is no war or other hostile acts. Peace can be divided into long-term stable positive peace and short-term fragile negative peace.

Research objectives

As an external norm, the goal of peace-building in this paper is not only to end the war and achieve short-term negative peace but also to eliminate potential war crises and achieve long-term positive peace. The localization of norms refers to the active construction of foreign

concepts by local actors (including controversy, framework, transplantation, and cultural selection), which results in the agreement between foreign concepts and domestic concepts and practices (Du, 2008). This paper argues that the degree of localization of norms can be examined from the two dimensions of normative adaptability and normative cognitive ability.

This paper attempts to take Myanmar and Cambodia as cases for analysis. The reason why Myanmar and Cambodia are compared is that Myanmar has maintained a strong national political authority since independence, so it has less localization of peace-building norms; Cambodia, on the other hand, has experienced national division. Its domestic political authority was initially shaped by the United Nations, which has largely localized the norms of peace-building. By comparing the interaction between the political authority and the localization of norms in the two states, we can find out the causal mechanism between the political authority and the localization of norms.

- 1. As a strong international norm, what is the practice of peace-building on land in Southeast Asia?
 - 2. What role does the political elite play in the process of localization of foreign norms?
- 3. How do the adaptability and cognitive ability of political elites affect the localization of foreign norms?

The conceptual framework

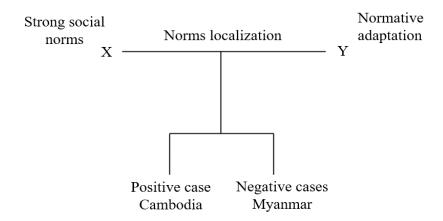


Figure 1 The analysis logic of comparing Myanmar and Cambodia (self-drawn by the author)

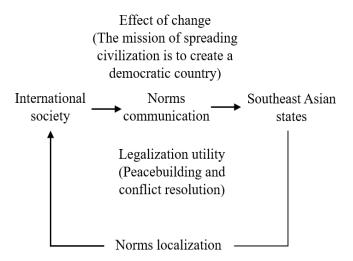


Figure 2 strong normative circulation model (self-drawn by the author)

Research Hypothesis

Therefore, starting from the development of Southeast Asia after the cold war, this paper assumes that since peace-building is the collective expectation of the international community for a long time, peace-building has all the elements of strong norms. However, in the process of the strong localization of norms in Southeast Asian states, the adaptability and cognition of local actors to the localization of norms are different, so there will be several phenomena, as shown in Table 1:

- 1. When the local actors have strong adaptability to foreign norms and strong cognitive ability to foreign norms, there will be "greater localization of norms", which shows that the local actors understand the significance of the norms and have the ability to adapt to the norms
- 2. When the local actors have strong adaptability to foreign norms and weak cognitive ability to foreign norms, there will be "a small degree of localization of norms", indicating that the local actors may not understand the meaning of norms, but can adapt to the localization of foreign norms.
- 3. When local actors have weak adaptability to foreign norms and strong cognitive ability to foreign norms, there will be "national failure". "National failure" means that although the country understands the meaning of the norms, it cannot adapt to and bear the gap between the localization of the norms and the actual situation of the country.
- 4. When the adaptability of local actors to foreign norms and their cognitive ability to foreign norms are weak, it means that the local actors of the country will resist the localization of strong norms.

 Table 1 Hypothesis of standardized localization actors (self-drawn by the author)

	Strong Adaptability to	Weak Adaptability to
	External Norms	External Norms
Strong Cognitive Ability	Norms Localization to a	National Failure
to External Norms	Large Extent	
Weak Cognitive Ability to	To a Lesser Extent,	Resist Strong International
External Norms	Norms, and Localization	Social Norms

Methodology

Based on recognizing the importance and value of historical research, this paper compares existing research articles and books to analyze the current situation and evolution trend of political systems in the process of internalization of peacebuilding in Myanmar and Cambodia. Through the analysis of history, we can find the cause and effect clues in the relationship of various events, deduce the causes of the current situation of the system, and speculate on the future changes of the system.

The research method used in this paper is Qualitative Research, which is to study An object whose meaning is beyond its boundary and is typical of the objective world The method of actual description and theoretical analysis of the event. This means that a single case is always It can provide an extremely detailed display for a wider subject of academic interest. This takes Interaction, evolution, and specific scenarios derived from them, and theoretical inference based on them includes A centralized comparison based on case studies and case studies.

Based on the above analysis logic, this paper will compare the localization process of peacebuilding between Myanmar and Cambodia, and try to find out the trends and laws.

Results

In 1991, the Cambodian civil war ended and in 1992, the United Nations Transitional Authority in Cambodia (UNTAAC) began its post-war reconstruction efforts to introduce the foreign norm of peace-building into Cambodia (Peou, 2000; Heininger, 1994). These liberals made a lot of attempts to localize foreign norms. Firstly, these liberal international organizations worked to integrate and transform the loose political forces within Cambodia to create a transparent and impartial domestic political authority to implement the domestication of foreign norms, which involved a wide range of policy areas, including policy formulation, implementation, and regulation, as well as dispute resolution and the development and transformation of administrative institutions.

To engage a wide range of local people in the process of localizing norms and to regulate domestic political authority, some international organizations such as the World Bank have developed a series of institutional frameworks to institutionalize external norms in local contexts, and these localized norms have been institutionalized into legal rules and regulations that take full account of the interests of local stakeholders (Sekiguchi & Hatstkano, 2013), and thus have survived over time. In addition to hard forms of external norm dissemination such as laws, these national organizations also undertake soft forms of norm dissemination such as organizing training and education.

For example, the United Nations Development Programme (UNDP) and the World Bank regularly organize training courses for young people, women, and children and local leaders to promote international norms such as human rights, democracy, free elections, and civic participation (Ledgerwood & Un, 2003). As a result, local organizations such as the Cambodian League for the Promotion and Defence of Human Rights and the Cambodian Human Rights and Development Association provide long-term analysis and monitoring of the policies and actions of the Cambodian government (Sperling, 2009) and ensure that local authorities in Cambodia effectively promote the localization of international norms in the long term. To promote the deepening of the localization of international norms, international organizations have established a series of local organizations at the community level, such as farmers' associations and women's information networks, which help local people to defend their interests and even support them in their opposition to the local government (political authority) when the government's actions are contrary to the localized international norms and cannot be resolved through legal means. The local organizations may even support the community in their campaign against the local government (political authority) when the government's actions are contrary to international norms and cannot be resolved through legal means (Boege et al., 2009).

The ability to establish effective institutions reflects the local capacity to adapt to external norms, while the development of civil society reflects the ability of the local population to recognize external norms. The process of localization of foreign norms in Cambodia can therefore be divided into three stages.

Stage I (1991 to around 2005): strong adaptive capacity, weak cognitive capacity, a lesser degree of normative indigenization

The Cambodian government has achieved a great deal in its first 15 years in terms of its ability to adapt to external norms, that is, in terms of home-grown institution-building. The democratic government, established with the help of external norms, has worked on three main themes: accountability, the rule of law, and the protection of human rights enacting a series of laws and establishing a large number of administrative structures to resolve conflicts and safeguard the interests of the people. Cambodia is one of the most dependent states in the world on external assistance, and the domestic authority established with the help of international organizations to obtain external assistance largely adhered to the agenda of external donors when formulating government policies and national laws in the 1990s and until 2001 Cambodia still calls it the best law in Cambodia (Chanboreth, & Hach, 2008; Hughes, 2009).

In terms of the ability to perceive external norms, i.e. the political participation of the Cambodian people, Cambodian civil society did not initially establish itself as a social organization independent of the government to guarantee democracy and freedom, but still showed a clear change, reflecting the Cambodian masses' greater ability to perceive external norms. The development of Cambodian people's awareness of external norms is concentrated on the understanding of democracy. In the 1990s, the war-torn Cambodian people understood democracy only in terms of security and the absence of violence and did not expect the government to solve the problems of the people's living standards (National Democratic Institute, 1996).

However, a 2003 study showed that nearly 70 percent of Cambodians believe that democracy should include freedom of expression, the guarantee of human rights, and free elections (The Asia Foundation, 2003). Furthermore, in terms of freedom of expression, Cambodians in the 1990s were reluctant to make political comments in public, fearing reprisals from political figures. Only a decade later, however, there has been a dramatic increase in the number of NGOs in Cambodia, almost half of which are engaged in localizing external norms, such as securing human rights for Cambodians, free elections, and relief for the needy. A large number of local Cambodians are involved. This shows that the Cambodian population has significantly increased its capacity to recognize external norms, but overall, awareness is still weak.

Stage 2 (2005 - 2015): strong adaptive capacity, strong cognitive ability, greater normative localization

After the Cambodian People's Party (CPP) strengthened its political authority through a military coup in 1997, Cambodia's growing domestic political authority, while not overturning established institutions, became selectively resistant to new institutional demands from external donors. The new institutional demands of external donors began to be selectively resisted. Cambodia's increased resistance to external norms is closely linked to China, which increased its economic aid to Cambodia around 2005, making it Cambodia's largest economic donor (Var, 2016). China's economic aid to Cambodia does not come with any strings attached or restrictions on the use of aid, as is the case in the West. As a result, Cambodia is more willing to accept Chinese aid, and the West is not building Cambodia's institutions as much as it used to (Touch, 2014).

In terms of awareness of external norms, the political participation of the Cambodian people has increased significantly and is of a high standard. The Cambodian people are acutely aware of the importance of democracy in external norms and expect democratic governance. People want elections to change the bad parts of government behavior. Since 2010, Cambodian people have organized a lot of peaceful demonstrations to protest against corruption in the government, and these protests have been the result of advocacy by local NGOs promoting external norms in Cambodia. In addition, the group of people involved in the localization of foreign norms is also growing, with an increasing number of Buddhist monks as well as farmers in rural areas (Fuller, 2013).

Another manifestation of the increased civic awareness of the population is the increasing demands on the government; whereas in 1991 the Cambodian people demanded

only that the government maintain peace and stability, around 2010 they demanded that the government ensure freedom and democracy for the people while also reducing corruption. The pace of institution building in Cambodia has not kept pace with the civic awakening of the people. In 2003, Cambodian people's satisfaction with the government was 76 percent; by 2014, this figure had fallen to 49 percent (The Asia Foundation, 2014).

Stage 3 (c. 2015 - present): weakened adaptive capacity, increased cognitive capacity, a trend towards state failure (negative mixed peace)

At the level of the adaptive capacity of external norms, the Cambodian government began to establish a series of new institutions to resist external norms, and the adaptive capacity of external norms was significantly reduced. In July 2015, the Cambodian National Assembly passed a new law that mandates the registration of domestic NGOs, allowing the government to stop the activities of any NGO and strengthen the regulation and restrictions on opposition political parties. However, there are no clear rules on how to limit government misconduct (Huang, Gu, & Lin, 2017).

In contrast, political participation in Cambodia has developed rapidly at the level of the perceived capacity of external norms. Many citizens first express themselves through legal channels, and when this does not work, they resort to collective appeals through NGOs (TIAdmin, 2012). The number of protests by victims of inappropriate government policies has grown, the groups involved have expanded from predominantly urban to rural areas, and the methods of struggle have evolved from unity with domestic groups to internal and external links with international organizations. A typical example is a general strike organized by Cambodian trade unions in 2014, where Cambodian workers united and contacted international organizations to put public pressure on the government, a strike that lasted four months, during which the Cambodian government could do nothing (Verkoren & Ngin, 2017).

The rapid development of external norms among the Cambodian population is mainly related to two factors: the development of social networking platforms, which have given the population wider access to information beyond the official media; and the fact that many NGOs and opposition figures have their online pages to expose government misconduct (Strangio, 2016). In addition, a new generation of youth born after the Cambodian civil war has begun to actively participate in social activism, demanding not only social stability but also a reduction in social unemployment and government corruption. This generation of young people has been educated from an early age on Western norms of liberal democracy and other foreign norms, and half of them are voting adults with a deep willingness for political change (Khemara, 2014).

As a result, peace in Cambodia presents a negative hybrid peace in which international norms are juxtaposed with local agents and foreign factors are mixed with local factors, neither liberal nor emancipatory (Simangan, 2018). Cambodia's peace-building has been generally successful, but in recent years it has become less robust and declining due to the complexity of various internal conflicts. In 1989, the name of the country was changed from Burma to Myanmar, and the Law and Order Restoration Council (LORC) was put in charge of the ethnic regions, with a ceasefire in place in the ethnic regions, officially starting the process of peace-building. Burma's peace-building process began in earnest.

Stage 1 (1989-2010): weak adaptive capacity, weak cognitive ability, and resistance to normative localization

In terms of adaptive capacity, the military ceasefire was not followed up by a process of political change or any institution building. Although the Su Maung government established three nationalisms and his successor Than Shwe began to establish the rule of law and enacted several laws, the extent of this was very limited. The ceasefire in some areas was followed by an increasing number of troops, and the increased local military presence led to the government violating people's lives and property, seizing their fields, and forcing them to work. Instead of creating new institutions, the Burmese military government has gone on a rampage to trample on basic institutional safeguards. The Burmese defense junta set up a series of companies for economic gain and was unwilling to make any political system changes (Kramer, 2018). In the 1990 general election, the military government lost to the domestic opposition NLD, but it resisted condemnation by external norms and refused to surrender state power.

This changed in 2003 when the government proposed a seven-step plan to return power to the people. In July 2005, under pressure from external norms (both ASEAN and international), Myanmar's Foreign Minister U Win Aung announced at an ASEAN meeting that Myanmar would promulgate a new constitution to effectively promote democratization. In 2010, Myanmar enacted five laws on general elections. In terms of cognitive capacity, civic political participation in Myanmar remains at a low level, and while the basic security of life in the country has been ensured since the end of the war in 1989, and civil society organizations have gained some scope for development (Kramer, 2011), actual development has been limited. Due to the low level of localization of external norms in Myanmar and the absence of local social organizations to resist government misconduct, international sanctions against Myanmar for breaches of international norms (Pouligny, 2005).

Such as democracy and human rights have tended to be external and direct, rather than a combination of domestic and international organizations opposing the government, such as the World Bank, the International Monetary Fund, and the United Nations Development Programme in response to the military government's refusal to hand over power after the 1990 elections. The World Bank, the International Monetary Fund, and the United Nations Development Programme, for example, directly punished Burma for refusing to provide loans and economic aid after the military government refused to hand over power after the 1990 elections, with no response from domestic social organizations. Isolated by Western international norms, Myanmar turned to ASEAN, which accepted Myanmar as a member in 1997 and incorporated Myanmar into the ASEAN regional normative framework, while providing substantial economic assistance and investment projects (Askandar, 2005).

In 2007, the military government raised the prices of essential goods such as gas and oil, making it difficult for the poor to make ends meet, so people took to the streets and marched in protest against the government's actions, which the military government brutally suppressed - the Saffron Revolution. But until the 2010 elections, there was still little sense of civil society in Burma. The largest opposition party, the NLD, which had received significant popular support, gave up its right to contest the election, and the junta's USDP won the election easily with resources provided by the military government. There was little protest from the Burmese

people in the process, and many even supported the USDP because of the medical resources and micro-credits it relied on government resources to provide. The root cause of this is that the basic needs of the Burmese people are not well met, so naturally, they cannot talk about democracy and freedom top of this (Owen, 2010).

Stage 2 (2011-2020): strong adaptive capacity, weak cognitive capacity, a lesser degree of normative localization

In terms of adaptability, the Myanmar government has initiated a degree of institution-building since 2011, and during the administration of Thein Sein, the first democratically elected government from 2011-2016, a lot of institutional changes were made in compliance with the requirement to localize external norms. In terms of the political system, he amended the electoral law to allow opposition leader Aung San Suu Kyi, who had a history of imprisonment, to run for political office. He also made changes to the media system, abolishing a series of political censorship of the media and granting freedom of expression to the people (BBC NEWS, 2012). On ethnic issues, Thein Sein's government has initiated peace talks with local ethnic armed groups and has institutionalized the National Ceasefire Agreement, which promises local autonomy to ethnic groups. In 2016, the NLD succeeded in taking over state power from the USDP, reflecting the first results of Myanmar's democratization reforms (Debiel, Held, & Schneckener, 2016).

In terms of cognitive capacity, citizen political participation in Myanmar remains low. Before Aung San Suu Kyi's rule, only 34 percent of households had access to electricity, and even though Aung San Suu Kyi's '12-point economic policy' had achieved excellent results in developing the economy (Thant, 2021), the basic livelihoods of Myanmar's population were still not fully secured during this period, and it is not possible to expect her to have a deep understanding of civil society. civil society. The Burmese population does not have a high level of acceptance of international norms such as human rights and freedoms. According to the UN, by 2019, the number of Rohingya refugees implicated in the war had reached 900,000 (The UN Refugee Agency, 2019). In the face of the atrocities committed by the Burmese army against the Rohingya, the NLD government, which was in power at the time, along with the general Burmese public, collectively lost their voices and remained silent. The NLD government has repeatedly compromised with the military in dealing with the human rights of ethnic minorities in Burma, and the Burmese public has no objection to this.

Stage 3 (2021-present): weak adaptive capacity, strong cognitive capacity, state failure In terms of adaptive capacity, the Burmese government has not completed "democratic consolidation" and is showing an institutional decline in terms of institution building. In Huntington's definition of "democratic consolidation", the peaceful transfer of power after the 2015 elections may be symbolic of a democratic system, but the real test of the quality of a democratic system (i.e. whether it is consolidated) will be the peaceful transfer of power after the 2020 elections. In 2021, the defense forces overthrew the National League for Democracy ("NLD") government and formed a new government headed by Min Aung Hlaing. The NDF declared the 2020 general election fraudulent and overturned the previous electoral system (i.e. simple majority) in favor of a new electoral system (i.e. proportional representation), and amended a lot of previous laws and regulations. At the same time, a new government was

formed by the NLD, leaving two parallel and opposing governments in Myanmar (Jitpiromsri, Haque, & Chambers, 2021).

ASEAN norms, as an external norm, also punished the Myanmar chaos after it occurred. The spillover effects of the chaos in Myanmar have affected regional stability in Southeast Asia and violated ASEAN's institutional normative framework. As a result, ASEAN did not invite Myanmar's leader Min Aung Hlaing to the ASEAN Summit in 2021. In contrast to ASEAN's soft punishments, the West has imposed several rounds of tough economic sanctions on Myanmar and put pressure on the military government through the UN (The European Parliament, 2021). While Western sanctions have failed to address the situation in Myanmar and international norms have failed, ASEAN, with its dynamic and flexible regional normative framework, has put forward a 'five-point consensus' that has led the military government to take concrete action to ensure that the situation in Myanmar does not deteriorate further (Sochan, 2022).

In terms of cognitive capacity, the level of civic political participation in Myanmar has increased significantly and is at a high level, with an unprecedented rise in enthusiasm following the junta coup in 2020. In contrast to the parallelism of the two governments, the response of the Burmese people has been polarised, with peaceful and violent means intertwined. Those who support the military have taken to the streets in solidarity, while those who support the NLD have expressed their discontent with the military government through soft means such as strikes, market strikes, and school strikes (UN News, 2022).

The lack of civic awareness has often led to extreme violence and terrorist attacks (The United Nations). Unlike previous civic engagement activities, civil society activism in Myanmar from 2020 to the present has been fragmented and loosely based on the lack of political party leaders, and due to the popularity of the internet in Myanmar, online opinion leaders have become the real offline leaders of civic activism in Myanmar. As a result of the political instability and the impact of the new crown epidemic, Myanmar's economy has been decimated and a large number of people have been laid off and unemployed (International Labour Organization, 2021). These unemployed people have also become involved in political activism and expressed their interests.

Discussions

We discuss the localization of peace-building from two aspects. From the perspective of ASEAN regional norms, the peace-building process in Cambodia generally conforms to international norms, and ASEAN has not received any pressure from Western states to interfere, so ASEAN norms have been the icing on the cake in promoting regional peace and stability and providing economic assistance in the process of localizing foreign norms in Cambodia; however, the peacebuilding process in Myanmar has often been criticized by international norms due to a series of hard-line and uncooperative behavior by the military government.

However, the peace-building process in Myanmar has often come under fire from international norms due to a series of uncooperative actions by the military government. It is the flexibility of ASEAN regional norms to mediate that has made possible a lesser degree of normative domestication in Myanmar in the period 2011-2020.

From the perspective of international norms, during the peace-building process in Cambodia, there was little resistance to the dissemination and localization of international norms, and it was easy to localize norms and establish a new order on the ruins of war. The contradiction between the people's significantly increased cognitive capacity and their weak ability to adapt to foreign norms, and between the enthusiasm of citizens for political participation and the backwardness of institutional development, has exacerbated the unrest in Burma and made state failure inevitable (Ginty, 2011).

From the above two aspects, we can find that as two "unstable" countries after the cold war, Myanmar and Cambodia have some common characteristics in internalizing the norms of peacebuilding. When ASEAN norms are consistent with the norms of peacebuilding, political elites are more able to accept the transformation from strong external norms. Positive circulation promotes the stable development of the country, and Cambodia has become a successful case.

When the ASEAN norms and the peace-building norms are mutually exclusive, the political elites are more inclined to abide by the ASEAN norms. However, this led to the disconnection between the cognition of the political elite and the society, and the rapid decline in the adaptation to foreign norms, which led to the gradual failure of the country, and Myanmar became a failure case. We believe that the cognitive ability of the political elite and the ability to adapt to external norms have an impact on the country's internal.

Conclusion and suggestions

By comparing the process of localization of the norms of peacebuilding in Myanmar and Cambodia, we find that the cognitive ability of political elites and their ability to adapt to foreign norms (receptivity) largely determine whether the norms can bring about national stability.

In addition, based on the previous theory of norm localization, this paper further finds that if foreign norms want to play a role in an "unstable" country, they should not only consider interest groups, political parties, or the public but also pay attention to the political elite. Our reason is that the political elites have enough political authority and decision-making ability (power), so to some extent, they are the representatives of the country, which is the key to determining whether the external norms can continue to be deeply localized or limited. In addition, external norms often involve important issues, such as national stability, general political groups, interest groups, etc., which have no way to directly affect the decision-making process. From a point of view, our research can effectively explain the reasons for the failure and success of Myanmar and Cambodia.

On the whole, the peace-building process in Cambodia, which began in 1991, was a success, while the peace-building process in Myanmar, which began in 1989, was a failure. The reasons for this can be considered in several ways: firstly, from the perspective of domestic authority, Cambodia did not have a strong political authority in the post-war period, which was established by the UN with the support of international norms, and the post-war recovery required significant assistance from international organizations, which were naturally unwilling and unable to resist external norms (including international and ASEAN norms).

We believe that although the norms of the international community are very important to Southeast Asia, this does not mean that Southeast Asian states must fully conform to the expectations of the international community. Southeast Asian states must maintain their characteristics.

New knowledge and the effects on society and communities

This research is to create new knowledge. By comparing the results of the internalization of the international norm of peacebuilding in Myanmar and Cambodia, we come to a different view from the mainstream. In the process of localization, strong foreign norms must cooperate with local political elites to effectively change the behavior of the country. As an intermediary, political elites' cognitive ability and adaptability largely determine the path and way of standardization internalization. Our hypothesis can provide Southeast Asian states with a new perspective to rethink the significance of peacebuilding. At the same time, peacebuilding in the process of localization will not necessarily increase the stability of Southeast Asian states, but will greatly weaken the country's ability to maintain order. This result highlights the role of ASEAN norms in safeguarding the autonomy of Southeast Asian states.

References

- Acharya, A. (1995). A regional security community in Southeast Asia?. *Journal of Strategic Studies*, 18(3), 175-200. DOI: 10.1080/01402399508437610
- Acharya, A. (2009). Whose Ideas Matter?: Agency and Power in Asian Regionalism. New York: Cornell University Press.
- Askandar, K. (2005). A regional perspective of UN peace operations in Southeast Asia. *International Peacekeeping*, *12*(1), 34-48. DOI: 10.1080/1353331042000286540
- BBC News. (20 August 2012). *Burma abolishes media censorship*. https://www.bbc.com/news/world-asia-19315806
- Boege, V., Brown, A., Clements, K.P., & Nolan, A. (2009). Building Peace and Political Community in Hybrid Political Orders. *International Peacekeeping*, *16*(5), 599 615. https://doi.org/10.1080/13533310903303248
- Boonpunth, K., & Saheem, N. (2022). Roles of civil society in peacebuilding in Southeast Asia: the case studies of Mindanao, Aceh, and Southernmost Thailand. *Asian Affairs: An American Review, 49*(2), 88-112. DOI: 10.1080/00927678.2022.2089522
- Buzan, B., & Segal, G. (1994). Rethinking East Asian Security. *Survival*, *36*(2), 3-21, DOI: 10.1080/00396339408442734
- Chanboreth, E., & Hach, S. (29 December 2008). *Aid Effectiveness in Cambodia*. The Brookings Institution. https://www.brookings.edu/wp-content/uploads/2016/06/12 cambodia aid chanboreth.pdf
- Curle, A. (1994). New Challenges for Citizen Peacemaking. *Medicine and War*, 10(2), 96–105. http://www.jstor.org/stable/45354499
- Debiel, T., Held, T., & Schneckener, U. (Eds.). (2016). *Peacebuilding in Crisis: Rethinking Paradigms and Practices of Transnational Cooperation (1st ed.)*. Routledge: London: https://doi.org/10.4324/9781315717852
- Du, J. (2008). Dissemination of International Norms: Socialization and Localization. (Doctoral Dissertation, Shanghai Jiaotong University).
- Finnemore, M. (1996). *National Interests in International Society*. New York: Cornell University Press.
- Fuller, T. (2013). *Rally Draws a Diverse Group of Protesters in Cambodia*. New York Times. https://www.nytimes.com/2013/12/30/world/asia/antigovernment-march-draws-broad-coalition-of-protesters-in-cambodia.html
- Ginty, R. M. (2011). *International peace-building and Local Resistance: Rethinking Peace and Conflict*. London: Palgrave Macmillan.
- Heininger, J. E. (1994). *Peacekeeping in transition: the United Nations in Cambodia*. New York: Twentieth Century Fund Press.

- Huang, W., Gu, C., & Lin, W. (2020). *Political and Economic Changes in Cambodia (1953-2018)*. Taipei: LianJing Press.
- Hughes, C. (2009). *Dependent Communities: Aid and Politics in Cambodia and East Timor*. New York: Cornell University Press. https://www.brookings.edu/wp-content/uploads/2016/06/12 cambodia aid chanbor eth.pdf
- International Labour Organization. (2021). *ILO estimates Reveal Heavy Job Losses in the First Half of 2021 in Myanmar*. https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS 814686/lang--e n/index.htm
- Jitpiromsri, S., Haque, M. & Chambers, P. (2021). Peace-building in Thailand's Deep South and Myanmar/Burma: the dynamic roles of Muslim minorities in conflict societies. *Asian Affairs: An American Review, 48*(1), 85-110. DOI: 10.1080/00927678.2020.1843216
- Khemara, S. (2014). *Cambodian Opposition Criticizes Dependence on China Aid Money*. Voice of America. https://www.voanews.com/a/cambodian-opposition-criticizes-dependence-on-china-aid-money/2527010.html
- Kobayashi, K., & Herbert. M. (2021). Rethinking business reforms in post-conflict settings: the case of Sierra Leone. *Conflict, Security & Development, 21*(4), 1-19. 10.1080/14678802.2021.1888501
- Kramer, T. (2011). *Civil Society Gaining Ground, Opportunities for Change and Development in Burma*. Amsterdam: Transnational Institute. https://www.tni.org/en/publication/civil-society-gaining-ground
- Kramer, T. (2018). From War to Peace in Kayah (Karenni) State: A Land at the Crossroads in Myanmar. Amsterdam: Transnational Institute. https://www.tni.org/files/publication-downloads/tni-2018 karenni eng web def.pdf
- Lee, S.Y., & Park, W. B. (2020). The dual track of democracy promotion in post-war peace-building in Cambodia: the gap between institutional development and civil society mobilization. Peace-building, 8(1), 78-97. DOI: 10.1080/21647259.2018.1498671
- Ledgerwood, J., & Un, K. (2003). Global concepts and local meaning: human rights and Buddhism in Cambodia. *Journal of Human Rights*, 2(4), 531-549. DOI: 10.1080/1475483032000137129
- Liu, X. (2009). Domestic System Reform under the Influence of International Norms. (Doctoral Dissertation, Nankai university).
- Li, Y., Zhu, Z., & Zheng, A. (2022). Research on the Interaction between China and Global Health Norms in the 21st century: a Security Perspective. *Macau Academic Journal*, *3*(1), 18-38.
- Lopes, C., & Theisohn, T. (2003). Ownership, leadership, and transformation: Can we do better for capacity building? London: Routledge.
- National Democratic Institute. (1996). *Public Attitudes Toward Democracy in Cambodia: A Focus Group Study*. Retrive from https://www.ndi.org/node/22201
- Öjendal, J., & Ou, S. (2013). From friction to hybridity in Cambodia: 20 years of unfinished peacebuilding. *Peacebuilding*, *1*(3), 365-380, DOI: 10.1080/21647259.2013.813178

- Owen, J. (2010). Listening to the rice grow: the local-expat interface in Lao-based international NGOs. *Development in Practice*, 20(1), 99-112. DOI: 10.1080/09614520903436968
- Peou, S. (2000). *Intervention & Change in Cambodia: Towards democracy?* (Vol. 8). New York: St. Martin's Press. Singapore: Institute of Southeast Asian Studies.
- Pouligny, B. (2005). Civil Society and Post-Conflict Peace-building: Ambiguities of International Programmes Aimed at Building "New" Societies. *Security Dialogue*, *36*(4), 495-510. https://doi.org/10.1177/0967010605060448
- Roy, B. (2020). Critical realism and the ontology of persons. *Journal of Critical Realism*, 19(2), 113-120. DOI: 10.1080/14767430.2020.1734736
- Sekiguchi, M., & Hatsukano, N. (2013). Land conflicts and land registration in Cambodia. In Land and Post-conflict Peacebuilding, ed. J. Unruh and R.C. Williams. London: Earthscan. Retrive from http://environmentalpeacebuilding.org/assets/Documents/LibraryItem-000-Doc-165.
- Simangan, D. (2018). When hybridity breeds contempt: negative hybrid peace in Cambodia. *Third World Quarterly*, 39(8), 1525-1542. DOI: 10.1080/01436597.2018.1438184
- Simangan, D. (2017). The pitfalls of local involvement: justice and reconciliation in Cambodia. *Kosovo and Timor-Leste, Peacebuilding, 5*(3), 305-319, DOI: 10.1080/21647259.2016.1273489
- Shinoda, H. (2008). *The difficulty and importance of local ownership and capacity development in peace-building*. Hiroshima: Institute for peace Science.
- Sochan, R. (2022). *Hun Sen Meets with UN Envoy Heyzer on Myanmar*. Phnom Penh Post. https://www.phnompenhpost.com/national-politics/hun-sen-meets-un-envoy-heyzer-Myanmar
- Sperling, V. (2009). *Democracy from Abroad? Political Globalization. In Altered States: The Globalization of Accountability*. Cambridge: Cambridge University Press. DOI:10.1017/CBO9780511609824.003
- Strangio, S. (2016). Hun Sen's Cambodia. London: Yale University Press.
- Thant, M. U. (2021). The Hidden History of Burma: Race, Capitalism, and the Crisis of Democracy in the 21st Century. Taipei: Macro Poro Press.
- The Asia Foundation. (2003). *Democracy in Cambodia-2003*'. A Survey of the Cambodian Electorate. Retrive from https://www.semanticscholar.org/paper/Democracy-in-Cambodia-2003-%3A-a-survey-of-the-Meisburger/b60b4774f25cd7a598b161a45545b593ae5bddd2
- The Asia Foundation. (2014). *The Asia Foundation Releases Cambodian Public Opinion Survey*. Democracy in Cambodia 2014: A Survey of the Cambodian Electorate reveals sobering trends. Retrive from https://data.opendevelopmentcambodia.net//dataset/democracy-in-cambodia-2014

- The UN Refugee Agency. (2019). *More than Half a Million Rohingya Refugees eceive Identity Documents, Most for the First Time*. Retrive from https://www.unhcr.org/news/briefing/2019/8/5d4d24cf4/half-million-rohingya-refugees-receive-identity-documents-first-time.html
- The European Parliament. (2021). European Parliament Resolution of 7 October 2021 on the Human Rights Situation in Myanmar, Including the Situation of Religious and Ethnic Groups (2021/2905(RSP)). Retrive from https://www.europarl.europa.eu/doceo/document/TA-9-2021-0417 EN.html
- TIAdmin. (2012). *Attacks and Threats Against Human Rights in Cambodia 2010-2012. The Report issue*. http://ticambodia.org/library/ti_resource/attacks-threats-against-human-rights-defenders-in-cambodia-2010-2012/
- UN News. (2022). *The number of Internally Displaced in Myanmar has doubled to 800,000*. Retrive from https://news.un.org/en/story/2022/02/1111812
- Var, V. (2016). *China's influence in Cambodia*. Khmer Times. Retrive from https://www.khmertimeskh.com/25255/chinas-influence-in-cambodia/
- Verkoren, W., & Ngin, C. (2017). Organizing against Land Grabbing in Cambodia: Exploring Missing Links. *Development and Change*, 48(3), 1336-1361. https://doi.org/10.1111/dech.12346
- Weber, M. (1997). The Theory Of Social And Economic Organization. New York: Free Press.
- Wendt, A. (1999). *Social Theory of International Politics*, London: Cambridge University Press.
- Wiener, A. (2015). In the Eye of the Beholder: A Sociology of Knowledge Perspective on Norm Transfer. *Journal of European Integration*, *37*(2), 211-228. DOI: 10.1080/07036337.2014.990136
- Wu, L. (2019). Neglected Assessment of Norm Diffusion Effect: A Case Study of the Convention on Cyber-crime. *World Economics and Politics*, 2, 53-77.
- Zhang, L. (2020). Mutual Construction of Norm Localization and State Agency: A Case study of Thailand Participation in Public Health. *Southeast Studies*, 2, 65-80.

Love is Better than Liking: Comparison of the Effects of Brand Love and Brand Likeability on Consumer Repurchase Intention –

21

A Case Study of Fashion and Barber/Hairdresser

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Abstract

The concept of brand love is gradually derived from positive consumer experiences and strong consumer-brand relationships. Branding literature supports that the power of brand love can tie consumers with the brand and motivate them to purchase products continuously. However, consumers' risk perceptions which are hidden in different product types, as in goods and services, may devalue the power of brand love and pose difficulties for the consumer before purchasing. Although existing literature suggests that positive consumer-brand relationships can be a significant source of risk reduction, little is known about the association between brand love and repurchase intention based on consumers' risk perceptions for different serviceproducts. This paper aims to investigate the effects of brand love on repurchase intention for fashion and barber/hairdresser. Fashion is chosen for goods category while barber/hairdressers is selected for service category because they can reflex the consumers' personalities and possibly generate emotional love-like experiences. An online survey is used to collect data from a convenience sample in Australia. By using quantitative method, this study also compares the power of brand love with brand likeability on repurchase intention. The results from Partial least squares-Structural equation modelling (PLS-SEM) clearly indicated that the effects of brand love on repurchase intention are stronger than brand likeability for both fashion and barber/hairdressers. These provide insightful knowledge for researchers and practitioners. In theory, the results offer a new perspective on how positive consumer and brand relationships can be used to curtail consumer risk perceptions and induce repurchase intention. In practice, this study provides a better understanding of how brand managers can use brand love strategies for marketing purposes effectively.

Keywords: Brand love, Brand likeability, Brand relationship, Repurchase intention, Risk, Products

Introduction

Marketing strategies entail fulfilling consumers' needs and wants by offering products to a market (Ferrell, Hartline & Hochstein, 2021). Based on the degrees of tangibility, products can be classified into two types, namely goods and services. Goods refers to a palpable material of which form is tangible, such as clothes and shoes (Keller, 2003). Thus, goods are tangible, and their quality can be evaluated by consumers with ease using their sensation (Fuchs, Schreier, & van Osselaer, 2015). While services are typically presented in the form of performance in nature and grounded on intangibility, their intangibility poses difficulties for consumers in understanding what is being offered (Lovelock & Wirtz, 2003). Yet, different attributes between goods and services pose a significant problem with regard to consumers' ability to evaluate a product quality and concern consumer risk perceptions (Mitchell & Greatorex, 1993). Consequently, the consumer risk perceptions remain an important foundation in the development of marketing strategies, including consumer purchase behaviour (Keller, 2003). Therefore, it is reasonable to consider that successful marketing strategies are not straightforward. This paper argues that besides the basic consumers' needs and wants, the consumer risk perceptions should be taken into account.

The theory of risk acknowledges that consumer risk perceptions serve as a pivotal influencer of consumer behaviour, for example choice selection and repurchase intention (McColl-Kennedy & Fetter, 1999). Risk perceptions can be referred to as 'the nature and amount of risk perceived by a consumer in contemplating a particular purchase decision' (Cox & Rich, 1964, 33). They emerge from a low level of consumers' ability to judge consumption outcomes, resulting in consumers' uncertainty before purchasing because they perceive that they are prone to experience a certain loss from the purchase as in financial or psychological loss if purchased products cannot fulfil their needs. When intangible characteristics are increased, consumers perceive that they have limited abilities to compare physical attributes, evaluate a product quality, and select the best choice (Murray & Schlacter, 1990).

In general, consumers are likely to be averse to risky products. Once risks arise, they have two choices, either not to buy or to buy the products (Guseman, 1981). There is a greater burden for the latter because they need to take account of different evaluation strategies to minimise their risks.

A common approach to tackle this issue is that consumers seek additional information about products from personal sources such as brand ambassadors, friends, or family members, who have previous experiences with the products and are willing to share such experiences (Zeithaml et al., 2009). However, different people may not interpret or perceive the product quality in the same fashion. As such, that poses a question as to how consumers can ensure that those personal sources can serve as an effective source of information to curb their risks. In addition, some of them may devote their time and efforts to gathering comprehensive information prior to arriving at purchase decisions. However, given that they are equipped with the limited mental capacity, it can be extremely difficult for them to retain the entire product

information (de Chernatony & McDonald, 2003). Literature also suggests that human brand and celebrities can be used to mitigate risks because they can build consumer trust and motivate them to purchase products (Giertz et al., 2022). Yet, using influencers will be effective if the consumers like the person who has been selected to be a presenter or an ambassador (Reinhard & Messner, 2009).

Besides, in respect of influencer marketing, researchers have found that there exists an association between price and product quality (Zeithaml et al., 2009). Generally, consumers assume that they will be more contented with high-priced products (Nelson, 1970), while having some doubts about those discounted products because low-priced products can be conceived or deemed as defective, expired, or outdated products (Drozdenko & Jensen, 2005). Although the price can be utilized as a quality indicator (Nayyar & Templeton, 1994), discovery of the product quality based on the price may not be reliable in all cases. This study argues that the price and product quality relationship is far more complicated for services. Due to the difficulties of quality evaluation, consumers are likely to be less oriented to the price than the quality. Simply put, they are more liable to rely more on courtesy, intimacy, and competence than the price (Danaher, Conroy & McColl-Kennedy, 2008). Despite that, in certain cases, the price can be used as a quality indicator especially for novice consumers when they urgently purchase products (Taher & El Basha, 2006).

Product trial allows consumers to try or test products before purchasing and to determine a product quality which has been claimed. However, this strategy may not be effective or optimal for services because of limitations in terms of intangibility and simultaneity characteristics. In the absence of tangibility, services cannot be displayed, seen, tried, or touched in the same manner which consumers find it easier to examine the quality by using normal sensory perception (Lovelock & Writz, 2003). Furthermore, product trial may not always be available because providing free sample of products could impact costs and profits (Collier, 2009).

Brand with good reputation reflects an overall product quality (Campbell, 1999), used to reduce consumers' risk perceptions (Lovelock & Writz, 2003) and minimise the time of evaluation (Phililip & Keller, 2016). Without a discounted price, brand name encourages consumers to make a quick purchase (Drozdenko & Jensen, 2005). With a different perspective, this study posits that brand name may be useless for services due to heterogeneous characteristics of services. Unlike products, services cannot be exactly replicated and are always performed by service employees. Although they have been well-trained to maintain service standards, they cannot control their performances precisely (Lovelock & Writz, 2003). Furthermore, different employees deliver different services, and, as a result, that presents a challenge for consumers to ensure whether they will receive the same service quality when they need the services in the future (Zeithaml et al., 2009). In addition, good reputation and positive images are acquired through individual opinions and word-of-mouth. Yet, there is no guarantee that service brand will finally achieve success for all consumers. Figure 1 depicts a concept of the consumers's ability to evaluate the product quality of goods and services. In this study, Fashion and barber/hairdresser are considered for tangible goods and intangible service category, respectively. As they are well suited to the concept of love-like brand experiences.

Arguably, products of fashion and services of barber/hairdresser can make the consumers look and feel good (Ismail & Spinelli, 2012) because the consumers purchase fashion and barber/hairdresser to reflex their personalities. If the brands of fashion and barber/hairdresser are congruent with the consumers' personality, they are likely to feel emotionally to the brands (Pradhan, Duraipandian & Sethi, 2016).

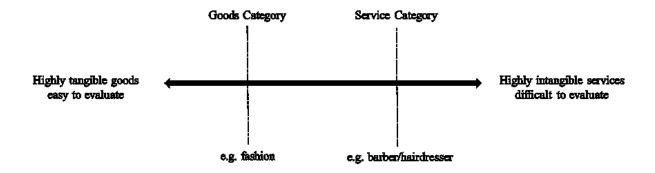


Figure 1 Products range from highly tangible goods to highly intangible services (Source: Suetrong, 2022)

Grounded on the above discussion, this study conceives that external sources of information, such as seeking information, celebrities, price, product trial, and brand reputation, can enable consumers to lessen their risk perceptions, yet it may not be sufficient and effective because those strategies seem to have their own limitations.

Thus, this study would suggest that marketers require distinct marketing strategies to relieve consumers' risk perceptions before they reach a final purchase decision. To do so, existing literature provides a logical guideline for researchers and brand managers to curb consumers' risk perceptions; although consumer risks are inevitable, they can be averted by a positive relationship between a consumer and a brand (Joshi & Garg, 2021). In line with the consumer and brand relationship theory (Fournier, 1998), this study postulates that it will be better if consumers recall their past experience with a brand as a potential internal source to manage their risks (Keller, 2003). In this way, it must be easier, faster, cheaper, and more accurate than other strategies. Compared with undertaking the search for information from external resources (e.g. celebrities, advertisement, or price), consumers spend only a couple of minutes recalling their memory to reduce uncertainty. Furthermore, enduring relationships enable consumers to identify potential brands (Lovelock & Wirtz, 2003), and in turn assist them in purchasing products with less effort which will prevent them from physical risks, such as fatigue and exhaustion (Jansson-Boyd, 2010). Hence, the present study posits that positive consumer experiences with a specific brand could serve as a powerful motivator and a risk reducer for consumers to purchase the brand's products.

Yet, positive consumer and brand relationships are crucial, for consumers serve as a principal source of incomes (Schultz et al., 2009). Previously, researchers developed valuable knowledge in relation to brand relationships based on their passionate belief that positive relationships (e.g. brand satisfaction, brand passion, brand attachment, brand engagement, or

brand nostalgia) could contribute to desirable outcomes. Recently, a concept of brand love has garnered increasingly growing attention among researchers and practitioners. In this paper, brand love is taken into account because it is a long-term consumer and brand relationship, resulting from an accumulation of positive consumer experiences and trust (Karjaluoto, Munnukka & Kiuru, 2016). Therefore, this paper assumes that brand love could serve as an effective risk reduction strategy. Besides brand love, this study also considers an effect of brand likeability that was brought in comparison with brand love for different products.

Brand likeability is 'a brand strategy based on attractiveness, credibility and expertise in order to create attachment and love by delivering beneficial outcomes for consumers and brands alike' (Nguyen, Melewar & Chen, 2013, 372). While, love combine a set of intense positive feelings which go beyond the concept of liking. Thus, brand love is defined as 'the degree of passionate emotion attachment a satisfied consumer has for a particular trade name' (Carroll & Ahuvia, 2006, 81). Branding literature mentions that brand love and brand likeability emerge from the same roots of interpersonal love (Langner, Schmidt & Fischer, 2015). Although the concepts of love and liking are remarkably similar, they are not alike since the former is more intense than the latter and requires a longer period of time to grow (Rossiter, 2012). Therefore, this study assumes that both brand love and brand likeability can be a good source of risk reduction, but their effects should not be equal for goods and services. Although desirable outcomes of brand love and brand likeability inspire researchers to offer more comprehensive scientific knowledge in the area of brand relationship, exiting literature seems to leave a research gap. Specifically, literature does not clearly identify empirical evidence of comparison of the effects of brand love and brand likeability on consumer repurchase intention for different products. The present study seeks to address the research question: Is brand love effect stronger than brand likeability effect for different product categories? To bridge the research gap, this study intends to: (1) ascertain the important role of brand love and brand likeability as a risk reducer for marketing purposes and (2) understand more about the relationships between brand love, brand likeability, and consumer repurchase intention in the cases of fashion and barber/hairdressers. Therefore, the hypotheses in Table 5 are examined to clarify the research question. Figure 2 illustrates the theoretical framework and the links between the key constructs.

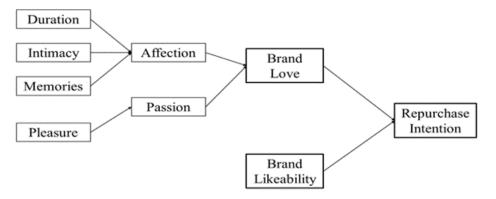


Figure 2 The theoretical framework (Source: Suetrong, 2022)

Methodology

This study seeks to test hypotheses involving causal relationships between constructs, justifying the adoption of a quantitative approach. This approach allows for appropriate inferences to be made, leading to conclusive outcomes. The population of interest can be any consumers who had previous consumption experience of fashion products and barber/hairdresser services. A convenience sample was used for this study. The participants were entirely voluntary. Those aged over 18 years who were interested to participate in the research project, were allowed to complete the questionnaire without any compensation.

All measurement scales used in this study were drawn from prior literature. With different views, existing literature offers several methods to measure brand love, but this study viewed that accumulated positive experiences between a consumer and a brand can stimulate brand love. Thus, brand love was measured by the multidimensional scales developed by Albert, Merunka, & Valette-Florence (2009). Brand likeability's meaning was examined through five items of Nguyen, Choudhury & Melewar (2014). Consumer repurchase intention was selected to reflect consumer behaviour towards brand love and brand likeability, and it was measured through three items from Putrevu & Lord (1994).

To test the effects of brand love and brand likeability on consumer repurchase intention, fashion and barber/hairdressers were considered for this study because they are common in consumers' daily life as consumers usually purchase fashion products and barber/hairdresser to reflex their personalities and image, widely available, and offered by several brands. Thus, the participants were assumed to have past experiences with these types of service-products.

Even though the measurement scales of this study were developed by experts and reported satisfactory reliability and validity, they had been used in different contexts. As a consequence, a pilot test was carried out with ten postgraduate students to identify unclear statements and revise the last version of the questionnaire. Some statements were slightly modified based on the feedback from the pilot test.

An online survey questionnaire was employed for data collection. Although an invitation and online survey link were advertised on a flyer that was presented in public places (e.g. gym, canteen, library, car park) in a university in Australia, the flyer informed the participants to feel free to send the link to other people. The survey comprised two sections. The first one was utilized to obtain demographic data, while the latter was employed to capture the three main constructs. A seven-point Likert scale ranged from 1 to 7, representing 'Strongly Disagree' and 'Strongly Agree' respectively. The participants were required to think about any brands of fashion and barber/hairdressers that they frequently purchased and answered all the questions. Control questions were included in the questionnaire to ensure that the participants had experiences with fashion and barber/hairdresser brand (e.g. How long do you have experience with this fashion brand? and How often do you purchase this fashion brand?). Thus, they could easily answer the questions. All of them reported that they had previous

consumption experiences with service-products in question. The participants were thanked for their responses and time after completion.

In total, 229 questionnaires were returned; however, some of data need to be rejected due to missing data and dropping out from the project. Statistic power analysis was conducted to determine a minimum sample size (Cohen, 2013). Upon two endogenous constructs and one exogenous construct, the power analysis suggests that the model requires less than 100 usable data to detect a medium effect size. Thus, 203 qualified samples of this study in total were sufficient for data analysis.

Harman's 1-factor test was performed to detect common method bias (CMB) (Harman, 1967). Results pointed out that all single factor produced a variation less than 50%. The highest percentage of variance for fashion and barber/hairdressers was 45.30% and 46.84% respectively. Therefore, CMB was not a serious problem for this study.

According to the usable data, descriptive statistics was performed to draw a conclusion about the participant characteristics which are reported in Table 1.

Table 1	The	participant	character	istics
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Demographic Data	Frequency	Percentage
	(n=203)	(%)
Gender		
Male	63	33.9
Female	134	66
Age (years old)		
18 - 24	71	34.5
25 - 34	69	34.4
35 - 44	45	22.1
45 or older	18	8.8
Education achieved		
High school graduate	72	35.4
College or technical degree	62	30.5
Bachelor's degree	16	7.8
Master's degree	53	22.1

SmartPLS version 3.2 was used to test the model. Despite the fact that the result of statistic power assured that 203 cases were adequate for data analysis, the data set was seen relatively small. In order to deal with the small sample size, this study used a bootstrapping technique which is available in PLS-SEM software. In addition, PLS-SEM is appropriate for handling hierarchical constructs, such as brand love (Hair, Hult, Ringle, & Sarstdt, 2017).

To establish the model quality, this study followed the two-step approach as suggested by Anderson & Gerbing (1988). The first step involved evaluating the measurement model whereas the structural model was assessed in the second step.

At a significance level of 0.05, composite reliability (CR) was employed to test the internal consistency reliability of the model (Henseler, Ringle & Sarstedt, 2015). The reliability

value of 0.7 and above indicates satisfactory reliability (Hair, Ringle, & Sarstedt, 2013). To verify the construct validity, PLS algorithm was run to observe outer loadings of indicators and average variance extracted (AVE) value (Hair et al., 2017). The satisfactory outer loading is 0.7 and above (Hair et al., 2017). The cut-off value of AVE was set at 0.5. That is, an AVE value of 0.5 and higher is justified for convergent validity (Fornell & Larcker, 1981). The results suggest that some items should be excluded to establish model reliability and validity. The statistical results of CR, outer loading, *p*-value of outer loading, and AVE are presented in Table 2.

Table 2 The results of composite reliability, outer loading, *p*-value of outer loading, and AVE of the model

Main Construct	Sub Construct and/or Indicator	CR	Outer Loading	p-value of Outer Loading	AVE
Brand Love (LV)		0.863			0.76
	Duration (DR)				
	This brand has been with me for		0.930	***	
	many years.				
	I have been using this brand for a		0.937	***	
	long time.				
	I have not changed a brand for a		0.832	***	
	long time.				
	Intimacy (IT)				
	Using this brand makes me feel		0.881	***	
	warm and comfortable.				
	I feel good emotions from using		0.885	***	
	this brand.				
	Memories (MM)				
	This brand reminds me of some		1.00	***	
	important events of my life.				
	Pleasure (PS)				
	It is a real pleasure to use this		0921	***	
	brand.				
	I am happy to use this brand.		0.920	***	
Brand Likeability		0.79			0.556
(LK)					
	I like this brand.		0.864	***	
	This brand is physically attractive.		0.651	***	
	The employees of this brand are		0.733	***	
	knowledgeable.				
Repurchase	-	1.00			1.00
Intention (RI)					
	I will definitely use this brand.		1.00	***	

Note: *p-value < 0.05, **p-value < 0.01, ***p-value < 0.001

Heterotrait-Monotrait (HTMT) approach was performed to ensure that all constructs were distinct (Henseler et al., 2015). Evidence of distinction can be justified by observing a HTMT value below 0.9 (Hair et al., 2017). Table 3 shows the HTMT score which confirms discriminant validity.

Table 3 HTMT score for each pair of constructs

LK	RI	DR	IT	MM	PS
0.663					
0.458	0.49				
0.842	0.488	0.392			
0.271	0.126	0.437	0.33		
0.882	0.472	0.394	0.875	0.245	
	0.458 0.842 0.271	0.458 0.49 0.842 0.488 0.271 0.126	0.458 0.49 0.842 0.488 0.392 0.271 0.126 0.437	0.458 0.49 0.842 0.488 0.392 0.271 0.126 0.437 0.33	0.458 0.49 0.842 0.488 0.392 0.271 0.126 0.437 0.33

Coefficient of determination (R²) was calculated to evaluate the model's ability of prediction (Hair et al., 2017). The results indicate that 60.4% and 31.4% of the variance in consumer repurchase intention were explained by brand love and brand likeability for fashion and barber/hairdresser respectively.

To sum up, statistical results showed satisfactory evidence that the model passed the criteria of reliability and validity. Hence, it could be used to test hypothesis with confidence.

By running PLS algorithm, the path coefficient (β) would inform the direction and strength of the relationship between constructs. The significance of the path coefficient was taken into consideration to justify the result of hypothesis testing (Hair et al., 2017). Table 4 provides the statistical results of path coefficients and p-value for each service-product category.

 Table 4
 Path coefficients and their significance

Relationship	Fashion	Barber/Hairdresser
	$(\beta, p$ -value)	$(\beta, p$ -value)
LV - RI	0.324, ***	0.473, ***
LK - RI	0.272, **	0.384, ***

Results

With regards to the purposes of this study which aim to understand the relationships between brand love, brand likeability, and consumer repurchase intention in the cases of fashion and barber/hairdressers, it is evident from PLS-SEM statistical results showed that brand love and brand likeability positively affected consumer repurchase intention for both fashion and barber/hairdresser. Thus, H1, H2, H3, and H4 are supported. To justify H5 and H6, the path coefficients from brand love to consumer repurchase intention were compared to those from brand likeability to consumer repurchase intention for fashion and barber/hairdresser. As shown in Table 4, the results demonstrated that the strength of the relationships between brand love and consumer repurchase intention were greater than those between brand likeability and consumer repurchase intention for both categories. Therefore, H5 and H6 are supported. This evidence supports that the effects of brand love and brand likeability were not equal for different service-products. Even though consumers are familiar to fashion products and barber/hairdresser services in their daily life, inevitably these two service-product categories hold some degree of consumers' risk perceptions. The results of hypothesis testing confirm that developing positive consumer-brand relationships such as brand love and brand likeability is important for risk reduction and marketing strategy as in the case of this study. Table 5 reports a summary of hypothesis testing.

Table 5 A summary of hypothesis testing

-	Hypotheses	Result
Н1.	Brand love positively affects consumer repurchase intention for fashion.	Supported
H2.	Brand love positively affects consumer repurchase intention for barber/hairdresser.	Supported
Н3.	Brand likeability positively affects consumer repurchase intention for fashion.	Supported
H4.	Brand likeability positively affects consumer repurchase intention for	Supported
	barber/hairdresser.	
H5.	The relationship between brand love and consumer repurchase intention is stronger	Supported
	than the relationship between brand likeability and consumer repurchase intention for	
	fashion.	
H6.	The relationship between brand love and consumer repurchase intention is stronger	Supported
	than the relationship between brand likeability and consumer repurchase intention for	
	barber/hairdresser.	

Discussions

In response to the purposes of this study, the results emphasise the importance of brand love and brand likeability to consumer repurchase intention in cases of fashion and barber/hairdresser, because they lead to consumer repurchase intention as observed in the results of H1, H2, H3, and H4. From consumers' perspective, love-like experiences with a brand can be adopted as a good risk reduction strategy when consumers are required to make a decision before purchasing. Especially, due to the fact that many brands are available in the market, this poses difficulties for the consumers in choosing the best brand. Furthermore, they tend to purchase the same brands because purchasing a new one may pose another risk and consume their time to assess the service-product quality. A plausible explanation of these phenomena is that consumers' risk perceptions can be diminished through positive consumers' experiences with their brands (Berry, 1995).

In addition, the valid results of H1, H2, H3, and H4 suggest that brand love and brand likeability exist for both fashion and barber/hairdresser. These results are consistent with the theory of consumer and object relationship which acknowledges that consumers can develop a relationship with their brands together with the brands' products, just as when developing an interpersonal love-like relationship (Shimp & Madden, 1988).

Although the concepts of brand love and brand likeability are relatively similar and derived from the same root of positive consumer' experiences towards a specific brand (Bagozzi, Batra & Ahuvia, 2017), the results of H5 and H6 further suggests that brand love is more intense and more powerful than brand liking for both fashion and barber/hairdresser. The emergence of this phenomenon lies in a plausible explanation that services such as barber/hairdresser are performed by service staff (Chen & Quester, 2015). Consequently, there will ample opportunities for staff to play a significant role in establishing a brand love relationship. Furthermore, being apart from the loved objects can cause psychological damage (Bagozzi, Batra & Ahuvia, 2017). Therefore, consumers will typically look for their loved products to relieve this suffering. This can also be extrapolated by another reason that consumers become contented when they use, consume, or interact with their favourite brands. Hence, they have their personal reasons to continue purchasing their loved brands (Amaro, Barroco & Antunes, 2021).

Conclusion and suggestions

In conclusion, the findings respond to the research question whether brand love's effect is stronger than that of brand likeability for different product categories. The statistical results clearly point out that brand love has a stronger power to bond consumers with the brand than brand likeability does. Furthermore, this study highlights the significance of brand love and brand likeability which can contribute to consumer repurchase intention for goods and services. Therefore, it could be concluded that both brand love and brand likeability can act as an advantageous strategy in mitigating consumers' risks. Arguably, consumers retrieve their love-like experiences with their brands to lessen the risks before making a final purchase. In addition, high competition emerges in many markets; therefore, positive consumer and brand

relationships are a necessary element for brands' survival in the markets. Based on the results, this study would suggest brand managers to develop positive and effective brand relationship strategies. Moreover, brands have limited time and resources to invest in consumer-brand relationships. Thus, brand managers should consider to give a high priority and allocate resources to create brand love.

New knowledge and the effects on society and communities

By addressing the research question, this study offers significant contributions for both researchers and practitioners. From an academic perspective, this study broadens the knowledge of the brand relationship theory and risk-taking theory by adopting the love-like concept to reduce consumer risks. As for a business perspective, building a consumer love-like relationship can lead to consumer repurchase intention that could contribute to positive financial outcomes and enduring competitive advantage (Bıçakcıoğlu, İpek & Bayraktaroğlu, 2018). In addition, there is a trade-off between establishing brand love and brand likeability. Thus, the results provide a compelling reason for brand managers to concern the importance of brand love rather than brand likeability for better outcomes. From a consumer perspective, staying with a loved brand could reduce uncertainty about the consequences of taking a risk when purchasing service-products of a new brand. In addition, trust underpins brand love and brand likeability (Thomson, MacInnis & Park, 2005). Therefore, consumers will be shielded from negative psychological effects such as financial loss and distress. From people in community's perspective, brands invest their resources in establishing the love-like relationship with the consumers. Simultaneously, consumers gain positive experiences from this relationship and express positive behaviour towards the brands themselves in the form of commitment and loyalty. Therefore, this study would suggest that brands should not only reap benefits from consumers' purchase but also return them to their consumers and maintain this pleasurable and sustainable relationship.

Limitation and further study

This study contains some limitations. Most of the examined data were collected from convenience sampling, and this in turn may cause an inability to generalise the findings. Thus, a larger sample size is needed in future research to contribute to a better understanding. Another limitation concerned a cross-sectional design; it may be worthwhile to use a longitudinal design to track the dynamics of brand love and brand likeability on consumer repurchase intention in a long-term period. In addition, repurchase intention was selected to test the effects of brand love and brand likeability. Future studies may include other forms of consumer behaviour such as positive word-of-mouth and willingness to pay a premium price in the model. As literature suggests that consumers can develop their love for any service-product (Shimp & Madden, 1988), future studies may test the model with different service-product typologies. Finally, consumers in low level of uncertainty avoidance may easily accept a risk and purchase a new brand (Soares, Farhangmehr & Shoham, 2007), so further studies may consider testing the model in different culture.

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References

- Albert, N., Merunka, D., & Valette-Florence, P. (2009). The feeling of love toward a brand: Concept and measurement. *Advances in Consumer Research*, *36*, 300-307. http://www.acrwebsite.org/volumes/14537/volumes/v36/NA-36
- Amaro, S., Barroco, C., & Antunes, J. (2021). Exploring the antecedents and outcomes of destination brand love. *Journal of Product and Brand Management*, 30(3), 433-448. https://doi.org/10.1108/JPBM-08-2019-2487
- Anderson, J., & Gerbing, D. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411-423. https://doi.org/10.1037/0033-2909.103.3.411
- Bagozzi, R. P., Batra, R., & Ahuvia, A. (2017). Brand love: Development and validation of a practical scale. *Marketing Letters*, 28(1), 1-14. https://doi.org/10.1007/s11002-016-9406-1
- Berry, L. L. (1995). Relationship marketing of services—growing interest, emerging perspectives. *Journal of the Academy of Marketing Science*, *23*(4), 236-245. https://doi.org/10.1177/009207039502300402
- Bıçakcıoğlu, N., İpek, İ., & Bayraktaroğlu, G. (2018). Antecedents and outcomes of brand love: The mediating role of brand loyalty. *Journal of Marketing Communications*, 24(8), 863-877. https://doi.org/10.1080/13527266.2016.1244108
- Campbell, M. C. (1999). Perceptions of price unfairness: Antecedents and consequences. *Journal of Marketing Research*, 36(2), 187-199. https://doi.org/10.1177/002224379903600204
- Carroll, B., & Ahuvia, A. (2006). Some antecedents and outcomes of brand love. *Marketing Letters*, *17*(2), 79-89. https://doi.org/10.1007/s11002-006-4219-2
- Chen, S.-C., & Quester, P. G. (2015). The relative contribution of love and trust towards customer loyalty. *Australasian Marketing Journal*, *23*(1), 13-18. https://doi.org/10.1016/j.ausmj.2014.12.003
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. (2nd ed.). New York, NY: Routledge.
- Collier, R. (2009). Rapidly rising clinical trial costs worry researchers. *Canadian Medical Association Journal*, 180(3), 277-278. https://doi.org/10.1503/cmaj.082041

- Cox, D. F., & Rich, S. U. (1964). Perceived risk and consumer decision-making—the case of telephone shopping. *Journal of Marketing Research*, *1*(4), 32-39. https://doi.org/10.1177/002224376400100405
- Danaher, P. J., Conroy, D. M., & McColl-Kennedy, J. R. (2008). Who wants a relationship anyway? Conditions when consumers expect a relationship with their service provider. *Journal of Service Research*, 11(1), 43-62. https://doi.org/10.1177/1094670508319095
- De Chernatony, L., & McDonald, M. (2003). *Creating powerful brands in consumer, service and industrial markets*. (3rd ed.). Burlington, MA: Elsevier/Butterworth-Heinemann.
- Drozdenko, R., & Jensen, M. (2005). Risk and maximum acceptable discount levels. *Journal of Product and Brand Management*, 14(4), 264-270. https://doi.org/10.1108/10610420510609285
- Ferrell, O. C., Hartline, M., & Hochstein, B. W. (2021). *Marketing strategy*. Massachusetts, MA: Cengage Learning.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. https://doi.org/10.1177/002224378101800104
- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*, 24(4), 343-373. https://doi.org/10.1086/209515
- Fuchs, C., Schreier, M., & van Osselaer, S. M. (2015). The handmade effect: What's love got to do with it?. *Journal of Marketing*, 79(2), 98-110. https://doi.org/10.1509/jm.14.0018
- Giertz, J. N., Hollebeek, L. D., Weiger, W. H., & Hammerschmidt, M. (2022). The invisible leash: When human brands hijack corporate brands' consumer relationships. *Journal of Service Management*, 33(3), 485-495. https://doi.org/10.1108/JOSM-06-2021-0211
- Guseman, D. (1981). Risk perception and risk reduction in consumer service. In J. Donnelly, & W. Gorge (Eds.), *Marketing of services* (pp.200-204). Orlando, FL: American Marketing Association.
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1-2), 1-12. https://ssrn.com/abstract=2233795
- Harman, H. H. (1967). *Modern factor analysis*. (3rd ed.), New Jersey, NJ: University of Chicago press.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. https://doi.org/10.1007/s11747-014-0403-8
- Ismail, A. R., & Spinelli, G. (2012). Effects of brand love, personality and image on word of mouth: The case of fashion brands among young consumers. *Journal of Fashion Marketing and Management: An International Journal*, 16(4), 386-398. https://doi.org/10.1108/13612021211265791

- Jansson-Boyd, C. V. (2010). Consumer psychology. Berkshire, England: McGraw Hill.
- Joshi, R., & Garg, P. (2021). Role of brand experience in shaping brand love. *International Journal of Consumer Studies*, 45(2), 259-272. https://doi.org/10.1111/ijcs.12618
- Karjaluoto, H., Munnukka, J., & Kiuru, K. (2016). Brand love and positive word of mouth: The moderating effects of experience and price. *Journal of Product and Brand Management*, 25(6), 527-537. https://doi.org/10.1108/JPBM-03-2015-0834
- Keller, K. L. (2003). Brand synthesis: The multidimensionality of brand knowledge. *Journal of Consumer Research*, 29(4), 595-600. https://doi.org/10.1086/346254
- Langner, T., Schmidt, J., & Fischer, A. (2015). Is it really love? A comparative investigation of the emotional nature of brand and interpersonal love. *Psychology and Marketing*, 32(6), 624-634. https://doi.org/10.1002/mar.20805
- Lovelock, C., & Wirtz, J. (2003). *Services marketing: People, technology, strategy.* (5th ed.). New Jersey, NJ: Pearson Prentice Hall.
- McColl-Kennedy, J. R., & Fetter, R. E. (1999). Dimensions of consumer search behavior in services. *Journal of Services Marketing*, *13*(3), 242-265. https://doi.org/10.1108/08876049910273871
- Mitchell, V., & Greatorex, M. (1993). Risk perception and reduction in the purchase of consumer services. *Service Industries Journal*, *13*(4), 179-200. https://doi.org/10.1080/02642069300000068
- Murray, K. B., & Schlacter, J. L. (1990). The impact of services versus goods on consumers' assessment of perceived risk and variability. *Journal of the Academy of Marketing Science*, 18(1), 51-65. https://doi.org/10.1007/BF02729762
- Nayyar, P., & Templeton, P. (1994). Seller beware: Information asymmetry and the choice of generic competitive strategies for service business. In T. Swartz, D. Bowen, & S. Brown (Eds.), Advances in services marketing and management research and practice (pp. 95-125). London, England: JAI Press Inc.
- Nelson, P. (1970). Information and consumer behavior. *Journal of Political Economy*, 78(2), 311-329. https://doi.org/10.1086/259630
- Nguyen, B., Choudhury, M., & Melewar, T. (2014). An integrated model of firms' brand likeability: Antecedents and consequences. *Journal of Strategic Marketing*, *23*(2), 122-140. https://doi.org/10.1080/0965254X.2014.914071
- Nguyen, B., Melewar, T., & Chen, J. (2013). A framework of brand likeability: An exploratory study of likeability in firm-level brands. *Journal of Strategic Marketing*, 21(4), 368-390. https://doi.org/10.1080/0965254X.2013.790472
- Phililip, K., & Keller, K. L. (2016). *A framework for marketing management*. (6th ed.). New Jersey, NJ: Pearson Education.
- Pradhan, D., Duraipandian, I., & Sethi, D. (2016). Celebrity endorsement: How celebrity—brand—user personality congruence affects brand attitude and purchase intention. *Journal of Marketing Communications*, 22(5), 456-473. https://doi.org/10.1080/13527266.2014.914561

- Putrevu, S., & Lord, K. R. (1994). Comparative and noncomparative advertising: Attitudinal effects under cognitive and affective involvement conditions. *Journal of Advertising*, 23(2), 77-91. https://doi.org/10.1080/00913367.1994.10673443
- Reinhard, M. A., & Messner, M. (2009). The effects of source likeability and need for cognition on advertising effectiveness under explicit persuasion. *Journal of Consumer Behaviour: An International Research Review*, 8(4), 179-191. https://doi.org/10.1002/cb.282
- Rossiter, J. R. (2012). A new C-OAR-SE-based content-valid and predictively valid measure that distinguishes brand love from brand liking. *Marketing Letters*, *23*(3), 905-916. https://doi.org/10.1007/s11002-012-9173-6
- Schultz, D. E., Barnes, J. G., Schultz, H. F., & Azzaro, M. (2009). Building customer-brand relationships. *Communicative Business*, *1*, 123-126.
- Shimp, T. A., & Madden, T. J. (1988). Consumer-object relations: A conceptual framework based analogously on Sternberg's triangular theory of love. *Advances in Consumer Research*, *15*, 163-168.
- Soares, A. M., Farhangmehr, M., & Shoham, A. (2007). Hofstede's dimensions of culture in international marketing studies. *Journal of Business research*, 60(3), 277-284. https://doi.org/10.1016/j.jbusres.2006.10.018
- Taher, A., & El Basha, H. (2006). Heterogeneity of consumer demand: Opportunities for pricing of services. *Journal of Product and Brand Management*, 15(5), 331-340. https://doi.org/10.1108/10610420610685884
- Thomson, M., MacInnis, D. J., & Whan Park, C. (2005). The ties that bind: Measuring the strength of consumers' emotional attachments to brands. *Journal of Consumer Psychology*, 15(1), 77-91. https://doi.org/10.1207/s15327663jcp1501_10
- Zeithaml, V., Bitner, M., & Gremler, D. (2009). Services marketing: Integrating customer focus across the firm (5th ed.). New York, NY: McGraw-Hill.

03

The Sustainable Retirement Planning and Management: A Case Study of Chetsamian Community, Photaram District, Rachaburi Province

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Abstract

Sufficient and sustainable well-being of Thai citizens has been the main government's objective for national development whether it is about the good health of the people or the country's economy. The main goal of the government is to assure that everyone can live happily, without torment, no matter which state in life they are - working or retired, everyone has to be able to live comfortably. Despite the government's policy to support the elderly, in reality of the welfare of the state for the elderly seems to be inadequate. At present, it can be seen that the elderly population is increasing, but they are still unable to sustain themselves. There is also a problem that most of the working-aged people still lack in knowledge for effective preparation for retirement. The objectives of this study were: 1) to study the attitude and behavior of aging people by analyzing the data from working age people; 2) to develop the planning and management approach in order to sustain the living in retirement age; and 3) to study the problems before and after retirement by analyzing the data from working age people from 25 to 59 years old. Quantitative method was used in this study. The results showed that working-aged people should plan for the retirement in order to live financial sustainably. The government can encourage people from every sectors to learn about financial planning for retirement together in order to promote health and well-being of the retirement.

Keywords: Aged society, Financial planning, Management, Planning for retirement

Introduction

Sufficiency and sustainable well-being is one of the important objectives of the government in order to develop the country. Well-being includes health and economic perspective that helps people lives happily for both working age population and retirement age. World Health Organization (2022) stated that 80% of older people will be living in low- and middle-income countries in 2050. There was high demand in welfare in countries with high ageing rate such as Korea and Japan (Gusmano & Okma, 2018).

The sustainable planning and management is increasing in awareness and importance as the number of aging people keeps increasing compared to people in other ages in the country. So, people in retirement age has to prepare for sustainable and sufficiency living as they do not have to rely solely on support from government or family members. The behaviors of aging people reflect the understanding in retirement planning and management that relates to financial planning and prepare for subsistent income.

People in Chetsamian Community, Photaram District, Rachaburi Province mostly are farmers. The well-known product of the community is fermented radish (Hua Chai Pow). People in the community rely on one source of income from this product, therefore, they cannot support the living of the family (Sroithong, 2022).

Therefore, this research aims to study the sustainable retirement planning and management in order to support the well-being of aging people in Thai society. The objectives of this research are:

- 1) To study the attitude and behavior of aging people by analyzing the data from working age people.
- 2) To develop the planning and management approach in order to sustain the living in retirement age
- 3) To study the problems before and after retirement by analyzing the data from working age people from 25 to 59 years old.

The conceptual framework of this study is shown in Figure 1

management for retirement

Independent variables Dependent variables Financial planning for retirement Personal variable 1. Preparation for the 1. Gender retirement 2. Age 2. Experience in savings and 3. Education level investment 4. Career before the retirement 3. Current financial burden 5. Career after the retirement 4. Health and well-being 6. Income 5. Retirement plan 7. Marital status 6. The channel used in study 8. Numbers of children the specific content of 9. Person living with before the interest retirement 7. Satisfaction in money spent 10. Person who will living with on living at the present after the retirement 8. The required support from 11. Experience in saving and government in sustainable investment

Figure 1 Conceptual framework (Source: Researcher, 2023)

Hypothesis 1: There is a difference between genders in financial planning for retirement.

Hypothesis 2: There is a difference between income levels in financial planning for retirement.

Hypothesis 3: There is a difference between education levels in financial planning for retirement

Hypothesis 4: There is a difference between careers before retirement in financial planning for retirement

Literature Review

Expansion of Ageing Population

12. Numbers of credit card

The Office of the National Economic and Social Development Board (2013) stated that in 2023, Thailand will have a population aged 60 years and over of 14.1 million, or a ratio of equal to 21 percent of the population in Thailand. From the number of population projections, Thailand will become aged society completely.

On the other hand, the number of people under the age of 15 will gradually decline compared to the historical ratio of 2013 which accounted for as much as 19 percent, would change to only 14 percent of the population across the country. This means that the number of people aged 60 years and over will increase by one-fourth of the number in 2033 as the expected average longevity will increase from 60 to 75 years (Thongphueng, 2013). Fertility rate or number of babies in Thailand has been reduced continuously and rapidly, resulting in the population structure. The total fertility rate per woman is reduced from 3 percent to 0.5 percent per year (Department of Older Persons, 2018). In the past 40 years, average number of children a woman had over her lifetime has decreased from more than 5 to 1-2 children. It can

be seen that the average birth rate has been reduced by more than half compared to the past. (Institute for Population and Social Research, 2018)

Health and Well-Being of the Elders

Illness and mortality in the elderly continues to get attention especially in public health and biomedical research as they are at risk in various diseases. Subsequently, it can be seen that the increase in elderly population in Thailand has been linked to the cost of treating various diseases (King Mongkut's University of Technology Thonburi, 2016). In addition, the health of the elderly need special attention as Thailand has an increasing number of elderly people and they will eventually be dependency (Srithamrongsawat & Bundhamcharoen, 2010).

As the number of elders in Thailand is increasing dramatically and rapidly, the cost to maintain public health of the government is also increasing. Moreover, the government has to concern about other welfare that must be allocated to the elderly. It will cost the government a financial burden if there are not well-prepared plans to cope with these costs (King Mongkut's University of Technology Thonburi, 2016).

The Working of the Elders

Hamdani (2012) stated that the elders in Thailand rely on their savings, various sources of welfare, and support from their children for their subsistence. Some of elders had other sources of incomes from working since they still have potential to work. There was assumption that people who aged 60 years can work less efficiently, therefore the elders are not able to work or out of labor criteria. This assumption has the effect on the overall economics as the hiring of the elders is decreased (The Foundation of Thai Gerontology Research and Development Institute, 2016).

There were studies in extension of work period by delaying the retirement age. However, those studies focused on civil servants and state enterprise employees. There are needs in study on elders who are freelancers, private company employees, and other informal workers (King Mongkut's University of Technology Thonburi, 2016).

Education for the Retirement

Srithamrongsawat & Bundhamcharoen (2010) stated that compared with the past, the elders tended to have higher education level. As the concept of lifelong learning, the longevity also be and opportunity for elders to learn. However, there is lack of research in lifelong learning in elders which could help develop elders in the aged society in the near future (Kasemsuk, 2019). The elders were experienced people who have coped with situations in their life so that they can handle the some changes at the present (Dankul, 2014). However, there are challenges for them in this era such as the changes in society, culture, or technology. Therefore, elders have to be courage to learn and develop them to catch up with the current situation (King Mongkut's University of Technology Thonburi, 2016). Moreover, the elders should learn about the health to reduce the risks that may occur in when they get older (King Mongkut's University of Technology Thonburi, 2016).

Preparation for the Retirement

The Office of the Civil Service Commission (2017) stated that the increase in elders had effect on the economics as a whole as it caused the lack of knowledge, ability, and expertise people in industrial sector, business, operations, and agricultural sector. Moreover, the elders

themselves had effect because they had less income for their substance. Therefore the preparation for the retirement is critical in this era. Srinuan (2016) state that the investment is savings to earn returns more than the investment and the investor must accept the increased risk as well. Therefore, it is absolutely necessary that the investor should consider carefully and thoroughly, including having to study the information in advance before being ready before making a decision to ensure that they will have expected return.

Suwanna (2021) stated that the financial preparation of the informal sector still lacked a lot of investment knowledge. More than 80 percent had never planned for retirement and expected money to spend in retirement. This group of people relied on the savings, however, they did not make deposits every month. The pain point for the informal sector is the lack of financial planning for self-sufficient retirement.

Welfare for the Elders

The government had put an important on the living of the elders which can be seen from the promotion and protection of the rights of the elderly as well as providing cost of living allowance. People with different age receive different amount of money: aged 60 - 69 years received 600 Baht per month, 70 - 79 years received 700 Baht per month, 80 - 89 years received 800 Baht per month and 90 or over received 1,000 Baht per month. Moreover, there were elderly fund that was set up to promote and support funding for the occupation of the elderly, including supporting various projects for the elderly as well. The government also provided subsistence subsidy for low-income people under the State Welfare Registration Program (Department of Older Persons (2018).

Methodology

This study used quantitative methodology. Purposive sampling was used from the population which was people between 25-59 years old who lived in Chetsamian Community, Photaram District, Rachaburi Province. The total population of this study was 34,166,785 according to the National Statistical Office of Thailand (2019). Sample size was calculated by using Yamane (1973)'s method and equal to 400 at the confidence level of 0.05.

Data was collect by using the questionnaire. Each part of the questionnaire require respondent to rate the level of agreement, participation, or the interest in each specific question by using 5-Likert type scale including: (1) strongly disagree, least participation, least interest; (2) disagree, less participation, less interest; (3) moderately agree, moderately participate, moderately interest; (4) agree, participate, interest; and (5) strongly agree, mostly participate, mostly interest.

The questionnaire was developed by using literature review in concept and theory about financial planning and well-being of aging people in both Thailand and international sources. Then, content specialists were asked to review the questions in order to ensured reliability of the questionnaire. After that, the researchers conducted a pilot test in 30 people who lived in Rachaburi Province. The Cronbach's Alpha Coefficient of the questionnaire equal to 0.90

which was higher than the accepted criteria (0.70) (Kaiyawan, 2011) Then, the questionnaire was reliable and used in this research.

Data was analyzed by using mean (\bar{x}) an interpreted as follow:

 \bar{x} equals to 1.00-1.49 meaning that the result is in the lowest level; \bar{x} equals to 1.50-2.49 meaning that the result is in low level; \bar{x} equals to 2.50-3.49 meaning that the result is in the moderate level; \bar{x} equals to 3.50-4.49 meaning that the result is in the high level; \bar{x} equals to 4.50-5.00 meaning that result is in the highest level. Moreover, the level of dispersion was interpreted by using standard deviation (S.D.). The hypothesis testing was done by using Pearson's Chi-square with the level of confidence equal to 0.05.

Results

Descriptive statistics of respondents were shown in Table 1

Table 1 Descriptive statistics

D	escriptive statistics	Amount	Percentage
1.	Gender	rimount	rerentage
1.	Male	149	37.25
	Female	242	60.50
	LGBT+	9	2.25
2.	Age		
	25-30	70	17.50
	31-40	146	36.50
	41-50	90	22.50
	51-59	94	23.50
3.	Education level		
	Less than high school	23	5.75
	High school	92	23.00
	Bachelor's degree	235	58.75
	Master's degree	47	11.75
	Doctoral degree	3	0.75
4.	Career before the retirement		
	Merchant	39	9.75
	Self-employed	35	8.75
	Employee	41	10.25
	Government officer/state enterprise employee	156	39.00
	Work for hire	84	21.00
	Other	45	11.25
5.	Career after the retirement		
	Merchant	96	24.00
	Self-employed	146	36.50
	Employee	6	1.50
	Unemployed	85	21.25
	Work for hire	52	13.00
	Other	15	3.75
6.	Income (Baht)		
	15,000 or below	165	41.25
	15,001-30,000	149	37.25

Descriptive	statistics	Amount	Percentage
30,001-4	15,000	57	14.25
More th	an 45,000	27	6.75
N/A		2	0.50
7. Marital	status		
Single		173	43.25
Married		163	40.75
Divorce		22	5.50
Unregis	tered marriage	42	10.50
8. Number	s of children		
1		185	46.25
More th	an 1	25	6.25
None		190	47.50
9. Person l	iving with before the retirement		
	husband/wife/children)	218	54.50
Parents/	relatives/siblings	139	34.75
Live alo		43	10.75
10. Person v	who will living with after the retir	ement	
	husband/wife/children)	231	57.75
•	relatives/siblings	134	33.50
Live alo		35	8.75
11. Living s	tatus		
Owner		202	50.50
Residen	t	198	49.50
12. Number	s of credit card		
1		76	19.00
2		51	12.75
More th	an 2	54	13.50
None		219	54.75

Mean and standard deviation of each part of financial planning for retirement were shown in Table 2

Table 2 Financial planning for retirement in details

Financial planning for retirement	\overline{x}	S.D.
1. Preparation for the retirement	3.47	1.18
1.1. Plan for the retirement in term of finance	3.60	1.14
1.2. Learning about financial planning for the retirement	3.38	1.20
1.3. Understand financial planning enough to live after the retirement	3.41	1.18
2. Experience in savings and investment	2.23	1.39
2.1. Saving in bank account	3.80	0.98
2.2. Buying Government Saving Bank lottery	2.22	1.37
2.3. Invest in funds	2.07	1.29
2.4. Invest in stocks	1.97	1.29
2.5. Invest in FOREX	1.67	1.12
2.6. Invest in digital currency (Bitcoin)	1.70	1.20
2.7. Deposit in Co-operative	2.25	1.43
2.8. Other saving or investment	2.20	1.17

Financial plannin	~	\overline{x}	S.D.
3. Current financi	al burden	2.53	1.40
3.1. Utility bil	ls such as water, electricity, internet, telephone	3.59	1.08
3.2. Renting		1.79	1.29
3.3. Home/con	dominium installment	2.15	1.47
3.4. Car install	lment	2.40	1.40
3.5. Credit car	d bill	2.28	1.34
3.6. Child supp	port	2.26	1.38
3.7. Parental/	penefactor care	2.74	1.28
3.8. Medical e	xpenses	2.51	1.28
3.9. Other exp	enses	3.09	1.13
4. Health and wel		2.41	1.42
4.1. Healthy, d	•	3.77	0.90
•	l care of health, regularly exercise	3.31	1.05
_	ronic disease, not healthy	1.92	1.25
	gular appointments, 1-2 times a month	1.96	1.27
	edication as prescribed by doctor on daily basis	1.86	1.29
	from others, not able to help themselves	1.62	1.15
5. Retirement pla	•	2.42	1.44
	avings or return on investment	3.75	0.98
	umily (their children, etc.)	2.37	1.29
•	nursing home or a care center for the elderly	1.17	1.22
	cone to take care at home. won't be a burden on their	1.79	1.27
children		11,7	11 2 /
6. The channel us	sed in study the specific content of interest	3.02	1.25
6.1. Register f	or classes/training/seminars by various locations	2.71	1.23
6.2. Register for	or online classes/training/seminars	2.68	1.25
6.3. Read bool	cs/articles in hardcopy form.	3.12	1.11
6.4. Watching	YouTube	3.59	1.19
_	money spent on living at the present	3.53	0.96
7.1. Sufficient	· ·	3.49	0.90
	nore income per cost of living	3.57	1.02
•	apport from government in sustainable management for	3.23	1.05
retirement			
8.1. Knowledg	ge of finances and investments before the retirement	3.25	1.04
_	for financial planning before the retirement	3.19	1.03
_	that support savings and investment for the retirement	3.22	1.03
_	that support health care for the retirement	3.27	1.06
-	that support other financial planning for the retirement	3.25	1.08
	lanning for retirement	2.86	1.4

From Table 2, the respondents had moderate level of financial planning for retirement ($\bar{x} = 2.86$). The highest score was satisfaction in money spent on living at the *present* ($\bar{x} = 3.53$) and the lowest score was experience in savings and investment ($\bar{x} = 2.23$).

For preparation for the retirement, the respondents rated plan for the retirement in term of finance as the highest score ($\bar{x} = 3.60$) and learning about financial planning for the retirement as the lowest score ($\bar{x} = 3.38$). Respondents invested in saving account with the

highest score ($\bar{x}=3.80$) and invested in FOREX with the lowest score ($\bar{x}=1.67$). The most expenses were utility cost ($\bar{x}=3.38$) and the least expenses were renting ($\bar{x}=1.79$). Most respondents were healthy ($\bar{x}=3.77$). Most of them will rely on savings or investment for their retirement ($\bar{x}=3.75$). The channel that they used to study about investment was YouTube ($\bar{x}=3.59$). They required more income to support cost of living ($\bar{x}=3.57$). The most support that they required from the government was knowledge of finances and investments before the retirement ($\bar{x}=3.25$).

Hypothesis Testing

The researcher used Chi-square independence test to describe the relationships between variables. The significant level equaled to 0.05 meaning that the p-value less than 0.05 indicated statistical significance. The details of each hypothesis testing were as follow.

Hypothesis 1. Chi-square independence test showed the value of χ^2 = 12.805 and p-value = 0.119. which means that males, females, and LGBT+ did not have difference financial planning for retirement.

Hypothesis 2. Chi-square independence test showed the value of $\chi^2 = 44.254$ and p-value = 0.000, which means that there was a difference between people who had different income levels in financial planning for retirement.

Hypothesis 3. Chi-square independence test showed the value of $\chi^2 = 77.182$ and p-value = 0.000, which means that there was a difference between people who had different education levels in financial planning for retirement.

Hypothesis 4. Chi-square independence test showed the value of $\chi^2 = 471.083$ and p-value = 0.038, which means that there was a difference between people who had different career in financial planning for retirement.

Discussions

The results showed that respondents rate high score in personal information part. Female gender had the highest score in financial planning for retirement. Respondents who had age between 25 - 29 and 51 - 59 had the highest score.

Respondents who had single status had the highest score and followed by those who were married. Respondents who had Bachelor's degree had the highest score and followed by Master's degree, the results were aligned with Suwanna (2021) that education levels had effect on knowledge seeking for retirement preparation.

Respondents who had income lower than 15,000 Baht had the highest score on financial planning for retirement. Respondents who worked as a government officer/state enterprise employee had the highest score, followed by those who were self-employed. After the retirement, they intended to be self-employed, followed by unemployed. Respondents who did not have a child had the highest score, followed by those who had one child.

Respondents who lived with family (husband/wife/children) had the highest score, followed by residents who lived with parent/relatives/siblings.

For sustainable retirement planning and management, the researcher used mean (\bar{X}) to analyzed preparedness of respondents in eight topics as shown in Table 3.

Table 3 Summary of financial planning for retirement preparation

	Financial planning for retirement	\overline{x}	Level of
			Preparedness
1.	Satisfaction in money spent on living at the present	3.53	High
2.	Preparation for the retirement	3.47	Moderate
3.	The required support from government in sustainable	3.23	Moderate
	management for retirement		
4.	The channel used in study the specific content of interest	3.02	Moderate
5.	Current financial burden	2.53	Moderate
6.	Retirement plan	2.42	Low
7.	Health and well-being	2.41	Low
8.	Experience in savings and investment	2.23	Low

It can be seen from the Table 3 that the respondents had only one topic in high level which is satisfaction in money spent on living at the present. Most topics were in moderate level including preparation for the retirement, the required support from government in sustainable management for retirement, the channel used in study the specific content of interest and current financial burden. The rests were low level including retirement plan, health and well-being, and experience in savings and investment.

According to the Table 2, the level of reparation for the retirement in term of financial plan and understand financial planning enough to live after the retirement, learning about financial planning were in high level, while the learning about financial planning for the retirement was in moderate level.

Experience in savings and investment was in low level. Most respondents were saving their money in bank account rather than in other sources of investment. This result was aligned with the study of Kowhakul (2016) that most working-aged people only had saving accounts. Investment in Government Saving Bank lottery, funds, stocks, FOREX, digital currency (Bitcoin), co-operative, or other investment were in low level.

The current financial burden was in moderate level. The utility bills were the highest among other cost of living.

Health and well-being was in low level. Respondents who were healthy and disease free were in high level, however, respondents who had chronic disease, not healthy, had a regular appointments 1-2 times a month, took a medication as prescribed by doctor on daily basis, and need help from others, not able to help themselves had mean in low level.

The overall mean of retirement plan was in low level. However, they can rely on the savings or return on investment in the retirement as the mean was in high level. While living in a nursing home or a care center for the elderly and hire someone to take care at home were in low level. So, respondents rely on the money that they earn before the retirement to live after the retirement.

The most channel used in study the specific content of interest was YouTube as the mean was in high level compared with other sources.

At the time that the research was conducting, respondents were satisfy in money that they. However, they still wanted to earn more money.

The support from government in sustainable management for retirement was in moderate level. Respondents put the importance on programs that support health care for the retirement, knowledge of finances and investments before the retirement, programs that support other financial planning for the retirement, programs that support savings and investment for the retirement, and programs for financial planning before the retirement, respectively.

According to the results, the researcher summarized the key issues as the objectives of the study as follow.

1. Attitude and behavior of aging people by analyzing the data from working age people. The results showed that respondents prepared for the retirement in moderate level especially the preparation for retirement, the channel used in study the specific content of interest, and current financial burden that should be in high or highest level. The government should support more in order to help working-aged people can live sustainably after the retirement.

Even though the satisfaction in money spent on living at the present was in high level, but they still wanted to earn more money which was in the oppose position. Therefore, the satisfaction did not reflect the actual needs in income.

Respondents had financial planning for retirement in high level, however, the understanding and learning in financial planning were in moderate level. Therefore, the retirement planning can be developed as it would enhance the learning process and the social would be self-improvement in the long run.

The channel that respondents used most was YouTube channel which reflect the behavior of working-aged people. However, the online channel apart from YouTube such as online classes, training, or seminars did not get enough attention. Respondents also access knowledge via books or articles in hardcopy form which reflect the traditional behavior of people in working age.

2. The planning and management approach in order to sustain the living in retirement age. According to the Table 2, respondents rated the required support from government in sustainable management for retirement with the mean of 3.23, which was moderate level. Respondents required the programs that support health care for the retirement the most. The rests were knowledge of finances and investments before the retirement, programs that support other financial planning for the retirement, programs that support savings and investment for the retirement, and programs for financial planning before the retirement, respectively.

Although the respondents rate the programs that support health care for the retirement the most, however, the researcher suggested that the government should focused on providing knowledge of finances and investments before the retirement and programs for financial planning before the retirement as the rising of people in retirement age had effect on the economics as a whole (Office of the Civil Service Commission, 2017).

Many organizations and business has the strategy that supports their employees to plan for the living after the retirement, especially the savings that is the most successful strategy (Choi et al., 2006). As the working-aged people had knowledge in financial planning for the retirement, they can plan for their incomes, expenses, and return on investment that they can use after the retirement effectively.

Apart from the knowledge in financial planning that is crucial, the programs for financial planning before the retirement is also important as the researcher believe that working-aged people in Thailand will be aware and start planning the plan for their retirement. Moreover, the programs that support health care for the retirement is also important as the healthy people leads to the happy life. According to Buranasing (1996) and King Mongkut's University of Technology Thonburi (2016) stated that if the retirement people are healthy, their financial burden will decrease. However, the knowledge in financial planning should be considered first as Kowhakul (2016) stated that the first priority of individual financial planning was the knowledge in financial management. The researcher also agreed that knowledge in this area will lead to the savings and investment for the retirement.

- 3. The problems before and after retirement by analyzing the data from working age people from 25 to 59 years old. The problems found from this study including the retirement plan for the retirement, health and well-being, and experience in savings and investment which were in the low level.
- 1) The retirement plan. It can be seen that the respondents did not have much problems in planning for the retirement as they were satisfied with the money spent on living at the present. Moreover, they already rate that they can rely on their savings and investment before the retirement. Therefore, the respondents might overlook the retirement plan.

As the results showed that they rely mostly on the savings, they must have the discipline in depositing money and the amount of money should be large enough to use in retirement. The investment in funds, Government Saving lottery, stocks, or other investment were in low level. It reflected that the working-aged people did not have much knowledge and experiences in investment for the retirement. They should consider more on diversification in order to meet the required return for the retirement. Moreover, Siritewankun & Sukcharoensin (2013) stated that in order get the most returns, it is best to start investing at an early age, not to invest near retirement.

2) Health and well-being. Even though the overall score of health and well-being was in the low level, the details within this topic showed that most of the working-aged people were healthy, take good care of health, and regularly exercise. The result seemed to be contradictory. However, it might be the opportunity to support working-aged people to take care of themselves.

3) Experience in savings and investment. The results showed that the experience in savings and investment was in low level whether buying Government Saving lotter, invest in funds, stock, FOREX, Bitcoin, co-operatives, or other investment. This reflected that there should be support on investment for the retirement for working-aged people apart from relying only on savings. This could be done by using the channel that was the most used such as YouTube.

Conclusion and suggestions

The researcher confirmed the original intention that the government and all relevant sectors should support and encourage working-aged people to learn about savings and investing for sustainable retirement. The researcher believed that nowadays social media has a huge influence and impact on people as the average score of the sample group's interest in learning and studying their interests through YouTube. However, it is not necessary to have online learning materials for every platform. There is no guarantee that all working-aged people will have access to and learn to all media that available online. Therefore, there should be an alternative media such as tangible documents provided to them as they might prefer reading books instead of using online media.

The most important results was that the working-aged people should be encouraged to invest early as they can have return on investment enough for the living after the retirement. However, all sectors including organizations, business owners, or employees should support the learning together with the government sector. Thus, the society can learn and develop the health and well-being of the retirement sustainably.

The needs of elders in the society should be study in the future research in order to examine the other needs in order to prepare for the next generation of ageing society. Moreover, longitudinal study that compared between older adults who are not prepared for retirement with older adults who are prepared for retirement can be done to test the importance of the financial planning.

New knowledge and the effects on society and communities

The research result suggested that working-aged people in the community should have financial planning in order to live carefree after the retirement sustainably. The better the planning, the more health and well-being are ensured. Then, it will lead to the sustainable development of the community and also the country.

References

- Choi, J. J., Laibson, D., Madrian, B., Brigitte, C., & Metrick, A. (2006). Saving for retirement on the path of least resistance. In E. J. McCaffrey & J. Slemrod J (Eds.) *Behavioral public finance: Toward a new agenda*. New York: Russell Sage Foundation.
- Dankul, W. (2014). The intergenerational exchange in family on subjective well-being among older persons: A case study of Lai Nan Subdistrict, Wiang Sa District, Nan Province (Doctoral dissertation, Chulalongkorn University). (In Thai)
- Department of Older Persons. (2018). *Annual report year 2018*. https://www.dop.go.th/th/implementaion/2/1/1159 (In Thai)
- Gusmano, M. K., & Okma, K. G. H. (2018). Population aging and the sustainability of the welfare state. In N. Berlinger, K. de Medeiros, & M. Z. Solomon (Ed.). What Makes a Good Life in Late Life? Citizenship and Justice in Aging Societies (pp. 57-61). The Hastings Center Report.
- Hamdani, S. K. (2012). The art of ageing. Bangkok: Plan Printing. (In Thai)
- Institute for Population and Social Research. (2018). *Situation of the Thai Elderly, Year 2018*. Retrive from
 - https://ipsr.mahidol.ac.th/ipsrbeta/th/ResearchProjectDetail.aspx?ProjectId=872
- Kaiyawan, Y. (2011). Fundamental of research (4th ed.). Bangkok: Suveeriyasarn. (In Thai)
- Kasemsuk, W. (2019). The guideline to promote lifelong learning for elderly school (Doctoral dissertation, Silpakorn Universi). (In Thai)
- King Mongkut's University of Technology Thonburi. (2016). *The national research plan, the eight issue*. Retrive from https://www.kmutt.ac.th/rippc/nrct59/14a3.pdf (In Thai)
- Kowhakul, M. (2016). Personal finance management affecting to the saving behavior of people in Bangkok Metropolitan Region. *Business Administration and Economics Review*, *12*(1), 128-149. https://www.rsu.ac.th/bae/index.php?/article/detail/70 (In Thai)
- Siritewankun, C., & Sukcharoensin, P. (2013). *Investment planning for retirement*. (Master's thesis, National Institute of Development Administration). NIDA Wisdom Repository database. (In Thai)
- Srinuan, K. (2016). A study of personal characteristics investment behaviors and investment motivation of Thai investors affecting decision making in the Stock Exchange of Thailand. (Master's thesis, Bangkok University). (In Thai)
- Srithamrongsawat, S., & Bundhamcharoen, K. (2010). Synthesis of long-term care system of the elderly in Thailand. Retrive from http://hdl.handle.net/11228/2902 (In Thai)
- Sroithong. C. (2022). *Basic information for the development of Chetsamein sub-district municipal administrative*. Retrive from https://www.gotoknow.org/posts/701037 (In Thai)

- Suwanna, T. (2021). The financial preparation for pre-retirement of informal labor in Bangkok and metropolitan area. *Humanities and Social Science Research Promotion Network Journal*, 4(2), 58-72. (In Thai)
- The Foundation of Thai Gerontology Research and Development Institute. (2016). *Elders situation report*. Retrive from https://thaitgri.org/?cat=8 (In Thai)
- The National Statistical Office. (2019). *Population distribution*. Retrive from http://statbbi.nso.go.th/staticreport/page/sector/th/01.aspx (In Thai)
- The Office of the Civil Service Commission. (2017). *Civil servants development plan for the aged society*. Retrive from https://www.dop.go.th/th/laws/1/34/817 (In Thai)
- The Office of the National Economic and Social Development Board. (2013). Strategic plan year 2013-2019, Office of the National Economics and Social Development Council.

 Retrive from https://www.nesdc.go.th/nesdb_en/download/article/article_20151016145556.pdf (In Thai)
- Thongphueng, P. (2013). Personal financial planning for retirement: A case study of school teachers under the jurisdiction of Bangkok Metropolitan Administration. (In Thai)
- World Health Organization. (2022). *Ageing and health*. Retrive from https://www.who.int/news-room/fact-sheets/detail/ageing-and-health

Tourism Service Management and Senior Foreign Travelers's Behavior in Thailand

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Abstract

This quantitative research studied factors in the management of the quality of life, received from tourism services by senior foreign travelers and their influence on reutilizing the services. A questionnaire was used, with a sample size of 400 senior foreign travelers. The statistics used were frequency, percentage, mean, and standard deviation. In addition, multiple regression statistics and Structural Equation Modeling (SEM) were also used. The results showed that overall, tourism management of senior foreign travelers in Thailand is of the highest level. The study found that the issue of medical/public health is of the highest level, followed by geography, service quality and the potential of tourist destinations. Travel experiences, and returning to use the service are of the highest level. Tourism management and satisfaction of travel experience positively influence senior foreign travelers's behavior on revisit intention at the statistical significance level of 0.05. The development of tourism management focusing on senior foreign travelers is one of the foci of Thai tourism policies. The age group is expected to expand and are a target age group with tourism potential in the future.

Keywords: Tourism service management, Tourism behavior, Senior foreign travelers, Quality of life, Revisit intention

Introduction

Recently, with the growth of tourism for recreation, adventure or learning the United Nations World Tourism Organization (UNWTO) was established to gather information on the business of tourism. The organization has several tasks,1) stimulating governments to provide suitable policies for tourism promotion leading to economic development, 2) promoting the expansion of the tourism market whilst being environmentally friendly, and 3) eradicating obstacles blocking the growth of the tourism industry.

In addition to UNWTO, there are several associations, Pacific Asia Travel Association (PATA), Caribbean Tourism Association (CTA), and ASEAN Tourism Association (ASEANTA) etc. which promote, service, and develop the tourism industry among the member states. At a national level the Tourism Industry Council of Thailand, The Association of Thai Travel Agents (ATTA), are responsible for inbound tourist-relevant regulations, setting targets for the development of the tourism industry. (ATTA, 2019).

Thailand is one of the countries, with a strong focus on tourism which generates a significant level of national income. Thailand has a great variety of tourism products and services, further facilitated by the Thai Chamber of Commerce, Tourism Industry Council of Thailand, and the Thai Tourism Board, all involved with the tourism industry variously, based on the policies of the Tourism Authority of Thailand as follow 1) promoting and persuading visitors to come to Thailand; 2) expanding the distribution of tourist attractions. 3) conserving and restoring cultural treasures and natural resources 4) develop tourism facilities and services of a high standard 5) increasing tourists' safety, 6) promoting domestic travel by Thais, 7) increasing the number of Thai workers in the tourism industry and, 8) encouraging people to widely participate in activities related to tourism development (Wanthanom, 2009).

Although, 2017 – 2018, was a good year for the tourism industry, generating income for Thailand, the sector still faces many problems and obstacles such as, the tourist boat sinking in Phuket and violence against travelers at entertainment venues, which affects tourism negatively and foreign travelers' confidence. The government tries to solve such problems by policy measures to build the confidence of foreign travelers, especially travelers from China. The data collected in 2018 showed that travelers to Thailand were 32.28 million people, with growth rate of 7.54%, most of them from China, 10.54 million people, with growth rate of 3.86%. The total revenue was 2 trillion baht, with growth rate of 9.43 percent and GDP share of 18.80 percent (Ministry of Tourism and Sports, 2018).

However, currently, the world is still experiencing problems with the outbreak of COVID-19 since 2020, which has severely affected tourism, because people are unable to travel to other countries freely. Consequently, the income generated by tourism around the world has decreased significantly. However, entrepreneurs involved in tourism business must find solutions to sustain their tourism business. Focusing on a new target group of travelers with potential is senior citizens, increasingly important to the tourism industry. This group of people are retired, have free time and the money to travel, also this group tends to stay at

tourism destinations longer than other travelers. The senior travelers traveling to Thailand, have a positive image of Thailand, Thais are nice and friendly to travelers. In addition, when compared with other countries, Thailand has low-cost tourism, has beautiful nature, beaches, and a distinct culture and history. However, increasing travel experience results in higher expectations for the creation of memories and good life experiences, and once in a lifetime events. Amnuay-Ngoentra (2016) and Sirgy et al. (2010) assert that travelers' quality of life is an outcome created by recreation, affecting well-being, when positive results in revisiting. In order to create a good quality of life and meet the needs of travelers, tourism should be developed as "Value with economic value" (Winyarat & Rimpranee, 2010) which gives travelers satisfaction with their travel experiences positively affecting their quality of life and thus repeat business.

Tourism is like an elixir and makes for relaxation, stress reduction, satisfaction, comfort, and happiness, associated with the concept "Tourism for the quality of life". COVID-19 has created the circumstance in which tourism can change to responsible tourism, a new form aiming for quality, inclusiveness and sustainable growth. Needing to develop the potential and strength of Thai SMEs, in the digital economy, to enable sustainable economic growth and solve the weakness of SMEs, through the concept of 3s strategies. Firstly, "Start, "development should focus on new entrepreneurs, start-up, and small enterprises to be strong and of an international standard. Secondly, "Strong," the development should focus on existing entrepreneurs to be able to adjust their business plans and competencies, systematically under government policies of competitiveness. And thirdly, "Sustainability," the development should focus on value creation of resources and energy, as much as possible with the least negative impact on the environment and promotion of development, innovation, and technology for sustainable benefit of society. This concept is also in line with the 3rd National Tourism Plan (2023-2027) that focuses on preparedness for change and risks, to meet sustainable growth, as well as the creation of internal strength by promoting domestic tourism, developing modern tourism through use of technology and innovation, scaling up the level of tourism-related staff and entrepreneurs understanding and adapting to the context of new normal tourism, as a break from the past.

These changes will lead to the development of a specific management plan for senior foreign travelers in order to comply with their lifestyle patterns and the behavior when using various services in the new normal after the COVID-19 recovery phase, and to cope with the expansion of the senior foreign travelers market which will become the main potential target of the Thai Tourism Industry in the future.

Objective

- 1. To study factors in tourism management for senior foreign travelers in Thailand
- 2. To study senior foreign travelers' quality of life as received from tourism services in Thailand
 - 3. To study senior foreign travelers' s behavior and intention of revisiting Thailand

Literature

The United Nations held a meeting in 1963 related to international travel and tourism in the city of Rome, Italy, and gave the definition of the word "Tourism" as " a journey to entertain and enjoy, visiting relatives, attending meetings. It is not an occupation and is not a permanent residence," while Jittangwattana & Srikampa (2014, 24) said that tourism management is facilitating services in accordance with the objectives and purpose of tourism and is consistent with goals, considering the real conditions. Including creating social and environmental guidelines, measures, and action plans that consider the conceptual framework of tourism that has been successful. Subsequently, The Office of Tourism Development (2003) described tourism as a trip for stress relief, seeking new experiences, provided that the journey is temporary and the traveler must not be forced to travel. While the Tourism Authority of Thailand (2009, 20) has said that tourism is a relational activity, with the movement of people from permanent residence to temporary residence for non-earning purposes and such activities may create a relationship between the people who travel and the people that service them, while Mill (Mill, 1990, 359) explains that tourism means organizing, all activities related to the service and creating satisfaction for tourists by giving meaning to tourism. The World Tourism Organization (W.T.O) (2015, 16) has concluded tourism means a person's journey from their normal place of residence to another place temporarily for not more than 1 year, to keep in touch, travel is voluntary, can be for recreation, business and other purposes, but not for making a career or earning money.

1. Travelers's satisfaction

"Satisfaction" is one of the main factors influencing the decision-making and behavior of tourists, especially their future behavior. Researchers in the past often used tourist satisfaction to reflect the quality of service at tourist attractions (Yoon & Uysal, 2005, 45 - 56), Maslow (Maslow, 1970, 112), describes how people use purpose-seeking pursuits to get something meaningful for oneself. Maslow asserts that humans are "animals with wants" and it is difficult to reach the point of complete satisfaction, because when a person is satisfied with one thing, the demand for other satisfactions continues, never ending. These are innate needs, which are arranged in order of demand from a First step, then up the hierarchy of needs, noting that the lower tiers must be filled before they can advance to the higher tiers respectively. Figure 1



Figure 1 Appling Maslow's concept of needs to satisfy tourists (Source: Maslow, 1970, 112)

2. Service quality

Kotler (2003, 438); Rust et al. (2004, 109 - 127) and Zeithaml et al. (2013, 89) have defined service quality similarly, in that it is the ability to meet the needs of a business or customers, and relates to the Marketing Mix, (1) Product (2) Price (3) Distribution channels, Sales (Place) (4) (Promotion) (5) Personnel (6) Process (7) Physical Environment and (8) Productivity and Quality. 1) A product is something that meets a human need, the seller offers to the customer and customer receives the benefits and value of the product 2) Price is a factor that shows the value of the product in money The customer is able to compare the value of the product and the price of the product, if the value is higher than the price the customer will decide to buy, so setting the price for the product, should be appropriate to the level of value of the product. 3) Distribution channel (Place) is a factor related to the ambiance when presenting products which effects customer perception of value and the benefits of the products offered. Marketing promotion is one of the factors that are important in communicating with customers, with the stated purpose to influence attitudes and behaviors in the decision to purchase the product; 5) People, staff are an important factor that alerts customers to the quality of service. Tourism and Hotel Business recruit conscientious personnel with a readiness to serve. 6) Process is the designing, planning, and provision of business service so as it does not cause confusion, works well, quickly and efficiently. 7) Physical environment is a criterion that helps in decision making in the use of services such as the beauty of tourist attractions, cleanliness, accommodation, the availability of equipment and facilities that can impress and build confidence in senior foreign travelers. 8) Productivity and quality is a success indicator that emphasizes both quantity and quality of goods and services, good value, and exceeds expectations.

3. Quality of life

Flanagan (1978); Cummins et al. (1998, 103) and Campbell et al. (2010) have described today tourists as traveling to meet their own satisfaction, escaping from the daily life to find new experiences, including visiting relatives or friends, relaxation, comfort, enjoyment, happiness and a better quality of life. Fekete et al. (2006, 299) and Puezko & Smith (2012, 218) argue that quality of life is an integrated component. The important components of quality of life are health and standard of living, Health being a multidimensional concept that relates to specific types of tourism, for example, emphasizing emotional well-being, yoga, spas, meditation. Health tourism that will positively affect the quality of life, when planning to travel to tourist attractions with the image of relaxed body and mind, reduced stress, a feeling of ease, relieved of aches and pains, happier and healthier. Quality of Life (QOL) can be studied at the level of individuals, families, communities, and regions and country. Quality of life relates to tourism activities. How does the experience of tourism affect the Quality of life? It has a positive impact on life in areas such as family life, social life, leisure life and cultural life. Tourism activities and its relationship with quality of life engages with all stakeholders, starting from the manufacturer, the supplier of the goods and services, leading to the concept of development tourism, with the aim of attracting tourists to return and there by generate income.

4. Senior travelers

Lohmann (1999, 54 - 64) notes the travel behavior of the elderly places importance on health, nutrition, quality of life, and care. Social activities of the elderly and routines are similar to other groups. Studies and forecasts are for travelers to become older and more significant. Senior travelers are approximately 55 - 75 years old. Sangpikul (2007, 39) in a study on tourism incentives for senior Japanese travelers in Thailand used the concept of motivating factors in tourism, focusing on internal factors, that is the needs of tourists searching for novelty, relaxation, and acquiring knowledge. The external factors that attracted attention were the charm of history, culture, tourism management, facilities, shopping, activities, recreation, safety and cleanliness of tourist attractions, etc., while Cathy et al. (2007, 1262) studied the social, economic, cultural and environmental conditions for senior travelers in two of China's major metropolises, Beijing and Shanghai. It was found that Chinese seniors attach great importance to frequent vacations and retirement tourism. The Thai Ministry of Tourism and Sports (2009, 63) collated information on the number of tourists that traveled around the world in 2008. There were 922 million tourists, 53% of total global travelers were in the European region, followed by the Asia-Pacific region, accounting for 20 percent of the world's travelers. The growth and expansion of tourists in the Asia-Pacific region will come from senior travelers. There will be about 700 million senior travelers. According to a study by Inthachak (2009, 84) domestic travel for senior Japanese found that tendency to expand more as a group tourism interested in cultural tourism.

Having gathered relevant information and conceptual frameworks (Figure 2 and 3) assumptions can be formulated:

- 1) Factors of medical/public health tourism management impacts the satisfaction of senior foreign travelers in Thailand. Statistically significant.
- 2) Factors of tourism geography management impacts the satisfaction of senior foreign travelers in Thailand at a statistically significant level.
- 3) Factors of tourism potential management impacts the level of satisfaction of senior foreign travelers in Thailand. Statistically significant.
- 4) Factors of service quality management impacts the satisfaction of senior foreign travelers in Thailand. Statistically significant.
- 5) Factors of medical/ health tourism management impacts the level of satisfaction of senior foreign travelers in Thailand. Statistically significant.
- 6) Factors of service quality management impacts the revisit intension by senior foreign travelers in Thailand at a statistically significant level.
- 7) Satisfaction with the travel experiences by senior foreign travelers in Thailand has a statistically significant effect on their quality of life.
- 8) Satisfaction with the travel experience by senior foreign travelers in Thailand affects the revisit intention at a statistically significant level.
- 9) The quality of life as related to health had a statistically significant effect on the revisit intention by senior foreign travelers in Thailand at a high level.

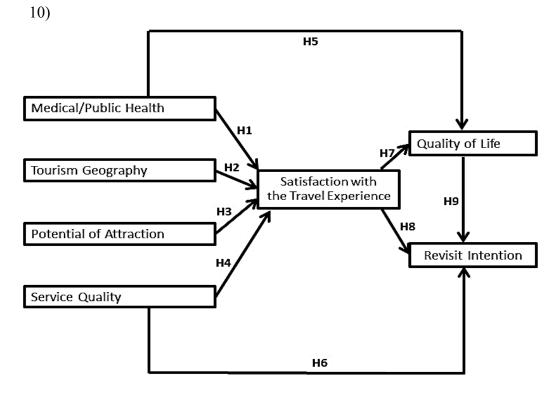


Figure 2 Research Hypothesis (Source : Researcher, 2023)

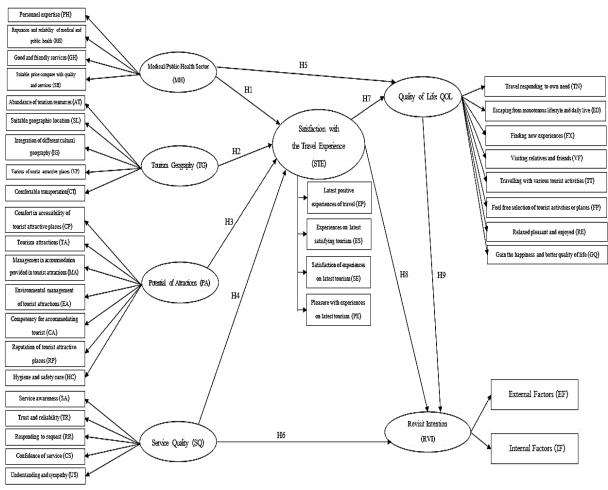


Figure 3 Conceptual framework used in research (Source : Researcher, 2023)

Methodology

The population used in this research is senior foreign travelers aged 55 years and over (WHO, n.a.), who come from East Asia, Europe, America, South Asia, Oceania, the Middle East, and Africa and have traveled to Thailand at least once. The sample group is based on the criteria of the number of variables in Hair et al. (2010) and is calculated from the ratio between the sample group and the number of variables. For the appropriateness of sampling, therefore, one variable should have at least 10 samples while total number of variables in this research is 36, the samples used for analyzing and collecting data are at least 360 people. The researcher, therefore, randomly selected another 40 people, resulting in increasing numbers of sample up to 400 people. The data were collected by using an online system that has been verified for the validity of the questionnaire by experts. This technique was selected based on the respondents' convenience, speed and safety, given the situation of the COVID-19 outbreak. It also allows the sample to receive questionnaires quickly and can get results in a short time. However, before doing the official data collection, the questionnaire has been tested as prior to data collection the questionnaire was assessed with 30 persons. The collected demographic data

were analyzed by the statistical software, to find percentage, mean and standard deviation. Multivariate analysis and Multiple Regression Analysis are applied to find the relationship among several variables, meanwhile Multiple Discriminant Analysis is applied to study several independent variables that directly or indirectly influence the creation of a structural equation model (SEM).

Results

The preliminary data analysis is the majority of foreign senior travelers come from East Asia, are male, aged between 55 - 60 years old, graduated with a bachelor's degree are married and have visited Thailand more than once. Table 1.

Table 1 Numbers and percentage of general information regarding respondents

(n=400)

			(n=40
Personal information	Grouping	Number	Percentage
Travelers' regions	East Asia	173	43.3
	Europe	56	14.0
	America	32	8.0
	South Asia	74	18.5
	Oceania	3	0.8
	Middle Asia	13	3.2
	Others	49	12.2
	Total	400	100.0
Sex	Male	198	49.5
	Female	194	48.5
	LGBT	8	2.0
	Total	400	100.0
Age	55 - 60 Years	326	81.5
	61 - 65 Years	49	12.2
	66 – 70 Years	9	2.3
	Over 70 years	16	4.0
	Total		100.0
Highest Educational	Less than Bachelor Degree	70	17.5
Attainment	Bachelor Degree	192	48.0
	Higher than Bachelor Degree	138	34.5
	Total	400	100.0
Marital Status	Single	101	25.3
	Married	255	63.7
	Separated	9	2.2
	Widowed	28	7.0
	Divorced	7	1.8
	Total	400	100.0
Experiences of travelling	1 time	38	9.5
Thailand	More than 1 time	362	90.5
	Total	400	100.0

The factors that the senior foreign travelers in Thailand were most satisfied with were medical/public health "Because I was impressed with the good and friendly service." Factors in tourism geography, "I was impressed with variety of tourist attractions." Factor of the potential of tourist attractions, "I was impressed with the reputation of a tourist attractions and the quality of service." Service quality, "I was impressed with the understanding and empathy of service providers." Table 2.

Table 2 The overall level of opinions about tourism management factors of Foreign Senior Travelers in Thailand

Tourism management factors of senior	Mean	S.D.	The overall level
foreign travelers in Thailand			
Medical/Public Health	4.51	0.63	The most
Tourism Geography	4.48	0.64	The most
Potential of Attractions	4.26	0.71	The most
Service Quality	4.27	0.67	The most
Total average	4.38	0.66	The most

In terms of satisfaction with trip experience impressed with having a full rest. Receive positive service and attitude from the attraction, including the great deals of the attraction, generate positive satisfaction and delight with the recent travel experience which can be described as shown in Table 3.

Table 3 The overall level of opinion about satisfaction with trip experience

Satisfaction with the travel experience	Mean	S.D.	The overall level
Latest positive experiences of travel	4.27	0.71	The most
Experiences on latest satisfying tourism	4.39	0.68	The most
Satisfaction of experiences on latest tourism	4.37	0.69	The most
Pleasure with experiences on latest tourism	4.04	0.55	High
Total average	4.26	0.65	The most

Senior foreign travelers are highly satisfied with their overall quality of life during their travel experience in Thailand. Especially in terms of relaxation, comfort, and enjoyment. With gaining new experiences, traveling whilst meeting their own needs, having the freedom to choose activities/attractions, getting enjoyment from escaping the monotony of everyday life. Table 4.

Table 4 The overall level of opinion about quality of Life of senior

Quality of life of senior foreign travelers	Mean	S.D.	The overall level
Travel responding to own need	4.34	0.59	The most
Escaping from monotonous lifestyle and daily live	4.27	0.83	The most
Finding new experiences	4.35	0.74	The most
Visiting relatives and friends	3.80	1.01	High
Travelling with various tourist activities	4.15	0.91	High
Feel free selection of tourist activities or places	4.31	0.71	The most
Relaxed pleasant and enjoyed	4.46	0.66	The most
Gain the happiness and better quality of life	4.28	0.73	The most
Total average	4.28	0.69	The most

Regarding the likelihood or return visit by senior foreign travelers, the overall satisfaction was the highest. Especially as it related to external factor, the price of products and services being appropriate. Building interest with attractive sales promotions and well-placed advertising and publicity. In addition, there was the great satisfaction as it related to internal factors, creating the desire to return in the future. Including being willing to incur additional expenses from tourism and would recommend telling others to travel more in the future to Thailand. Table 5.

Table 5 The overall level of opinion about senior foreign travelers on revisit intention, on external and internal factors

Revisit Intention	Mean	S.D.	The overall level
External Factors			
Access to advertising and continuous public relations	3.99	0.83	High
Interested in sales promotions	4.04	0.83	High
Product pricing and service is appropriate	4.14	0.74	High
Internal Factors			
Wanting to travel again and again in the future	4.42	0.59	The most
To recommend and tell others to come and travel	4.35	0.73	The most
Being willing to spend more	4.16	0.80	High
Total average	4.18	0.75	High

From the confirmatory factor analysis, it was found that the medical/public health factors, tourism location, the quality of service and satisfaction with recent travel experiences is positive. Wanting to travel again and again in the future, revisiting to use the service again is statistically significant at the 0.05 level. Table 6 and 7.

T 11 (C 1	CC	C .1	1	. 11
Lable 6	Correlation	coefficient of	of the	latent	variable

	MH	TG	PA	SQ	STE	QOL	RVI
Mean	4.51	4.48	4.26	4.27	4.28	4.28	4.29
SD	0.63	0.64	0.71	0.67	0.55	0.69	0.61
MH							
TG	0.140**						
PA	0.197**	0.171**					
\mathbf{SQ}	0.225**	0.191**	0.256**				
STE	0.147**	0.222**	0.270**	0.287**			
QOL	0.106*	0.115*	0.144**	0.207**	0.354**		
RVI	0.164*	0.134**	0.153**	0.115*	0.239**	0.161**	

^{**}p-value <0.01, *p-value <0.05

Table 7 Relationship between external and internal variables positively affecting intention to return for quality of life by senior travelers in Thailand

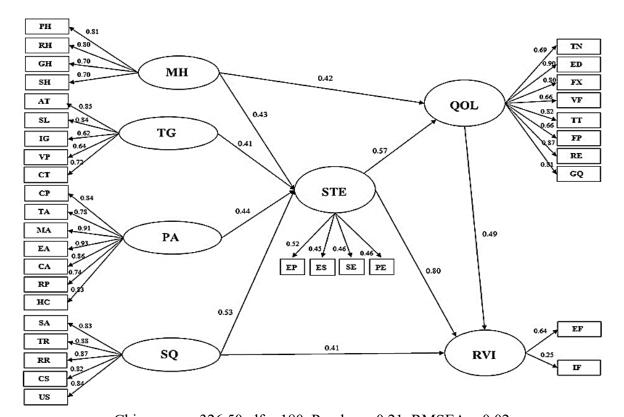
Latent Variable		Unstandardized		Standardized	Adjusted R ²	t	Sig.
		Coefficients		Coefficients			
		В	Std. Error	Beta			
	(Constant)	2.522	0.352			7.162	0.000**
external	MH	0.002	0.049	0.002	0.200	0.039	0.000**
	TG	0.067	0.048	0.071	0.150	1.397	0.000**
	PA	0.069	0.045	0.079	0.290	1.526	0.000**
	SQ	0.014	0.048	0.015	0.300	0.288	0.000**
	STE	0.251	0.050	0.170	0.600	5.033	0.000**
	QOL	0.069	0.046	0.078	0.529	1.501	0.000**
internal	RVI	0.108	0.043	0.123	0.630	2.530	0.000**

^{*} p-value <0.05, ** p-value <0.01

From the analysis of the model based on the research and comparing the consistency between the developed model and the empirical data the statistical values used to check the concordance consisted of chi-squared values (χ^2), relative chi-squared values (χ^2 /df), relative conformity index (CFI), and statistical values. harmoniousness (GFI), adjusted harmoniousness index (AGFI), and root mean square of error of estimation (RMSEA). The results of the analysis showed that there is a consistency between the developed model and the empirical data. The researcher has adjusted the model (Model Modification) by considering the recommendations for parameterization in the model with Model Modification Indices: MI. (after model adjustment) Table 8 and Figure 4.

Table 8 Model consistency index causal and outcome relationship of returning behavior for quality of life of senior foreign travelers in Thailand (after model adjustment)

Statistics used in	Criteria used for consideration	Calculated	Result of
inspection		value	consideration
χ^2	There was no statistical	326.50	-
	significance at the 0.05 level		
df	-	180	-
p-value	p > 0.05	0.21	-
χ^2/df	$\chi^2/df < 2$	1.81	pass the criteria
CFI	≥ 0.95	0.97	pass the criteria
GFI	≥ 0.95	0.97	pass the criteria
AGFI	≥ 0.95	0.96	pass the criteria
RMSEA	< 0.05	0.02	pass the criteria



Chi-square = 326.50, df = 180, P-value = 0.21, RMSEA = 0.02

Figure 4 Results of the causal and correlational model analysis of the service with intention to revisit for the quality of life of senior foreign travelers in Thailand. (After modifying the model)

Discussions

Tourism management factors of senior foreign travelers in Thailand are of 4 levels of importance: medical/public health. tourism location, the potential of a tourist attraction, and quality of service. This is consistent with the senior foreign travelers in Thailand wanting cover in medical/public health (Medical/Public Health), Thailand has applied forms of treatment and health promotion to increase the variety of health care services and tourism entrepreneurs have brought natural and alternative medicine for health tourism. This is in line with the principles of medical theory that emphasize health prevention rather than disease treatment integrating alternative medicine in private hospitals, nursing centers or spa establishments, For receiving the service travelers will mostly likely choose health tourism activities or rehabilitation in natural attractions. to further a feeling of relaxation of the whole body and promote better health (Erfurt-Cooper & Cooper, 2008, 5) list factors that induce foreign travelers to choose health services in Thailand: 1) expertise, 2) services, 3) reasonable prices, 4) tourism, and 5) available information. (Lau & Mckercher, 2004, 41)

Prueksikanon et al. (2008, 94 - 95) studied the competitiveness of medical tourism industry. The study found that currently, Thailand is a center for medical care and medical tourism in Asia with a higher market share than other countries in the region. Thailand's important foreign patient markets are Asia-Pacific countries such as Australia, ASEAN, Japan, etc., although medical tourism is a relatively small market compared to other foreign patient markets. It is mainly driven by the private sector. Pattharapinyophong & Sukpatch (2019, 5 - 12) Studied the opportunities and challenges of Thailand becoming a center of medical tourism in the ASEAN region. The study found that Thailand has many capabilities and resources. The tourist infrastructure as well as the natural and cultural attractions available in Thailand are world-class and attract travelers from around the world. And the growth of the medical tourism industry has been an economic phenomenon, resulting in many countries in Southeast Asia such as Singapore and Malaysia being interested in and competing in the medical tourism sector. But Thailand has several competitive advantages, Thailand is known as a popular tourist destination and its reputation has promoted medical tourism to the extent that tourism is partially the basis for medical tourism (Burkett et al., 2007, 223; Kelly & Connell, 2013)

Satisfaction with the travel experience is positive. Thailand has managed tourism factors appropriately to meet the needs of tourists by utilizing the concept of "satisfaction" one of the main factors influencing tourists' decisions, especially the future decisions of tourists to return, with tourist satisfaction reflecting the quality of service provided by tourist attractions. (Yoon & Uysal, 2005, 45 - 56) by Maslow (Maslow, 1970, 112) has explained that people search for the meaningful experiences in life and where there is a need, desire, gain something meaningful to oneself there is motivation to achieve 1) physical satisfaction, 2) safety, 3) needs satisfaction, and 4) self-esteem 5) Satisfaction with true self-understanding. This is in line with research by Devesa et al. (2010, 547), which examined tourism incentives affecting tourist satisfaction in local tourist destinations in Spain. The study found that local tourist attractions

in Spain attract foreign elderly tourists of which there are 4 categories: tourists looking for natural recreation, cultural tourists, nature tourists, and tourists who return for other reasons or purposes such as meeting friends, relatives, family, etc., Satisfaction directly correlated with tourism incentives and the service provided at the tourist attractions. Those that responded to the needs of tourists the most both in terms of attractions and service is had the highest level of tourist satisfaction.

The quality of life of senior foreign travelers is very important. It also influences the decision to return Subjective QOL uses social science indicators, such as life satisfaction, happiness, physical well-being, quality of life, etc. Currently, traveling on their own to escape from the monotonous lifestyle daily life to find new experiences visiting relatives or friends and doing business, etc. When satisfied, they will be happy and consider a return visit. Having a better life and quality of life is the heart of tourism management, including perceived overall feelings of well-being, The 3 important elements of quality of life are health, living standards and well-being (Cummins et al., 2012). Living standards, senior foreign travelers must have income to some degree to travel. Most of them are people with a good financial status and live in the western hemisphere. Tourism also improves the quality of life of senior foreign travelers on many levels. (Puezko & Smith, 2012). Combining personal success self-development and social responsibility in the quality of life. The Global Wellness Institute (2007) also proposed that the overall quality of life includes physical, spiritual, intellectual, emotional, social and occupational dimensions.

Kotler et al. (2006, 121) states that the structure of the world's population has changed. into an aging society as a result, long stay tourism or tourism with long-term stays whose purpose is recreation is very popular in the 21st century due to the "Baby Boomer" era entering retirement age from work This population has very high purchasing power. ability to spend money No worries about costs because they are experienced in life, they are careful when choosing to buy various products and services. Therefore, the tourism patterns and behaviors that are characteristic of retired or elderly tourists are: (1) emphasizing tourism and good quality services; (2) considering the value of buying the service (3) wanting confidence in safety (4) wanting confidence in the service. (5) Need activities that are suitable for age and health.

Senior foreign travelers' behavior on revisit intention is very important. It is a situation where a person uses the product more than once. The patterns of reusing the service are diverse. Factors for reusing services consist of external factors arising from the tourism business, such as advertising, public relations, promotions, setting prices of products and services. transportation of goods, etc., in order to create a market. Internal factors of tourists, namely consumer attitudes towards a brand, the number of purchases per person and duration of purchase per time and demographic characteristics, using the service repeatedly arises from the satisfaction of tourists, which, according to Lennon et al. (2001, 51 - 62), Internal sources of information, including personal experience. or learning from the experiences of others This is derived from collecting word-of-mouth information about services provided by other organizations to consumers. and external sources of information such as advertising, various publications, with knowledge and understanding of that information consumers will be able to

decide what they should buy or use. Loyalty that arises from the behavior of consumers who have the intention or want to come back again and again may be regarded as a commitment to return to use the service or purchase again. Therefore, customer loyalty is a valuable asset. by returning to use the service repeatedly and by word of mouth to friends and family members businesses save on the cost of acquiring new customers. According to Lovelock et al. (2005, 37) and Chen & Tsai (2007, 1115). Especially nowadays word of mouth is important. In business competition, whether it is a business service, recipients are not just an individualized service, but is a service to the network of service recipients. The reason why word of mouth is very important in today's travel services (Rosen, 2000, 72) is due to 1) tourists cannot receive news 2) tourists must communicate with each other. By defining the key factors to measure tourist loyalty (Robinson & Etherington, 2006, 6-8) are 1) repeat travel, 2) recommendation and 3) willingness to pay more. Therefore, to create tourism satisfaction of senior foreign travelers. which is an emerging market that has high growth potential in the future. Because it is a quality market and has higher purchasing power than tourists in the general market, the senior travelers have different travel styles and behaviors from general tourists. The focus must be on travel and services that are of good quality, worthwhile, focusing on buying for reasons, not emotions, giving priority to satisfaction. Senior stay longer than other groups of travelers, have the ability to purchase services at high prices from having saved money from working hard all their lives, They choose activities that are appropriate for age and health.

Senior people often have more travel requirements than young people. Therefore, preparation to support this market group needs to be studied in detail. At the same time, many ASEAN countries, such as Singapore, are accelerating their overseas marketing efforts to attract and increase their capacity to support the expansion of the senior traveler market. Because they see business growth opportunities and trends from behavioral changes of consumers who turn to pay attention to health care to prevent disease, including anti-aging for beauty The Malaysian government grants senior citizens from Japan the right to enter the contry without a visa. And get other privileges like Malaysian old people to attract old people into the country, etc. (Bangkok Business, 2014, 62) and in line with the research of Choi (2007) to study and search for information on the leisure travel behavior of Chinese people. The study found that behavior of mainland Chinese people who come to travel in Macau. Most travelers decide to travel by searching for attractions on the website. Most Chinese travelers go online to search for tourist attractions. According to a survey of 3,220 Asian travelers traveling between July and September 2005, 1,725 travelers chose to visit Macao for the reason.

Conclusion and suggestions

Most of the incoming senior foreign travelers come from East Asia, and they prioritize Thailand's tourism management in terms of medical/public health. Senior foreign travelers choose to use health services in Thailand, because there are doctors with expertise, good service and reasonable price.

The diverse and dynamic locations of tourism in Thailand gives a very positive contribution to the recent travel experiences of senior foreign travelers and makes travel very popular and delights senior foreign travelers with their latest travel experiences.

Quality of life of senior foreign travelers in Thailand is improved by giving satisfaction through relaxation, comfort and enjoyment, and new experiences from traveling that meet their needs. Having the freedom to choose activities and attractions brings more happiness, making senior foreign travelers feel that they have a better quality of life especially to escape the daily way of life, while some of them can be visit relatives or friends at the same time.

When satisfied with the impressive travel experience, it is not difficult for senior foreign travelers to have the desire to return to use the service again in the future for sure. Because they are satisfied with the pricing of products and services that are appropriate.

In order to have a positive effect on the Thai tourism industry after the COVID-19 situation it is necessary for government and private sectors to accelerate their strengths and improve the weaknesses in tourism management in terms of service quality, the potential of a tourist attraction, create incentives for senior foreign travelers. In addition, it must help strengthen business operators in the tourism industry to have liquidity and increase channels to expand more target groups especially the development of tourism management methods in a specific format for the senior foreign travelers. To be consistent with their life choices and behavior when using a variety of services under the new normal tourism, and to support the expansion of the senior foreign travelers market, which will be the main target that will generate income and has potential for the Thai tourism industry in the future.

New knowledge and the effects on society and communities

This research found that senior foreign travelers who come to travel in Thailand will pay attention to the factors of medical tourism management/public health and is an incentive to come back to use the service again and again. Therefore, all sectors involved in the tourism industry must study the forms and methods to integrate operations across agencies that promote tourism, such as tourism by the Ministry of Tourism and Sports. Provincial Office of Tourism and Sports with entrepreneurs working together to organize tourism activities for senior foreign travelers. Including coordinating with other regions to promote tourism in little known regions, both in terms of marketing and public relations. There should be a study to prepare tourist guides for senior foreign travelers.

The final take away is that Thailand is well placed to become a destination of choice by senior foreign travelers due to a world standard health care system, an open and friendly people, the high quality of life it offers to the tourists and diverse natural and cultural attraction that can be incorporated into any travel arrangements. Such a combination of factors, along with the push for the development of the sector will ensure senior foreign travelers will return again and again.

References

- Amnuay-Ngoentra, S. (2016). Value Added Creation in Hotel Business with Blue Ocean Strategy. *Silpakorn University Journal*, *36*(1), 1-23. https://so05.tci-thaijo.org/index.php/sujthai/article/view/57574/47696 (In Thai)
- Association of Thai Travel Agents (ATTA). (2019). Development Plan of Tourism Industry in Short and Long Term. Bangkok: Association of Thai Travel Agents. (In Thai)
- Bangkok Business. (2014). Tourism Market of Senior: New Opportunity of Thailand for AEC. *Bangkok Biz News*, *3*(153), 2 (In Thai)
- Burkett, V. S., & Cleeland, C. S. (2007). Symptom burden in cancer survivorship. *Journal of Cancer Survivorship*, 1(2), 167-175. DOI: 10.1007/s11764-007-0017-y
- Campbell, S. C., Novick, A. C., Belldegrun, A., Blute, M. L., Chow, G. K., Derweesh, I. H., Faraday, M. M., Kaouk, J. H., Leveillee, R. J., Matin, S. F., Russo, P., & Uzzo, R.G. (2010). Guideline for management of the clinical T1 renal mass. *The Journal of urology*, 182(4), 1271-1279. doi: 10.1016/j.juro.2009.07.004
- Cathy, H. C. H., Cai, L. A., & Wong, K. K. F. (2007). A model of senior tourism motivations—Anecdotes from Beijing and Shanghai. *Tourism Management*, 28(5), 1262-1273. https://doi.org/10.1016/j.tourman.2006.09.015
- Chen, C.-F., & Tsai, D. (2007). How destination image and evaluative factors affect behavioral intentions?, *Tourism Management*, 28(4), 1115-1122. https://doi.org/10.1016/j.tourman.2006.07.007
- Choi, S. (2007). *Information search behavior of Chinese leisure travelers*. United States Indiana: Purdue University.
- Cummins, K. L., Murphy, M. J., Bardo, E. A., Hiscox, W. L., Pyle, R. B., & Pifer, A. E. (1998). A Combined TOA/MDF Technology Upgrade of the U.S. National Lightning Detection Network. *Journal of Geophysical Research*, *103*(D8), 9035-9044. https://doi.org/10.1029/98JD00153
- Cummins, R. A., McCabe, M. P., Romeo, Y., & Gullone, E. (2012). The Comprehensive Quality of Life Scale: Instrument development and psychometric evaluation on tertiary staff and students. *Educational and Psychological Measurement*, *54*, 372-382. https://doi.org/10.1177/0013164494054002011
- Devesa, M., Laguna, M., & Palacios, A. (2010). The Role of Motivation in Visitor Satisfaction: Empirical Evidence in Rural Tourism. *Tourism Management*, 31(4), 547-552. https://doi.org/10.1016/j.tourman.2009.06.006
- Erfurt-Cooper, P. & Cooper, M. (2008). *Health and Wellness Tourism: Spaand Hot Springs*. Bristol, UK: Channel View.
- Fekete, A., Viklický, O., Hubáček, J. A., Rusai, K., Erdei, G., Treszl, A., Vítko, Š., Tulassay, T., Heemann, U., Reusz, G., & Szabó, A. J. (2006). Association between heat shock protein 70s and Toll-like receptor polymorphisms with long-term renal allograft

- survival. *Transplant International*, 19(3), 299-306. DOI: 10.1111/j.1432-2277.2006.00265.x
- Flanagan, J. C. (1978). A Research Approach to Improving Our Quality of Life. *American Psychologist*, 33(2), 138–147. https://doi.org/10.1037/0003-066X.33.2.138
- Global Wellness Institute. (2007). *The Global Wellness Tourism Economy 2007*. Retrieved form http://www.globalwellnesssummit.com/images/stories/pdf/wellness tourism economy exec sum final 10022013.pdf
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis*. (7th ed.). New York: Pearson.
- Inthachak, M. (2009). Cultural Tourism in Thailand for Japanese Elderly Tourists. *Journal of International and Thai Tourism*, *I*(1), 1-10. (In Thai)
- Jittangwattana, B & Srikampa, P. (2014). *Sustainable Tourism Development*. (2nd ed.). Bangkok: Thammasan. (In Thai)
- Kelly, S. P., & Connell, R. G. O'. (2013). Internal and External Influences on the Rate of Sensory Evidence Accumulation in the Human Brain. *Journal of Neuroscience*, 33(50), 19434-19441. DOI: https://doi.org/10.1523/JNEUROSCI.3355-13.2013
- Kotler, P. (2003). *Marketing Management*. (11th ed.). Upper Sanddle River, New Jersey: Pearson Prentice-Hall.
- Kotler, P., Ned, R., & Tony, L. (2006). Alleviating Poverty: A Macro/Micro Marketing Perspective. *Journal of Macromarketing*, 26(2), 233-239. https://doi.org/10.1177/0276146706291039
- Lau, L. S., & McKercher, B. (2004). Exploration versus Consumption: A Comparison of First-time and Repeat Tourists. *Journal of Travel Research*, 41 (3), 279-285. https://doi.org/10.1016/S2212-5671(16)00076-9
- Lennon, R., Weber, J. M., & Henson, J. (2001). A Test of a Theoretical Model of Consumer Travel Behavior: German Consumers' perception of Northern Ireland as a Tourist Destination. *Journal of Vacation Marketing*, 7(1), 51-62. https://doi.org/10.1177/135676670100700105
- Lohmann, M., & Kaim, E. (1999). Weather and holiday destination preferences image, attitude and experience. *The Tourist Review*, *54*(2), 54-64. https://doi.org/10.1108/eb058303
- Lovelock, C., Wirtz, J., Ken, H. T., & Lui, X. (2005). *Service Marketing in Asia*. (2th ed.). Singapore: Prentice Hall.
- Maslow, A. (1970). Motivation and personality. New York: Harper & Row.
- Mill, C. (1990). *Tourism: The international business*. N.J.: Prentice Hall International, Englewood Cliffs.
- Ministry of Tourism and Sports. (2009). *Thai Tourism Statistic* 2009 2010. Retrieved from http://www.mots.go.th/ewt_dl_link.php?nid=7114 (In Thai)
- Ministry of Tourism and Sports. (2018). *The Expansion of Tourists Travelling to Thailand*. Bangkok: Ministry of Tourism and Sport. (In Thai)

- Pattharapinyophong, W. & Sukpatch, K. (2019). The Development of Medical Tourism in Thailand. *Liberal Arts Review, 13*(25), 12-20. https://so04.tci-thaijo.org/index.php/larhcu/article/view/143829/106420 (In Thai)
- Prueksikanon, W., Phuangsaichai, S., Tianteerawith, P., Rauechai, V., Kanchanakaroon, P., Puttawong, P., Himakalasa, W., Kantawongwarn, K., Promkutkeo, S., Phunnarong, S., Boonyasana, P., & Kaewmanee, P. (2008). Competitiveness of Thailand's Health Tourism Industry (Medical). *In Document of 8th Chaing Mai University Academic Converence Research Path: the Path to the Future* (pp. 94-95). 22-23 November 2008. Chiang Mai University Convention Center. (In Thai)
- Puezko, L., & Smith, M. (2012). An analysis of tourism QOL domains from the demand side. In Uysal, M., Perdue, R. R. & Sirgy, M. J. (Eds.). *Handbook on tourism and quality-of-life: enhancing the lives of tourists and residents of host communities* (pp. 263-278). New York: Springer. DOI:10.1007/978-94-007-2288-0 15
- Robinson, S. & Etherington, L. (2006). *Customer Layalty: A Guide for Time Travelers*. New York: Palgrave Macmillan.
- Rosen, E. (2000). *The Anatomy of Buzz: How to create Word-of-Mouth Marketing*. USA: Doubleday.
- Rust, R. T., Lemon, K. N., & Zeithaml, V. A. (2004). Return on marketing: using customer equity to focus marketing strategy. *Journal of Marketing*, 68(1), 109-127. DOI:10.1509/jmkg.68.1.109.24030
- Sangpikul, A. (2007). Travel motivations of Japanese senior travellers to Thailand. *International Journal of Tourism Research*, 10(1), 81-94. https://doi.org/10.1002/jtr.643
- Sirgy, M. J., Robin, N. W., Lee, D.-J., & Yu, G. B. (2010). Developing a Measure of Community Well-Being Based on Perceptions of Impact in Various Life Domains. *Soc Indic Res*, 96(2), 295-311. DOI 10.1007/s11205-009-9479-9.
- The Office of Tourism Development. (2003). *Tourism meaning*. Retrieved from https://tourismatbuu.wordpress.com./Tourism (In Thai)
- Tourism Authority of Thailand. (2009). *Thailand Domestic Tourism Statistics 2009 Ministry of Tourism and Sport*. Retrieved from: https://www.mots.go.th (In Thai)
- Wanthanom, C. (2009). Tourism Industry. Bangkok: 3 Lada Publisher. (In Thai)
- Winyarat, P., & Rimpranee, S. (2010). Worth for Economic Value. Bangkok: Thailand Political Information Center. (In Thai)
- World Tourism Organization. (2015). *Making Tourism More Sustainable-A Guide for Policy Makers*. Madrid: UNWTO.
- Yoon, Y. & Uysal, M. (2005). An Examination of the Effects of Motivation and Satisfaction on Destination Loyalty: A Structural Model. *Tourism Management*, 26(1), 45-56. https://doi.org/10.1016/j.tourman.2003.08.016
- Zeithaml, V., Berry, L., & Parasuraman, A. (2003). The Behavioral Consequences of Service Quality. *Journal of Marketing*, 60(2), 31-46. https://doi.org/10.1177/002224299606000203

Measures to Promote Creative and Safe Online Games for Children and Youth Through a Collaboration Network

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Abstract

Nowadays, children and youth have easy access to online games. Inappropriate online gaming can be harmful to young people. As a result, the purpose of this research study is to study the situation of online games and online gaming among children and youth, and to create a network of collaboration in order to develop measures to promote creative and safe online games for youth through research and development (R&D). The findings revealed that Thai children and youth play more online games, and Thailand still has legal restrictions on online game services. The measures to promote creative and safe online games for children and youth are based on the principle of "controlling and promoting", which consists of (1) controlling the manufacturing process; (2) controlling the process of providing online game services; (3) surveillance and supervision; (4) promoting the production of creative and safe games; (5) promoting secure gaming online. The implementation of measures requires mechanisms at both the policy and operational levels; It should be implemented in a network affiliate manner to promote the products and services of creative and safe online games for young people.

Keywords: Gaming policy, Juvenile, Online game, Creative game, Safe game

Introduction

One of the world's fastest-growing industries is gaming. In 2019, data from gaming industry analytics firm Newzoo revealed that the global gaming industry was worth two and three times more than the global music and film industries in the same year, with a market capitalization expected to exceed \$218 billion by 2023 (Marketeer, 2021). This is consistent with the widespread use of internet gaming in today's world. According to a survey of the critical factors of the ever-increasingly popular online games, the first is that the Internet is now more accessible and faster, allowing people to play online games from anywhere. According to the Digital Stat Thai 2021 survey, 69.5% of Thais had Internet access in early 2021, which is higher than the global average. That internet users will be ranked fifth in the world in 2020. (Peer Power, 2020). Another critical factor is e-Sports, a sport derived from online games that is becoming more popular. Thailand's e-sports industry is expanding, as it ranks first among the top five countries in terms of live gaming streaming on Facebook, demonstrating its popularity. Another factor is government support, which resulted in the establishment of the Thailand E-Sports Federation (TESF) in 2017, causing Thailand's gaming industry to grow even more as a result of the creation of many new gaming careers (Peer Power, 2020). Besides this, several educational institutions offer esports and game development courses in order to produce a large number of professionals to feed the industry (Lao, 2018), demonstrating the gaming industry's support in all forms and capacities.

The expansion of the online gaming industry is beneficial to the economy. However, given the social and public health consequences, there is a problem that needs to be addressed and prevented, particularly among vulnerable teenagers who play video games constantly and ignore school. They are so preoccupied with the game that they have no interaction with the people around them, which leads to violence (Ramsutra, 2014; Pengpan, 2017). Regarding the hidden dangers of online games, some children might be persuaded to spend money. It was found that some children spend more than 5,000 baht per month (The Social Communication Group, Office of the National Health Commission, 2021). They are lured into gambling hidden in the game and tempted to lose property or be sexually harassed by people in online gaming. However, some types of online games can positively affect children and young people, such as entertaining, promoting thinking, technology, and teamwork skills, and observing strategy games and etiquette. Furthermore, playing online games can generate income and create careers for children and youth (Radio and Media Association for Children and Youth, 2021; Phewku, 2017). In fact, it is impossible to prohibit children and young people from accessing online games, while so many online games are still inappropriate for children and youth, and there are still dangers lurking in online gaming, such as the previously mentioned negative effects of playing online games on children and youth. Therefore, it is critical to promote creative and safe online games for children and adolescents. In terms of society, Thailand still has some good news. As it has been discovered, some game developers are becoming increasingly aware of the importance of social gaming and service, such as dealing decisively

with aggressive and rude players in games. or adding a menu to assist players in the game, such as adding assistance for colorblind players or having captions for the deaf, etc.

Theories concerning children's and youth's online gaming

According to the literature review, an increasing number of Thai children and youth are playing online games. A study of 3,292 students in grades 1-6, Vocational Certificate, and Advanced Certificate found that 85.18% played online games, 88.57% were male, and 83.93% were female. The study also discovered that 69.79 percent of people played games almost every day. (Social Communication Group Office of the National Health Commission, Social Communication Group, 2021) The following theories can explain children's and youth's online gaming behavior.

Neo-Freudians of Alfred Adler, one of his most important ideas of Adler is the concept of superiority and inferiority, in which he believes Human beings have one important motivation: "Striving for superiority," the desire to be outstanding. It is associated with feelings of inferiority and the pursuit of compensation. Adler believes weakness makes humans have "inferiority feelings," trying to compensate for their inferiority. In addition, if the online gaming behavior of children and youth is described under these concepts, it may be due to the need to compensate for the inferiority of real-world sense of self-worth or social power, including aiming to win in the game fiercely. It made him unable to manage himself properly in the game (Davis & Palladino, 2002; Kaewkangwan, 2018). It may be due to the need to seek out more significant clues.

Abraham Maslow's Theory of Needs explains that human motivation arises from five hierarchical needs (Costa & McCrae, 1994; Kaewkangwan, 2018). It starts from Physiological needs, Safety needs, Belongingness and love needs, and Esteem needs, and the highest is the need to develop one's capacity to achieve self-actualization. This concept can be used to describe the needs that cause the motivations of children and youth playing online games at various stages, such as the need for security. This is because some children may feel that the in-game society is safer than the outside society in which they may be bullied or undervalued. They need love and praise from people in the game society as game-winner. Even some teenagers have a clear purpose in life to use online games for a career. However, they should be moderately adapted to meet their gaming needs. They should start by understanding to what extent they do not meet their needs by choosing a way to satisfy them to meet their needs, instead of obsessing over the game alone.

Carl Rogers' Self Theory discusses the key elements that cause the formation of the behavior and personality of a person (Coon & Mitterer, 2008; Kaewkangwan, 2018). The first element is (1) Organizing valuing process, Roger believes ambient experiences affect the development of a person's values. Suppose the children are in a safe environment full of love and care; in that case, they will express the experience positively and develop positive values. (2) Positive regard from others and Self-regard, The self of a person develops from interaction with the environment. When children learn which behaviors will be acceptable to others, they will choose to show that behavior. Moreover, a person will begin to learn to accept himself from his perception that others accept him. (3) The condition of worth in which a person will feel that they are valuable when he can accept himself. There is no sense of self-worth when used to describe a child who escapes from the real world and immerses himself in the world of online games. The real world does not make him feel worthwhile or feeling not accepted by others or unable to look at themselves positively in the real world.

Therefore, he turns into the world of games that help him feel more tangible or valued, especially by family members. Feeling valued will help him develop into a person with positive values and be able to control his behavior in the right direction.

Behaviorism focuses on the environmental factors that influence a person and how to condition the stimuli that motivate the person to act. Key theories in this group are Classical conditioning and Operant conditioning (Pavlov, 1960; Skinner, 1938, 1953; as cited in Palmer, 2003). The classical conditional theory describes behavior caused by two stimuli together. In terms of online gaming, the behavior of children and young people arises from how a person associates a game stimulus with the positive feelings experienced by the player. It is a condition that encourages the wanting to play the game because of the happiness that will be received. It includes how online games are linked with colorful and virtual in-game elements or society the children pursue. It becomes a familiar stimulus that encourages them to play more. The operant conditioning theory emphasizes the effects of reinforcement after a person exhibits a behavior from this concept when children play games and become happy, a feeling of self-esteem or feel accepted, thus, becoming a positive reinforcement that makes children play more games.

The socio-Ecological Model by Bronfenbrenner (1977) believes that a person's behavior results from the interaction between the person and their surroundings which determines the behavior of children in playing games appropriately or inappropriately. It is a result of various factors, including individual, organization, community, and public policy, such as the upbringing of parents and schools as well as the gaming industry and social media that encourage children to become more interested in online games. This concept is in line with Jiamjai Srichairatanakul and the others (Srichairatanakul et al., 2020), who also discussed online game playing of children and young people, by explaining this concept as playing games causes them to release dopamine, a neurotransmitter of happiness. Therefore, they want to play more games, especially when other stimuli such as phone calls, friends, and family of children who lack discipline make children pay more attention to games. It was also found that many children obsessed with games have problems in family relationships, causing them to stress and turn to games and having friends who support playing games. The social condition has a stimulus to encourage children to turn to games.

Social control theory proposes social control or organization to prevent members from violating social norms or engaging in deviant behavior (LaPiere, 1954). There are two types of social controls, namely, *internal control*, which arises from the ability to learn and be trained and makes a person see the need to comply with the norms of society. Moreover, they need to practice until it becomes a habit; *external control* uses methods such as rewards when meeting social norms and punishment when violating social norms, including providing education and training and various incentives.

According to the review of the aforementioned theories, there were factors in both psychological and social dimensions that influenced children and youth to play online games, which if playing online games that are inappropriate and unsafe will inevitably have a negative impact on children and youth who are vulnerable groups. For prevention According to the social control theory concept mentioned above, it should be noted that appropriately controlling online games for children and youth necessitates both internal control and external control, such as providing education, training, or discipline to children and youth to help them gain

control of their behavior in order to play online games responsibly. As for external controls, this is achieved through measures that include both promotion and appropriate sanctions to ensure the production and delivery of creative and safe online games for children and young people, in order to avoid the negative consequences and harm that may occur as a result of children and youth playing online games.

Prior review

In Thailand, there are numerous studies that provide guidelines for preventing problems associated with online gaming among Thai children and young people. For example, the research of Patcharaporn Hongsibsong and others (Hongsibsong et al., 2014) has proposed ways to strengthen cooperation among schools, families, and communities in order to encourage children and youth to spend their free time productively and to organize creative activities for children and youth. Finally, game store employees must be trained in ethics in order to raise awareness and social responsibility. In addition, research by Pirongrong Ramsutra (Ramsutra, 2014) proposed the role of each sector in preventing and resolving problems of online game addiction among Thai youths: (1) The government should impose a rating system and organize training and treatment programs for game addicts. (2) Parents should help their children develop their knowledge, understanding, and rules for playing online games. (3) Civil society focuses on educating children and their families about online media literacy. (4) Schools should focus on enhancing youths' knowledge and understanding of online games. (5) Mass media should disseminate accurate and creative information about online games. (6) In the game industry, the rating system should be used as part of rules, regulations, etiquette, and professional norms.

Based on a review of previous research, It was revealed that the majority of the studies proposed policy approaches or guidelines for problem prevention. However, no research studies have been found to formulate measures with concrete driving mechanisms and practical guidelines, and the majority of the guidelines are aimed at preventing game addiction in children and young people. Studies that focus on promoting creative and safe online games for children and young people, on the other hand, have yet to find a study that offers a concrete approach. This is in accordance with the relevant literature review. It was found that there is still a lack of integration between various departments involved in collaboratively promoting creative and safe online games for children and youth. As a result, the focus of this research study is on reducing the negative impact of online gaming on children and youth. by promoting creative and safe online games for them.

Methodology

According to the literature review and related research, Thailand still lacks concrete measures to promote creative and safe online games for children and youth. As a result, the purpose of this study is to (1) study the online gaming situation of Thai children and youth. (2) examine national and international online gaming policies, regulations, and laws, and (3) establish a collaborative network in developing measures to promote creative and safe online games for children and youth. Research and Development (R&D) was used as the research methodology, with a focus on solving problems from practice in order to produce products that are useful and expandable. The emphasis is on developing a cooperative network at every stage of research and development to provide concrete measures for promoting creative and safe online games for children and young people through harmonious collaboration among network partners.

Research and Development process and Participants

The research and development process is divided into five steps, with each step emphasizing the establishment of a cooperative network. A purposive sampling method was used to select 82 participants. The following are the research methods and participants in each step.

- **Step 1 (R1)** is a research process in which relevant knowledge is analyzed and synthesized.
- 1) Documentary Research, in which researchers analyze and synthesize relevant documents, including Thai and foreign literature, relating to the nature and form of the problem, the factors related to the problem, as well as the impact of online gaming on children and youth in Thailand and abroad, including policies, measures, and laws relating to online games in Thailand and abroad.
- 2) In-depth interview, to gather information about the current state of online gaming, current measures or practices, and proposals for problem prevention. The 44 participants included (1) 20 students from four primary and secondary schools, (2) student families, (3) five representatives from educational agencies, (4) two officers from the Royal Thai Police, (5) five experts in adolescent psychology and psychiatry, (6) eight stakeholders, and (7) three online game operators.
- **Step 2 (D1)** is a step in framing and developing measures to promote creative and safe online games for Thai children and youth. Six workshops were held. Participants included experts in psychology and sociology, as well as representatives from the Ministry of Culture, the educational agency, and law enforcement, for a total of 5 participants.
- **Step 3 (R 2)** examines the systems and mechanisms for implementing measures and reviews their effectiveness. Ten participants were experts and representatives from various sectors involved in preventing and resolving issues related to online media or online games.
- **Step 4 (D2)** is a step in which measures are improved and developed. The researchers held four workshops, totaling 5 people, with experts in psychology, psychiatry, law enforcement, and experts from the sector that will implement the measures.

Step 5 is the dissemination step, which is critical for driving the enhancement of the measures developed from the research study. Using the method of meetings, seminars, and dialogue. Participants in this step include representatives of social networks from both the public, private, and civil society sectors who have experience dealing with the prevention and treatment of children and youth's use of online media, as well as stakeholders in the measures' implementation, totaling 15 people.

The research and development process can be summarized as shown in Figure 1.

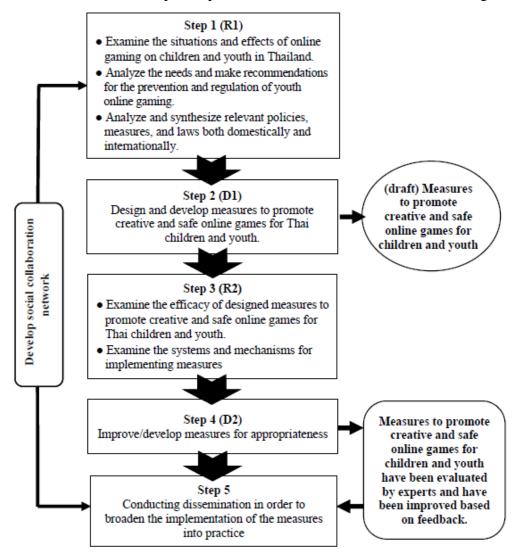


Figure 1 Display the research and development (R&D) process in action

Data Analysis and Creditability

Data analysis employs qualitative content analysis. The analysis steps were as follows: (1) identifying and collecting data, (2) determining coding categories, (3) coding the content, (4) checking validity and reliability, and (5) analyzing and presenting results. Using Triangulation for research findings credibility consists of (1) checking from multiple sources whether the data from research groups and documented data are consistent or have the same conclusion or not, (2) examine analyses from multiple investigators and experts, and (3) examine the same data from various theoretical perspectives to see if it affects the interpretation of the data.

Research Ethics

Before collecting data, this study was reviewed by the Human Research Ethics Committee (Institutional Review Board: IRB), faculty of Social Sciences, Police Cadet Academy, book number SSRPCA-REC no. 2-016/2564. The researcher gave the participants preliminary information about the study by using the participant information sheet and showing their consent to participate in the research on the Informed consent form.

Results

The following are the findings of research studies on important issues that are consistent with research objectives:

1. Thailand's online gaming situation

1.1 The current situation of online games in Thailand, It was found that more than 90% of online game producers who provide services in Thailand are foreign companies with Thai distributors. Most online games available today are addictive, challenging, beautiful, and more realistic, with group play from all over the world on the same platform. Online games come in a variety of forms. There are violent and competitive games, as well as creative games that focus on problem-solving or planning skills, with cryptocurrencies serving as the center of exchange in the games. Other than manufacturers and distributors, game designers, and graphic designers, there are people in the gaming market who use online games for their careers, such as game streamers or game casters, and these occupations are idols of the new generation of Thai children and youth. Furthermore, there is no legislation in place to supervise or regulate these occupational groups.

"Currently, games are virtual. It's similar to when we watch movies, everything in the game is almost like a film, the game's resolution immerses players more." (representative of the ministry of culture)

1.2 The situation of Thai children and youth who engage in online gaming, according to the study, the rate of Thai children and youth has increased over the last 6-7 years, particularly during the COVID-19 outbreak. It was discovered that junior high school students were the most active players of online games. However, among elementary school students, the age of children and youth playing online games is rising. The study also found that the games chosen by children and young people, mostly males, are frequently violent and inappropriate for the age of the players. Female students, on the other hand, prefer less intense games. Furthermore, more than 85% of youth between the first and second grades play online games, and a third of them play online games every day, with 10% playing games for more than five hours per day. This demonstrates how much time is spent playing online games. Concerning the control of online gaming by Thai children and youth, the family situation has evolved into a more urban society. Some families raise their children by providing them with a cell phone or tablet, or the parents themselves are role models for online addiction. As a result, children are more likely to engage in online gaming.

"I play all the time; as soon as I finish my homework, after school, I call my friends and invite them to join the game." (youth group)

- "...but at the same time, being a parent with no time... working alone, throwing the iPad when their son cries..." (specialist in sociology)
- **1.3 Online gaming's hidden dangers,** it was also found that there are hidden dangers with online games, such as online games that use cryptocurrencies, which is a game style to buy tokens first. and whoever wins will receive the prize money, which is a form of gambling. There is also a lot of gambling among people playing online games. Cheats hidden in the game pornography Including the society in the game may be tempting. or fraud can see examples of girls being seduced by playing games with unknown people in the game. causing in addition to the loss of assets may also be tempted to commit sexual harassment.

"There are dangers all over the Internet, the girls were duped. Even though it is obvious that the players spend a lot of money on the game, he occasionally claims that he also makes money from it, as a result, it is hidden gambling." (specialist in education)

2. Proposals from collaboration networks to promote creative and safe online games for Thai children and youth.

The researchers emphasize the importance of social networks in developing measures to promote creative and safe online games for Thai children and youth, which research findings The following key discoveries were made:

2.1 Controlling the process of providing online game services that are appropriate for children and youth.

"If we control the origin and destination, they will only get what is good and right." That is, the law must regulate producers to determine what level of control they have and allow them to operate, but it must not be overly burdensome." (representative of the civil society)

- Clearly defining the scope and level of control. It should cover both the manufacturing and service processes. For example, the control should be age-appropriate, manage threats or deceptions, and determine the level of intensity, which should be set appropriately while not imposing too many restrictions on the gaming industry.
- Controlling online game content that is harmful to children and youth, as well as preventing impersonation or unwanted behavior after online gaming, such as violent games with gambling-related content, is emphasized, and appropriate penalties should be imposed. Among the key proposals for implementing measures to control online game content are establishing online game ratings for children and youth, as well as encouraging entrepreneurs to self-certify in accordance with the framework established by the Ministry of Culture. Finally, develop technology to monitor or control the content, which should be used to monitor inappropriate game content in order to promptly block the dangers or negative impacts caused by online games of children and youth.
- A screening system in the game to limit the playing time of children and youth. It has proposed collaborating with game developers to use technology to verify and limit the age of online gamers, which should be able to filter to some extent to prevent children and youth from playing inappropriate or unsafe online games. It specifies the minimum age for making financial transactions related to the game. Furthermore, there may be a system in place

to limit the amount of time they spend playing the game. There is currently no law requiring online game operators to implement such a system.

- **Provide information about online game services notification.** The online game service provider should provide notification information on the online game service so that parents can help monitor and determine which games are appropriate for their children's ages. They should also be informed about the potential risks associated with gaming.
- Communicate and build understanding with entrepreneurs at various stages of establishing measures or improving the law that should allow entrepreneurs to participate. As a result, they will create understanding and guidelines for standard practices to protect children and young people from playing online games creatively and safely without impeding the growth of the gaming industry, particularly games that are creative and useful for children and young people.
- Communicate and build understanding with online game-related professionals such as game casters or game streamers who make a living presenting or advertising games to a large number of young fans. According to the findings of the study, some professionals use inappropriate communication, such as profanity or misbehaving. The practical guidelines emphasize asking for cooperation. Additionally, families and educational institutions should keep an eye on following these presentations to prevent children or youth from imitating unwanted behavior.

2.2 Promoting the development and distribution of creative and safe online games for children and youth.

"A creative and safe online game is one that contains no violent content and is appropriate for the age and development of students of various ages... It is a game that broadens children's learning horizons and fosters the development of various potentials and skills." (representative of education)

- *Identify the characteristics of creative and safe online games*. The definitions from the research study are as follows:

"Creative online games for children and youth" should promote education and learning while also assisting in the development of potential and skills including academic, calculation, creative, analytical thinking, planning, and problem-solving. The game should aid in the development of professional skills, the promotion of a positive culture, the development of personality, the development of muscles, and the creation of positive emotions.

"Safe online games for children and youth" must not contain violent or harmful content nor encourage them to imitate deviant or inappropriate behavior, such as causing aggressive behavior based on violent game content. Imitate criminal methods, be indistinguishable from the real world, and so on. Safe games should provide a warning of potential hazards or caution to the purchaser.

- **Promote the development of creative games.** Policies or measures should be implemented for the development or availability of creative and safe online games. It not only promotes the online gaming industry for the benefit of the country, but it also assists in the protection of children's and youth's welfare.

- Encourage education in the development of safe and creative games. Online game production and design courses, particularly in higher education, should be promoted in order to produce graduates who can support current and future world changes. These graduates should be instilled with a code of ethics in game production and design or gaming-related careers, focusing on the financial benefits while also taking social responsibility into consideration.
- Allocate budgets to promote the production of creative and safe games. Encourage Thai game developers to have investment opportunities and the potential to produce more creative and safe games both in the design, production, and marketing processes. In this regard, the government should advance an adequate budget support policy while promoting products that provide a balance of economic and social benefits.

2.3 Monitoring for children's and youth's safe and creative online gaming.

"All departments, all parties, including parents and society, should be monitoring and strengthening media literacy skills or games on social media." (Representative of Education)

- Understanding children and youth in the digital age. Instead of directing or controlling children or youth, the emphasis should be on optimizing behavior and building consensus.
- Raise public awareness about online games and create a network of collaborative surveillance. To promote online game literacy, the government and related agencies should promote and support training courses, learning materials, and public relations through a variety of channels. Families, society, and relevant agencies must work together to monitor online gaming that may harm children and youth or expose them to the inherent dangers of online gaming.

2.4 Establishing or improving laws governing online games.

"There must be a law to regulate this, as well as cooperation in taking the law seriously and organizing online games." Strictly limiting the age of gamers for children and youth does not suffice and leads to undesirable behavior." (specialist in psychology)

- Establishing specific game laws. According to the research study, Thailand does not have a specific law on online gaming, unlike some other countries that have laws governing the game as well as child and youth protection laws. Alternatively, even in the absence of specific legislation, strict measures to control game content, such as time limits, will be implemented in some countries, such as China. As a result, some key informants believe that Thailand requires specific game laws to protect children and youth. Some may argue, however, that having specific laws may limit the growth of the gaming industry.
- Expand existing laws to include online gaming. The Ministry of Culture is currently revising the Film and Video Act B.E. 2551 to make it more modern and relevant to today's digital society. The emphasis is on resolving the problems of children and youth who play online games. Improving the law's content to include online games can also be accomplished by incorporating cooperation from relevant agencies to help optimize the law. This approach is entirely feasible.

2.5 Establish a network of partners to promote creative and safe online games for Thai children and youth

"It has to have a policy unit, and the horizontal unit in policy coordination, as we said, and the horizontal coordination may also go hand in hand in the manufacturing sector to help each other, or in law enforcement, they must help each other. (Representative of the Ministry of Culture)

In order to achieve efficiency in implementing research-based measures and promoting creative and safe online games for children and youth. Mechanisms at the national policy level, the government, should be linked to operational-level mechanisms that operate on the same plane of cooperation among different sectors. Agencies or groups of people, such as parental networks, education, mental health, legal, social and cultural sectors, as well as business or private sectors, should work together.

3. The development of measures to promote creative and safe online games for children and youth.

The finding of document analysis and analysis of proposals or needs of participating network partners. Table 1 summarizes the specific details of the measures.

Table 1 Measures to promote creative and safe online games for children and youth

Guidelines of Implementation				
(1) Determine strategies for controlling online digital content.				
(2) Specify the type of game to be controlled, with an				
emphasis on games that are inappropriate and insecure for				
children and young people.				
(3) Define features or levels of control over online game				
content in a clear manner.				
(4) Provide guidelines for categorizing games by age range				
(rating categories).				
(5) Build understanding with game operators to see the				
importance of measures and cooperation.				
(1) Establish guidelines for online game operators to follow				
when publishing and serving games, with important				
information prominently displayed for users.				
(2) Build understanding and discuss with game operators to				
see the importance and jointly determine the guidelines for				
displaying information for users.				
(1) Supervise, monitor, and randomly inspect online game				
services and games used in e-sports activities, both produced				
in Thailand and imported from abroad.				

Measure

Guidelines of Implementation

- (2) Notify law enforcement agencies If an online game service is found to be an offense under the Computer Crime Act or the Consumer Protection Act, or other relevant laws.
- (3) Utilize contemporary technologies to simplify censoring or screening online games.
- (4) Develop channels for people to make complaints or report clues.
- (5) Establish a network that enables civil society to participate in monitoring, tracking, and examining inappropriate and insecure online game content.
- 4. Promote and encourage the production of creative and safe online games for children and youth.
- (1) Promote and support the gaming industry which benefits the economy, society, culture, and national security, while keeping a balance between profit and social benefit.
- (2) Promote Thai game developers and encourage the production and development of creative online games for children and youth, including online games used in e-sports activities
- (3) Collaborate with online game developers to create mechanisms or features that make online games secure and appropriate for children and youth.
- (4) Encourage the establishment of funds or fundraising efforts to promote the development of creative and safe online games for children and youth.
- 5. Oversee and safeguard children and youth from the dangers posed by online gaming.
- (1) Establish guidelines for surveillance and investigation of potential threats associated with online games. They may consider guidelines for defining payment gateways for providing transparent online game services for Thailand.
- (2) Cooperate with game operators to develop procedures to prevent online game users from gaining unauthorized access to the personal information of others.
- (3) Collaborate with law enforcement. If any online game service or action that is an offense under the law is revealed hidden with the service, the emphasis on legal proceedings should be swift and serious in order to protect the welfare of children and youth.

An efficient drive mechanism is required in driving measures to promote creative and safe online games for children and youth as proposed above. The mechanisms at the policy level should have clear policies to promote and support working mechanisms at the operational level. Supporting the development of laws that can be enforced covering online games, in particular, or requiring specific laws relating to online games. Including the development of a mechanism to drive in the form of network partners, which necessitates the development of a strategy to strengthen the network in order for it to operate collaboratively.

Discussions

- 1. The situation of online games among children and youth, the trend of playing online games among children and youths has increased. This corresponds to an increase in the number of online gamers and participation in e-sports competitions. One of the reasons is the ongoing support of the public and private sectors, although some segments of society may oppose the development of online gamers and E-Sport competitions as a career, it must be recognized that this type of business can generate a good income for players. Furthermore, the liberalization of the online gaming industry will allow it to expand, causing children and youth to receive more public relations media in this regard. This issue appears in a study by the Department of Children and Youth Affairs, the Ministry of Social Development and Human Security (2020), online media had the second greatest influence on the decision to play online games among young people, following the solicitation of friends or families who are unfamiliar with online gaming and does not have enough time to raise their children, including failing to teach children to be disciplined when playing online games. As can be seen, a variety of factors influence children and young people's interest in playing online games. This is explained by the Socio-Ecological Model, which holds that a person's behavior is determined by their relationship with their environment. At the individual and community levels, the environment is a factor, as are organizational and societal factors at the macro level (Bronfenbrenner, 1977).
- 2. Proposals from collaboration networks to promote creative and safe online games for Thai children and youth, including (1) controlling the process of providing online game services that are appropriate for children and youth, (2) promoting the development and distribution of creative and safe online games for children and youth, (3) promoting the development and distribution of creative and safe online games for children and youth, (4) creating or improving online gaming laws, and (5) stablishing a network of partners to promote creative and safe online games for Thai children and youth. The previously mentioned offer This is consistent with the social control theory concept (LaPiere, 1954), which proposes social control to prevent members from violating social norms or behaving defiantly. The network partners' proposals are quite consistent with external control, proposing laws and procedures for the relevant authorities to control the production and service of online games. and monitoring to prevent children and youth from engaging in destructive online gaming and endangering themselves. In addition, proposals from network partners who are involved in research on various issues from research studies. There is a trend toward wanting to regulate

online games without negatively impacting the national economy; that is, there must be a balance between promoting creative online games business and social benefits. particularly to protect the welfare of children and youth. There must be a mechanism in place that can function properly and rely on the cooperation of network partners from various sectors.

3. The development of measures to promote creative and safe online games for children and youth. Measures to promote creative and safe games for children and youth are classified into five categories: (1) regulate the content of appropriate online games for children and youth, determining the type of game that should be controlled, (2) establish guidelines for displaying critical information to users concurrently with online game services, (3) track and examine offensive and dangerous online game content, (4) promote and encourage the production of creative and safe online games for children and youth, and (5) supervise and protect children and youth from the dangers of the internet. Measures 1, 2 and 3 are related to the control of online game services. These measures focus on content control appropriate for children and youth, which has been monitored under the control framework by appointing the Ministry of Culture as the primarily responsible body. It is consistent with Phirongrong Ramsutra's (Ramsutra, 2014) study, which discusses the role of government organizations in regulating online games. Part of this is the enactment and enforcement of laws and measures. The Ministry of Culture is in the process of improving existing laws and enforcing them to cover the subject of online games, seeking guidelines for grading the suitability of computer games and online games, including surveillance and inspection, and in accordance with the legal measures governing or controlling that online game. Furthermore, according to Arthit Wongyarit's (Wongyarit, 2010) study, the definition of the Film and Video Act B.E. 2551 should be expanded to include online games, and the rules and procedures for reviewing and permitting should be improve. Additionally, all agencies and sectors should collaborate to enhance consumer protection awareness, particularly, among children and youth.

In terms of measures 4 and 5, the Ministry of Digital Economy and Society is primarily responsible for utilizing network partner cooperation to support the operation, primarily to protect children from the hidden dangers associated with online games. It necessitates the cooperation of law enforcement agencies such as the Royal Thai Police or the Office of the Consumer Protection Board (OCPB). These two sub-measures emphasize the importance of striking a balance between promoting a creative and safe gaming industry and social responsibility in preventing children and youth from using online gaming services. However, it was discovered that the applicable law may still have limitations. It is consistent with the research study of Pharunyu Kaewkla and Rung Srisomwong (Kaewkla & Srisomwong, 2017), who investigated the legal principles for the protection of consumers who use online game services. It was discovered that there is no specific law to be enforced. It discovered a problem with false advertising to invite them to play online games or is unable to make consumers understand the essence. It includes the use of unfair messages or certain conditions that cause consumers to misinterpret the essence and have no power to negotiate with the business operator. As a result, this study proposes a law to bridge the gap and protect consumers from being exploited, including educating consumers about their rights and responsibilities and striking a balance between promoting the economy and protecting consumers at the same time.

Concerning the mechanisms proposed in the research findings for driving measures to implementation, the emphasis is on the connections between mechanisms at the policy and practice levels, including the operation of a cooperative network, which is consistent with the study by Thipwimon Saengsuwan (Saengsuwan, 2018), which mentioned the achievement of networking in accordance with the set goals of cooperation and good relationships by having a solid network. It increases the likelihood of problem-solving, policy advocacy, and the creation of power or bargaining power. The important thing is to establish a process of continuous learning and development. In this regard, the benefits of cooperation networks in implementing measures from this study are a synergy by bringing together the potential of various sectors to help prevent and solve problems more effectively than having one agency operating alone or each unit operating separately.

Conclusion and suggestions

The rising rate of game industry growth is one of the critical situations related to Thai children and youth playing online games. Most online games' interfaces have been improved to make them more addictive, challenging, and realistic, including the creation of an online game society in which players from all over the world can play on the same platform. Furthermore, in today's Thai families, parents rarely have time to care for their children. As a result, children are more likely to play games online. Because the majority of online game manufacturers are foreign, it is difficult to control game content. At the same time, there are hidden dangers that come with online games in a variety of ways, such as gambling cheats embedded in the game, pornography, and the society in the game that may be tricked or defrauded. Furthermore, while it has been declared that e-sports are professional sports, there is no law directly regulating online games, which is distinct from other countries according to this study, some countries have specific laws governing online games. Despite the lack of specific legislation in some countries, each has a separate agency in charge of overseeing the online gaming service. For proposals from network partners involved in research on a variety of issues arising from this study, there is a trend toward wanting to regulate online games without negatively impacting the national economy; that is, there must be a balance between promoting creative online games business and social benefits, particularly to safeguard the well-being of children and youth. There must be a mechanism in place that can function properly and rely on the cooperation of network partners from various sectors.

The findings of the proposals submitted by network partners participating in the research, as well as the findings of the document analysis, indicate that "Controlling and Promoting" is the main principle that guides the development of measures to promote creative and safe online games for children and youth. The "Control" section is concerned with overseeing the manufacturing process and providing online game services, including the approval of games appropriate for children and youth. The emphasis in the "Promotion" section is on promoting the development of creative and safe games for children and youth, as well as creating a safe online environment for threats associated with online gaming. This crucial conclusion resulted in the establishment of all five sub-measures, as well as the

identification of the primary responsible person. Collaboration from mission-based social networks is required, and each sector must draw on its own expertise and experience. Furthermore, a mechanism for driving at the policy level is required. Furthermore, a mechanism for driving at the policy level is required. The government should develop policies and strategies to support the serious and continuous implementation of measures. In particular, it may consider having a specific agency to achieve unified operations while focusing on the integration of cooperation from relevant agencies in cooperating with this specific agency. Figure 2 displays conceptual conclusions related to the development of measures to promote creative and safe games for children and young people.

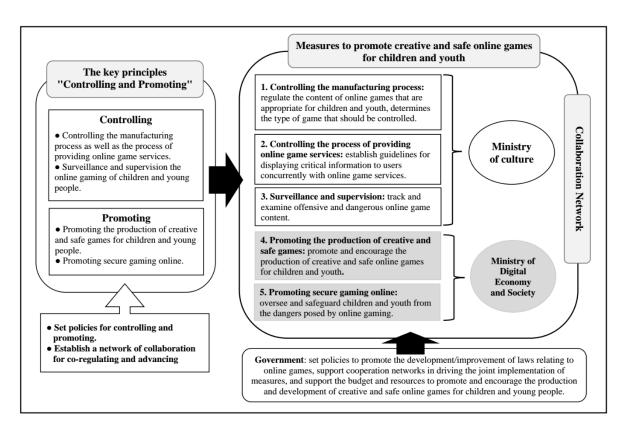


Figure 2 the relationship between the key principles of "Controlling and Promoting," as well as the establishment of measures to promote creative and safe online games for children and youth in Thailand

In order to drive the measures in the same direction, policy should be communicated to the operational level before they are implemented. The person with the primary responsibilities outlined in the measure should communicate continuously and on a regular basis to foster understanding and cooperation among network agencies, ensuring that the measures are consistent and mutually supportive. To enable the implementation of measures to cover children and youth throughout the country, the Ministry of Education should oversee the implementation of measures to cover both children and youth in the education system and informal education. Departments at the policy level of other ministries related, such as the Ministry of Social Development and Human Security, should have a clear policy for implementing relevant guidelines based on research

findings in order to proceed with children and youth who are not enrolled in the Ministry of Education's education system by cooperating. Another significant offer is that online game business operators, including game casters and streamers, should keep a balance between profit and social responsibility in protecting children and young people from the harm caused by gaming, while also recognizing the reduction in risk of deviant behavior from inappropriate online game content and imitation of undesirable behaviors. Furthermore, those who have a close relationship with children and youth, such as parents and teachers, should seek knowledge and understanding about children and youth who play online games. It also teaches children and youth how to distinguish between creative and non-creative games, as well as how to play online games responsibly.

New knowledge and the effects on society and communities

The new knowledge gained from this research is the "key principles" used to formulate measures to promote creative and safe online games for Thai children and youth, namely "Controlling and Promoting", which focuses on controlling online game services to be creative and safe for children and young people without employing overly strict controls that will limit Thailand's game industry's expansion. At the same time, it focuses on promoting the development of creative and safe games for children and young people, with the goal of stimulating the Thai economy without causing social problems. This principle resulted in the development of "measures to promote creative and safe online games for Thai children and youth", which clearly define the guidelines that Thailand had never imposed before. In addition, the relevant cooperation network partners have established a mechanism to drive cooperation in the implementation of measures. In addition, as part of the R&D process, the researchers formed a collaborative network to make proposals and contribute to the development of these measures. The positive effect is networked participation in the development of measures recognizing the impact of online gaming on children and young people, as well as obtaining guidelines for implementing the measures obtained from research studies in accordance with the agencies' roles and missions, including the establishment of a cooperative network to jointly push the measures toward policy formulation and more directionally focused guidelines. Finally, the researchers delivered the measures to the Ministry of Culture for application of measures to improve laws, rules, or regulations in order to effectively implement the ministry's mission of promoting the creative online game industry, as well as protecting children and youth from online game threats.

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References

- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*. 32(7), 513 531. DOI: 10.1037/0003-066X.32.7.513
- Coon, D., & Mitterer, J.O. (2008). *Introduction to Psychology: Gateways to Mind and Behavior*. 4thed. Belmont, CA: Wadsworth.
- Costa, P. T. Jr., & McCrae, R. R. (1994). Set like plaster? Evidence for the stability of adult personality. In T. F. Heatherton & J. L. Weinberger (Eds.), *Can personality change?* (pp. 21–40). *American Psychological Association*. https://doi.org/10.1037/10143-002
- Davis, S. F., & Palladino, J. J. (2002). *Psychology*. (3rd ed.). Upper Saddle River, NJ: Prentice-Hall, Inc.
- Hongsibsong, P., Toemsombatthaworn, N., & Narinrat, S. (2014). Need to solve the problem of the online games and internet of young people in Du Tai municipality, Nan. *RMUTP Research Journal*, Special Issue. 119-124. http://repository.rmutp.ac.th/handle/123456789/1676 (In Thai)
- Kaewkangwan, S. (2018). *Theory of personality psychology*. (17th edition). Bangkok: Folk healers. (In Thai)
- Kaewkla, P., & Srisomwong, R. (2017). Legal measures to protect the rights of online game service users. *Journal of Humanities and Social Sciences*, 6(1), 1-19. https://so05.tcithaijo.org/index.php/MFUconnexion/article/view/241292 (In Thai)
- LaPiere. (1954). A Theory of Social Control. New York: McGraw-Hill.
- Marketeer. (2021, 12 February). *Game Industry: The more you play, the more you grow. Business opportunities of entertainment media in the digital age.* Retrieved from https://marketeeronline.co/archives/209418 (In Thai)
- Palmer, J. E. (2003). Offending Behaviour: Moral Reasoning, Criminal Conduct and the Rehabilitation of offenders. Portland, Oregon: Willan Publishing.
- Pavlov, I. P. (1960). Conditioned Reflexes. New York: Dover Reprints.
- Peer Power. (2020, 19 June). *Industry "Thai game" 2020*. Retrieved from https://www.peerpower.co.th/blog/smes/thai-game-industry/ (In Thai)
- Pengpan, K. (2017). Preventing health problems of childhood addicted to online games. *Journal of Ratchathani Innovative Health Sciences, 1*(1), 16-32. https://he02.tci-thaijo.org/index.php/JRIHS/article/view/171116/122950 (In Thai)
- Phewku, C. (2017). Online game communities toward communities. *Journal of MCU Social Science Review*, 6(2-01), 143–158. https://so03.tci-thaijo.org/index. php/jssr/article/view/240198 (In Thai)

- Radio and Media Association for Children and Youth (2021). The proposed policy to government agencies, the private sector, and civil society involved in measures to supervise and protect children and youth competing in video/online games to complete for eSports prize money safety and knowingly. Retrieved from chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.healthymediahub.com/st orage/mediafiles/050070013W.pdf (In Thai)
- Ramsutra, P. (2014). Immunization against online game addiction for Thai youth. *Journal of Communication Arts*, *32*(2), 25-44. https://so02.tci-thaijo.org/index.php/jcomm/article/view/179045/127185 (In Thai)
- Saengsuwan, T. (2018). *The role of the network in community energy management: a case study of Singburi renewable energy group.* (Master's thesis, National Institute of Development Administration). (In Thai)
- Social Communication Group Office of the National Health Commission. (2021). Research results indicate that children and youth are addicted to games on average 5 hours/day, costs 5,000 baht/month. Retrieved from https://www.nationalhealth.or.th/th/node/3006 (In Thai)
- Srichairatanakul, J., Aphisitthiwat, N., & Thiammork, M. (2020). Teacher's Perspectives on Game Addiction of Students in Elementary Schools. Primary Education Area 2, Nakhon Pathom Province. *Journal of Health and Nursing Research*, *36*(3), 244-258. https://he01.tci-thaijo.org/index.php/bcnbangkok/article/view/247023/167859 (In Thai)
- This is Games. (2021, January 21). *Newzoo analyzes the direction of the gaming industry in 2021*. Retrieved from https://www.Thisisgame thailand.com/content/Newzoo-Predicted-Five-Trends-in-Gaming-Industry-This- Year.html (In Thai)
- Wongyarit, A. (2010). *Legal measures to control and supervise computer business*. (Master of Law's Thesis ,graduate school, Dhurakij Pundit University.) (In Thai)
- Workpoint Today. (2021, 16 February). *The game industry continues to grow, 'depa' expects this year to spread 3.3 billion baht to support the digital economy of Thailand*. Retrieved from https://workpointtoday.com/depa-game-industry/ (In Thai)

The Effects of Teachers' Teaching and Learning Management by Integrating CCR Concepts on the Teaching Behavior Change in Schools under the Office of the Basic Education Commission

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Abstract

The goal of this study was to examine the effects of teaching and learning management practices used by teachers in schools run by the Office of the Basic Education Commission by using CCR ideas. Teachers of mathematics who work in classrooms run by Secondary Educational Service Area Office 40, Phetchabun Province, made up the population. Purposive sampling was used to pick 127 individuals overall. The study tools included an observation form for teacher training development, a teacher supervision record, a supervision report form for teacher development project by integrating CCR principles, a teacher's teaching record, and a teacher satisfaction assessment form. Utilizing the mean and standard deviation, the quantitative data was examined, content analysis was used to analyze the qualitative data.

The study's findings indicated that teachers' teaching behaviors changed as a consequence of the development of mathematics instructors in line with the workshop titled "The teacher development by adopting CCR integration." By using CCR ideas in schools, start by being able to develop learning management plans that utilize CCR integration for setting up math learning activities. According to the findings of the project's educational oversight of the math teachers who took part, the average results of the improvement of teaching and learning management increased for each individual item as well as overall, and the teachers who underwent development gave the workshop titled "the teacher development by CCR concepts integration" the highest level of overall satisfaction. Additionally, the qualitative data showed that teachers had altered their pedagogical practices. The instructors successfully managed their students' learning in the classroom by utilizing the CCR integration and the information and understanding they gained from the training in terms of the learning activity process. Through the use of a variety of activities, including singing, playing games, searching for information, using questions, solo and group activities, and presentations in front of the class, the teachers were found to have altered their teaching styles in accordance with the concepts of contemplative education, coaching and mentoring, and researchbased learning. These gave pupils the chance to learn, comprehend, practice, and communicate their ideas, the usage of a range of instructional material by teachers to encourage and promote learning among pupils in the classroom was also noted.

Keywords: Teaching and learning management, Integrating, The CCR concept

Introduction

The core curriculum of basic education from 2008 (Revised 2017) states that one of the three learning disciplines, mathematics, should prioritize students' learning by developing the necessary content and learning standards and indicators. The third subject in conventional education is statistics and probability, which is a mathematical aptitude and approach to problem-solving (Thongtavee, 2015). Thus, the main goal of managing mathematics studies is to have the ability to respond to a wide range of mathematical issues (Wasi, 2017). Thus, one of the five skills that students should master and practice is the capacity to solve math problems, and whereas fostering the growth of these talents in children will result in more diverse thinking, excitement, and less discouragement. Students should feel confident and competent in problem-solving both inside and outside of the classroom since it is a high-level skill that they can utilize to handle challenges in their everyday life. (Reungdam, 2018)

It has been found that math education in grades 12 (Matthayom 6) has not been as successful as it might be, despite the importance of managing math instruction in schools. Which the teaching and learning management of the mathematics learning subject group, which the Secondary Educational Service Area Office 40 of Phetchabun Province. It is clear from the National Educational Test (O-NET) results that mathematics has the lowest average score, at 37.48, compared to science, which has the highest average score at 39.93, English, which has the lowest average score at 39.24, and Thai, which has the highest average score at 55.90. When results were broken down by region, it was discovered that Phetchabun Province had average mathematics scores for the academic years 2019 and 2020 that were both below than the aim outlined in the educational development plan at 26.30% and 30.04%, respectively, it was found that the mathematics learning achievement was still far below the necessary level when the third learning standard on statistics and probability was investigated. (Panyapinitnukul, 2015)

There are a number of ways to address issues that lower learning achievement, for instance, the development of teaching methods for teachers is one of the solutions to the issue; the teacher improves the method to suit the content and the age of the students, and by involving students in learning and teaching activities, instructors may foster an engaging learning environment that keeps students interested in mathematics and motivated to study, in addition to having a p (Mckinney, 2008). However, as each student has a different learning style, successful teaching should take into account these differences, the finest educational strategies are those that cater to the unique requirements of each student, according to teachers. (Methawut, 2015).

One of the innovative teaching professions that can be used to minimize student inequalities is learning activities that integrate CCR concepts, which is a sort of activity made up of three principles (Ampanon, 2018; 2019) the notion of intellectual education, among others Contemplative education is instruction that places a strong emphasis on the student's innate ability to develop their mind. Studying cheerfully improves academic performance and includes mental exercise, meditation, and improved physical and mental health. The oneness

of all things can be explained to increase awareness of the value of things without prejudice, to foster love, compassion, and community consciousness, and to help build an intellectually basic society (Panich, 2018). The principle of mentoring (coaching) comprises leading and directing, as well as learning alongside a person or group of people, with the purpose of enabling individuals to solve their own issues while putting an emphasis on sustainable practices (Sinlarat, 2016). Include research-based education to discover solutions or acquire new knowledge. Teaching and learning processes are arranged in a method known as research-based learning, to find solutions within the field of science related to the study topic (Mezirow, 2003).

Because of this, the researcher is interested in using the five-step CCR idea integration model that was created by the researcher. These are (1) preparation step, (2) knowledge acquisition stage, (3) linking to action step, (4) reflection and evaluation step, and (5) learning conclusion step, to research the outcomes of teaching and learning management of instructors using the CCR concept integration model with the goal of altering teaching behavior at institutions of higher learning under the office of the basic education commission (Buzan, 1991). The researcher is an administrator and an instructor under the Faculty of Education, Phetchabun Rajabhat University which is responsible for determining the main policy for producing and developing quality teachers. A research project and workshop on developing teachers using the integration of CCR concepts was established in order to give teachers the knowledge and understanding of the process to assist teaching-learning by applying CCR ideas, as well as to be applied in the workplace study. In addition to serving as a model for teaching and learning in other subjects and as a means of addressing issues with national educational test results, it also helps students develop diversified and sustainable learning, lower barriers, promote the whole person, and develop their ability to think critically and solve mathematical problems (O-NET).

Research Objectives

To study of the results of learning management and teaching behavior modification of teachers in schools under the Office of the Basic Education Commission (OBEC) by integrating CCR concepts.

Methodology

By collaborating on teacher development to send teachers to this training with Secondary Educational Service Area Office 40 and Phetchabun Provincial Educational Institutions, 127 math instructors from schools affiliated with Secondary Educational Service Area Office 40 Phetchabun Province were carefully selected for the development population.

Research tools include; forms for teacher development training observation records, teacher supervision records, teacher development project supervision reports using the CCR concept, teacher teaching result records, and teacher satisfaction surveys are all available online. The researchers created great teachers in the northern region using the equipment,

methods, and manufacturing processes from the research and development project, there are audits of the tools' efficacy, including IOC compliance audits and reliability audits.

Data collection; it is divided into 3 phases as follows:

Phase 1: In CCR integration activities, understanding and use of the observational participatory behavior model is necessary. During the teacher development training session, data from the workshop were collected and divided into the following three models; the first training consisted of 62 persons, the second training consisted of 27, and the third training consisted of 38 people.

Phase 2: Teachers will develop their abilities and advance in teaching mathematics by using the teacher's teaching record form and the supervision record form. Teachers will either post the findings online or ask you to email them your pictures as an attachment. Consider a learning management approach that includes CCR concepts, learner innovations, the formation of a distinct line group named CCR, and collaboration with networks and educational institutions that are participating in the project at least twice in a total of 24 locations as an example.

Phase 3: Utilizing the student assessment form, a survey of mathematics instructors was conducted to ascertain their satisfaction with the curriculum following the three training sessions.

Statistics in Analysis; data analysis while statistical analysis, such as mean and standard deviation, is used for quantitative data, content analysis is used for qualitative data.

Data Analysis; the researcher conducted the data analysis as follows:

- 1. Data were acquired through the study of knowledge on the utilization of CCR integration activities using an observational participatory behavior model and a workshop during the teacher development training session, which was separated into 3 models. Specifically, the first training at the Faculty of Education Phetchabun Rajabhat University (28 February–11 March 2021), the second training (18 March–1 April 2021), and the third training (25 April–15 May 2021). Objectives (1) to inform math instructors about the project's history and significance, as well as the collaboration between the Faculty of Education, the Educational Service Area Office, and the educational institutions that send teachers to participate in the project, 2) to train instructors how to integrate principles from cognitive education, the mentorship program, and the CCR, a research-based learning management system with five activities. These are (1) preparation stage, (2) knowledge acquisition stage, (3) linking to action step, (4) reflection and evaluation step, and (5) learning conclusion step. There were 127 instructors present, and the presenters shared a wide range of information and the study's directors to take part. The observations show that instructors shared knowledge about curriculum analysis, learning management system design, and developing learning management plans. They also understood the importance of teacher development projects, including CCR ideas, and recognized the need for these projects, and they helped one another improve mathematics teaching and learning as well as set up teaching supervision from lecturers through the integration of CCR ideas.
- 2. The examination of phase 2 supervision data on teachers' skill and growth in teaching mathematics yielded the educational outcomes reported in table 1.

Table 1 Comparison results from the supervision of teaching and learning management of mathematics teachers

		Training Training			ining				
	Teaching and learning	Phase 1		perfor Phase 2			Perfor		develo
No.	management of mathematics	_ X	S.D.	mance	_ X	S.D.	mance	differe	pment
1100	teachers using the integration	^		level	^		level	nce	results
	of CCR concepts						-0,0-		
1	A learning management plan	3.88	0.91	a lot	4.76	0.05	most	+0.88	more
	using Integrate CCR concepts.								
2	Results of the learning process,	4.03	0.81	a lot	4.69	0.57	most	+0.66	more
	knowledge plan, and learning								
	management are in line with the								
	integration of CCR ideas.								
3	By incorporating CCR ideas, the	3.94	0.81	a lot	4.80	0.51	most	+0.86	more
	process of planning learning								
	events puts a strong emphasis on								
	participants and learners.								
4	Structured exercises that use the	3.83	0.40	a lot	4.65	0.68	most	+0.82	more
	five-step CCR idea are used to								
	help students improve their								
	ability to process information								
	and solve mathematical								
_	problems.	4.05	0.04	- 1-4	1.60	0.64		10.62	
5	Using the right learning	4.05	0.84	a lot	4.68	0.64	most	+0.63	more
	management tools and innovating learning management								
	by incorporating CCR ideas.								
6	Timing each step and the overall	4.00	0.82	a lot	4.83	0.54	most	+0.83	more
O	learning activity properly.	4.00	0.02	a lot	4.03	0.54	most	10.03	more
7	By incorporating CCR ideas and	3.89	0.85	a lot	4.66	0.68	most	+0.77	more
	learner competencies,								
	measurement and evaluation are								
	congruent with the learning								
	management system.								
8	Monitor and follow up with	3.78	0.78	a lot	4.74	0.56	most	+0.96	more
	students, provide direction, help								
	with reprimands in accordance								
	with the mentoring system,								
	document student progress								
	following instruction, and								
	present results for improvement.								
9	The project's development	4.06	0.83	a lot	4.75	0.62	most	+0.69	more
	outcomes should be given to the								
	supervisor in accordance with								
	the numerous papers that should								
	be employed in the project.								
	average total	3.94	0.49	a lot	4.73	0.36	most	+0.79	more

From Table 1: It was found that from the first supervision, the teacher's results in teaching mathematics, overall were at a high level ($\times = 3.94$, S.D. = .49) and when considering the mean of each item, it was found that all items were at a high level, with the item with the highest teaching average being development results according to various documents that should be used in the project, and presented to the supervisor ($\times = 4.06$, S.D. = .83), followed by the use of appropriate learning management media. and innovation in learning management by integrating CCR concepts ($\stackrel{-}{\times}$ = 4.05, S.D. = .84), respectively. As for the item, the average teaching management was the least. Supervise and follow up students, perform guidance and help correct according to the mentoring system, record after teaching. and use the results to modify and develop ($\times = 3.78$, S.D. = .78). From the second supervision, teachers had the highest level of teaching management overall ($\times = 4.73$, S.D. = .36) and when considering the mean of each item, it was found that it was at the highest level for all items, with the item with the highest level of teaching and learning was the appropriate timing of overall learning activities and each step ($\times = 4.83$., S.D. = .54), followed by the process of setting up CCRintegrated participation and student-centered learning activities, respectively. The item with the least average teaching management was Organize activities by integrating the 5 stages of CCR concepts, to develop students' competence in interpretation, analytical thinking, synthesis, creativity, and mathematical problem solving ($\times = 4.65$, S.D. = .68). Therefore, when comparing the difference between supervision 1 and supervision 2 found that teachers improved their ability and progress in teaching mathematics, equal to +0.79.

- 3. Instructors were asked to remark on the following learning outcomes of teachers in phase 3 that were examined using the teacher's teaching record form:
- 3.1 It was found that teachers in educational institutions had used all three concepts to write in a learning management plan integrated with the CCR concept, to design learning activities, and to expand the results with other teachers. The knowledge that has been developed includes the intellectual education concept, mentoring systems, and research-based learning management. However, several speakers from the Rajabhat University network in the northern group have received training in the subject matter.
- 3.2 The five phases in mathematics that use development knowledge to assist learning activities by combining CCR ideas are as follows: (1) preparation stage, (2) knowledge acquisition stage, (3) linking to action stage, (4) reflection and evaluation stage, and (5) learning summary. It was found that teachers had used the five stages of the activities to assist and put into reality actual arithmetic teaching and learning activities. This had boosted interaction between teachers and students, made students more assertive, and had made students love learning mathematics.
- 3.3 The general concept of intellectual education, mentorship, and research-based learning management, or CCR, may be used to teach and learn mathematics and should be maintained by instructors, it can be concluded after taking into account one's own ideas as well as those of the projects that are currently being developed. Since it's a good concept, it will help kids build their ability to solve mathematical problems and raise their awareness of the importance of learning

arithmetic. Additionally, it was seen from the students' conduct that they had a more positive attitude toward learning mathematics.

4. Teacher development utilizing the Integration of CCR principles, which came from the questionnaire with the teacher satisfaction evaluation scale, is displayed in table 2 as an effect of teacher satisfaction on research and workshop projects.

 Table 2
 Teachers' satisfaction with the project

No.	Development Questions	×	S.D.	Satisfaction Level
1	Research and workshop studies on the incorporation	4.37	.54	A lot
	of CCR ideas in teacher development	4.37		
2	Location / Service of staff	4.82	.40	More
3	The service process's procedural component	4.76	.43	More
4	The benefits received from the training	4.59	.49	More
5	Supervision and follow-up of trainees	4.44	.56	A lot
	Average on all sides	4.60	.48	More

From Table 2: It was found that teachers who participated in the research and workshop development projects: teacher development using the integration of CCR concepts had the highest overall satisfaction ($\stackrel{-}{\times}$ = 4.60, S.D. = .48), and when considering income, teachers' overall satisfaction with the project was at the highest level ($\stackrel{-}{\times}$ = 4.60, S.D. = .48), and when considering each aspect, it was found that at the highest level of 3 items, and at the highest level of 2 items, the aspect with the highest mean was location/service of staff ($\stackrel{-}{\times}$ = 4.82, S.D. = .40), followed by Process aspects of the service process ($\stackrel{-}{\times}$ = 4.76, S.D. = .43), Benefits received ($\stackrel{-}{\times}$ = 4.59, S.D. = .49), supervision and follow-up of trainees ($\stackrel{-}{\times}$ = 4.44, S.D. = .56), and the topic aspect of research and workshop projects: teacher development using the integration of CCR concepts ($\stackrel{-}{\times}$ = 4.37, S.D. = .54).

Results

Following are key points that succinctly summarize the research findings from the study of the outcomes of managing teachers' teaching and learning using the model of integrating CCR concepts towards changing teaching behavior in educational institutions, conducted by the Office of the Basic Education Commission:

1. The findings of the first phase of teacher training revealed that instructors had knowledge of utilizing activities integrating the CCR concept, knowledge of the mentoring system and learning by using research as a foundation, and comprehension of learning activities by integrating the five-step CCR concept, and put more of an emphasis on the process, understand the value of integrating CCR concepts to help students develop their ability to solve mathematical problems, share knowledge about teaching using the integration of CCR

concepts, and form a group to create teaching management that will result in new innovations used in teaching in the context of the subject.

- 2. The teaching results of mathematics teachers were compared to the evaluation of mathematics teachers from the second phase of supervision on the growth of competence and progress in teaching mathematics, using the integration of the CCR concept both times. The change in instructional management conduct had enhanced improvement, it was found while comparing the differences between the first supervision and the second supervision. Overall, it was found that the instructors' proficiency and advancement in instructing mathematics had improved, totaling +0.79 etc.
- 3. Using data from the teacher teaching record form that represented the outcomes of math instructors, the learning outcomes of math teachers were studied. In order to develop learning management plans that integrated CCR themes, to plan activities that will improve students' ability to solve mathematical problems, increase their appreciation for and understanding of the value of learning mathematics, and, based on observations, it was found that instructors had changed their methods of instruction. They had done this by using their understanding of concepts related to cognitive education, mentorship systems, and research-based learning management.
- 4. In accordance with the findings of the survey of math teachers on the aforementioned project, the teachers' overall satisfaction with it was at the highest level ($\stackrel{-}{\times}$ = 4.60, S.D. =.48), and when looking at each component separately, it was discovered that 3 items were at the highest level and 2 items were at a high level, location/services, personnel service ($\stackrel{-}{\times}$ =4.82, SD =.40).

Discussions

From the results of teaching and learning management of teachers by using the model of integrating CCR concepts towards changing teaching behavior in educational institutions under the office of the basic education commission, there are important points to discuss the results as follows;

1. The teachers who participated in the study demonstrated behaviors that indicated a desire to alter the way mathematics was taught using new teaching techniques, according to the findings of the teacher training phase 1 on understanding and usage of activities incorporating CCR ideas, is the integration of CCR principles and the comprehension of 5 phases of activities based on 3 concepts to comprehend mathematics teaching and learning. In order to improve students' arithmetic problem-solving abilities and to see answers to issues on National Educational Test Results (O-NET) in mathematics, teachers are more process-oriented and emphasize the necessity of integrating CCR topics. By incorporating CCR concepts, there is a learning exchange about how to teach and learn mathematics, a group has been formed to develop mathematics teaching and learning management, and this has resulted in new teaching innovations that are used to teach in the context of problem areas, needs, and teaching at the same level, to create a network for learning exchange and assistance. This is

due to the project's clear basis and policy, which it begins to apply in order to produce quality instructors, thinking abilities, and math problem-solving skills for kids, and to have a clear development process. On both occasions, the presenters offered a wide range of information on the concepts of intellectual education, mentorship systems, and research-based learning management, as well as the supervision of instructors. Teachers have also come together to share knowledge, improve mathematics instruction through the incorporation of CCR concepts, school-level PLC process learning, and log book activities for math students, all of which have the effect of causing teachers to alter their behavior in teaching mathematics in line with the intended goal. In line with the findings of Panyapinitnukul (2015) study of the teacher development coupon project, a teacher development course designed to improve learning outcomes in English language learning groups by delivering a rigorous academic curriculum in Chaiyaphum Province. It was discovered that the project participants had knowledge and understanding before they were able to change the way they taught cognitive education. They also noticed that the teachers who participated in the project were present at the training sessions, and their teaching supervision revealed that overall and item-specific teaching management had increased on average. Additionally, the instructors that were developed expressed a high degree of satisfaction with the teacher coupon program as a whole. The qualitative data also demonstrated the instructors' proficiency in using the cognitive education method of instruction and learning management in the classroom.

- 2. Comparative results of the evaluation of math teachers' teaching-learning strategies using the integration of CCR concepts in the second and second phases, and the second time, it was discovered that math teachers had changed their teaching behavior, resulting in improved teaching and learning outcomes. When comparing the results of the first and second supervision, the overall and individual mean increases were greater than all of the first. This is due to the fact that math teachers have received training in cognitive education, mentoring systems, and research-based learning management, as well as having received twice as much mentorship from supervisors, but only once did the supervisor lead math teachers through their individual presentations and reports. Math instructors may improve their knowledge and skills in teaching and learning by employing the integration of CCR principles, as well as through working together to support one another and studying examples and methods from other teachers. In line with Pusiripinyo (2018), the learning management outcomes were investigated using the notion of intelligence, coaching and mentoring, and research as a foundation for behavior modification and the development of teaching competency in student instructors' Thai language courses. When taking into account the findings of the supervision evaluation, the first was of moderate quality and the second was of very good quality. Teaching behaviors of Thai language subject teachers were found to have been modified, including teaching preparation, purpose determination, instructional design, media/learning resource use, teaching and learning management, and evaluation and evaluation.
- 3. The learning outcomes of mathematics instructors, which were examined using data from the teacher teaching record form indicating the teachers' teaching outcomes, revealed that the teachers' conduct about teaching and learning had changed. Because teachers have been trained by a variety of expert trainers, they have the ability to apply knowledge to integrate the

concepts of intellectual education, mentoring systems, and research-based learning management, or CCR. Teachers of mathematics can use the integration of CCR concepts to write learning management plans. Be able to create teaching and learning activities that incorporate CCR concepts, and then apply your knowledge to extend the outcomes to other students and faculty members in the educational setting, particularly by utilizing the knowledge from the CCR integration activities' five steps, it may be used for instruction in classrooms. Consistent with Reungdam (2018) conclusion on the roles and benefits of expert training, personnel training is a tool of human resource development that helps develop change in knowledge management behavior skills and attitudes of personnel, and develop the ability to work better than ever.

4. The satisfaction of mathematics teachers with research and workshop projects: teacher development using the integration of CCR concepts revealed that the project had the highest level of overall teacher satisfaction. Because the project was aware of the O-NET problem in mathematics and received outside money to train more competent math instructors, it was discovered that it was at the highest level of both 3 and 2 items when each component was taken into account. Additionally, the Faculty of Education, Educational Service Area Offices, and schools that send teachers for training have collaborated on this issue since poor math test scores are a national concern in an effort to cultivate competent instructors and mobilize efficient math teaching techniques. As a result, the Faculty of Education is able to completely plan the project and provide the trainees with a place, personnel, and administration. This is in line with research by Pusiripinyo (2018) that looked at how satisfied quality instructors were with their efforts to enhance their instruction using competency-based knowledge standards. It was found that teachers were satisfied with teacher development both overall and in each aspect at the highest level, when considering each aspect found that it was at the highest level in 1 aspect, i.e., the benefits received, at a high level in 3 aspects is the management process of the facility, staff, and service procedures respectively.

Conclusion and suggestions

Applying the five-step process of learning activities and the integrated model of the CCR idea created by the researcher, instructors should concentrate on the following:

- 1. Highlights of 3 concepts are as follows:
- 1.1 Through contemplative education (CE), which aims to improve the psychological or inner aspect of learning, such as meditation, in-depth listening, and mental contemplation, the human spirit also grows in "inner knowledge."
 - 1.2 Coaching and mentoring (CM) is separated into the following two categories:
- 1.2.1 Coaching focuses on specific tasks or abilities on a particular difficulty, assisting the mentor in solving issues with their own job.
- 1.2.2 With an emphasis on general care or work and life difficulties, mentorship covers a wide range of themes, the majority of mentors have senior jobs or are seasoned professionals.

- 1.3 The idea of research-based learning management (RBL), with its guiding principles of emphasizing mentorship over lectures, focusing on asking questions and finding answers, and encouraging teachers to switch roles by letting students take initiative, emphasizes thinking, searching, seeking, and mentoring.
- 2. Using the integrated model of the CCR idea created by the researcher, there are 5 processes for learning activities that integrate CCR concepts, and they are as follows: step 1 realization is ready, step 2 seek knowledge: ask is teach, step 3 linking to action: action is understanding, step 4 evaluate and exchange learning: reflection is learning, and step 5 reflecting learning to development: writing is thinking.

New knowledge and the effects on society and communities

The findings of this study will assist both public and private educational institutions in developing instructional strategies that correspond to the principles of intellectual education, coaching and mentoring, and research-based learning. This is a crucial component of the management of competency-based education and aids in the establishment of educational equity in schools by giving students the opportunity to experience thinking, analyzing, problem-solving in a variety of scenarios, and dealing with challenging problems through their hands-on practice. According to the three ideas, it also resulted in the development of a competency-based curriculum that places an emphasis on more useful instructions. This knowledge will be used to manage learning in educational institutions for groups of students studying mathematics in terms of their abilities and learning styles, embracing other people's viewpoints that may have an impact on academic performance and the significance of curriculum creation teaching methods using a variety of methods that can help learners in studying in accordance with their individual learning styles for improved academic performance, it is also important to embrace other people's viewpoints that may have an impact on learning outcomes (O-NET). In this regard, this research offers the information needed to train math instructors, a talent that students in the twenty-first century need, since it is essential to train teachers with demanding and contemporary math teaching techniques, notably promoting critical thinking requires first learning from the instructor, then using the learned information and abilities to help learners develop even further. (Flavell, 1979)

References

- Ampanon, K. (2018). The Development of Learning Management that Promotes Thinking Skills by Using Mind Mapping for Students of the Faculty of Education at hetchabun Rajabhat University. *Phetchabun Rajabhat Journal*, 20(2), 87-101. http://research.pcru.ac.th/rdb/project/datafiles?id=1714&tag (In Thai)
- Ampanon, K. (2019). Learning Management that Promotes Thinking Skills Using Mind Mapping for Students of the Faculty of Education of Rajabhat University. *Journal of Southern Technology*, 12(2), 247-256.
 - https://so04.tcithaijo.org/index.php/journal_sct/article/ view/167998/154001 (In Thai)
- Buzan, T. (1991). Use Both Sides of Your Brain. New York: Penguin Group.
- Flavell, J. H. (1979). Cognitive Developmental. New Jersey: Prentice-Hall.
- Mckinney, K. (2008). *Sociology through Active Learning*. Retrieved from http://www.teachtech.ilstu.edu/additional/tips/newActive.pdf.
- Methawut, P. (2015). *Teaching and Learning Based on Research*. Bangkok: Chulalongkorn University. (In Thai)
- Mezirow, J. (2003). Transformative learning as discourse. *Journal: Transformative Education*, *12(1)*, 58-63. https://journals.sagepub.com/doi/10.1177/1541344603252172.
- Panich, W. (2018). *Paths to Creating Learning for 21st Century Students*. (3rd ed.). Bangkok: Sodsri-Saritwong Foundation. (In Thai)
- Panyapinitnukul, C. (2015). Effects of Contemplative Education on Learning for Personnel Changes Boromarajonani College of Nursing Bangkok. *Boromarajonani College of Nursing Journal*, 28(2), 38-51. https://he01.tci-thaijo.org/index.php/bcnbangkok/article/view/32046 (In Thai)
- Pusiripinyo, V. (2018). Developing a Teaching Model Integrated the Concepts of Contemplative Education, Research-based Learning, Coaching for Preparing Student Teachers, Majoring in English to Community. *Academic Journal: Buriram Rajabhat University*, 10(2), 97-122. https://e-journal.snru.ac.th/topics/1345/ (In Thai)
- Reungdam, S. (2018). The Effects of Integrating the Concept of Contemplative Education, Coaching and Mentoring and Research-based Learning to Change Teaching Behavior and Development of Teaching Competency of Teacher Students in Thai Language major. *Narkbhut paritat: Nakhon Si Thammarat Rajabhat University, 10(2),* 15-25. https://so04.tci-thaijo.org/index.php/nakboot/article/view/115916 (In Thai)
- Sinlarat, P. (2016). *The Creative and Productive Education*. Bangkok: Chulalongkorn University. (In Thai)
- Thongtavee, C. (2015). *Contemplative Education: Education for Human Development*. Nakhon Pathom: Comtemplative Education Center Mahidol University. (In Thai)
- Wasi, P. (2017). *The Education System Curing the Whole Country's Poverty.* (3rd ed.). Nakhon Pathom: Comtemplative Education Center Mahidol University. (In Thai)

Management Strategies for Ethnic Prototypes of Senior Clubs in the Upper Northern Region

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Abstract

The objectives of this article were 1) to explore the management strategies for senior clubs, and 2) to study the implementation of the management strategy of the ethnic senior clubs in the upper northern region. This research was mixed methods research. The target audience of the research was the elderly who were members of five ethnic senior clubs in the upper northern region. 30 of them were collected from each club; there were 150 people in total. The tools used to collect the data were documented files, observation forms, interview forms, and focus group forms. The data were analyzed based on content analysis and descriptions. The results demonstrated that:

- 1) The management strategies for ethnic prototypes of senior clubs in the upper northern region included 1) SWOT 2) vision 3) mission 4) objectives and 5) four strategies that involved committees, management, member participation, and activity management aspects.
- 2) Concerning, the implementation of the management strategies for ethnic prototypes of senior clubs in the upper northern region, it was found that the management strategies were implemented as planned. Activities were conducted as follows: six committee items, eleven management items, five member participation items, and five activity management items.

This research uncovered an important finding. Strategies and strategic plans for managing ethnic senior clubs in the upper northern region could be applied to senior clubs, as well as geriatric schools across the country. Emphasis should be placed on strategic planning for management, plan compliance, monitoring, following up, and continual improvement to ensure that senior clubs or schools were operated in a stable and sustainable environment for all time.

Keywords: Management strategies, Ethnic prototypes of senior clubs

Introduction

With regard to the projections of the country's population in 2015-2030, Thailand is in the situation of an "aged society." In the next 10 years, it will begin to become a completely aged society. By 2030, the number of seniors will increase to 17.8 million, representing roughly a quarter of the country's population (Office of the National Economic and Social Development Board, 2013). Therefore, there is a need to prepare for the coming aging society. Government, private sector organizations, citizens, and various social institutions recognize the dignity and values of seniors. As a result, they jointly established Thailand's Seniors Charter as an obligation to ensure that seniors have a good quality of life. In particular, the elderly have the opportunity to continue to study, learn, and develop their potential. They should have access to information and social services that are beneficial to their livelihood. Therefore, they can understand the dynamics of the society around them, adapt their roles based on their age, and play roles and participate in family, community, and social activities. Specifically, they should gather to share knowledge, learn, and understand each other and people of all ages. In addition, according to the Elderly Person Act B.E. 2546 (Second Amendment) B.E. 2553, Section 11 provides that the elderly person shall receive the following protection, promotion, and support: 1) Medical and public health services; 2) Education, religion, and information that are beneficial to living; 3) Performing a profession or training for an appropriate profession; 4) Self-development and participation in social activities, groping as a network or community; 5) Provide sufficient accommodation, food, and clothing as necessary; 6) Payment of the living allowance monthly which is sufficient and fair, etc. (National Board of the Elderly, 2010)

Ethnic elderly groups in the upper northern region are one of the key target populations who should be recognized for their human worth as Thai citizens living in Thailand. Improving the quality of life of these populations has been consistently achieved for a long time in various dimensions, such as hygiene, education, housing, occupations, and additional income. Nowadays, Thai society has gone from a digital society that incorporates modern culture. This affects the lifestyles of the elderly population, ethnic groups, and mountaineers who have had to adapt to today's changing environment. Highland ethnic groups are divided into ten main groups: Karen, Hmong (Meo), Lisu (Lisaw), Lahu (Muser), Akha (Ekaw), Mien (Yao), Khmu, Mlabri, H'tin, and Lua, totaling approximately 1,116,669 people. The Karen ethnic group is the largest, followed by the Hmong group, the smallest being the Mlabri group (Ministry of Social Development and Human Security, 2018).

The senior club is another tool used to develop the potential of older people "within the framework of the concept of non-formal education for lifelong learning" through the systematic transfer of knowledge, which seniors will learn in a fun way. This can develop high standards of self-care and independence, including the development of physical, mental, social, intellectual, and economic capacities to make seniors "active aging" to contextualize the area. The key concept is to solve the problems of the elderly in communities. These include providing happiness for seniors, increasing the knowledge and life skills necessary for seniors,

and opening up social spaces for them, which vary depending on the context of particular areas. As a result, they have been successfully transformed into an aging school. Some have operational challenges and separate operations; members do not cooperate with operations.

Based on the above background and significance, suggestions, and research findings, this research was conducted in response to the 20-year national strategy for the development and improvement of human resource capacity. The research findings were developed in line with the country's integration in Goal 2: Research and innovation roadmap. This goal concerns research and innovation for the social development and environment of Thai seniors and society in the 21st century. In particular, it addresses issues related to the potential and opportunities of the elderly and the coexistence of the multi-generational population, with the main goal being to allow seniors to live well and to live happily. This can serve as a source of strength for the country. This research was conducted concerning the management strategies for ethnic prototypes of senior clubs in the upper northern region. It also aimed to improve the quality of life of the elderly from the ethnic groups in the upper northern region. Therefore, they have a good quality of life, well-being, and happiness, as a strength to drive the nation further.

A theoretical approach to strategy relies on concepts from Abraham, Stanley (2006), Beall (2007), David (1997) and Saritwanich. (2010). To conclude, there are important steps in the development of strategies: (1) SWOT, (2) vision, (3) mission, (4) objectives, and (5) strategies. Another idea of setting up and managing senior clubs comes from Department of Elderly Affairs (2016), Ministry of Social Development and Human Security (2016), and Yodpetch et al. (2012). Regional cooperation is important. And, most seniors are satisfied and want to establish a senior club in their area. Senior clubs should have components of committees, management, member participation, and ongoing activities.

This article presents the strategies and their implementation for the management strategies of ethnic prototypes of senior clubs in the upper northern region. The findings can apply to the management of senior clubs across the country.

Research Objectives

This research aimed to investigate:

- 1. The management strategies for ethnic prototypes of senior clubs in the upper northern region
- 2. The implementation of the management strategies for ethnic prototypes of senior clubs in the upper northern region

Methodology

This research was mixed methods research. This involved both quantitative and qualitative research. The field of research was senior clubs, which were well managed by the Office of Social Development and Human Security. The focused study was conducted in five locations using five ethnic groups: 1) Lisu in Ban Mai Lee Saw, Ping Khong Subdistrict, Chiang Dao District, Chiang Mai Province, 2) Muzeur (Lahu) in Ban Huai Chadan, Ping Khong Subdistrict, Chiang Dao District, Chiang Mai Province, 3) Hmong in Ban Mae Sa Noi, Pongyang Subdistrict, Mae Rim District, Chiang Mai Province, 4) Karen in Ban Phra Bat Huai Tom, Nasai Subdistrict, Li District, Lamphun Province, and 5) Lua in Ban La-oob, Huay Hom Subdistrict, Mae La Noi District, Mae Hong Son Province. The research process was made up of three stages:

- 1. The survey, the synthesis of problems, and the needs were examined through documentary research and a study of the problems and needs of ethnic prototypes of senior clubs in the upper northern region. These were collected from a sample of members of five ethnic senior clubs. 30 people were gathered from each club, totaling 150 people. The researcher collected the data through the interview. The data were analyzed based on descriptive and content analysis.
- 2. Creation of management strategies for ethnic senior clubs in the upper northern region
- 3. Trying out the management strategies for ethnic senior clubs in the upper northern region
 - 3.1 Try out with a small target group in Ban Mae Sa Noi, Muang District, Chiang Mai Province
 - 3.2 Try out with four large target groups of ethnic senior clubs in the upper northern region
 - 3.3 Examine the management strategies of ethnic senior clubs in the upper northern region with the original target group

Results

The findings of this research were consistent with the objectives established for both items, as illustrated below.

Objective 1: The findings showed that the management strategies for ethnic prototypes of senior clubs in the upper northern region included four aspects. These were 1) committee strategy 2) management strategy 3) activity strategy and 4) member participation strategy.

Objective 2: The findings showed that the implementation of the management strategies for ethnic prototypes of senior clubs in the upper northern region of five locations complied with the management strategies for ethnic prototypes of senior clubs in the upper northern region in each of the following aspects:

- 2.1 Committee strategy: it was found that the five senior clubs were implemented in line with a strategic plan regarding committee strategy for each of the following: 1) the committee had to be elected by its members or recognized by a majority of its members. 2) The committee had leadership and a code of conduct for administering the clubs. 3) The committee was altruistic, voluntary, honest, and of good conduct which was acceptable to society. 4) The committee performed its duties in the manner assigned to it. 5) The committee was transparent, non-discriminatory, and fair. 6) The committee had knowledge of seniors in various fields.
- 2.2 Management strategy: it was found that the five senior clubs were operated in the following manner. 1) Clubs had a permanent stable location that was convenient for carrying out activities. 2) There were clear management rules for clubs. 3) Clubs had operational plans in place. 4) Clubs had the management structures and roles of chairs, committee members, and members. 5) Clubs were provided with advisors. 6) Clubs systematically collected information about their members. 8) Budgets were recruited for operating purposes. 9) The income and expense accounts, registers of durable articles, registers of members, guest books, and meeting journals were up to date. 10) Clubs had good and quick communication. Items that were not clearly and regularly executed were as follows: 7) Clubs analyzed themselves and investigated their problems. 11) Club performance was monitored and reported.
- 2.3 Member participation strategy: it was found that the five senior clubs implemented in line with a strategic plan regarding member participation in every item as follows: 1) Members shared a common ideology to conduct activities following the club's objectives. 2) Members felt they were part of the club, which would contribute to the cooperation and participation in club activities. 3) Members participated in reflection, decision making, joint monitoring, evaluation, and participation in the interests of the club. 4) Members followed the club's rules, regulations, and requirements. 5) Members jointly establish the identity or strength of the club.
- 2.4 Activity strategy: it was found that the five senior clubs implemented in line with a strategic plan regarding activities in every item as follows: 1) Club activities responded to the needs and problems of its members. 2) Club activities were organized with continuity. 3) Club activities could address problems or promote members' quality of life. 4) Club activities were integrated into various networks, government agencies, or private organizations. 5) Club activities were diverse and rotated so that members did not get bored.





Figure 1 Data Collection with Focus Groups (Source: Researcher, 2023)

This research uncovered an important finding. Strategies and strategic plans for managing ethnic senior clubs in the upper northern region could be applied to senior clubs, as well as geriatric schools across the country. Emphasis should be placed on strategic planning for management, plan compliance, monitoring, following up, and continual improvement to ensure that senior clubs or schools were operated in a stable and sustainable environment for all time.

Discussions

After researching the management strategies for ethnic prototypes of senior clubs in the upper northern region, the researcher found the results from exploiting senior clubs so that they were successful and sustainable. There were issues that the researcher would raise to discuss the findings to better understand as follows:

1. The management strategies for ethnic prototypes of senior clubs in the upper northern region: senior clubs were considered to be the starting point for the integration of seniors into the community. If the clubs were successful in doing so, it would affect the quality of life of the elderly and prepare them for full entry into the aged society of Thailand. Therefore, relevant organizations, communities, as well as the senior club committees should concentrate on the strategies that made the clubs successful. These strategies included (1) a committee strategy, (2) a management strategy, (3) an activity strategy, and (4) a member participation strategy. The promotion of the strategies which constituted every club should also be improved. If the senior clubs were managed using both science and art in management, the knowledge management would be shared across senior clubs. Excursions to successful senior clubs and management training could guide club management and influence the operation of the clubs in an ongoing and sustainable way. Successful senior clubs might have different indicators or assessments of club management. This was consistent with the findings of Siripanich (1999). It was found that the establishment of senior clubs needed to take into account various structural elements to ensure successful and beneficial operations for club members as planned. This

involved the following factors: (1) members, namely their age, status, knowledge, economic and financial status, ideology, and number, (2) committees or administrators, namely character traits, knowledge, abilities, motivations, training in which knowledge and abilities came from personal interests, getting information, training or circumstances surrounding them at that moment, dedication, and willingness to work that contributed to the smooth operation of the work, (3) club locations and venues for activities, and (4) regulations of senior clubs. In addition, the support of health care workers in the fields of education, information, health check-ups, and consultations were important factors that made the clubs healthy and sustainable. The participation of club members also enabled the clubs to pursue their activities.

- 2. For the implementation of the management strategies for ethnic prototypes of five senior clubs in the upper northern region, it was noted that the implementation was operated as stated in each aspect as follows:
- 2.1 A committee strategy: it was found that ethnic prototypes of five senior clubs in the upper northern region were utilized as intended in all aspects of senior club management strategies as follows: (1) the committee had to be elected by its members or recognized by a majority of its members. (2) The committee had leadership and a code of conduct for administering the clubs. (3) The committee was altruistic, voluntary, honest, and of good conduct which was acceptable to society. (4) The committee performed its duties in the manner assigned to it. (5) The committee was transparent, non-discriminatory, and fair. (6) The committee had knowledge of seniors in various fields. The strategies that allowed senior clubs or aging schools to succeed were to have a dedicated, altruistic, transformational leader, and a committee for activities. In particular, the transformational leaders who were elderly or psychological leaders, such as monks, could have a direct impact on faith-building for senior members of clubs, schools, agencies, and organizations. This was in line with the research by Boonjang, P. (2014). It was found that the success factor was having strong, engaged, and understanding community leaders in their activities, as well as the strong and ongoing support of resources from local government organizations. A key way for the clubs to succeed was to focus on their members' joint activities rather than the cumbersome form. Club administration should be flexible with members from various occupations. All sectors of the organizations were supportive, and they were understood and appreciated by the communities.
- 2.2 A management strategy: it was found that ethnic prototypes of five senior clubs in the upper northern region implemented as intended in all aspects of senior club management strategies in the Lanna approach in Chiang Mai Province as follows: (1) Clubs had a permanent stable location that was convenient for carrying out activities. (2) There were clear management rules for clubs. (3) Clubs had operational plans in place. (4) Clubs had the management structures and roles of chairs, committee members, and members. (5) Clubs were provided with advisors. (6) Clubs systematically collected information about their members. (8) Budgets were recruited for operating purposes. (9) The income and expense accounts, registers of durable articles, registers of members, guest books, and meeting journals were up to date. (10) Clubs had good and quick communication. Items that were not clearly and regularly executed were as follows: (7) Clubs analyzed themselves and investigated their problems. (11) Club performance was monitored and reported. This was in line with the

Ministry of Social Development and Human Security (2016) that researched "Strategies for Elderly Network Strengthen of Ministry of Social Development and Human Security." The findings demonstrated that the seniors' network style was divided by mission, activities, and social groups. The seniors' network comprised four groups that were government, people, private, and non-governmental. All groups performed their duties according to their principles, objectives, and structure. Similar procedural styles across all four groups were applied to both vertical and horizontal management. Vertical management was implemented by the Ministry of Social Development and Human Security, and the hierarchy system was applied to structural management. The decision making depended on the most competent person in the group. In terms of collaborating with other agencies, horizontal management was chosen; for example, requiring data and activities matters. Taking into account the communication between the Ministry of Social Development and Human Security and agencies (inside and outside), it was found that cooperation and assignment of missions was a slightly horizontal management style through the node leader relationship. This cooperation focused on the leadership network to move forward. Moreover, individuals and NGO groups were subjected to the application of the horizontal management style using participation in each process. There were various factors affecting the strategies of strengthening the network of seniors of the Ministry of Social Development and Human Security, but the cooperation between the ministry and the external seniors' network was not seriously pursued. There were many target groups and organizations within the area or province. Guidelines and work strategies of seniors were revealed in three criteria. (1) The management of senior networks supported participation in other networks. (2) Not only the support and development of the senior leadership network were needed, but also the selection and development of leaders were crucial to driving the senior network. (3) The combined strategies and the cooperation of networks of seniors needed an operational plan among networks of seniors inside and outside. Three policy recommendations were presented as a result of this research. First, the support of the Ministry of Social Development and Human Security for seniors' networks on the budget, the knowledge system, and the mission should be seriously implemented so that projects and activities for the elderly were pursued regularly. Second, the strategies and cooperation of senior networks should be promoted at a national level. Third, data on seniors should be developed and linked to a development plan.

2.3 A member participation strategy: it was found that ethnic prototypes of five senior clubs in the upper northern region were implemented as intended in all aspects of senior club management strategies in the Lanna approach in Chiang Mai Province as follows: (1) Members shared a common ideology to conduct activities following the club's objectives. (2) Members felt they were part of the club, which would contribute to the cooperation and participation in club activities. (3) Members participated in reflection, decision making, joint monitoring, evaluation, and participation in the interests of the club. (4) Members followed the club's rules, regulations, and requirements. (5) Members jointly establish the identity or strength of the club. Participation generated relationships and a sense of shared ownership. Mechanisms for members to participate both formally and informally, such as monthly meetings, a forum for discussion, and the exchange of ideas, were to be developed. This was in agreement with Thamdee (2017) who researched "Agency, Society, and Culture: Conditions

Promoting Active Aging in Older Persons in Chiang Mai." The findings revealed that the "social" and "cultural" contexts of solidarity, support, and self-sufficiency, were the most significant conditions. These, when combined with the "agency" of the elderly person's desire to learn and pride and self-respect, fostered active aging in them. Therefore, by encouraging active aging, all these dimensions should be integrated into the activities projects and associated with community strengthening so that families and the community came to participate in the process of sustainable active aging.

2.4 An activity strategy: it was found that ethnic prototypes of five senior clubs in the upper northern region implemented as intended in all aspects of senior club management strategies in the Lanna approach in Chiang Mai Province as follows: (1) Club activities responded to the needs and problems of its members. (2) Club activities were organized with continuity. (3) Club activities could address problems or promote members' quality of life. (4) Club activities were integrated into various networks, government agencies, or private organizations. (5) Club activities were diverse and rotated so that members did not get bored. An important strategy was to have clear objectives and to organize activities on an ongoing basis. Setting clear goals was a direction of work that created mutual understanding among the committees or leaders. This would be a strong force to collaborate and organize ongoing activities regularly as a mechanism to connect senior groups and communities. This could lead to collaborative cooperation to carry out the aging schoolwork. In addition, there should be continually learning and development of operations by reviewing them periodically and summarizing lessons learned. Learning strengths and weaknesses and what needed to be improved could be used to develop the work process continuously. This was in line with Sachiyo (2012) who researched "A Model of Lifelong Learning for Seniors in Toomhom Looglan Banlaoling Center, Bandoo Subdistrict, Atsamat District, Roi Et Province." It was found that the key to well-informed and professional learning was a network at the local, district, and provincial levels. The result of this research was a lifelong learning LING MODEL for seniors at the Toomhom Looglan Banlaoling Center. This model consisted of (1) learning by adjusting concepts, demonstrating, and exploring alternative communities for further development, (2) individual learning from known and new knowledge, (3) networking by continuously supplementing knowledge, and (4) community-based learning growth based on self-sufficiency.

Conclusion and suggestions

Concerning the summary of the article on the management strategies of ethnic prototypes of senior clubs in the upper northern region, these consisted of four aspects. They were (1) committee strategy, (2) management strategy, (3) activity strategy, and (4) member participation strategy. With regard to the implementation of strategies for managing ethnic prototypes of senior clubs in the upper northern region, it was noted that the management strategies were implemented as planned. Activities were conducted as follows: six committee items, eleven management items, five-member participation items, and five activity management items.

Suggestions

According to the research findings, the researcher proposed the following suggestions:

1. Suggestions for implementing research findings

Objective 1: The findings showed that the management strategies for ethnic prototypes of senior clubs in the upper northern region included four aspects. These were (1) committee strategy, (2) management strategy, (3) activity strategy, and (4) member participation strategy. Therefore, the relevant authorities should take steps to encourage the senior clubs to manage by using the four strategies as a tool to drive their operations.

Objective 2: The findings showed that the implementation of the management strategies for ethnic prototypes of senior clubs in the upper northern region of five locations complied with the management strategies for ethnic prototypes of senior clubs in the upper northern region in each of the following aspects: six committee items, eleven management items, five-member participation items, and five activity management items. Therefore, the relevant agencies should continue to encourage the senior clubs to develop a strategic plan with indicators for management based on research results and implement a strategic plan to manage the clubs for efficiency and effectiveness.

2. Suggestions for future research

This research uncovered important findings that the strategies and the strategic plan for managing ethnic senior clubs in the upper northern region could be applied to senior clubs and aging schools across the country. Emphasis should be placed on management planning approaches. For future research topics, they should involve the preparation of a strategic plan, compliance with the plan, ongoing monitoring, and continuous improvement of the operation to ensure that the senior clubs or aging schools were operated in a stable, sustainable manner at all times.

New knowledge and the effects on society and communities

The research generated knowledge, which was the management strategies for ethnic prototypes of senior clubs in the upper northern region illustrated below:



Vision: By 2022, the ethnic prototypes of the senior clubs in the upper northern region develop their management based on the strategic management plans of the prototypes of senior clubs in all indicators.



Mission: (1) Senior clubs are systematically managed. (2) Senior clubs are organized continually. (3) Senior clubs are organized permanently. (4) Senior club members participate in the operation.



Objectives: In order for senior clubs (1) to be systematically managed, (2) to have continuous activities, (3) to have an ongoing implementation committee, and (4) to have members participating in the operation.



Committee	Management	Member Participation	Activities
Strategy	Strategy	Strategy	Strategy
(1) The committee had	(1) Clubs had a permanent stable	(1) Members shared a	(1) Club activities
to be elected by its	location that was convenient for	common ideology to	responded to the
members or	carrying out activities.	conduct activities	needs and problems
recognized by a	(2) There were clear management	following the club's	of its members.
majority of its	rules for clubs.	objectives.	(2) Club activities
members.	(3) Clubs had operational plans in	(2) Members felt they	were organized with
(2) The committee had	place.	were part of the club,	continuity.
leadership and a code	(4) Clubs had the management	which would contribute	(3) Club activities
of conduct for	structures and roles of chairs,	to the cooperation and	could address
administering the	committee members, and members.	participation in club	problems or
clubs.	(5) Clubs were provided with	activities.	promote members'
(3) The committee	advisors.	(3) Members	quality of life.
was altruistic,	(6) Clubs systematically collected	participated in	(4) Club activities
voluntary, honest, and	information about their members.	reflection, decision	were integrated into
of good conduct which	(7) Clubs analyzed themselves and	making, joint	various networks,
was acceptable to	investigated their problems.	monitoring, evaluation,	government
society.	(8) Budgets were recruited for	and participation in the	agencies, or private
(4) The committee	operating purposes.	interests of the club.	organizations.
performed its duties in	(9) The income and expense	(4) Members followed	(5) Club activities
the manner assigned to	accounts, registers of durable	the club's rules,	were diverse and
it.	articles, registers of members, guest	regulations, and	rotated so that
(5) The committee	books, and meeting journals were	requirements.	members did not get
was transparent, non-	up to date.	(5) Members jointly	bored.
discriminatory, and	(10) Clubs had good and quick	establish the identity or	
fair. (6) The	communication.	strength of the club.	
committee had	(11) Club performance was		
knowledge of seniors	monitored and reported.		
in various fields.			

Figure 2 The research generated knowledge, which was the management strategies for ethnic prototypes of senior clubs in the upper northern region illustrated (Source: Researcher, 2023)

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References

- Beall, J. (2007). Strategic Management of Private School: Recruitment, Compensation,

 Development and Retention of Teachers. Retrieved from http://proquest.umi.com/
- Boonjang, P. (2014). Development of the operation model of the Elderly Club That Noi Subdistrict, Khueang Nai District, Ubon Ratchathani Province. Retrieved from http://tdc.thailis.or.th/tdc./basic.php. (In Thai)
- David, F. R. (1997). Strategic Management. (6th ed.). New Jersey: Prentice-Hall, Inc.
- Ministry of Social Development and Human Security. (2016). *The elderly population of ASEAN*. Social Statistics Document. Bangkok: Information and Communication Technology Center Ministry of Social Development and human stability. (In Thai)
- National Board of the Elderly. (2010). *National Plan for the Elderly*, Vol. 2 (2002-2021), No. 1, 2009. Bangkok: Thepphenwanis. (In Thai)
- Office of the National Economic and Social Development Board. (2013). *Estimates Population of Thailand 2010-2040*. Bangkok: October. (In Thai)
- Office of the Promotion and Protection of the Rights of the Elderly. (2013). *Manual for the Center* for the Development of Quality of Life and the Elderly. Bangkok: Thepphenwanis. (In Thai)
- Sachiyo. M. (2012). Lifelong learning patterns of people of many ages in the Lao Ling Home Descendants Center. Khon Kaen: Khon Kaen University. (In Thai)
- Saritwanich. S. (2010). *Strategic management: concepts and theories*. (3rd ed.). Bangkok: Thammasat University. (In Thai)
- Siripanich, B. (1999). Thai elderly people. Bangkok: Council of the Elders of Thailand. (In Thai)
- Stanley, C. (2006). *Strategic Planning A Practical Guide for Competitive Succeed*. California: Thomson South West.
- Thamdee. P. (2017). Identity Social Culture Conditions for Potential Aging of the Elderly in Chiang Mai. *Social Science Journal Faculty of Political Science, Chulalongkorn University, 47*(2), 109-131. http://www.library.polsci.chula.ac.th/journal2 (In Thai)
- Yodpetch, S. (2012). *Characteristics of operations and activities of the Elderly Club*. Bangkok. J. (In Thai)

Promoting Pre-Service Teachers' Multicultural Competence through Culturally Responsive Pedagogy-Based Art Education Courses

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Abstract

This study aims to enhance the multicultural competence of preservice teachers by integrating culturally responsive teaching into teacher preparation courses. The study was designed as participatory action research, and 36 pre-service teachers, one instructor, and two in-service teachers were involved. The study collected qualitative data through semi-structured interviews and observations and quantitative data through a multicultural competency self-assessment scale. Quantitative data were analyzed with descriptive statistics, whereas qualitative data were analyzed with content analysis. The study's findings indicate that culturally responsive teaching-based courses in teacher education encompass six fundamental areas: attitude, culture, consideration, ethics, and pedagogy (or ACCEPT). In addition, enrollment in pedagogy-based teacher preparation courses led to an increase in pre-service students' multicultural competence. Among the three components of multicultural competency, statistics indicate that knowledge changes the most, followed by skills and attitudes. The study argues that incorporating multicultural education concepts into teacher education courses fosters multicultural competency in future teachers, albeit to varying degrees.

Keywords: Multicultural competence, Pre-service teachers, Culturally responsive teaching

Introduction

In the twenty-first century, it is vital to prepare teachers with multicultural knowledge, attitudes, and skills (Barnes, 2016; Gay & Howard, 2000; Gay, 2015). Migration within and between nations is growing, increasing racial, ethnic, linguistic, and religious diversity in schools and communities. Several studies indicate that, in this context, preparing teachers to serve traditional or dominant student groups or to adopt narrow perspectives and pedagogical approaches when working with children from various backgrounds is questionable. Recent research suggests that teacher preparation programs should prepare future teachers with multicultural competence. Teachers with multicultural competency are believed to work efficiently and respectfully with kids from diverse backgrounds (Barnes, 2016; Gay, 2015). In addition, they serve vital roles in instilling in children the multicultural values essential in a globalized society, including tolerance, respect, appreciation for plurality, and a commitment to social justice. Extensive research has been conducted on methods for preparing teachers with multicultural competence. Having field-based experiences (Knight, 2006) such as servicelearning (Barnes, 2016; Krummel, 2013), studying abroad (Byker & Putman, 2019), taking a course on multicultural education (Banks, 2014), enrolling in a short or extended training program, and integrating multicultural education concepts and issues into existing curricula (Gay, 2002, 2015) are examples. This study investigated the last approach to preparing future educators. It particularly proposed to employ the multicultural concept of what Gay (2002) and Gloria Ladson-Billings (2014) refer to as culturally responsive teaching and culturally relevant pedagogy, respectively, to cultivate multicultural competence in pre-service teachers. This study uses the terms "culturally responsive teaching" and "culturally relevant pedagogy" interchangeably. Widespread support for culturally responsive pedagogy and its integration into teacher education programs has existed since the 1990s (Richly & Graves, 2012). Gay is a leading scholar in the field, as evidenced by her previous research, and has proposed strategies for implementing it in teacher education (see Fox & Gay (1995) and Gay, 1997)).

Gay (2002, 2010) describes culturally responsive teaching as employing the cultures, experiences, and perspectives of ethnically diverse students to promote learning. It assumes that contextualizing academic knowledge and skills in students' lives makes them more meaningful, engaging, and easier to understand. Gay (2002, 2010) outlines five features of culturally responsive teaching. The first part involves understanding the diverse cultures present, which requires educators to comprehend the historical and contemporary cultural distinctions among various ethnic and cultural groups, as well as an appreciation for the cultural values and contributions of these communities. The second component is the development of a culturally relevant curriculum. Teachers must learn how to translate their knowledge of racial and cultural diversity into curriculum designs and culturally sensitive instructional strategies. The third focuses on developing conducive learning environments for students from varied cultural backgrounds. This can be achieved, for instance, by exhibiting high expectations for students, adopting innovative techniques to ensure students' academic achievement from diverse ethnic backgrounds, and establishing learning communities in which students support one another. The fourth involves effective communication across cultural

borders. It stresses learning about the communication patterns of various ethnic groups, how communication styles reflect cultural values and affect learning, and how to use students' communication methods to facilitate their learning or when dealing with them. The final part is tailoring instructional strategies to students' varied learning styles. It assumes that pupils have diverse learning styles affected partly by their cultural backgrounds. Therefore, culturally responsive teaching should tailor instruction to the unique learning styles of each student for better learning outcomes.

This study proposed integrating culturally responsive teaching principles into existing art education courses at a public university in Thailand to enhance pre-service teachers' multicultural competence. There are approximately 113 teacher institutions in Thailand, and 17 offer art education programs at the undergraduate level. These 17 institutions prepare roughly 4,000 art teachers for the nation's educational system. Moreover, Thailand is one of the most ethnically and linguistically diverse nations in the region. Over the past decade, it has accepted a substantial number of migrant students from Myanmar, Laos, and Cambodia into its public education system (Nawarat, 2018). Knight (2006) speaks to the rarity of programs that aim to equip art teachers by infusing multicultural goals into standard art education curricula. This is true in a Thai context as well. Despite the large number of teacher education programs and the increasing ethnic, linguistic, and cultural diversity in schools, few studies have examined the preparation of future art teachers for multicultural competence. Training future teachers in multicultural competency adds to the purpose of multicultural education, which is to restructure schools so that students from diverse backgrounds have equitable access to and success in school (Banks, 2014). Teachers without an orientation toward diversity may not be able to provide pupils from diverse cultural backgrounds with the greatest possible art education (Dana, 2022; Knight, 2015). This study aims to contribute to the literature on approaches for preparing future educators to work in culturally diverse schools.

Objectives

- 1. To identify essential guidelines for integrating culturally responsive pedagogy into art education courses.
- 2. To examine the effects of participation in culturally responsive pedagogy-based art education courses on the multicultural competence of pre-service teachers.

Methodology

Researchers employed participatory action research (Kemmis & McTaggart, 1988) in this study to develop culturally relevant, pedagogy-based teacher education courses to help future teachers become more culturally competent. This study was conducted at a Thai public university with a long history of teacher training and a diverse student body, including students from disadvantaged socioeconomic backgrounds, underrepresented ethnic groups, and rural communities.

Sample

The research involved 36 fourth-year pre-service teachers, one instructor (one of the paper's four authors), and the director of an art education program. Participants were chosen using a purposive sampling technique. The 36 pre-service teachers enrolled in the two required art education courses. During the first semester of the 2020 academic year, they enrolled in Art Instruction I and then Art Instruction II, respectively (See Table 1). Pre-service teachers come from a wide range of backgrounds and experiences. Some are from ethnic minority backgrounds, others from non-dominant religious backgrounds, some are from urban or rural areas, and others identify as members of the lesbian, gay, bisexual, and transgender communities (LGBT).

Data collection and research instruments

This study gathered both qualitative and quantitative data. Before and after the completion of the two courses, semi-structured interviews were conducted with student participants and the program director. The culturally relevant pedagogy-based semi-structured interview protocol for student participants included questions regarding their knowledge of and experiences with cultural diversity in the classroom and at home, as well as their perspective on incorporating culturally responsive teaching into art instruction courses. Additionally, one of the authors, a course instructor, conducted participant observation while implementing culturally relevant pedagogy-based art instruction courses. The multicultural education self-assessment scale, based on culturally relevant pedagogy, was used to gather qualitative data. The three primary components of the scale are knowledge, skill, and attitude. The scale is a 5-point scale, with 5 representing the greatest level, 4 representing a higher level, 3 representing a moderate level, 2 representing a low level, and 1 representing the lowest level. Before beginning the first course, students completed a multicultural education self-assessment scale, which they repeated after completing the second course.

Research activities

The research activities encompassed two phases: Phase 1 from August 2019 through October 2020 and Phase 2 from October 2020 through February 2021. Participatory action research, which consists of four phases: plan, act, observe, and reflect, was utilized to guide the execution of the activities. The activities are detailed in table 1.

 Table 1 Research activities

Period/						
Stages	Activity	Participant	Location	Duration	Result/output	
Phrase 1						
Plan	1) Conducting interviews regarding art education's teaching and learning experiences and cultural diversity viewpoints. 2) Analyzing and synthesizing interview data to build a guideline for incorporating culturally responsive teaching into the selected course—Art Instruction I	All participants All participants	- Campus - Schools Campus	Aug 2019 - Nov 2019 Nov 2019	Perspectives and experiences of participants A guideline for incorporating culturally responsive teaching into the selected course.	
	3) Holding group meetings with all target groups to discuss how to apply the guideline to reconstruct the selected course. 4) Examining a draft of the redesigned curriculum and	All participants Researcher	Campus	Nov 2019 Nov 2019 May 2020	A draft of the revised curriculum and instructional approaches for the selected course. Newly redesigned syllabus and instructional	
	curriculum and instructional strategies for the chosen course.			May 2020	strategies for the selected course.	

Period/	A ativity	D 4* * 4	Location	Duration	Posult/output
Stages	Activity	Participant	Location	Duration	Result/output
Act	1) Introducing the newly designed courses—Art Instruction I — to participating students. 2) Implementing the newly designed course-Art Instruction I.	Researcher	Campus	June 2020 - Oct 2020	- Course implementation - Students' perceptions of the course and its teaching and learning activities.
	3) Participating students practiced teaching in classroom settings.	Participating students	Campus	Aug 2020	- Students gaining experience in teaching using culturally relevant
	4) Participating students practiced teaching in schools with diverse cultures.	Participating students	Schools	Sep 2020	pedagogy Lesson plans, instructional videos and instructional materials
Observe	1) Observing the implementation of the newly designed course and the teaching practices of students in classrooms and schools.	Researcher	- Campus - Schools	June 2020 - Oct 2020	Students' responses to the course's instructional and learning activities.
Reflect	1) Conducting the activity in which students wrote their course reflections. 2) Conducting the activity in which students reported the outcomes of their teaching practice.	- Participating students - Researcher	Campus	Oct 2020	Reflections and feedback from participating students

Period/			T	D .:	D 1// / /	
Stages	Activity	Participant Location		Duration	Result/output	
Phrase 2			1			
Plan	Incorporating culturally responsive teaching into the chosen course—Art Instruction Art Instruction II —using a guideline developed in the first phrase and based on input from the initial course implementation.	- Researcher - Participating students	Campus	Oct 2020	Newly redesigned syllabus and instructional strategies for Art Instruction II	
Act	1) Introducing the newly designed courses—Art Instruction II — to participating students. 2) Implementing the newly designed course-Art Instruction 2.	Researcher	Campus	Oct 2020 - Feb 2021	- Course implementation - Students' perceptions of the second course and its teaching and learning activities.	
	3) Participating students practiced teaching in classroom settings.	Participating students	Campus	Jan 2021	- Students gaining experience in teaching using culturally relevant	
	4) Participating students practiced teaching in schools with diverse cultures.	Participating students	Schools	Jan 2021	pedagogy Lesson plans, instructional videos, and instructional materials	
Observe	Observing the implementation of the newly designed Art Instruction II and the teaching practices of students in classrooms and schools.	Researcher	- Campus - Schools	Oct 2020 - Feb 2021	Responses of students to the instructional and learning activities in a course.	
Reflect	Conducting the activity in which students wrote their course reflections.	- Participating students -Researcher	Campus	Feb 2021	Reflections and feedback from participating students	

Data analysis

The data from interviews and field notes were analyzed using content analysis. The interview data were transcribed, carefully read, and then coded to identify patterns and recurring themes. To analyze quantitative data from the multicultural competence self-assessment scale, descriptive statistics including mean, percentage, and standard deviation were employed.

Results

This study sought to strengthen the multicultural competency of pre-service teachers by incorporating culturally responsive teaching into two art education courses. The findings are as follows.

Integrating Culturally Responsive Pedagogy into Teacher Education Curriculum: Key Guidelines

The study chose to incorporate culturally responsive pedagogy into two art education courses—Art Instruction I and Art Instruction II— for two primary reasons. First, these two courses allow pre-service teachers to translate previously acquired theories and concepts in art education and culturally responsive teaching into K-12 instructional possibilities. Second, these courses provide opportunities for pre-service teachers to design and implement lesson plans in realistic classroom and school settings. The school setting particularly provides preservice teachers with the opportunity to connect with pupils from diverse cultural backgrounds and to experiment with lesson plans developed with and without students' backgrounds in consideration.

This engagement comprises three stages; preparation for change, action to effect change, and reflection on actions for further change. During the first phase, which occurred primarily before implementing the first art instruction course, key activities included obtaining participant interest and agreement and organizing workshops for pre-service teachers to learn about cultural diversity, multicultural education, and culturally relevant instruction. The second phase focuses on implementing two courses, Art Instruction I and Art Instruction II, that adopt culturally responsive pedagogy components. Teaching and learning activities in the classroom, pre-service teachers teaching at local schools, and pre-service teachers working on assignments such as lesson plans and teaching materials are important activities during this time. In the final phase, the dominant activity is reflection. During a reflection session, preservice teachers wrote their thoughts and course evaluations. At the same time, the instructor reviewed the preservice teachers' lesson plans and instructional materials, planned Art Instruction II implementation based on Art Instruction II implementation, and conducted semi-structured interviews (this was done after the second course implementation).

Implementing two newly developed courses over two semesters identifies six core components for strengthening the multicultural competency of pre-service teachers. These six important components can serve as a framework for incorporating multicultural themes and concepts into any teacher education course that strives to cultivate multicultural competency

among pre-service teachers. These are designated by the acronym ACCEPT, which stands for attitude, culture, caring, ethics, pedagogy, and trust. Attitude refers to a positive perspective on the diversity of learners, including their gender, age, religion, ethnicity, lifestyle, culture, and tradition, among other factors. The cultural diversity that students brought to the classroom was an excellent opportunity for teaching and learning management.

Additionally, those responsible for regulating the teaching and learning in art education must have a positive view of the artwork. The culture component stresses how important it is for teachers to learn about different cultures and learn from their students' experiences in a variety of ways so that they can plan and put into practice relevant teaching and learning. Caring refers to the teachers' awareness and respect during the teaching and learning processes, including using words, expressions, gestures, attitudes, and other actions that are sensitive to the students' feelings. Without caring, a teacher could impede pupils' sentiments of comfort and respect for themselves, their peers, and their teachers. Furthermore, it may lead to discriminatory practices. Ethics relates to the moral standards required of professional educators. Pedagogy focuses on instructors' abilities to incorporate students' knowledge, voices, perspectives, and life experiences into the classroom and teaching and learning activities. Trust necessitates that teachers have faith and confidence in their students. Teachers must have faith in their students, believing they can learn and will do so with enthusiasm.

Teaching and learning played a significant part in fostering cultural awareness, acceptance, and respect. Integration of culturally appropriate pedagogical concepts into courses such as Art Instruction I and Art Instruction II is one example among many. However, one important consideration is incorporating them into the course without diluting its core.

Changes in Pre-Service Teachers' Multicultural Competence

This research aims to improve the multicultural competency of pre-service teachers by exposing them to courses that integrate culturally relevant pedagogical principles. According to the findings, their multicultural competence, comprised of knowledge, skills, and attitudes, altered due to taking the courses. The results of the self-assessment scale for multicultural competency indicate that 36 pre-service teachers' knowledge, skills, and attitudes have improved marginally after completing the courses. As demonstrated in Table 2, after completing the courses, the mean and standard deviation of their multicultural competency increased from 3.56 and 0.73 to 3.96 and 0.76.

Table 2 Pre-service teachers' multicultural competence before and after taking culturally relevant pedagogy-based art instruction courses

Multicultural	Pre-study		Level		Post-study		Level	Mean	Results	
competence	X	%	S.D.	Level	X	%	S.D.	Level	differences	resuits
Knowledge	3.19	63.73	0.72	Moderate	3.78	75.51	0.78	high	0.59	+1
Skill	3.28	65.53	0.74	Moderate	3.85	77.06	0.78	high	0.57	+1
Attitude	4.23	84.56	0.77	high	4.25	84.97	0.74	high	0.02	0
Total	3.56	71.27	0.73	high	3.96	79.18	0.76	high	0.4	0

Regarding each component of multicultural competence, knowledge and skills changed more than attitudes. Before taking the courses, the average level of knowledge of pre-service teachers was moderate, with a mean of 3.19 and a standard deviation of 0.72. But after completing the course, the mean level of knowledge was 3.78, and the standard deviation was 0.78. Before enrolling in the courses, the average skill level of the students was moderate, as shown by a mean score of 3.28 and a standard deviation of 0.78. However, after completing the courses, students reported significantly greater skill levels—a mean score of 3.85 and a standard deviation of 0.78. Of the three aspects of multicultural competence, attitude is the least likely to shift over time. Before enrolling in the classes, pre-service teachers had a positive attitude, with a mean of 4.23 and a standard deviation of 0.77. After enrollment, pre-service teachers' attitudes remained positive, with a mean score of 4.23 and a standard deviation of 0.74.

Discussions

1. This study incorporated five culturally relevant pedagogy components developed by Gay (2002) into two art instruction courses and implemented both courses for two semesters (each for one semester). This engagement is comprised of three stages: preparation for change, action to effect change, and reflection on actions for further change. The research identified ACCEPT, an acronym for attitude, culture, caring, ethics, pedagogy, and trust, as the six guiding principles for such engagement. Some fundamental guidelines are comparable to Gay's culturally relevant teaching elements (2002, 2010), including learning about different cultures, developing a curriculum that is sensitive to those cultures, making classrooms inclusive of students of all backgrounds, promoting meaningful cross-cultural communication, and adapting teaching methods to accommodate students' diverse learning styles. The ACCEPT guideline is comparable but differs for some practical reasons. First, the course subjects establish the extent to which teachers can integrate culturally appropriate material and the amount that can be done. The course topics that lend themselves most to incorporating culturally relevant pedagogy are curriculum design, instructional management procedures, teaching techniques and approaches, classroom management, and the creation and utilization of teaching materials. Second, the course learning objectives and material restrict chances for

group-based learning, which hinders the creation of a community of learners supported by culturally relevant instruction. Therefore, instructors emphasized fostering a positive or joyful classroom environment using various techniques. Lastly, preservice teachers and instructors, as well as pre-service teachers and pre-service teachers, encounter challenges in learning one another's languages because of linguistic diversity, limited time, and the course content that must be completed each semester to meet the program's curriculum requirements. This limits the ability of the two-arts instruction course's execution to utilize the cross-cultural communication component properly. However, the design and selection of visual languagebased art instructional resources may be an alternative to spoken communication. The ethics component is distinctive since it is adapted to the local context, including Thai professional standards and ethics, addressing desirable characteristics in the practice of the educational profession and Thailand's basic core curriculum. The ACCEPT principles can serve as the basis for incorporating multicultural concepts or goals into teacher education, particularly by incorporating such concepts into the curriculum of existing teacher education programs. The ethics component is distinctive since it is adapted to the local context, including Thai professional standards and ethics, addressing desirable characteristics in the practice of the educational profession and Thailand's basic core curriculum. The ACCEPT guidelines can serve as the framework for bringing multicultural concepts or aims into teacher education, notably through incorporating such notions into existing teacher education programs' curricula.

2. According to the findings, enrolling in the two courses with culturally responsive pedagogy, which invalidates deficit-based thinking or "cultural blindness (Gay, 2010), altered the multicultural competence of pre-service teachers in all three areas, including knowledge, attitudes, and skills. The positive impact of incorporating culturally responsive pedagogy into art education courses is consistent with the findings of field-based experiences such as servicelearning (Barnes, 2016; Krummel, 2013) and studying abroad (Byker & Putman, 2019). According to Rychly and Graves (2012), teachers with culturally responsive pedagogy possess the following characteristics: compassion and empathy, a reflection of their attitudes and beliefs regarding other cultures, knowledge of other cultures, and their own cultural frameworks. Before and after completing the two courses, the pre-service students in this study demonstrate a positive attitude. They enter the classroom with empathy and sympathy for others. This study found, however, that the skills and knowledge of preservice teachers increased from moderate to high levels. The attitude component, which was already high before the courses, increased slightly and remained higher than the other two despite undergoing the least change. This result suggests two focus areas. The first is that the students' attitudes toward cultural differences such as ethnicity, religion, and beliefs were positive. The newly developed two art instruction courses have little effect on their attitudes. Possessing positive attitudes may not necessitate additional educational opportunities, such as those investigated in this study. It is necessary to conduct research to determine, if necessary, how and in what way the attitudes component of multicultural competence can be promoted further. The second implication is that the newly developed two art instruction courses have a measurable impact on the multicultural knowledge and skills of preservice teachers. This was in accordance with the findings of Suwanma and Srisuk (2017), who discovered that, following the workshop, teachers had the opportunity to practice teaching in classrooms with students of different ethnicities, thereby enhancing their teaching and learning management skills. The progress of pre-service teachers in this study may be influenced by the course design embedded with the ACCEPT guideline, the students' active participation with the instructors' encouragement, hands-on learning in which they designed and implemented lesson plans in the classroom and school, and their prior cultural understanding. Also intriguing is the question of whether a positive attitude toward cultural diversity influences the acquisition of multicultural knowledge and skills. If this is the case, how will future research on incorporating multicultural concepts into teacher education courses address this issue?

Conclusion and suggestions

The study's findings indicate that culturally responsive teaching-based courses in teacher education encompass six fundamental areas: attitude, culture, consideration, ethics, and pedagogy (or ACCEPT). In addition, enrollment in pedagogy-based teacher preparation courses led to an increase in pre-service students' multicultural competence. Among the three components of multicultural competency, statistics indicate that knowledge changes the most, followed by skills and attitudes. The study argues that incorporating multicultural education concepts into teacher education courses fosters multicultural competency in future teachers, albeit to varying degrees.

Based on the investigation's findings, the study made the following suggestions.

- 1. Recommendations for implementation
- 1.1 The circumstances, challenges, and backgrounds of participating students must be explored and effectively addressed to design the most relevant and appropriate teaching and learning and to foster the development of multicultural competence among participating students.
- 1.2 Few courses are insufficient to foster multicultural competence in pre-service teachers. It is strongly recommended that multicultural concepts, such as culturally relevant pedagogy, be incorporated into the entire teacher education curriculum. Also, teacher education programs could investigate other approaches for cultivating such competency, incorporating culturally relevant teaching, for instance, into other courses or student activities within and outside the art education curriculum. More opportunities to develop multicultural competence would enable future teacher to understand, accept, and cherish diverse cultures.
 - 2. Recommendations for future research
- 2.1 Before and after finishing the courses, the attitude of pre-service teachers was stronger than their knowledge and skills, according to this study. Future research might investigate the relationships between attitude and the other two components, as well as how to employ attitude to foster the other two sets of competence.

2.2 Future studies could investigate an alternative approach for fostering multicultural competence in pre-service teachers compared to the approach adopted in this study, which promotes multicultural competence to some extent.

New knowledge and the effects on society and communities

New teachers entering the area of art education have the power to influence their students' understanding and appreciation of art in a multicultural society (Knight, 2015). To accomplish this, they will need multicultural competence and the ability to adapt their teaching to the diverse cultural backgrounds and learning styles of their students. This study illustrates that "culturally relevant pedagogy" or other concepts can be incorporated into pre-existing teacher education courses to facilitate a change toward cultural diversity in art teacher training and art education. This study demonstrates that integrating multicultural concepts such as culturally responsive teaching into teacher preparation courses equips future teachers with multicultural competency. The study identified six essential components for integrating and implementing culturally responsive teaching in courses for teacher education. This is represented by the acronym ACCEPT, which stands for attitude, culture, care, ethics, pedagogy, and trust. The ACCEPT can serve as a guide or framework for preparing prospective teachers to work with students from diverse backgrounds and to deliver equitable and meaningful teaching and learning in their future classrooms and schools. Teacher education programs and institutions can use ACCEPT to develop culturally competent future teachers by adapting the framework to their own social, cultural, and political contexts.

References

- Banks, J. (2014). An introduction to multicultural education. NJ: Pearson.
- Barnes, M.E. (2016). The student as teacher educator in service-learning. *Journal of Experiential Education*, 39(3), 238 253. DOI:10.1177/1053825916643831
- Byker, E. J., & Putman, S. M. (2019). Catalyzing Cultural and Global Competencies: Engaging Preservice Teachers in Study Abroad to Expand the Agency of Citizenship. *Journal of Studies in International Education*, 23(1), 84–105. https://doi.org/10.1177/1028315318814559
- Dana, K. S. (2022). *Culturally responsive teaching in the art room*. (Master's thesis, Grand Valley State University). https://scholarworks.gvsu.edu/gradprojects/194
- Fox, W., & Gay, G. (1995). Integrating multicultural and curriculum principles in teacher education. *Peabody Journal of Education*, 70 (3), 64-82. DOI: 10.1080/01619569509538835
- Gay, G. (1997). Multicultural infusion in teacher education: Foundations and applications. *Peabody Journal of Education*, 72 (1), 150-177, DOI: 10.1207/s15327930pje7201 8
- Gay, G. (2002). Preparing for culturally responsive teaching. *Journal of Teacher Education*, 53 (2), 106-116. https://journals.sagepub.com/doi/10.1177/0022487102053 002003
- Gay, G. (2010). Culturally responsive teaching: Theory, research, and practice (2nd ed.) Teachers College Press.
- Gay, G., & Howard, T. C. (2000). Multicultural teacher education for the 21st century. *The Teacher Educator*, *36* (1), 1-16. https://doi.org/10.1080/08878730009555246
- Gay, G. (2015). The what, why, and how of culturally responsive teaching: International mandates, challenges, and opportunities. *Multicultural Education Review*, 7 (3), 123-139, DOI: 10.1080/2005615X.2015.1072079
- Kemmis, S., & McTaggart, R. (1988). *The Action Research Planner*. (3rd ed.). Victoria: Deakin University.
- Knight, W.B. (2006). Using contemporary art to challenge cultural values, beliefs, and assumptions. *Art Education*, *59* (4), 39-45. https://doi.org/10.1080/00043125.2006.11651602
- Knight, W. B. (2015). Culturally responsive teaching in art education. *The International Journal of Arts Education*, *13*(1), 70–89. http://ed.arte.gov.tw/uploadfile/periodical/3459 70-89.pdf
- Krummel, A. (2013). Multicultural teaching models to educate pre-service teachers: Reflections, service-learning, and mentoring. *Current Issues in Education*, *16*(1), 1-6. https://cie.asu.edu/ojs/index.php/cieatasu/article/download/1059/450/
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: a.k.a. the Remix. *Harvard Educational Review*, 84(1), 74-84. DOI:10.17763/haer.84.1.p2rj131485484751
- Nawarat, N. (2018). *Multicultural education critical perspectives and praxis in schooling*. Wanida Karnpim Limited Partnership.

Rychly, L., & Graves, E. (2012). Teacher characteristics for culturally responsive pedagogy. *Multicultural Perspectives*, *14* (1), 44-49. DOI: 10.1080/15210960.2012.646853

Suwanma, P., & Srisuk, K. (2017). The Effect of Instructional Management Competencies of Teachers in Multi-Ethnic Classrooms. *Journal of Education Khon Kaen University*. *40*(1), 73-84. https://so02.tci-thaijo.org/index.php/EDKKUJ/article/view/80494/73846. (In Thai)

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Confirmative Component Analysis of Management Optimization of Educational Organizations

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Abstract

This research aimed to analyze the corroborative components and examine the correspondence between the corroborative structure of the management of educational organizations and the empirical data. The sample consisted of 400 educational administrators in Thailand. The instrument used in this research was a questionnaire with a confidence value of 0.95 in the whole questionnaire. For Confirmative Component Analysis and second corroborative component analysis, the results showed that Educational Organization Management Optimization Components. The components whose weights were arranged in descending order include Organizational structure, Human Resources, Organization Management and Leadership. The results showed that first confirmed components that all index values were found to pass the criteria. They had an element weight of 0.01-0.15 with a statistical significance of .01 and a second-order confirmation component analysis result. All index values were found to pass the criteria. The constituent weights of 0.26-1.26 were statistically significant at .01. The harmonization index between the model and the empirical data was p = 0.09, CMIN/DF = 1.59, GFI = 0.99 and RMSEA = 0.02. It made you aware of the components of organizational management optimization in education to be used to further develop educational organization management efficiency.

Keywords: Corroborative component analysis, Optimization, Organization management, Education

Introduction

The education system was an important factor affecting the development of people and the nation. Because it was a process of creating learning and an important basis for improving the quality of life, society, and economy (Montri, 2015). It was the basis for solving various problems and was also an important basis for each individual when an individual with a good educational background can be combined into a cog to drive the prosperity of the country resulting in success in various fields, whether economically, socially and in all aspects, which will definitely lead the country to an international level. Everything that has been said depends on the effective management of education. Nowadays, the social and economic conditions of countries around the world are linked and more interdependent, planning and analyzing global economic trends society and politics Including the development of human potential based on databases and statistics were very important and necessary for the development of the country towards sustainability and balance management or the International Institute for Management Development (IMD) analyzes and ranks the competitiveness of countries around the world based on the different environments that affect their competitiveness. It is conducted annually and has presented its results in the form of The World Competitiveness Yearbook (WGY) since 2007. 1989 to present and ranking results obtained from data analysis through indicators. It covers four main factors: 1) economic performance, 2) government efficiency, 3) business efficiency, and 4) infrastructure. (Office of the Education Council Secretariat, 2015), which would reflect the capabilities and performance of the country in creating and maintaining an environment suitable for business operations. Countries with high competitiveness would have a high level of productivity. This made it possible to maintain sustainable economic growth as well for the infrastructure at international institutions in order to develop a focus, there is a part of educational management included in the country's competitiveness rankings (Office of the Education Council Secretariat, 2015), in line with the results of the World Economic Forum (WEF) rankings, presented in the report "The Global Competitiveness Report 2013-2014" the 2012-2013 study at in the past, Thai education fell to 8th place among ASEAN countries. The countries in ASEAN are as follows: 1) Singapore 2) Malaysia 3) Brunei 4) Indonesia 5) Philippines 6) Laos 7) Cambodia 8) Thailand and 9) Vietnam (Office of the Education Council Secretariat, 2015) Currently, education in Thailand has clearly divided compulsory education at different levels, whether it was education at the primary level, secondary level, or vocational level, higher education is also divided into Thai education under different ministries, and departments, which care will be different. The educational administration of private educational institutions is different from public education institutions. It is characterized as an educational business, in addition to having to focus on academic quality. The administration also had to consider profits in order to operate the business as the relatively large decline in the number of learners affected private schools and the number of students. Therefore, it said that the educational administration of private educational institutions was a competitive educational business and it was necessary to improve the efficiency of management. And the Private

Education Commission Since the academic year 2012 onwards, a number of educational institutions have been closed continuously and due to the decline of educational institutions, there has been an interest in finding out how to find a model of private education management that would have ways to be able to sustainable; therefore, the researcher is interested in finding ways to manage educational organizations as a guideline to improve the performance of educational institutions to be effective and effective which would lead to sustainability in the future.

Research Objectives

- 1. To analyze the corroborating components of the organization management optimization in education with confirmative component analysis.
- 2. To examine the coherence between the corroborative structure of the organizational management optimization in education and the empirical data.

Literature Reviews

This research reviewed the paper as follows:

Leadership Theory: Leadership theories are the explanations of how and why certain people become leaders. They focus on the traits and behaviors that people can adopt to increase their leadership capabilities or their skills and leadership theories help explain how leader harness and develop these traits.

Human Resource Management: Human resource management (HRM) is the practice of recruiting, hiring, deploying and managing an organization's employees. HRM is often referred to simply as human resources (HR). A company or organization's HR department is usually responsible for creating, putting into effect and overseeing policies governing workers and the relationship of the organization with its employees. The term human resources were first used in the early 1900s, and then more widely in the 1960s, to describe the people who work for the organization, in aggregate (Wesley, 2022). The objectives of HRM can be broken down into four broad categories: Societal objectives, Organizational objectives, Functional objectives, and Personal objectives.

Concept of Organizational Structure: An organizational structure is a system that outlines how certain activities are directed in order to achieve the goals of an organization. These activities can include rules, roles, and responsibilities. The organizational structure also determines how information flows between levels within the company. For example, in a centralized structure, decisions flow from the top down, while in a decentralized structure, decision-making power is distributed among various levels of the organization. Having an organizational structure in place allows companies to remain efficient and focused (Quangyen & Yezhuang , 2013).

Organization Management: The organizational management of a business needs to be able to make decisions and resolve issues in order to be both effective and beneficial. The process of organizing, planning, leading and controlling resources within an entity with the overall aim of achieving its objectives. In addition, organization management refers to the art of getting people together on a common platform to make them work towards a common predefined goal. Organization management enables the optimum use of resources through meticulous planning and control at the workplace. Essential Features of Organization

Management comprised planning, organizing, staffing, leading, control, time management, and motivation (Prachi, 2022)

The literature review can summarize the component of Management Optimization of Educational Organizations comprising leadership, human resource management, organizational structure, and organization management as follows the figure 1.

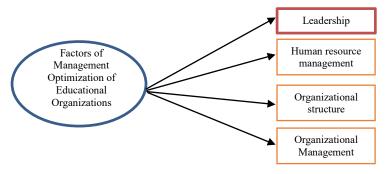


Figure 1 Conceptual Framework (Source : Researcher, 2022)

Methodology

Components synthesis

The process for synthesizing components of organizational management optimization in education is as follows:

- 1. Study the documents, concepts, theories and research results related to the enhancement of educational organization management.
- 2. Select variables and components which consist of Organizational structure, Human Resource Management, and Leadership.
- 3. Apply a conceptual framework for research as shown in Figure 1, by proposing a hypothetical model on the components of organizational management optimization in education which is consistent with the empirical data.

Population and sample

The population was educational institution administrators in Thailand. There are a total of 600 locations (Department of Industrial Works, 2020). Because this research was a factor analysis, a minimum of 10 - 20 samples were required per 1 observed variable (Schumacker & Lomax, 2015; Kline, 2016; Jackson, 2003). In this research, there were 18 observed variables. Therefore, an appropriate sample size for structural equation model analysis should be at least equal to 10x400 = 400 units. After that, we used the purposive sampling method. *Research Instrument*

The research instrument was a questionnaire on factors influencing organizational management efficiency in education. The questionnaire was a rating scale, which had five criteria for assessing the weight of the assessment according to Likert's method, and respondents made the right choice (Joshi et al., 2015). Researchers then took the draft questionnaire created with the assessment form to 5 experts. who had knowledge and

experience in the field to be studied, considered a questionnaire of 3 persons to find the quality of the tool by examining the Index of Item-Objective Congruence (IOC) The value is between 0.60-1.00, the optimum value is 0.50 or more (Turner & Carlson, 2002). The discriminant power was between 0.43-0.84 and the confidence of the whole questionnaire was 0.95, which is greater than 0.9 considering that the confidence was at a very good level (George & Mallery, 2003) collecting data by asking for assistance in responding to questionnaires from the sample group.

Data Analysis

The researchers performed a corroborative component analysis of the built measuring instruments (Confirmatory Factor Analysis: CFA) and second-order confirmation component analysis, Second-order Confirmatory Factor Analysis (S-CFA) examines the coherence of the structure-correlation model of the components developed with the empirical data with the use of statistical and social science software packages.

Results

This research was a corroborative component analysis and examined the coherence between the corroborative structure, the corroborative component analysis of the organization management optimization in education and the empirical data. The researcher divided the presentation of the research results as follows:

The results of the exploratory component analysis

The results of the corroborative component analysis

Confirmative Component Analysis (CFA)) to examine the structural validity of the observed variable measures in research and model development to be consistent with empirical data which is a model that the researcher has modified until it is complete, acceptable and reliable according to the principles of the research process. Researchers need to take into account the criteria used to evaluate and modify the model, it must also be widely accepted and used. Arbuckle $(2\ 0\ 1\ 3)$ recommends the model evaluation criteria that should be used considered 4 criteria as shown in Table 1-2.

Table 1 Mean and Standard Deviation of all Variables.

n = 400

Variables	\overline{x}	S.D.	Interpretative
Leadership	4.04	0.79	Much
Human resource management	4.06	0.77	Much
Organizational structure	4.05	0.71	Much
Organization management	4.14	0.77	Much
Total	4.07	0.76	Much

From table 1 The overall management enhancement component of the educational organization was at a high level. ($\bar{x} = 4.07, S.D. = 0.76$)

Table 2 Presents the criteria for assessing the conformity of the underlying model with the empirical data.

(Evaluating the Data-Model Fit)	(Criteria)	Evaluation		
1) CMIN- ρ (Chi-square	a > 0.05	The value ρ must be greater than 0.05.		
Probability Level)	$\rho > 0.05$	The higher the value ρ , the better.		
2) CMIN/df (Relative Chi-square)		CMIN/df must be less than 3.		
	< 3	The closer the CMIN/df value is to 0,		
		the better.		
3) GFI (Goodness of fit Index)		The GFI must be greater than 0.90.		
	> 0.90	The closer the GFI value to 1, the		
		better.		
4) RMSEA (Root Mean Square		The RMSEA value must be less than		
Error of Approximation)	< 0.08	0.08.		
		The closer the RMSEA value is to 0,		
		the better.		

Table 2 shows the four key model evaluation criteria of the AMOS program, and the researcher has to adjust the research model to meet all of these criteria. Therefore, it can be considered that the model is complete, acceptable and reliable in accordance with the principles of the research process.

The results of confirmation element analysis to verify the structural validity of the gauge prior to component modification revealed that p=0.00, CMIN/DF = 4.74, GFI = 0.79 and RMSEA = 0.08, indicating that the model was inconsistent with the empirical data. The researcher adjusted the composition to choose a method to exclude observed variables that had inappropriate values and connect the arrowhead so that the modified latent component or variable is most consistent with the empirical data. The results of the confirmation component analysis to verify the structural validity of the gauge after the component modification revealed that p=0.11, CMIN/DF = 1.51, GFI = 0.99 and RMSEA = 0.02, indicating that the model was consistent with the analytical data as shown in Figure 2.

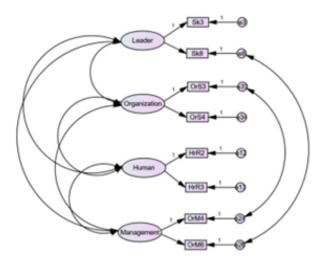


Figure 2 Confirmative component analysis (CFA) results after model modification (Source : Researcher, 2022)

From Figure 2, the results of the confirmation element analysis verify the structural validity of the gauge after the component adjustments were made. When considering the components of the leadership variables, it found that there were two variables that were weighted in the identification of all variables, arranged in order of priority from most to least: the ability to use a foreign language in good communication skills (SK3) and knowledge transfer skills (SK8), with the weight of the components equal to 1.00 and 0.76, respectively, when considering the organizational structure components found that there are variables that are weighted in the identification of all variables, 2 variables, arranged in order of priority from most to least, namely the establishment of an educational institution board of directors from representatives of work groups and outsiders (ORS4) and An operational manual and a clear regulation to be used as a guideline for the operation (ORS3) with the weight of the components equal to 1.11 and 1.00, respectively. In the identification of all 2 variables, the order of importance is from highest to lowest, i.e. providing adequate welfare for the life of personnel (HRR3) and having an evaluation system Fair and practical performance (HRR4) with the weight of the components of 1.22 and 1.00, respectively. All 2 variables are arranged in order of importance from least to greatest, namely, promoting activities that allow personnel to meet, exchange and build experiences from external organizations (ORM4) and adopt the Sufficiency Economy Philosophy in organizational management (ORM3) with component weights of 1.00 and 0.95, respectively.

The researcher then adjusted the composition and chose how to connect the arrow lines. It was the result of a Second Order Confirmatory Factor Analysis (S-CFA) to verify the structural validity of the gauge. After adjusting the components, it was found that p=0.09, CMIN/DF = 1.59, GFI = 0.99 and RMSEA = 0.02, indicating that the model was consistent with the empirical data as shown in Figure 3.

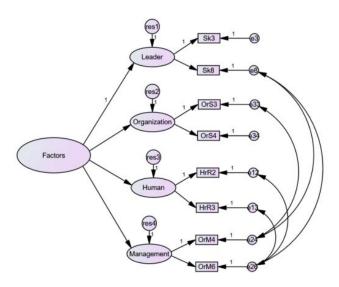


Figure 3 The results of the second corroborative component analysis (S-CFA) after model tuning. (Source : Researcher, 2022)

From Figure 3, when considering the weight of each component, it was found that the element weight was positive 0.26-1.26 with statistical significance at the .0 1 level. (Organization) has the most element weight equal to 1.26, followed by Organizational management (Management) has a component weight of 1.12, Leadership has a component weight of 1.00 and Human Resources (Human Resource) having a component weight of 0.26, respectively, with each component having confidence in the measurement (R2) is between 0.01-0.15, indicating that all 4 components can be used as components to increase organizational management efficiency in education and the corroborative component model, the corroborative component analysis of the educational organization management optimization was consistent with the empirical data. Show that this model is structurally straight and all 8 variables are important variables of components of organizational management optimization in education.

Discussions

1. The results of a corroborative component analysis of the management optimization of educational organizations

It was found that all 40 variables used in the analysis could be grouped into 4 components from the elemental analysis by extracting the principal components and rotating the element axis with an acute angle by the Varimax method with a value greater than 1.00 for each component consisting of 6-11 variables. It has an element weight of 0.43 - 0.80. This adjusted element is named for its meaning. Consistent and encompassing a list of variables in

each component. The components whose weights are arranged in descending order include organizational structure, Human Resource, Organization Management and Leadership, respectively, in accordance with the research that used all 4 components of the Deming Cycle as a research hypothesis such as the research of Pothongsangarun & Kumplanon (2017) using the Deming Cycle as a model for the development of processes to optimize logistics management of the sugar industry group in Wangkanai factory. and Testa, Iraldo and Daddi (2018), summarized their research on the effectiveness of industrial environmental management tools in accordance with ISO 14001 or EMAS (Eco-Management and Audit Scheme). Ming used to create a tool to store information that the organization has better environmental performance and more incentives to invest in the environment. It is a key factor in achieving real efficiency improvements.

2. The results of the examination of the conformity between the constituent structure of industrial inventory management optimization and empirical data revealed that the confirmation component model, the confirmation component analysis of the industrial inventory management optimization, was significantly higher consistent with empirical data by the results of the first and second confirmation component analysis. It was found that the composition weight was positive. The first confirmatory component weight was between 0.72-0.87, was statistically significant at the .01 level, and the second confirmed constituent weight was between 0.86-0.91, was statistically significant at the .01 level. The harmonization between the model and the empirical data was obtained for p = 0.46, CMIN/DF = 0.99, GFI = 0.99 and RMSEA = 0.00, indicating that the validation component model, the confirmation component analysis of industrial inventory management optimization was consistent structural and all 8 variables are important parameters of the component of inventory management optimization in the industry. The components that have the weight in order from most to least are planning (Plan) with planning to reduce the overall cost and have a good coordination plan This is consistent with research by Goulielmos (2019) that describes the importance of cost (cost) planning for shipping companies. This research focuses on using strategies to reduce transportation costs by analyzing the structure of different departments related to the company's income and expenses. The result is cost reduction to a minimum and the research by Vlasenko (2021), summarizes the quality assurance control research. In-house coordination of entrepreneurial activities is a modern concept to support effective entrepreneurial activities. Strategic control fulfils the function of implementing plans and entrepreneurial goals. The main task is to coordinate strategic planning and control as well as provide information that is important to strategic decision-making. Operational controls will contribute to current planning, Implementation of plans (Do) such as increasing welfare for employees. This is consistent with research by Nagakumari & Pujitha (2021), which states that employers provide benefits other than wages or salaries to employees. For example, welfare will help raise the standard of living of employees. Employee satisfaction for efficiency and effectiveness can continue to achieve the goals of the organization assessment (Check) There is sufficient storage of products without problems with insufficient products to meet customer needs and can distribute products in a timely manner This is in line with research by Lin (2019), which said Wal-Mart's inventory management is an integral part of its internal control making it a

successful company. If the inventory turnover rate and total asset turnover are adjusted It can improve the economic efficiency of the business and research by Fatehi & Franza (2020) found the importance of timely production (Just-in-Time) that organizations cannot ignore and should be carefully addressed. Production should adopt Just-in-Time in their business and the last component Modifications (Act) should improve the workflow to be smooth with no interruption of production Let the disbursement and payment go smoothly. This is consistent with research by Susanto (2018), which states that inventory control is an activity that helps organize the availability of goods to customers. The primary function of inventory is to ensure a smooth response to customer needs. Customer demand affects inventory levels. Many organizations face the problem of more inventories leading to increased costs. The research section of Gupta (2019) found the importance of effective inventory-level management. By developing an economic order quantity model (EOQ) to determine the appropriate amount of inventory for raw materials that can be stored in limited quantities.

Conclusion and suggestions

Recruitment, appointment of knowledgeable personnel competency according to job position which is in this issue, it is consistent with society today, whether in the government or private sectors, in order to accept new employees or to find people to work in any position, which is clearly defined. Qualifications of those who come to work must have knowledge. What are your abilities? Initially, it will be checked based on educational qualifications, or inquire about work history or work certificates from other places. In order to confirm that the person who applied to work in that position has the knowledge and competence to do the job or not. All of them are human resources work.

Human Resources Behavior of personnel and groups of people within the organization that interact in the organization. As a result of the aforementioned elements, educational institutions, both government and private sectors, should pay attention. and deeply aware in management organizational structure organization management This element, if managed properly and systematically, would affect the behavior of personnel and people within that organization.

Moreover, this research is focus on the human resources in the educational field. There can help and develop the organization.

Suggestions for applying the research results

- 1. The results of the research resulted in a component to optimize inventory management in the industrial sector. According to the components of the Deming Cycle. Therefore, the organization's executives can use this model to explore the organization according to the variables found to find strengths and weaknesses in the development of each variable.
- 2. The results of the research found that various issues in the industrial inventory management optimization component must receive serious support from corporate executives.

Suggestions for future research

- 1. This research is a corroborative elemental analysis using Deming Cycle components only. If there is further research, the composition should be divided according to the ideas and theories of researchers or other scholars come to synthesize to obtain more comprehensive components according to actual conditions
- 2. This research is a study of the industrial sector in Thailand only. Therefore, the components of industrial inventory management optimization in other areas should be studied.

New knowledge and the effects on society and communities

It was the basis for solving various problems and was also an important basis for each individual when an individual with a good educational background can be combined into a cog to drive the prosperity of the country resulting in success in various fields, whether economically, socially and in all aspects, which will definitely lead the country to an international level. Everything that has been said depends on the effective management of education. Nowadays, the social and economic conditions of countries around the world are linked and more interdependent, planning and analyzing global economic trends society and politics. Including the development of human potential based on databases and statistics were very important and necessary for the development of the country towards sustainability and balance management.

There was new model to develop the organization and the society. There had the model of the education which focus on human resources. The good model can help the organization and the society.

References

Arbuckle, J.L. (2013). IBM SPSS Amos 22 User's Guide. U.S.A. IBM Corporation.

- Department of Industrial Works. (2020). *Industrial statistics*. Retrieved from https://www.diw.go.th/webdiw/static-fac/
- Fatehi, K., & Franza, R. M. (2020). Systems considerations for adopting just-in-time production. *Journal of Competitiveness Studies*, *28*(2), 143-157. https://iblog.iup.edu/americansocietyforcompetitiveness/files/2021/05/JCS-Vol-28-2-2020-Table-of-Contents.pdf
- Goulielmos, A. M. (2019). Plan the Business of a Vessel of a Tramp Shipping Company. *Modern Economy*, *10*(06), 1633-1653. DOI: 10.4236/me.2019.106107
- Gupta, R. (2019). Reconciling service levels by customers on a non-constrained production line for raw material and finished goods inventory levels. Iowa State University Ames, Iowa
- Jackson, D. L. (2003). Revisiting Sample Size and Number of Parameter Estimates: Some Support for the N:q Hypothesis. *Structural Equation Modeling A Multidisciplinary Journal*, *10*(1), 50 64. https://doi.org/10.1207/S15328007SEM1001 6

- Joshi, A., Kale, S., Chandel, S., & Pal, D.K. (2015). Likert scale: Explored and explained. *British. Journal of Applied Science & Technology*, 7(4), 396-403. DOI:10.9734/BJAST/2015/14975
- Kline, R. B. (2016). *Principles and Practice of Structural Equation Modeling*. (4thed.). New York, NY: The Guilford Press.
- Lin, R. (2019). The importance of successful inventory management to enterprises: A case study of Wal-Mart. In 2019 International Conference on Management, Finance and Social Sciences Research (MFSSR 2019). London: Francis Academic Press.
- Montri, T. (2015). School curriculum administration of school administrators under the jurisdiction of the area office Secondary Education Area 16. (Master Thesis, Hatyai University). (In Thai)
- Nagakumari, P., & Pujitha, N. S. (2021). Employee Welfare Measures in Manufacturing Industry. *The International journal of analytical and experimental modal analysis*, 13(8),1153-1162. https://www.researchgate.net/publication/354562559_Employee_Welfare_Measures_i n Manufacturing Industry
- Prachi, J. (2022). Organization Management Meaning, Need and its Features. Retrieved December, 25th 2022. Retrive from https://www.managementstudyguide.com/organization-management.htm
- Pothongsangarun, T., & Kumplanon, N. (2017). Efficiency Enhancing of Logistics Management for the Sugar Industry Group: Case Study of Wangkanai Sugar Factory Group. *The Journal of KMUTNB*, *27*(2), 371-378. https://ph01.tci-thaijo.org/index.php/kmutnb-journal/article/view/166491/120258 (In Thai)
- Quangyen, T., & Yezhuang, T. (2013). Organizational Structure: Influencing Factors and Impact on a Firm. *American Journal of Industrial and Business Management*, 3(2), 229 236. DOI:10.4236/ajibm.2013.32028
- Schumacker, R. E., & Lomax, R. G. (2015). A Beginner's Guide to Structural Equation Modeling. (4thed.). New York, NY Routledge.
- Susanto, R. (2018). Raw material inventory control analysis with economic order quantity method. *In IOP Conference Series: Materials Science and Engineering*, 407(1), 012070. IOP Publishing.
- Turner, R. C., & Carlson, L. (2002). Index of Item Objective Congruence for Multiple Objective Measures. *Unpublished manuscript, University of Arkansas*.
- Wesley, C. (2022). Definition Human resource management (HRM). Retrive from https://www.techtarget.com/searchhrsoftware/definition/human-resource-management-HRM

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Phu Chom Ngea Reserved Forest Conservation Model, Xiangngern District, LuangPrabang Province, Lao Peoples's Democratic Republic

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Abstract

This study aimed to investigate problem conditions, recommendations for problem-solving, and the identification of an appropriate conservation model for the Phu Chom Ngae reserved forest. The locale of the study was at Xiang Ngern district, Luang Prabang province, Lao People's Democratic Republic. Focus group discussion was used for data collection conducted with a sample group of three government officials in the area, five members of village forestry committee, five community leaders, and 13 focus group discussion participants. This study consisted of 3 parts: 1) data collection on problem conditions and opinions of officials and villagers to solve problems in the conservation of Phu Chom Ngae reserved forest (Descriptive data analysis); 2) creating a reserved forest conservation model; and 3) Assessment of Phu Chom Ngea reserved forest conservation Model.

Results of the study revealed that the conservation problems in the Phu Chom Ngae reserved forest are at a high level (3.59). The following were found at a high level: People in the area, the community administrative organization, and the public sector agency, however, found the problem of conservation to be moderate: Context area and Forest conditions. The opinions of officials and villagers identified: 1) The community should realize the importance and necessity of being involved in forest conservation; 2) concerned agencies should promote occupational training; 3) prevention of forest encroachment by clear determination of the forest area; 4) strengthen community leaders; 5) training on knowledge about conservation; 6) continually instill awareness of forest conservation; 7) should have continual plans on projects implemented in the area; 8) government officials must take the regulations comprehensively and seriously.

The Phu Chom Ngae reserved forest conservation model comprised the following: 1) driving force of stakeholders—the government, community administrative organizations and people in the area. 2) operation—3 important sector: The public sector—The former included budgets material equipment support, clear determination of the forest area, issuing regulations and training/education trip; community administrative organization-public relations, campaigning, being a coordinator with people and other agencies. The latter included people in the area-participate in forest conservation. 3) output-increased participate in the forest conservation. The model had been evaluated and approved by experts.

Keywords: Model, Conservation, Phu Chom Ngae reserved forest

Introduction

Lao PDR is a country located in Southeast Asia. It is rich of forest resource which is directly and indirectly valuable / important to livelihoods of people in the country. Since 1986, Laos has adopted the new economic mechanism. There is adjustment of land use following marketing mechanisms and investment (Ministry of Agriculture and Forestry, 2005, p.3). The said transformation results in a decreased forest area. In 2010 the forest area in Lao PDR decreased to 9.55 million hectares or 40.34% compared with that of the year 1960 having 17 million hectares or 70% of the country's area (Forest Inventory and Planning Division, 2012, p.2) Crop rotation, unauthorized logging, infrastructure construction, urbanization, irrigation, and the building of hydroelectric dams are the factors contributing to the decline in forest area. Besides, growth of the timber industry and the country's revenue-generating exports of timber products contributed to the deterioration of the area and quality of natural forests.

According to the tendency of a decrease in forest area, the Lao government held a national forestry conference in 1989 (Ministry of Agriculture and Forestry, 2005, p.4). This emphasized on forest conservation and reforestation. Since then, the Lao government has developed and proclaimed forestry strategy to the year 2020 was endorsed and declared by the Lao government in 2005. It was an important strategy of forestry in Lao PDR which aimed to increase forest area to be 70% of the total area of the country (Ministry of Agriculture and Forestry, 2005). In this respect, the Lao government indicated civil and local administrative organization liberties to play important roles in the management of natural resources and environment of the community. This included people participation in the decision making in the management of forest resource and other natural resources beneficial to livelihoods of the community economic stability, society and politics (Ministry of Agriculture and Forestry, 2005, p.44). Even though Lao government works hard to manage and preserve forests, the forest area cannot expand as intended. This is due to needs for land use for agriculture, urbanization, the development of infrastructure, and a lack of funding for the management of forest resources. (Department of forestry, 2021, p.2).

The forest area in Luang Prabang province accounts for 65% of the province area. This includes one national reserved forest area (70,788 hectares), one provincial reserved forest

area (1,370 hectares), and 22 district reserved forests (88,661 hectares), Phu Chom Ngae reserved forest covers an area of 3,530 hectares (Forest Resource Management Sub-division, Luang Prabang Province, 2019). It covers 5 villages: Ban Pak Thor, Ban Na kha, Ban Huay Khot, Ban Huay Khong, and Ban Huay Phaeng, of Xiang Ngaern district. In the past, the communities near the Phu Chom Ngae reserved forest used it as a food source and a place to gather wood for personal use and sale. Examples of the utilization are herbal plants, bringing wood to build houses and forest encroachment for cultivation. Unfortunately, because of a lack of awareness on the part of the general public, the Phu Chom Ngae Reserved Forest is deteriorating. In order to reduce the problem of forest deterioration, the Lao government has determined that the aforementioned area is a reserved forest area that people may use sparingly (Upland Agriculture Research Center, 2008). In order to manage the forest resource appropriately, conservation is very important. According to a study, the concept of conservation is existing resource keeping and making use of it as planned.

Finding a suitable model for forest conservation will be helpful in terms of looking for and clearly determining a process of reserved forest conservation of people, according to the problem conditions and development guidelines that have been mentioned. The investigation of problem conditions, recommendations for problem-solving, and the identification of an appropriate conservation model for the Phu Chom Ngae reserved forest the main objectives of this study

Methodology

Population and sample group

- 1) The population was made up of people from five villages around Phu Chom Ngae Reserved Forest. The sample group consisted of 188 people. (Channang et al, 2022).
- 2) The sample group of three government officials: 1) Staff of Upland Agriculture Research Center, 2) Staff of District of Agriculture and Forestry officer Xiangngern and 3) Staff of District of Natural Resources and Environment Officer Xiangngern, five members of village forestry committee, 2) five community leaders from five villages and 13 participants in focus group discussion and they were obtained by purposive sampling.
- 3) The inspectors of the Phu Chom Ngae reserved forest conservation model consisted of five experts and concerned personnel in the area: 1) the head of Upland Agriculture Research Center; 2) the head of Forest Unit in the Upland Agriculture Research Center; 3) the head of District of Agriculture and Forestry Officer Xiangngern; 4) the head of District of Natural Resources and Environment Officer Xiangngern; and 5) the head of forest Unit in the District of Agriculture and Forestry Officer Xiangngern.

Research instruments and Data collection

1) Questionnaire: The researcher used a questionnaire to ask people's opinions about problem conditions. The questionnaire was a five point-rating-scale of Likert, and the obtained data were analyzed for finding the mean and standard deviation. Researchers then took the draft questionnaire created with the assessment form to three experts who had knowledge and

experience in the area, considered a questionnaire to determine the tool's quality by examining the Index of Items (IOC). The value is between 0.60-1.00, and the optimum value is 0.50 (Ongiem, 2018), and the confidence level of the whole questionnaire was 0.89, which is greater than 0.7. It is accepted that the question has sufficient precision (Numsang & Tantrarungroj, 2018).

- 2) Focus group discussion record forms: It was used in a group meeting to brainstorm problem conditions and recommendations for problem-solving in reserved forest conservation for the purpose of developing a model of reserved forest conservation.
- 3) Assessment form: The latter was the application of theoretical concepts gained from review of related literature for the preparation of an assessment form. It comprised 4 aspects: 1) appropriateness of the model; 2) possibility of the model application in practice; 3) consistency with the context; and 4) actual utilization of the model (Pengsawat, 2010). The experts evaluated the prepared model using a five point-rating-scale of Likert, and the obtained data were analyzed for finding the mean and standard deviation.

Data analyses

- 1. Quantitative data: Obtained data were analyzed by using were mean and standard deviation.
- 2. Qualitative data: Processed according to the information from the document and data gained from the focus group discussion to be knowledge back in the preparation of the reserved forest management model. Finally, the data were analyzed and grouped to form the groups of data that answered the question.

Results

The findings revealed that the conservation problems in the Phu Chom Ngae reserved forest are at a high level (3.59). The following were found at a high level: People in the area, the community administrative organization, and the public sector agency, however, found the problem of conservation to be moderate: Context area and Forest conditions (Table 1).

Table 1 Mean, Standard Deviation, and Problem on conservation of Phu Chom Ngea Reserved Forest

(n=188)

Issue	Mean	SD	Problem level
Context area	3.25	1.20	moderate
1. Topography	3.82	1.42	high
2. social and cultural conditions	2.04	0.78	Low
3. economy	3.88	1.40	high
People in the area	3.75	1.39	high
1. knowledge of conservation	3.76	1.48	high
2. Public participation in conservation	3.73	1.51	high
The community administrative organization	3.94	1.12	high
1. Roles of community leaders	4.10	1.30	high
2. Surveillance patrolling the area	3.81	1.41	high
Forest conditions	3.35	1.18	moderate
1. forest encroachment	3.31	1.62	moderate
2. illegal deforestation	3.38	1.44	moderate
Public sector agency	3.64	1.34	high
1. Budget and equipment support	4.13	1.25	high
2. Implementation of rules	3.15	1.43	moderate
Total	3.59	1.25	high

Focus group discussion related to recommendations for the management of problems for the conservations of Phu Chom Ngae reserved forest included the following: 1) area context; 2) forest condition and situation; 3) people in the area; 4) the community local administrative organization; and 5) public sector agencies. (Table 2)

 Table 2
 Problem Condition and opinions of Officials and Villagers for solving problems in the Phu Chom Ngae reserved forest conservation

Issue	Current problem conditions	opinions of Officials and Villagers for solving problems
1. Context area		
1.1 Topography	The area had limited potential such as most of area was mountainous, little flat area, many creeks were dry, less fertility was mostly the agricultural society, and depend nature for sustain sustenance.	It should put the importance on reserved forest caretaking.
1.2 Social and cultural conditions	Most people in the communities around Phu Chom Ngae reserved forest were traditional local people comprising 3 ethnic groups and their way of life must rely on the forest products.	It should have people participate in the reserved forest conservation and continual reserved forest management
1.3 Economy	The community economy mostly relied on agricultural occupation and the agricultural	Concerned agencies should promote agricultural occupation and training such as used of technology to increase in agricultural yields
2. Forest conditions		
2.1 Forest encroachment	The problems in the reserved forest encroachment for occupying farm land, unclear forest areas, and forest burning for farming.	Prevention of the reserved forest encroachment by clearly determining of the reserved forest area.
2.2 Illegal deforestation	Problems in violation of logging and deforestation by people inside and outside the area.	Strengthening of community leaders, the village committee and the community to realize impacts of forest destruction
3. People in the area		
3.1 Knowledge of conservation	People in the area lacked of knowledge about forest law and consciousness of natural resource conservation	Training on knowledge about conservation and concerned law as well as continual holding activities to instill forest consolation.

Issue	Current problem conditions	opinions of Officials and Villagers for solving problems
3.2 Public participation in conservation 4. The community administrative	People participation and consciousness of conservation were at a low level. For example, some groups of people acted against rules & regulations eg. illegally cutting down trees, clearing the forest and wild hunting.	Extension of knowledge about the importance and usefulness of the forest and avoidance of illegally cut down trees, forest burning, forest encroachment, resource destruction, etc.
organization 4.1 Roles of community leaders	Capacity strength of the village committee and it had few roles.	Strengthening community leaders and the village Committee by the
	They would perform their tasks when there were allocated budgets or project implementation in the area	Extension of knowledge about conservation and finding budget sources
4.2 Surveillance patrolling the area5. Public sector agency	Lack of surveillance to patrol forest areas	Preparing the prevention of forest encroachment and destruction project
5.1 Budget and equipment support	The public sector lacked of budgets used for forest conservation. It must rely on budgets for various aid organizations and the budget to operate in the area was not continually thorough.	It should have continual through roadmaps and project implementation
5.2 Implementation of rules		Government officials must implement the regulations comprehensively and seriously.

Preparation of the Phu Chom Ngae reserved forest conservation model

The team of researchers used factors/conditions, problems encountered, and methods of improvement in the area as a basis for the model preparation. This was in order to have ideas or concepts in the model preparation. In fact, the team of researchers employed the concepts of participation, model construction and development and Phu Chom Ngae reserved forest model drafting. Importantly, this study chose to employ Semantic model using language communication for the explanation of phenomenon studied by language, chart or picture to understand. This was in order to perceive structure of thought, components and relationships of the components of the phenomenon. Besides, there was use of the text to explain to make it clear like the Phu Chom Ngae reserved forest conservation model (Figure 1)

The Phu Chom Ngae reserved forest conservation model can be a formal form of development, starting from

Driving force of stakeholders: 1) government-policy setting and budget support. 2) The community administrative organization took part in the forest management in terms of setting rules & regulations as a mechanism or tool for managerial administration. 3) People - People in the area provide cooperation to support labor and jointly decide to solve problems that arise together.

Operation: 1) The public sector: the Ministry of Agriculture and Forestry and the Provincial Department of Agriculture and Forestry-played crucial roles in providing budget and material support under various roadmaps/projects. Upland Agriculture Research Center, District of Agriculture and Forestry Officer Xiangngern, and District of Natural Resources and Environment Officer Xiangngern support operations to prevent the encroachment of the reserved forest by clearly determining the reserved forest area, setting rules, restoring the forest, and providing rewards and wages for workers to participate in activities as appropriate. A learning process must be created for local people to be aware of importance and value of forests. The levering process creation by training and educational trip focused on direct knowledge transfer to people in the area by experts. 2) The community administrative organization - public relations campaigns for local people to be aware of the importance and value of forests. In fact, the community administrative organization was coordinator with people and organizations both local and non-local for the conservations of Phu Chom Ngae reserved forest conservation. 3) People - People in the area participating in the forest conservation had a common consciousness and perceived the importance and benefits of forests. They avoided forest encroachment and destruction. They participate in forest utilization as necessary. Besides, people in the area were given an opportunity to rehabilitate natural conditions. That was, they participated in the determination of village rules & regulations

Output: Increased participate in the forest conservation.

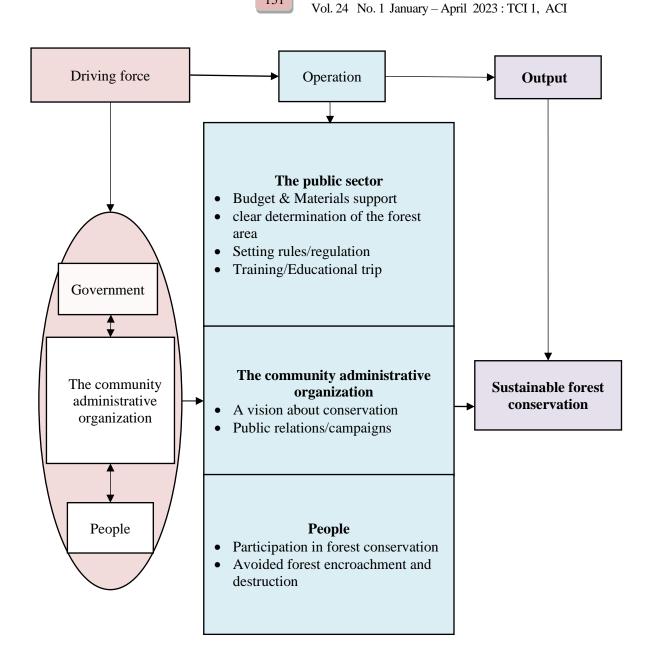


Figure 1 Phu Chom Ngae reserved forest conservation model at Xiang Ngern district

Assessment of the Phu Chom Ngae reserved forest conservation model

Five experts evaluated the prepared Phu Chom Ngae Reserved Forest Conservation Model in terms of appropriateness, practicability, context coherence, and model application. There were five levels in the system used to determine score weight. The results of the assessment in every area showed a value greater than 3.60, indicating that the model was actually usable (Table 3)

Table 3 Results of the assessment of Phu Chom Ngea reserved forest conservation model

Issue	Mean	S.D	Description
Appropriateness of the model	4.13	0.49	High
Possibility to be used	4.03	0.38	High
Consistency with the context	4.07	0.45	High
The model is truly utilized	3.97	0.30	High

Discussions

According to study findings, Luang Prabang province's Phu Chom Ngae Reserved Forest conservation issues are primarily the result of low levels of locals' participation in forest conservation. Inadequate budget support resulted in forest destruction rather than forest utilization. This is perhaps consistent with research by Sangchanthavong & Sitthi (2016) which found that the forest conservation problems were due to: 1) local people lack of knowledge and 2) most local people did not put the importance on forest conservation. Vannabuathang & Khamjatpai (2017), conducted a study and found that problems in forest conservation included people lacked of knowledge and understanding bout forest conservation. Besides, Pengvansavan et al. (2018) found that problems the conservation and rehabilitation of Dong Hua Sao National Reserved forest resource included the following: 1) inadequate budgets, 2) people lacked of knowledge about conservation; 3) people did not perceive the importance of conservation; 4) Some groups of people violated reserved forest regulations such as collecting forest products, and clearing the forest for farming, illegally cut down trees, wild hunting, etc.

The Phu Chom Ngae reserved forest conservation model was a study which aimed to encourage all parties to express their opinions in an analysis of forest conservation problems and solving the problems. Results of the study comprised to aspects: a) driving force of stakeholders—the government, community administrative organizations and people in the area. b) operation—3 important sector: The public sector—played crucial roles in providing budget and material support; community administrative organization—public relations, campaigning, being a coordinator with people and other agencies. The latter included people in the area-participate in forest conservation. c) output-increased participate in the forest conservation. This is perhaps consistent with research by Wichaiwong et al. (2018) which proposed guidelines for developing watershed forest conservation which cultivation area allocation and training villagers on environment were included. Sungkaew et al. (2021) claimed that community participation in sustainable management of forest must be supported by the government in terms of budgets and technology. Channang et al. (2022) found that people's training in forest conservation would result in their participation in forest conservation as well. Besides, Kantaros & Sodamark (2022) revealed that the procedural form of co-development of

a community constitution should be defined as a covenant on common agreement arising from people in a sub-district. Singkham (2006) claimed that an appropriate model for the area where the community on the community administrative organization was not strong comprised 3 parts: 1) communities in the area, 2) concerned government agencies in the area, and 3) local administrative organization. Jirapong & Rojanatrakul (2021) claimed that it was mutual use of the community forest under a common process from many sectors, including the government sector the people's sector, the community forest committee, and the Village committee.

The assessment of the Phu Chom Ngae reserved forest conservation was on the basis of 4 aspects and each reserved gained an average mean score higher than 3.60 which implied that the model was appropriate. This is perhaps consistent with research by Suebsing (2021) which revealed & 4 aspects of assessment: 1) benefits, 2) possibility, 3) appropriateness, and 4) correctness. Vannabuathong & Khamjatphai (2017) assessed strategies on the development of understanding, awareness, and participation in forest conservation by using five-point rating scale. It was found that the developed strategies were appropriate at a high level (Total average score > 3.51).

Conclusion and suggestions

According to results of the study it could be concluded that sustainable development of natural resources must be under the coordination of all parties. This included the necessity of the extension of knowledge in the conservation and maintenance of natural resources. This would be beneficial to the community is various aspects. Importantly, truly support from the public sector could make people in the area perceive the importance of conservation and participate in the conservation to prevent deterioration.

Recommendations

Concerning the lack of budgets to conserve the reserved forest, concerned agencies should support the budgets on a need-to-basis. Furthermore, it should emphasize knowledge transfer, public relations on forest conservation, and raising awareness among local residents about the importance of reforestation. Furthermore, research on the roles and awareness of community leaders in the management of the Phu Chom Ngae reserved forest in Luang Prabang province should be conducted. The study's findings can be applied to forest conservation in other areas that have similar socioeconomic characteristics.

New knowledge and the effects on society and communities

In this study, a model for developing forest conservation that is consistent at the local level is obtained. It may be used as a tool to address issues with the management of forest resources. This will contribute to raising awareness of the significance of forest conservation. It will result in the community as a whole becoming stronger for the sustainable management of forest resources.

References

- Channang, B., Sakkatat, P., Fongmul, S., & Rungkawat, N. (2022). Factors Affecting Conservation of the Phuchomngea Forest Reserve by People in Xiangngern District Luang Prabang Province, Lao People's Democratic Republic Province. *Rajabhat Chiang Mai Research Journal*, 23(2), 50-64. https://so05.tci-thaijo.org/index.php/cmruresearch/article/view/252662 (In Thai)
- Department of Forestry. (2021). *Five-year Summary of forest management (2016-2020) and plan (2021-2025)*. Vientiane: Department of Forestry (Unpublished Manuscript).
- Forest Inventory and Planning Division. (2012). *The results of the survey of forest cover all the country*. Vientiane: Department of forestry (Unpublished Manuscript).
- Forest Resource Management Sub-Division. (2019). *The Forest reserved area in LuangPrabang Province*. LuangPrabang Province: Division of Agriculture and Forestry (Unpublished Manuscript).
- Jirapong, S., & Rojanatrakul, T. (2021). The participation of the public in the conservation of forest resources in the area of Wang NokAen sub-district Wang Thong district Phitsanulok province. *Journal of Roi Kaensarn Academi*, 6(10), 441-458. https://so02.tci-thaijo.org/index.php/JRKSA/article/view/250449 (In Thai)
- Kantaros, N., & Sodamark, K. (2022). Guidelines of community charter formation for mutual land utilization in community forest at Sermkhwa sub-district, Sermngam district, Lampang Province. *Rajabhat Chiang Mai Research Journal*, 23(1), 159-174. https://so05.tci-thaijo.org/index.php/cmruresearch/article/view/249174 (In Thai)
- Ministry of Agriculture and Forestry. (2005). Forest strategy of the Lao PDR to the year 2020. Retrieved from https://data.opendevelopmentmekong.net/dataset/c15c5cb1-dd12-4b8e-a09e-7db879efa588/resource/35ff73d8-fc68-49e6-ad2d-6a93634cd2b5/download/rpaf 012-2020-lao.pdf
- Numsang, T., & Tantrarungroj, T. (2018). Validity and Reliability of the Brief COPE Inventory: Thai bersion. *Journal of the Psychiatric Association of Thailand*, 63(2), 189-198. https://he01.tci-thaijo.org/index.php/JPAT/article/view/131529 (In Thai)
- Ongiem, A. (2018). Validation of the Tests. *Thai Journal of Anesthesiology, 44*(1), 36-42. https://he02.tci-thaijo.org/index.php/anesthai/article/view/116944 (In Thai)
- Pengsawat, W. (2010). Model development research. *Rajabhat Sakon Nakhon University Journal*, 2(4), 2-15. https://www.tci-thaijo.org/index.php/snru_journal/article/download/10014/9048 (In Thai)
- Pengvansavan, K., Sopha, N., & Koddok, A. (2018). Strategies for forest resource conservation and habilitation of Dong Hua Sao national forest, Pathumporn district, Champasak province, Lao PDR. *Journal of Innovation Technology Management Rajabhat Maha Sarakham University*, *5*(special), 32-40. http://it.rmu.ac.th/itm-journal/downloads/entry/439 (In Thai)

- Sangchanthavong, S., & Sitthi, P. (2016). Strategy to manage effective participation in protection of Hinnamnor nation area, protected area, Khammouane province, Lao PDR. *Journal of graduate school Sakon Nakhon Rajabhat University*, *13*(63), 37-47. https://so02.tci-thaijo.org/index.php/SNGSJ/article/view/81818 (In Thai)
- Singkham, W. (2006). A model of sustainable development of villagers' participation on management of community forest: A case study of Dongmao-Dongkhamklang community forest in Amphoe Nathom, Changwat Nakhon Phanom. (Master'thesis, Sakon nakhon University). https://alist.snru.ac.th/BibDetail.aspx?bibno=40370 (In Thai)
- Suebsing, S. (2021) The development of community solid waste management model by environmental education: A case study of ThaMuang subdistric, Selaphum district, Roi Et Province. *Rajabhat Chiang Mai Research Journal*, 22(1), 235-252. https://so05.tci-thaijo.org/index.php/cmruresearch/article/view/240548 (In Thai)
- Sungkaew, B., Phookpan, P., & Rattana, U. (2021). The development of a sustainable forest management model by community participation in national park: A case study of Mae Yom national park in Song district, Phrae province. *Journal of Social Development*, 23(1), 1-29. https://so04.tci-thaijo.org/index.php/jsd/article/view/245590 (In Thai)
- Upland Agriculture Research Center. (2008). *The results of the survey in Phuchomngea Forest Reserve*. Xiangngern: Upland Agriculture Research Center (Unpublished Manuscript).
- Vannabuathong, B., & Khamjatphai, S. (2017) Strategy of developing create the understanding awareness of participation in conservation of the protected forest: A case study in Ban Kabud-Chingwaen, Thakhek district, Khammouane province, Lao PDR. *Journal of graduate school Sakon Nakhon Rajabhat University*, *14*(64), 123-131. https://so02.tci-thaijo.org/index.php/SNGSJ/article/view/92786 (In Thai)
- Wichaiwong, M., Nobnorb, S., & Putrjari, K. (2018). The development of watershed forest conservation model in Chiangdao district by using the social processes and Buddhist principles. *Saint John's journal*, *21*(29), 185-197. https://sju.ac.th/pap_file /7f180bd2f0c56c9c150c915293b755e9.pdf (In Thai)

Highland Management in Rotation and Mono Cropping Systems of Li Sub-watershed, Lamphun Province

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Abstract

The objectives of this research are: 1) To compare the factors of land tenure, ecological aspects, economic conditions, perception of information and wisdom affecting the selection in highland rotation cropping and mono cropping. 2) To analyze and identify differences in land management between highland rotation cropping and mono cropping. And 3) to analyze and assess the link between the intensive highland rotation cropping and mono cropping with soil management and degradation. There were quantitative and qualitative data collections from farmer groups of both systems by using the tools as questionnaires and in-depth interviews with participant observation including exploring the research area plot. The data were analyzed using descriptive statistical method in the form of frequency distribution, percentage and comparison table. The results showed the land tenure of the two highland cropping systems was not different. There were no documents and rights over the lands. Rotation cropping system focused on intensive commercial agricultural production, whereas mono cropping system focused on subsistence. Both systems used traditional wisdom. The characteristics of rotation cropping were separated rotation cropping with legumes and no legumes, so crops could be grown throughout the year and continuously. Therefore, the soil management was intensive and the soil was not time for resting. The characteristics of mono cropping system involved growing only one type of crop every other year and year after year. There was a oneyear soil resting and the mono crops were replanted annually, so there was not the soil resting. There are differences in the use of chemical fertilizers and concentrated chemicals, as well as soil fertility. It could be concluded that both of cropping systems were not different and had moderate fertility The soil erosion in rotation cropping system was very low to moderate level, thus soil condition was sustainable. The soil erosion in mono cropping system was low to very severe level, thus soil condition was not sustainable. The policy and action recommendations, the government should support in terms of alternative agricultural policies and budgets for developing highland areas seriously and comprehensively in accordance with the sufficiency economy.

Keywords: Highland management, Rotation cropping, Mono cropping

Introduction

In Li Sub-watershed area, Ban Puang Sub-district, Thung Hua Chang District, Lamphun province, the most of population consists in Thai lowland and Thai hill tribe as Karen (Pga K'nyau) who were mainly engaged in agriculture and the agricultural areas were permanent multi-system cropping. The intensive rotation cropping and mono cropping for both commercial and subsistence systems at highland, upland and lowland area, the small river flowing through the year and the main crops cultivated were paddy rice, upland rice, corn and shallot. The study areas were Ban Mae Bon Nuea, M. 1 and Ban Mae Bon Tai, M. 10 which the bost of villagers were White Karen or Pga K'nyau. The problem situation in Li Subwatershed area were the population increases but the agricultural area had the same area so resulting in intensive use of the production area and the highland areas along the former Li Sub-watershed had been declared national forest reserves by the Royal Forest Department for control and conserve forest areas. It was considering as a strict and lawful management of existing forests and it had brought problems over the farming areas of the villagers who lived in forest areas. They have cleared the forest areas for shifting cultivation in the original community areas and it was illegal to farm in their native locations. It eventually become conflicts between the government and the villagers that causes problems in highland agriculture due to the plantation of short-term crops. (Boonchai, 2016For instance, all the soil covers are cleared during the soil preparation. The conditions of slopes cause soil erosion. Improper cultivation and burning weed in the plots cause minerals and soil organisms, such as earthworms and other beneficial insects, are destroyed and ecosystems are damaged. Especially in terms of soil resources, when agricultural activities are carried out, it causes soil deterioration and increasing of consumer demands. Therefore, they accelerate farmers to increase agricultural productivity by using more inputs, sources of capital, increasing their debt burden. What has been overlooked is the cultural control and soil management. From such phenomena, highland farmers have continued to cultivate traditional crops, although they have known that they may lose because of the uncertain marketing, productivity and price. Different planting systems of farmers affect changes in soil resources in terms of soil fertility and soil erosion. Is there soil management or not? In terms of production efficiency and sustainability, can it be implemented or not? (Kampolkon, 2004).

Therefore, the issues had been a research study on the topic of highland management in rotation and mono cropping systems of Li Sub-watershed, Ban Puang Sub-district, Thung Hua Chang District, Lamphun Province and the research questions were the two highland cropping systems which are highland rotation cropping system, which grow leguminous plants alternatively with crops and do not grow leguminous plants alternatively with crops and it has been practiced for two to three years, and mono cropping system, which grows only one type of crop every other year and grows only one type of crop year after year in the same plot. What conditions of both cropping systems that determine soil management, differences of crops, external factors of production that affect the stability of agricultural production, whether it is sustainable or not?

Objectives

- 1. To compare the factors of land tenure, ecological aspects, economic conditions, perception of information and wisdom affecting the selection in highland rotation cropping and mono cropping.
- 2. To analyze and identify differences in land management between highland rotation cropping and mono cropping.
- 3. To analyze and assess the link between the intensive highland rotation cropping and mono cropping with soil management and degradation.

Benefits

- 1. Government agencies understand that the farmers who have managed the land in the highland cropping systems and the farmers who have lived in the highland are able to participate in soil management in highland cropping systems.
- 2. To understand the conditions that affect farmers in terms of soil management in the highland cropping systems, land tenure, production systems, income, production costs, and changes in soil quality and farm ecology.
- 3. Farmers in the highland are able to adapt the soil management methods and to solve problems of soil quality and ecosystem of farmers in highland cropping systems.

Conceptual frameworks

A conceptual framework is on farmer's land management in highland rotation cropping and mono cropping systems in Li Sub-watershed. Each cropping system has different conditions. The highland rotation cropping system has conditions relating to land ownership due to the limitation of lands. The state announced a law that controls national forest reserves and national park areas that overlapped with the arable lands. Thus, farmers are unable to reclaim new planting areas by having conditions in terms of the ecology of the area, slopes, height above sea level that is different according to the topography, transportation and distance. (Boonchee et.al., 1997)

It also consists of the economic conditions of the households in the highland rotation cropping system throughout the year which requires external inputs such as chemical fertilizers, chemicals, and capitals. Planting of this cropping system depends on conditions of knowledge acquisition, information and news from various development projects that educate and promote intensive commercial crop rotation until it turns into permanent agricultural plots and cannot be planted as before. As a result, farmers have to adapt to practice mono cropping system. In the past, the soil was left for 7-12 years to allow the lands to turn into forests, and then to clear again. The cultivation period was shortened with the condition of land tenure. The two cropping systems have different cultural control and soil management. Highland rotation cropping system is practiced throughout the year in the same area year after year and grows leguminous plants alternatively with crops and do not grow leguminous plants alternatively with crops and also increases productivity by using external factors to support, such as plant varieties, chemical fertilizers, chemicals, and capital utilizations, both cash and contract agriculture. The number of labors depends on the size of the cultural control and soil management, weed removal, soil digging, plot preparation, raising trenches and across the slope of the area. While

farmers, who practice mono cropping system, have also adapted to grow crops, some farmers grow the same crop in the same area year after year. Some grow the same crop every other year. However, mono cropping system, cultural control and soil management by mulching methods and soil improvement has applied natural methods. The current rotation cropping system is planted in the same area and use intensive inputs and management causing soil erosion. The quality of the soil is deteriorated and yields have declined sharply. In the study and evaluation of soil fertility and soil loss together with comparative plots in order to distinguish the different conditions. Crop rotation is practiced in the same area year after year. When it is evaluated for soil erosion, soil loss, and soil fertility by randomly collecting soil samples for analysis and conducting research according to the conceptual framework, it reveals the dynamics of farmers' land management in the two highland cropping systems. Conditions and factors that determine the success or failure of farmers in soil management in the two highland cropping systems are being studied in order to find guidelines for developments and solving problems to meet the needs of farmers. Hence, natural resources, soil, water, and forests are more sustainable and are able to reduce conflicts in various dimensions (Shiner et. al., 1982) (see Fig. 1, the conceptual framework of the research).

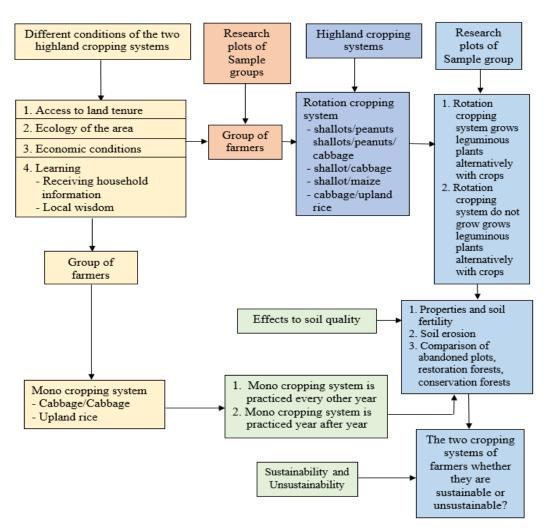


Figure 1 Conceptual Frameworks

Methodology

1. Locale of the study

This research study was conducted in Li Sub-watershed, Mu 1, Ban Mae Bon Nuea and Mu 10, Ban Mae Bon Tai, Ban Puang Sub-district, Thung Hua Chang District, Lamphun Province. The villagers were White Karen or *Pga K'nyau*. The research plots were selected based on the size of the area, slope, type of crops planted in each plot per year, soil management as well as the intensive use of inputs which were not significantly different in the groups that produced commercial crops.

2. Research population and sampling

Groups of farmers, who still stick to traditional farming practices, were selected, including the selection of information on the cultivation patterns of the farmers in order to determine the sample plots of the two systems: rotation cropping and mono cropping systems.

3. Instrumentation and data collection

The researcher selected a research methodology and data collection, both quantitative and qualitative data from groups of farmers of both cropping systems.

Tools, which were used in research studies.

- 1) The questionnaires and
- 2) In-depth interviews of sample population, community leaders, local experts and relevant government officials by emphasizing participant observation, including exploring the research plots.

4. Data analysis

Data analysis and interpretation, which were used in presentation, obtained from the questionnaires and surveying of plots and in-depth interviews. Data from sample groups of farmers, both primary and secondary data, and discussion of the results of the study presented quantitative and qualitative data by using statistical processing and displaying the results with a frequency distribution table, percentage, comparison table, pictures, and maps. which applied Geographic Information System (GIS) for analysis the data more clarity and accuracy. (Huizing & Bronsveld, 1992)

Results

Changes in land use from the original forest areas were used as the residential area and agricultural lands. The result of the increasing number of population caused conflict over land rights and forest utilization. It caused intensive commercial agriculture; as a result, it created changes and problems in land use. At the same time, changes and problems of land use created conflicts over land rights, forest utilization and intensive agriculture and different cropping management. The results of the study can be summarized as follows:

1. Conditions of land tenure, ecology condition, economic condition, perception of information and local wisdom affecting the choice in two cropping systems.

For the results of the study on the conditions of farmers affecting the selection of rotation cropping system and mono cropping system, it can be summarized as follows:

 Table 1 Farmer's conditions affecting the selection of the rotation cropping system and the mono cropping system

Farmers' conditions	Rotation cropping system	Mono cropping system
1. Land tenure	Not different in the both of farming and residential areas that no title documents or deeds. Those areas were located in a national forest, therefore, villagers were unable to reclaim or expand the new arable lands. However, they still had the rights to use the lands which have been farmed before.	Not different in the both of farming and residential areas that no title documents or deeds. Those areas were located in a national forest, therefore, villagers were unable to reclaim or expand the new arable lands. However, they still had the rights to use the lands which have been farmed before.
2. Ecology	 Not different in terms of the location of the arable area, the elevation above sea level, the physical characteristics, and size of the research plot. The difference in percentage of slope that less steep, the size of the average arable area and the size of the arable area as larger than . 	 Not different in terms of the location of the arable area, the elevation above sea level, the physical characteristics, and size of the research plot. The difference in percentage of slope that steeper than, the size farm area that average large plots and the amount of arable area were less than.
3. Economic	 Not different in terms of crop cultivation factors such as temperature, climate, rainfall, relative humidity, marketing and agricultural tools. Difference in production cost and average annual income. There was stability and less risk in terms of yield and price, and labor intensive. 	 Not different in terms of crop cultivation factors such as temperature, climate, rainfall, relative humidity, marketing and agricultural tools. Difference in production cost and income on average per year more stable, higher productivity and price risks and not much labor.

Farmers' conditions	Rotation cropping system	Mono cropping system
4. Perception of	1. There was no difference in the	1. There was no difference in the
information	use of plant varieties, area	use of plant varieties, area
and local	selection, temperature, wind and	selection, temperature, wind
wisdom	sun direction, moisture,	and sun direction, moisture,
	watershed forest, observation of	watershed forest, observation
	soil fertility, drainage	of soil fertility, drainage
	management. The Using of	manage- ment. The Using of
	Karen Tribal Cultivation	Karen Tribal Cultivation
	Calendar with the general	Calendar with the general
	planting calendar.	planting calendar.
	2. Different in the amount of arable	2. Different in the amount of
	area, each person was more or	arable area, each person was
	less not equal. The ideas in	more or less not equal. The
	terms of preserving culture,	ideas in terms of preserving
	traditions, and the tribal ways of	culture and traditions. Farmers
	life for farmers who rotate crops	who grow crops in mono mono
	will focus on commercial	cropping had many plots and it
	production.	also adheres to traditional
		methods of growing crops.

From table 1, farmer's conditions affecting the selection of the rotation cropping system and the mono cropping system as followed: 1) In the aspect of rights to access land resources: not different in the both of farming and residential areas that no title documents or deeds. Those areas were located in a national forest, therefore, villagers were unable to reclaim or expand the new arable lands. However, they still had the rights to use the lands which have been farmed before. In case the lands were far away from the village, forest officials set up as a conservation forest area. It could be considered that they were being pressured by government policies. Thus, there was no stability in land tenure. 2) Ecological classification: Plots of farmers in the two cropping systems were not different. The plots were located in the north of the village with the height of 1,197 meters and 1,165 meters above mean sea level. The sizes of research plots were small and the plots were about 3 rais. The distance from the village to the agricultural plots were 1.2 kilometers and 1.9 kilometers on average. The difference was the percentage of slope. The rotation cropping system had an average slope area of 27.6 percent. The mono cropping system had an average slope area of 37.8% which was steeper than large arable lands. The average size of plots of rotation cropping system were about 6-9 rais. The mono cropping system was about 6 rais. The number of plots of rotation cropping system was 81 rais of crops and the mono cropping system was 24 rais. It showed that mono cropping system in area had been reduced. 3) In the aspect of economy: the rotation cropping system had more production costs and income in average per year. This system had stability and less risk of productivity and price than mono cropping system because the rotation cropping system had varieties of crops. The factors which related to crop cultivation such as temperature, climate, rainfall, relative humidity, and marketing were not different. The use of labor in the rotation cropping system was more labor intensive than mono cropping system. The uses of agricultural tools were not different. And 4. In the aspect of the perception information and local wisdom: There was no difference in the use of plant varieties, site selection, temperature, wind and sun direction, humidity, watershed forests, observations of soil fertility, drainage management, the use of *Pga K'nyau* cultivation calendar in conjunction with the academic general cultivation calendar. The differences were the number of arable area for each individual that were not the same. In the aspect of conserving culture, traditions and tribal livelihood of farmers who practiced rotation cropping system focused on commercial production. As for farmers who practiced mono cropping system had number of plots of land and still stick to the traditional *Pga K'nyau* method of planting which was the production of subsistence. However, they did not deny the commercial production system.

2. Differences in soil ecosystems, soil characteristics and soil properties of the two cropping systems.

- 2.1 Ecosystems and soil characteristics had the same characteristics. Organism was still diverse. The soil characteristics had ability to drainage water. The soil texture was sandy loam which was in the soil groups' No. 62 and was at high risk of soil erosion and soil loss. The differences were the relationship between crops and crops in rotation cropping system. Crops were related and depended on each other for the appropriate time and season. There was a use of chemical fertilizers and soil improvement because legumes were planted in rotation as soil nourishing crops. However, the mono cropping system had no relationship between crops to crops because it was a monoculture which was the practice of growing one crop species in a field at a time a single plant. This system relied on soil improvement by allowing a rest period and applying manure. In monoculture crops, crops were grown every other year, but only in some cases.
- 2.2 Chemical and biological properties of soil: Plots of both cropping systems and the comparative plots could be concluded that plots of both cropping systems and abandoned plots. The soil condition was very acidic and moderately fertile. Abandoned plots had high soil fertility. The noticeable difference was comparative plots, restoration forests, and conservation forests which soil was moderately acidic and had very high in organic matter, nitrogen, potassium, calcium and magnesium. Those nutrients were higher than both cropping systems and more than abandoned plots.

3. Differences in soil erosion and soil loss.

- 3.1 Soil loss: Rotation cropping system depended on planting method and percent of slope. Plots with less than 20 percent of slope had soil loss ranged from 1.2-2 tons/rai/year and the severity level were very low. Plots with 20-30 percent of slope had soil loss ranged between 3-4 tons/rai/year and the severity level were low. Plots with more than 35 percent of slope had soil loss between 6-9 tons/rai/year and the severity level were moderate.
- 3.2 Soil loss: Mono cropping system had plots with less than 20 percent of slope and soil loss was 3 tons/rai/year. The severity level were very low. Plots with more than 35 percent of slope had soil loss of 30 tons/rai/year and the severity level were very severe.

3.3 Soil loss: Abandoned plots with less than 20-30 percent of slope had soil loss of 0.9 tons/rai/year and the severity level were very low. The restoration forest plots with more than 35 percent of slope had soil loss about 0.4 tons/rai/year and the severity levels were very low. The conservation forest plots with more than 35 percent of slope had soil loss of 0.18 tons/rai/year and severity level was very low.

In summary, soil loss was compared depending on the cropping method and the soil moisture percentage for slope of the area, it was found that abandoned farm plots had the least severe soil loss. The followed by the plots of the crop rotation system and the plots of the mono cropping system had the most severe soil loss.

Discussions

There is no difference in terms of land tenure and ecosystems, but there is a difference in economic status. Farmers who grow crops in rotation cropping system use higher capital and inputs and earn more net profit per year than mono cropping system. There is no difference in the perception of information. Farmers who grow crops in rotation cropping system receive knowledge from government agencies and non-governmental organizations from abroad and nearby villages. They obtain local wisdom by inheriting various methods from ancestors according to the livelihood of the Paganyaw people. In terms of sustainability, rotating cropping system is more sustainable in terms of soil resources and economic conditions, income and risk of product price is less than mono cropping system.

Farmers, who practice mono cropping system in the research area, have changed their crops from local crops to field crops in their original areas without relocation because there are limitations and they cannot expand new farming areas. They develop the agriculture into mono cropping system, both growing only one type of crop every other year (letting the soil rest) and growing only one type of crop year after year (Without soil rest). In this system, farmers still stick to the traditional subsistence livelihood and commercial production. As a result, it leads to fewer farmers who grow crops in this system. Cultivation of crops in the traditional livelihood of the Paganyaw tribe is embedded with beliefs, culture, nature and environment. How long and how stable can ethnic origins stand against capitalism and consumerism? And how both stakeholders and tribes should find ways to preserve traditional livelihood? (Hirsch, 1990). Those questions should be continued to study and research in order to find answers. As for the issue of comparing the effects of both cropping systems on yields and soil ecology, the research area is in Mae Li sub-watershed. The study finds out that farmers who grow crops in rotation cropping system have a crop calendar all year round. There is a high use of inputs. The crops can be harvested all year round. Average annual yields include all types of crops can be calculated for total average annual income of 70,150 baht. A production cost is 50,440 baht and net profit is 19,710 baht per year. Farmers, who practice mono cropping system, have a crop calendar from May to December. The use of inputs is less than the average annual yields. The average annual income is 22,500 baht. The cost of production is 19,600 baht and net profit is 2,900 baht. It can be seen that the net profit from the rotation cropping system has better and more sustainable incomes than mono cropping systems. For soil ecology in both cropping systems, the soils are acidic and soil fertility is moderate. Comparative plots compare to the abandoned plots, restoration forests, and conservation forests, the soil conditions are highly and moderately acidic. The soil fertility is very high. It is noted that farmers' plots in research studies use chemical fertilizers which might remain in the soil as well. It is consistent with the academic data of Wongmaneerot (2004) described that chemical property of soil was essential for the absorption of nutrients and the utilization of nutrients. Soil had a high amount of nutrients. If the chemical property of soil was not suitable, it would reduce the usefulness of plant nutrients. What caused a yield to decrease or increase depended on certain chemical property of soil was equally important as the soil's pH. While Suksawat (2000) explained more about soil reaction or soil pH level. It was a chemical property that was very important to soil fertility. The ability of the soil in its natural state to produce a certain yield under proper management, maintenance and environmental conditions depended on soil fertility and many other factors, such as environmental factors, humidity, temperature, sunlight, soil looseness, crop production systems, such as soil preparation and watering, and weed control in order to maximize soil efficiency. It is in accordance with Hengprayoon (2004) who presented that agriculture had a production process that must sustain or maintain resources to prevent deterioration so that they could be used to produce food to support the increase of the population in the future. Farmers must have economic rewards which was incentive. This allowed farmers to continue to pursue this occupation. The production process must not destroy the environment and be accepted by society. Corresponds to Pasabud et. al. (2022) The problems in traditional farming were soil loss, nutrient loss and soil erosion that effected decreasing agricultural production. Therefore, the importance of study success factors for the integrated agriculture farming is to transfer the knowledge and promote to the interested people.

For soil erosion in both cropping systems in the research area can divide the slope of the area into 3 levels as following: less than 20 percent of slope, 20-35 percent of slope, more than 35 percent of slope. It can be concluded that the rotation cropping system has a soil loss that can be classified at a very low level and low to moderate level. It is a cropping system that has sustainability in soil conservation. Farmers who practice mono cropping system have soil loss at mild to very severe level. It is a system that has high risk to soil loss. Soil is considered to be an important production cost in growing crops. This system is considered unsustainable. The results of the above studies are consistent with the research of Boonchee (1997) who presented that the problem of soil erosion was a major problem in upland and highlands. It caused deteriorations, both chemically and physically. In the North of Thailand had moderate to severe level of soil erosion. There were approximately 9.3 million rais or 87.7 percent of the total agricultural areas of the North. For soil erosion in both cropping systems in the research area can divide the slope of the area into 3 levels as following: less than 20 percent of slope, 20-35 percent of slope, more than 35 percent of slope. It can be concluded that the rotation cropping system has a soil loss that can be classified at a very low level and low to moderate level. It is a cropping system that has sustainability in soil conservation. Farmers who practice mono cropping system have soil loss at mild to very severe level. It is a system that has high risk to soil loss. Soil is considered to be an important production cost in growing crops. This system is considered unsustainable.

Conclusion and suggestions

The results of the research can be concluded that different conditions in terms of land tenure, ecological aspects, economic conditions, information perception and wisdom that affect the selection of two. It showed that the right of land tenure of the two cropping systems was not different. There was no document and rights over the lands because it was located in the national forest area and they inherited the lands which had been passed down from their ancestors. However, both cropping systems also had the same and different conditions. In the aspect of ecology, the agricultural plots were located in the north of the village. In the aspect of physical geography, the location of rotation cropping system was grouped together and was close to each other. It could be seen that the rotation cropping system earned more and had less price risk than mono cropping system. Conditions or factors that involved in both of cropping systems which were important were temperature, climate, rainfall, relative humidity that had no difference. In the aspect of marketing, rotation cropping system focused on intensive commercial agricultural production which used high inputs of production and had a high risk of debts.

Mono cropping system was a production that focused on subsistence and was also a commercial production, but not much. It used fewer inputs and had a price risk. The two cropping systems were not different in terms of the wisdom. There was a use of traditional wisdom in the selection of plant varieties, areas, temperature suitability, wind direction, sunlight, humidity, watershed forests, soil fertility, and water management. The traditional cultivation calendar was used together with new agricultural cultivation calendar. The use of labor in rotation cropping system was more labor intensive than the mono cropping system.

There were differences in the land management of farmers in both of highland cropping system. It was found out that the soil management in the rotation cropping system, farmers needed to have good financial status or have a steady source of working capital, such as from the BAAC, Village Fund, relatives and merchants, etc. The rotation cropping system was located in the north of the village. Farmers' plots were close to each other. They gathered and set up as a group. The slope was 27.6 percent on average with the height of 1197 meters above mean sea level. The physical feature of landscape was a steep area. The soil characteristic was in the soil groups' No. 62 with some shallow surface and deep surfaces in some areas. Water resources were from natural creeks or rainwater. Forest resources were classified as mixed deciduous forest and evergreen forest. The numbers of research plot were 81 rais. The distance from the village to the agricultural plots was 1.69 kilometers on average. The rotation cropping system had been practiced in the same areas and in the same year. It could be divided into the two types of rotation cropping system. The first type grew leguminous plants alternatively with crops and the second type did not grow leguminous plants. For the cultivation calendar, farmers who grew crops in this system, crops could be grown throughout the year and continuously. The soil had been managed since March until April by weeding, burning, and using chemicals to control weeds. Farmers also made seed beddings to prepare for planting shallots, which were the first crops to be planted, followed by peanuts. Before planting peanuts, they pretreated soil by using slaked lime. Such soil preparation method was done the same to prepare for planting other field crops. There were a variety of production factors and it had a high input of production, including weeding. Soil management was intensive. The soil did not have a rest period due to crop rotation. Soil management of farmers, who practiced mono cropping system, had been evolved from shifting cultivation which grew only one type of crop since the tribal ancestors. Farmers who grew crops by using this system did not have financial support and access to capital. It was impossible to grow many types of crops or grow the crops in large areas. The plots were located in the north of the village. The plots were scattered and far apart. The slope was 37.8 percent on average with the height of 1,165 meters above mean sea level.

The physical characteristics were the same as rotation cropping system. The numbers of research plots were 24 rais. The distance from the village to the agricultural plots was 1.84 kilometers on average. Characteristics of mono cropping system had been practiced in the same areas and every other year. It could be divided into the two types of monoculture farming. The first type was mono cropping system which involved growing only one type of crop every other year. There was a one-year break and it was considered as a non-intensive planting. The second type was mono cropping system which involved growing only one type of crop year after year. It was an intensive planting. For the cultivation calendar, farmers who grew crops in this system, the type of crop was the same every year. The soil did not have a rest period. The soil had been managed since March until April, especially the plots where crop was planted on every other year. The preparation of weeding was done by labors more than any other methods. For the upland rice planting plots, there were procedures for preparation more than other types of rice cultivation. In the plot preparation of mono cropping system, only one type of crop was replanted every year. The soil did not have a rest period. However, there were differences in the use of chemical fertilizers and concentration of chemicals.

Therefore, soil fertility was defined as moderate fertility. Properties of the soil for planting in both of the systems were not different. The rate of soil erosion in the rotation cropping system was defined as very low to moderate low level. It can be considered that the soil condition is sustainable. As for mono cropping system, the rate of soil loss was defined as low to very severe level, depending on the slope of the area. Unsustainable soil was at high risk when it was compared with abandoned plots.

Suggestions

Policy and action recommendations could be done by asking the government sector to support the budget, follow up, evaluate, and to give recommendations. The development of highland areas, which were watershed areas, could be done concretely. Budget allocation should be done to manage highland irrigation as a full-service operation. Moreover, there should be a support of alternative agricultural policy, including the policy and the budget seriously in accordance with the Sufficiency Economy Guidelines and the New Theory.

New knowledge and the effects on society and communities

If this research are approved and are corrected already, they give many advantages to agricultural parts of Thai government for improve highland management.

References

- Boonchai, K. (2016). Rotational Farming: Cultural Rights for Ecological and Social Practice. *Journal of Social Development*, 18, 137–156. Retrieved from https://so04.tci-thaijo.org/index.php/jsd/article/view/62640 (In Thai)
- Boonchee, S., Inthaphan, P., & Utpoung, N. (1997). *Management of Sloping Lands of Sustainable Agriculture in Thailand Progress Report 1989 1996*. Technical Section Office of and Development Region 6. Bangkok: Department of Land Development, Ministry of Agriculture and Cooperatives. (In Thai)
- Hengprayoon, C.. (2004). Fundamentals of Soil Science for Sustainable Agriculture. Nakhon Pathom: Department of Soil Science Faculty of Agriculture Kamphaeng Saen Kasetsart University Kamphaeng Saen Campus. (In Thai)
- Hirsch, P. (1990). *Development Dilemmas in Rural Thailand*. England: Oxford University Press.
- Huizing, H., & Bronsveld, K. (1992). The Use of Geo-Information Systems and Remote Sensing for Evaluating the Sustainability of land use Systems. Proc. International workshop on Evaluation of Sustainable land Management in the Developing World, Chiang Rai Thailand. Retrived from IBSREM, Bangkok, Thailand. (In Thai)
- Kampolkon, T. (2004). Shifting Farming in the Life Cycle of the Paganyaw Tribe: Relationship of Balancing and Sharing Between Man and Man, Man and Nature, Man and Supernatural Beings. Chiang Mai: B.S.D. Printing Co., Ltd.
- Pasabud, P., Lattirasuvan, T., Yothapakdee, T., & Khonkaen, P. (2022). Critical success factors for sustainable integrated agriculture in Sajook and Sakiang villages in Khun Nan Subdistrict, Chalerm Prakiat District, Nan Province. *Humanities and Social Sciences Journal, Ubon Ratchathani Rajabhat University*, 13(1), 267–275. https://so01.tci-thaijo.org/index.php/humanjubru/article/view/250538 (In Thai)
- Shiner, W.W., Philipp, P.F., & Schmehl, W.R. (1982). Farming Systems Research and Development. Guideline For Developing Countries. Boulder: Westview.
- Suksawat, M. (2000). Soil Fertility. Bangkok: Pimluck. (In Thai)
- Wongmaneerot, A. (2004) Fundamentals of -Soil Science for Sustainable agriculture.

 Nakhon Pathom: Department of Soil Science, Faculty of Agriculture, Kamphaeng Saen, Kasetsart University, Kamphaeng Saen Campus. (In Thai)

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Results of Psychological Training Program To Develop Children and Youth Mainstays for Immune-Strengthening and Surveillance of Family Violence in Children and Youth in Chiang Rai

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Abstract

This experimental research aimed to study the result of the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai. The sample group was the youth in Chiang Rai aged 15-25 years who had the average score from the questionnaire about the violence in families of children and youth in Chiang Rai from the 75th percentile. The purposive sampling method was used to select 60 samples to participate in the psychological training program by conducting a match pair of children and youth whose averages were similar: 30 youth to the experimental group and 30 youth to the control group. The psychological training program was conducted twice a week, 1.30 to 2 hours each session, five sessions in total within three weeks. The operational step included three stages: Initial, Working, and Ending Stage.

Research results demonstrated that the mean of family violence in children and youth in Chiang Rai from the experimental group during the pre-test period was 3.54 and the Standard Deviation (SD) was 0.65, which was high. The mean of family violence and SD during the post-test period was 2.63 and 0.34, which was moderate. The mean of family violence and SD during the post-test period was 2.56 and 0.33, which was moderate. As for children and youth from the control group, the mean of family violence and SD during the pre-test was 3.86, and SD was 0.48, which was high. The mean of family violence, and SD during the post-test period was 3.82 and 0.50, which was high. During the follow-up stage, the mean of family violence and, SD was 3.80 and 3.48, which was high. It proved that the program was successful to some extent due to the increasing mean of family violence.

Keywords: Training, Psychology, Immune-strengthening, Violence, Children and youth

Introduction

Resilience quotient (RQ) leads a person to overcome crisis or trauma incidents by having speedy emotional and mental rehabilitation, freeing from the grift, having emotional and mental flexibility, and self-adaptation to live a normal life happily. A person with good and healthy mental health will turn the crisis into an opportunity and become stronger (Siriratrekha, 2022). For this reason, RQ boosting is crucial for children and youth. The participatory RQ-strengthening is a collaboration between community networks to enhance the children and youth's spirit to prevent themselves from the risk of insecure situations, or being non-resilient person during the difficult time (Noosorn & Phetphoom, 2016), such as during the spread of drug abuse in the community, domestic violence situation where parents fight or hurt each other, particularly the increasing rate of family violence. Data from the website of Child and Female Abuse and Family Violence Information Center, Ministry of Social Development and Human Security (Ministry of Social Development and Human Security, 2016) stated that most family violence problems were through the fight between a couple and physical and mental abuse which caused other related multiple issues. The cause of violence level in children was the dysfunctional family, readiness for maternity, and lack of care from parents since they had to go out to work and left children with their relatives, mentor, or on their own, so children were abused, such as being beaten by the relative or mentor without parent's acknowledgment. After the repeated action, children became emotionally suppressed, quiet, and had an emotional impact (Sodsri, 2017). With any risk circumstance, either physical, verbal, or social violence, RQ and violence surveillance are vital that the relevant organizations/agencies should be aware of the prevention. The visit and survey of families in the community or psychological training to develop children and youth mainstays, and the constant surveillance and follow-up with the family violence might need attention. United Nations (UN) defined the universal declaration of rights of the child that all children have the right to learn and develop their potential without the racial, skin tone, gender, language, religious, political opinions, ethical, social, or other status discrimination. Therefore, children and youth have the right to have psychological training for mental development and boosting their RQ. Besides, it constructs their secure mental health to grow up as adults, which would minimize the violence problems in society (Timur et al., 2016).

From the above issues, the researcher was interested in studying the impact of psychological training on children and youth in Chiang Rai using the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai. The experiment stage was divided into the initial, working, ending, and follow-up stage. If the program was successful, the researcher expected that it could be applied to other groups of children and youth. Even though problems would not be resolved, immune-strengthening for children and youth would prevent and help them be stronger and tougher to overcome violence problems and grow up efficiently with quality as other children and youth from healthy families.

Research Objective

To study result of psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai.

Methodology

Methodology:

This research article was partial to the research and development of children and youth innovation to reduce family violence in Chiang Rai Province using the experimental research method; it was to create the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth as the following details.

Population

Population was 165,728 youth aged 15 to 25 years old in Chiang Rai (The Bureau of Registration Administration, 2017)

Sample group

The sample group for studying results of the psychological training program was the youth in Chiang Rai aged 15 to 25 years old chosen from the sample group in the initial study who had the mean score of the questionnaire about the violence in families of children and youth in Chiang Rai from the 75th percentile. Then, the purposive sampling method was conducted to select the children and youth to participate in the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai. The steps of sample group selection details were as follows.

- 1. The researcher applied the purposive sampling method to acquire 60 samples whose average score was from the 75th percentile, and who were willing to participate in the training program.
- 2. The researcher conducted a match pair of youth whose average were similar: 30 youth to the experimental group based on the Schmidt process (Schmidt, 1993, p.137) and 30 youth to the control group who did not participate in the training program.

This research prevented the rights of the sample group. Personal information was not identified. The research was approved for human research ethics by Chiang Rai Provincial Public Health Office, Project No. CHRPHO 73/2564.

Research tool

The psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai determine the structural relationship of theories, principles, concepts, and techniques of counseling, psychological technique, and training techniques that will be adapted to the youth development for immune-strengthening and surveillance of family violence in children and

youth in Chiang Rai in each aspect, which involves physical, verbal, and social violence. Youth participate in the training program two times a week, 1.30-2.00 hours for each session, five sessions in total within three weeks. The operational step included three stages: Initial, Working, and Ending Stage. The content validation of the training program has been validated by three experts to check the consistency of objective, application of theories, psychological training technique, and psychological technique. The IOC of the step of the training program was 0.80 - 1.00, consisting of the orientation, physical violence, verbal violence, social violence, and post-training.

Data collection

The researcher conducted the following processes to collect data to study the results of the psychological training program to develop children and youth mainstays for immunestrengthening and surveillance of family violence in children and youth in Chiang Rai.

- 1. Experiment planning design The researcher utilized the experimental research method, Two-Group Pre-test-Post-test Design, which is the experiment with two groups and two tests, pre-test and post-test. The researcher adjusted the experiment plan by having measures or tests after the 5th test within one month; it is the measures during the follow-up period. This plan was the repeated measures design, three in total, which were the pre-test, post-test, and follow-up period.
- 2. Experiment process The researcher used the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai as follows.
- 2.1 Initiate stage: Select the 60 samples to participate in the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth aged 15 to 25 in Chiang Rai whose mean score from the questionnaire about the family violence in children and youth in Chiang Rai was the 75th or higher percentile, and who wanted and accepted to participate in the training. The researcher interviewed them to check their readiness and willingness to participate in the program, and matched pair children and youth who had similar mean scores; 30 of them were assigned to the experimental group. Then, the researcher made an appointment with the group members to get the details about joining the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai.
- 2.2 Working stage: The researcher conducted the created psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth with the sample group to navigate the process to promote children and youth mainstays to apply promotion process for children and youth to extend the innovations of immune-strengthening and surveillance of family violence to 30 children and youth in the experimental group for five times within three weeks.
- 2.3 Ending stage: The researcher asked the participant of the psychological training program to complete the questionnaire about the family violence in children and youth in Chiang Rai, which was the score of the post-test stage.

2.4 Follow-up stage: One month after the psychological training program, the researcher met with the experimental and control group to complete the questionnaire about the family violence in children and youth in Chiang Rai again to acquire the data from the follow-up period.

Data analysis and statistics

The researcher compared the mean of the pre-test, post-test, and follow-up period as follows.

- 1. Analyze to verify the quality of the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai using the content validity and considering the consistent objectives, theories, techniques for psychological training, and psychological techniques, and step of the training program by the expert (Item-objective Congruence: IOC) using the mean calculation.
- 2. Analyze to compare results of the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai as follows.
- 2.1 Analyze to compare the mean of family violence in children and youth in Chiang Rai in the experimental and control group during the pre-test, post-test, and follow-up period using the Two-Way Repeated MANOVA) (Stevens, 2002, p.455).
- 2.2 Analyze to compare the pair difference and post hoc test of the overall mean of family violence in children and youth in Chiang Rai and by each component: during the pretest, post-test, and follow-up period using the Least Significant Differences (LSD) (Stevens, 2002, p.462).

Results

To study the results of the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai who were in the experimental and control group, during the pre-test, post-test, and follow-up period, the researcher validated the normality using the statistics and found that the statistical significance of the pre-test, post-test and, follow-up period was .06-.99. It implied that the family violence in children and youth in Chiang Rai during the pre-test, post-test and follow-up period had a normal curve distribution. As a result, it could be moved to the next step, which was the Two-way Repeated MANOVA.

1. Mean and Standard Deviation (SD) of the family violence in children and youth in Chiang Rai in the experimental and control group during the pre-test, post-test, and follow-up period

The researcher analyzed the mean and SD of the family violence in children and youth in Chiang Rai in the experimental and control group during the pre-test, post-test, and follow-up period as results shown in Table 1.

Table 1 Mean and SD of the family violence in children and youth in Chiang Rai in the experimental and control group during the pre-test, post-test, and follow-up period (n=60)

						Peri	od			
Family Violence	Group		Pre-	test		Post-	test		Follov	v-up
Violence		M	SD	Level	M	SD	Level	M	SD	Level
Physical Violence	Experimental	3.24	0.57	Moderate	2.61	0.37	Moderate	2.54	0.36	Low
	Control	3.58	0.68	High	3.55	0.69	High	3.52	0.64	High
Verbal Violence	Experimental	4.16	0.49	Very High	3.27	0.49	Moderate	3.09	0.61	Moderate
	Control	4.15	0.53	Very High	4.13	0.53	High	4.12	0.53	Very High
Social Violence	Experimental	3.46	0.77	Very High	2.68	0.40	Moderate	2.58	0.42	Moderate
	Control	3.84	0.75	Very High	3.80	0.76	High	3.78	0.74	Very High
Overall Domestic Violence	Experimental	3.54	0.65	Very High	2.63	0.34	Moderate	2.56	0.33	Moderate
	Control	3.86	0.48	Very High	3.82	0.50	High	3.80	0.48	Very High

Table 1 illustrates that the mean and SD of children and youth in the experimental group during the pre-test period was 3.45 and 0.65, which was high. During the post-test, the mean and SD was 2.63 and 0.34, which was moderate. During the follow-up period, the mean and SD was 2.56 and 0.33, which was moderate. At the same time, the mean and SD of children and youth in the control group during the pre-test period was 3.86 and 0.48, which was high. During the post-test, the mean and SD was 3.82 and 0.50, which was high. During the follow-up period, the mean and SD was 3.80 and 0.48, which was high. If considering by aspect, it could be concluded as follows.

Physical violence The mean of physical violence in children and youth in Chiang Rai in the experimental group during the pre-test period was 3.24, and SD was 0.57, which was moderate. During the post-test period, the mean and SD was 2.61 and 0.37, which was moderate. During the follow-up period, the mean and SD was 2.54 and 0.36. Meanwhile, the mean and SD of physical violence in children and youth in Chiang Rai in the control group during the pre-test period was 3.58 and 0.68, which was high. During the post-test period, the mean and SD was 3.55 and 0.69, which was high. The mean and SD during the follow-up period was 3.52 and 0.64, which was high.

Verbal violence The mean and SD of verbal violence in children and youth in Chiang Rai in the experimental group during the pre-test period was 4.16 and 0.49, which was high. During the post-test period, the mean and SD was 3.27 and 0.49, which was moderate. During the follow-up period, the mean and SD was 3.09 and 0.61, which was moderate. At the same time, the mean and SD of physical violence in children and youth in Chiang Rai in the control group during the pre-test period was 4.15 and 0.53, which was high. During the post-test period, the mean and SD was 4.13 and 0.53, which was high. During the follow-up period, the mean and SD was 4.12 and 0.53, which was high.

Social violence The mean and SD of social violence in children and youth in Chiang Rai in the experimental group during the pre-test period was 3.46 and 0.77, which was high. During the post-test period, the mean and SD was 2.68 and 0.40, which was moderate. During the follow-up period, the mean and SD was 2.58 and 0.42, which was moderate. At the same time, the mean and SD of physical violence in children and youth in Chiang Rai in the control group during the pre-test period was 3.84 and 0.75, which was high. During the post-test period, the mean and SD was 3.80 and 0.76, which was high. During the follow-up period, the mean and SD was 3.78 and 0.74, which was high.

2. Assumption test of the family violence of family violence in children and youth in Chiang Rai in the experimental and control group during the pre-test, post-test, and follow-up period

The researcher tested the assumption of the family violence in children and youth in Chiang Rai in the experimental and control groups during the pre-test, post-test, and follow-up period, as results shown in Table 2.

Table 2 Assumption test of the family violence of family violence in children and youth in Chiang Rai in the experimental and control group during the pre-test, post-test, and follow-up period (n=60)

Domestic Violence	Period	Levene Statistic	df1	df2	р
Overall domestic violence	Pre-test	0.28	1	58	.59
	Post-test	0.24	1	58	.62
	Follow-up	0.17	1	58	.68

Table 2 demonstrates that the variance between different groups during the pre-test and post-test period was the same without the statistical significance (F=0.28 df=1, 58 p=.59) and (F=0.24 df=1, 58 p=.62), respectively. Likewise, the variance between different groups during the follow-up period was the same without a statistical significance (F=0.17 df=1, 58 p=.68).

Table 3 Multivariate analysis of variance of family violence in children and youth in Chiang Rai in the experimental and control group during the pre-test, post-test, and follow-up period (n=60)

Effect	Multivariate Test	Value	F	Hypothesis df	Error df	p
Period	Pillai's Trace	0.72	22.76*	6	53	.00
	Wilks' Lambda	0.28	22.76*	6	53	.00
	Hotelling's Trace	2.58	22.76*	6	53	.00
	Roy's Largest Root	2.58	22.76*	6	53	.00
Group	Pillai's Trace	0.58	25.64*	3	56	.00
	Wilks' Lambda	0.42	25.64*	3	56	.00
	Hotelling's Trace	1.37	25.64*	3	56	.00
	Roy's Largest Root	1.37	25.64*	3	56	.00

Effect	Multivariate Test	Value	F	Hypothesis df	Error df	p
Period X Group	Pillai's Trace	0.69	20.07*	6	53	.00
	Wilks' Lambda	0.31	20.07*	6	53	.00
	Hotelling's Trace	2.27	20.07*	6	53	.00
	Roy's Largest Root	2.27	20.07*	6	53	.00

Remark: *p<.05

Table 3 shows the assumption test of the family violence of family violence in children and youth in Chiang Rai in the experimental and control group during the pre-test, post-test, and follow-up period. Results exhibits that when the time changed, the family violence in children and youth in Chiang Rail was different with a statistical significance of .05 (Wilk's Lambda=0.28 F=22.76 df=6, 53 p=.00). Further, children and youth in Chiang Rai who were from different groups had the different family violence with the statistical significance of .05 (Wilk's Lambda=0.42 F=25.64 df=3, 56 p=.00). In addition, the changing time and children and youth from different groups had different family violence with a statistical significance of .05 (Wilk's Lambda=0.31 F=20.07 df=6, 53 p=.00). Therefore, results of the psychological training program to develop children and youth mainstays to minimize the family violence in children and youth in Chiang Rai in the experimental and control group during the pre-test, post-test, and follow-up period could be examined as follows.

Table 4 Results comparison of the psychological training program to develop children and youth mainstays to minimize the family violence in children and youth in Chiang Rai in the experimental and control group during the pre-test, post-test, and follow-up period (n=60)

Family Violence	SS	df	MS	F	р
Physical violence					
Period	19.78	2	9.89	45.82*	.00
Group	27.69	1	27.69	33.88*	.00
Period X Group	16.72	2	8.36	38.73*	.00
Error	25.04	116	0.21		
Verbal violence					
Period	21.32	2	10.66	49.84*	.00
Group	34.49	1	34.49	57.62*	.00
Period X Group	19.45	2	9.72	45.47*	.00
Error	24.81	116	0.21		
Social violence					
Period	15.27	1.51	10.07	45.39*	.00
Group	23.61	1	23.61	22.06*	.00
Period X Group	12.83	1.51	8.47	38.15*	.00
Error	19.51	87.88	0.22		
Overall family violence					
Period	18.50	1.80	10.23	92.43*	.00
Group	23.61	1	28.42	22.06*	.00
Period X Group	16.03	1.80	8.86	80.06*	.00
Error	11.61	104.86	0.11		

Remark: *p<.05

Table 4 presents the psychological training program to develop children and youth mainstays to minimize family violence in children and youth in Chiang Rai in the experimental and control group during the pre-test, post-test, and follow-up period. It indicates that due to the different periods, the overall mean of family violence was different with a statistical significance of .05 (F=92.43, df=1.80, p=.01). In addition, the different groups had a different overall mean of family violence with a statistical significance of .05 (F=22.06, df=1, p=.00). Also, the different periods and groups affected the different overall mean of family violence was different with a statistical significance of .05 (F=80.06, df=1.80, p=.00). When considering by aspect, the following results were discovered.

Physical violence Different periods affected different means of physical violence with a statistical significance of .05 (F=45.82, df=2, p=.00). Different groups affected the means of physical violence with a statistical significance of .05 (F=33.88, df=1, p=.00). Additionally, different periods and groups affected different means of physical violence with a statistical significance of .05 (F=38.73, df=2, p=.00).

Verbal violence Different periods affected different means of verbal violence with a statistical significance of .05 (F=49.84, df=2, p=.00). Different groups affected different means of verbal violence with a statistical significance of .05 (F=57.62, df=1, p=.00). Additionally,

different periods and groups affected different means of verbal violence with a statistical significance of .05 (F=45.47, df=2, p=.00).

Social violence Different periods affected different means of social violence with a statistical significance of .05 (F=45.39, df=1.51, p=.00). Different groups affected different means of social violence with a statistical significance of .05 (F=22.06, df=1, p=.00). Additionally, different periods and groups affected different means of social violence with a statistical significance of .05 (F=38.15, df=1.51, p=.01). Since the overall mean of family violence and by aspect were different, the researcher compared them using Bonferroni Pairwise comparison method, as shown in Table 5 to 7.

Table 5 Comparison of family violence in children and youth in Chiang Rai during the pretest period classified by group (n=60)

Family Violence	Experime	ntal Group	Contro	l Group	MD	р	
	M	SD	M	SD	_	M	
Physical violence	3.24	0.57	3.58	0.68	0.34	.86	
Verbal violence	4.16	0.49	4.15	0.53	-0.01	.80	
Social violence	3.46	0.77	3.84	0.75	0.38	.88	
Overall family violence	3.54	0.65	3.86	0.48	0.32	.81	

Remark: *p<.05

Table 5 illustrates that the overall family violence and by aspect: physical violence, verbal violence, and social violence, during the pre-test period of children and youth in Chiang Rai in the experimental and control group were different without a statistical significance.

Table 6 Comparison of family violence in children and youth in Chiang Rai during the post-test period classified by group (n=60)

Family Violence	Exper	imental	Control Group		MD	р
	Group					
	M	SD	M	SD	_	\mathbf{M}
Physical violence	2.61	0.37	3.55	0.69	0.94	.00
Verbal violence	3.27	0.49	4.13	0.53	0.86	.00
Family Violence	Exper	imental	Contro	l Group	MD	p
	Gr	oup				
	M	SD	M	SD	_	M
Social violence	2.68	0.40	3.80	0.76	1.12	.00
Overall family violence	2.63	0.34	3.82	0.50	1.19	.00

Remark: *p<.05

Table 6 illustrates that the overall family violence and by aspect: physical violence, verbal violence, and social violence, during the post-test period of children and youth in Chiang Rai in the experimental group was lower than the control group with a statistical significance of .05.

Table 7 Comparison of family violence in children and youth in Chiang Rai during the follow-up period classified by group (n=60)

Family Violence	Exper	imental	Control Group		MD	p
	Group					
	M	SD	M	SD	=	
Physical violence	2.54	0.36	3.52	0.64	0.98	.00
Verbal violence	3.09	0.61	4.12	0.53	1.03	.00
Social violence	2.58	0.42	3.78	0.74	1.20	.00
Overall family violence	2.56	0.33	3.80	0.48	1.24	.00

Remark: *p<.05

Table 7 illustrates that the overall family violence and by aspect: physical violence, verbal violence, and social violence, during the follow-up period of children and youth in Chiang Rai in the experimental group was lower than the control group with a statistical significance of .05.

Discussions

From the research objective to study results of the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai, the IOC from experts to validate the training program analyzed with the qualitative evidence indicated that the IOC was 0.80-1.00. It presented that the psychological training program passed the qualitative test, which might be utilized to develop children and youth mainstays for immune-strengthening and surveillance of family violence.

Anyhow, it might be that the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai followed the concept of Nelson-Jones (Nelson-Jones, 1992) who stated about the training program that consisted of the key stages, which each of them had common qualities, which were the initial stage, working stage, and ending stage. The objective of health development of the advisor was determined and the training period with the specific objective was set at 5-12 sessions the average, which was the length of the group and duration of the session. Each session was 2-3 hours. The appropriate venue and environment, visual media, material and equipment for training, and facilities were prepared. Moreover, the training method and materials were considered to be consistent with the training objective and content, which included brainstorming, self-assessment, teaching, game, simulation, role-playing, imagination, and story-telling technique.

As for the content of family violence, the setup of a training group to change the mindset and to promote the members to create the method of immune-strengthening and surveillance of family violence creatively and apply the model to the other groups. It was the social innovation with the highest efficiency. It was in line with Chafetz (Chafetz, 2008) who examined clinical test results of health training for health promotion for seriously ill patients. The sample group was 309 seriously ill patients who had short-term treatment and registered for the training. The research tool was active health promotion with health training consisting of self-assessment, self-monitor, and self-health management within 12 months. Results showed that from the health assessment (SF-36) and self-scoring via the interview in the 6th, 12th, and 18th month, the health training related to physical health with a statistical significance. It was consistent with the study of McGarrigle and Walsh (McGarrigle & Walsh, 2011) who investigated the impact of meditation on consciousness, self-care, and health in social work. The sample group was 12 staff who were in charge of service affairs. The research tool was the 8-week meditation program. Results showed that after attending the meditation program, the level of consciousness, self-care, awareness, and problem-facing strategies of the sample group increased with a statistical significance. It implied that meditation practice enhanced the health level. On the other hand, it positively impacted the service providing of service staff. It corresponded with Phillips et al. (Phillips et al., 2019) who reported that a flexible person was likely to have better health and less stress. Thus, the process to construct curiosity, acceptance of new things and mistakes, and admiration for what they know, as well as the process to design the flexibility of ideas that activate the immune-strengthening and surveillance of family violence was crucial for designing the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of the family violence in children and youth in Chiang Rai. It was in line with Osborn et al. (Osborn et al., 1997, p.325) who explained that seeking the truth and curiosity were the crucial components of immune-strengthening and surveillance of family violence.

For this reason, the development of the three components to design the efficient psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of the family violence in children and youth in Chiang Rai should be taken into consideration since they related to each other and assisted children and youth in the immune-strengthening and surveillance of family violence that balanced and corresponded to work and daily life.

Nevertheless, the researcher applied the theory of counseling, counseling technique, psychological theory, and other psychological theories to the psychological training program including client-centered counseling theory, behavioral counseling approach, and rational emotive behavior counseling. Psychological group activities, training concepts, method, and technique, which was consistent with Nelson-Jones (Nelson-Jones, 1992, p.10) who stated that the psychological training program could apply the concepts, theories, counseling skills, and psychological technique to the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of the family violence in children and youth in Chiang Rai for the practice, either the psychological education framework, idea counseling, and humanistic and behavioral counseling theory (Thompson, 2016).

Conclusion and suggestions

Conclusion

The psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai could be applied for immune-strengthening and surveillance of family violence in children and youth. Experiment results illustrated that group members had a positive relationship, which was reflected via harmony and participation, admiration of other members, assistance, relaxed actions, laughs, enjoyment, smiley faces, expression of opinions, appropriate response, and attempt to answer questions. Before ending the program, members talked intimately; they discussed, gave opinions, advice and information, and learned about concepts and self-emotion. Besides, results of developing children and youth mainstays for immune-strengthening and surveillance of the family violence exhibited that the mean of family violence during the follow-up and post-test period was lower than the pre-test period with a statistical significance of .05, which was consistent with the research hypothesis.

Therefore, it could be concluded that the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai was created to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai could be applied for immune-strengthening and surveillance of family violence in various aspects. As Nelson-Jones (Nelson-Jones, 1992, p.6) stated that group training was the method to allow group members to enhance life skills via the process of learning by doing, systematic teaching, and members interaction. It was in line with the study of Baker and Absenger (Baker & Absenger, 2013) who investigated the construct of the training group to increase sexual wellbeing efficiency. The hypothesis was the training group model could increase good health and sexual well-being. The sample group was the population with high stress. The research tool was the Sexual Wellness Enhancement and Enrichment Training (SWEET) adapted from the mind-body skills group comprising breathing exercises, mindfulness, mindful eating, exercise, and relaxation practice. Results revealed that the group training model increased good health and sexual well-being, which was consistent with the hypothesis. Moreover, the research of Treven et al. (Treven et al., 2015) on the training program to develop well-being in the organization, which was conducted with 320 employees who participated in stress management programs, diversity management programs, wellness programs, employee assistance programs, and programs for personal growth reported that the program could maximize happiness and wellness to employees. In addition, it was consistent with the research of Tabitha et al. (Tabitha et al., 2015) that investigated the development of physical, mental, and spiritual health with the wellness development program for college counseling. The sample group was 38 master and doctoral students. The qualitative research method and the 5F-Wel questionnaire were utilized. Results showed that the wellness development program had a positive impact on the knowledge of students and well-being practice (Shaffer & Galinski, 1974).

Recommendations

Recommendations for results application: Research results can be applied to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth by enhancing all components: physical, verbal, and social violence since they are related. The development and follow-up should be continued constantly.

Recommendation for future research: The program model or other methods of children and youth mainstays for immune-strengthening and surveillance of family violence should be developed, such as computer-based training, web-based training, E-Learning, learning portals, etc., for developing the new normal learning.

New knowledge and the effects on society and communities

The results of the psychological training program to develop children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth in Chiang Rai illustrated that the mean during the follow-up and post-test period was higher than the pre-test period. Moreover, the mean during the follow-up period was higher than the post-test period with a statistical significance of .05. The difference in mean during the pretest, post-test, and follow-up period had a statistical significance. Therefore, the psychological training program to develop children and youth mainstays was beneficial and effective to develop children and youth mainstays for immune-strengthening and surveillance of family violence. In addition, this research was conducted with the sample group and in a specific area, so the results are specific due to the identity and context of the sample group. Consequently, the knowledge and innovations from this research are practical substantially and can be extended to be appropriate to the community and study area. After the research, the researcher would return the information to the community for their benefit by focusing on the participatory development of children and youth mainstays for immune-strengthening and surveillance of family violence in children and youth towards the application to resolve the policy problem related to the surveillance, mitigation, and prevention of family violence problems that would lead to the policy change.

References

- Baker, A. C., & Absenger, W. (2013) Sexual Wellness Enhancement and Enrichment Training (SWEET): A hypothetical group model for addressing sexual health and wellbeing, *Sexual and Relationship Therapy*, 28(1-2), 48-62. https://doi.org/10.1080/14681994.2013.770142
- Chafetz, M. D. (2008). Malingering on the social security disability consultative exam: predictors and base rates. *The Clinical neuropsychologist*, 22(3), 529–546. https://doi.org/10.1080/13854040701346104
- McGarrigle, T., & Walsh, C. A. (2011). Mindfulness, self-care, and wellness in social work: Effects of contemplative training. *Journal of Religion & Spirituality in Social Work: Social Thought*, 30(3), 212–233. https://doi.org/10.1080/15426432.2011.587384
- Ministry of social development and human security. (2016). *Data centers. Violence against children. Women and violence in the family*. Retrieved from https://www.msociety.go.th/main.php?filename=index
- Nelson-Jones, R. (1992). Group Leadership: A Training Approach. California: Brook/Cole.
- Noosorn, N., & Phetphoom, C. (2016). Developing a Motivational and Prevention Programs Based on Self Efficacy Theory for Reducing the Risk Associated with Illegal Drug Use by Children and Youth Living in Border Area of Tak Province. *EAU Heritage Journal Science and Technology*, 10(3), 177–187. https://he01.tci-thaijo.org/index.php/EAUHJSci/article/view/64963 (In Thai)
- Osborn, M., Broadfoot, P., Planel, C., & Pollard, A. (1997). Social Class, Educational Opportunity and Equal Entitlement: Dilemmas of Schooling in England and France. *Comparative Education*, *33*(3), 375–393. http://www.jstor.org/stable/3099497
- Phillips, K., Brockman, R., Bailey, P. E., & Kneebone, I. I. (2019). Young Schema Questionnaire Short Form Version 3 (YSQ-S3): Preliminary validation in older adults. *Aging & mental health*, 23(1), 140–147. https://doi.org/10.1080/13607863.2017.1396579
- Schmidt, J. J. (1993). *Counseling in Schools: Essential Service and Comprehensive Programs*. Boston: Allyn & Bacon.
- Shaffer, J. B. P., & Galinski, M. D. (1974). *Models of group therapy and sensitivity training*. Englewood Cliffs, NJ: Prentice-Hall.
- Siriratrekha, T. (2022). Foster Home Camp Activities. Bangkok. (In Thai)
- Sodsri, S. (2017). The Problem of Family Violence in Thai Society. *Journal of MCU Peace Studies*, 6(Special Edition), 600-609. https://so03.tci-thaijo.org/index.php/journal-peace/article/view/116657/94918 (In Thai)
- Stevens, J. P. (2002). *Applied multivariate statistics for the social sciences*. Mahwah, NJ: Lawrence Erlbaum.

- Tabitha, L.Y., Rebekah, R., Talunja, E., & Jonathan, H. O. (2013). Personal Growth Groups: Measuring Outcome and Evaluating Impact. *The Journal for Specialists in Group Work*, (38)1, 52-67. https://doi.org/10.1080/01933922.2012.745915
- The Bureau of Registration Administration, Department of Local Administration. (2017). *Official statistics registration*. Retrieved from https://stat.bora.dopa.go.th/stat/statnew/statMONTH/statmonth/#/mainpage
- Thompson, K.A. (2016). *Counseling techniques: Improving relationships with others, ourselves, our families and our environment.* (3rded.). New York: Routledge.
- Timur, H., Kokanalı, M. K., Topçu, H. O., Topçu, S., Erkılınç, S., Uygur, D., & Yakut, H. İ. (2016). Factors That Affect Perinatal Outcomes of the Second Pregnancy of Adolescents. *Journal of pediatric and adolescent gynecology*, 29(1), 18–21. https://doi.org/10.1016/j.jpag.2015.05.002
- Treven, S., Treven, U., & Zizek, S.S. (2015). Training Programs for Managing Well-being in Companies. *Naše gospodarstvo/Our economy*, *61*(4), 23-31. https://doi.org/10.1515/ngoe-2015-0015

Customer Preferences for Coworking Spaces in Chiang Mai

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Abstract

The objective of this research is to study the customer preferences for coworking spaces in Chiang Mai Province as well as to make a comparison among customers of different occupations. This research applies quantitative research methodology and uses an online questionnaire for data collection. The researcher then applied purposive sampling by collecting data only from those who had used coworking space services during May 1, 2021 – August 16, 2021. The data collection was taken place in August – November, 2021. The sample includes 385 coworking spaces customers. The researcher applied descriptive statistics including frequency, mean, and standard deviation to analyze data and also applied Analysis of Variance to analyze the difference among various informant groups. The study showed that most of the respondents were female, aged 21 -25 years, hold a bachelor's degree, and earned average monthly income between 10,000-20,000 baht, had used the coworking service within the past 6 months, visit coworking space around 1-5 times per month, spent about 1-3 hours per each visit, and usually visit during 9:01 – 12:00 hours. The customer preferences toward service marketing mix of coworking spaces in Chiang Mai are product, place or channel, price, process, physical evidence, promotion, and people, all at the highest level. In comparison of customer preferences among different occupation, it was found that there are 3 factors that showed the statistically significant difference which include price, promotion, and people. As the result revealed that generation Z are the main customers of coworking spaces, the business owners shall focus on applying suitable marketing mix strategies to meet their preferences.

Keywords: Coworking space, Chiang Mai, Preference, Service marketing mix

Introduction

A coworking space is a shared professional-style working space where people can pay a service fee to use a shared workspace. Coworking spaces often foster community, hold networking events, and create ideal solutions for small companies, startups or remote workers, like freelancers (Dan, 2022). Coworking space service providers usually provide a work environment and generally, office equipment and services characteristic of a typical workplace. The features of such an office space typically include shared space to work, round-the-clock access to workplace, conference and board rooms that can be reserved or rented on need basis, Wi-Fi, shared printing, copying, faxing and/or scanning facilities, to mention a few (The Workplace Co, 2021). According to Statista, there is approximately 28,500 coworking spaces worldwide and the number is projected to raise up to approximately 42,9000 by the end of 2024 (Statista, 2022b).

The market for coworking space in Thailand also grows quickly as it has been driven by demand from new generations (Katharangsiporn, 2018). Chiang Mai is a hub of northern Thailand and the second-largest city in Thailand. The province has a population of around 1.2 million in the urban city area as of 2022 (Wikivoyage, 2022). The market for coworking space has also expanded to Chiang Mai. There is no formal statistics on number of coworking spaces in Chiang Mai available. However, people can find out where coworking spaces are by searching from several channels including internet sources. For instance, in 2022, there are 22 coworking space in Chiang Mai on coworkingspace.com list (Coworkingspace, 2022). This number may not reveal the exact amount of all working spaces out there, however, it provides important data that there are a lot of them and the services are well accepted by the customers.

As the coworking space trend is continuous raising, it is important to learn the customer preferences so that the business operators can design the marketing mix strategy appropriately. This research aims to study the customer preferences for coworking spaces in Chiang Mai Province as well as to make a comparison among customers of different occupations. The results of this research would be beneficial for the coworking space service providers in the long run.

Literature Reviews Customer Preference

This research applied consumer preference concept to explain the behavior of consumers. Consumer preference concept is usually be employed in marketing, strategies. The theory states that consumers are influenced by their own preferences, the preferences of others, and the context in which they make decisions. Many business organizations have recognized the importance of customer preference. In turn, they use customer data to improve their products and services. Customer preference concept helps the marketers to understand what customers want in order to create new products or services based on their preferences (Williams, 2022). Customer preferences are, for example, product categories, price points,

marketing channel, to name a few. Data of customer preferences can be gathered in various ways such as purchase data, focus group, and survey. This research applied survey method to collect data.

Marketing Mix

Marketing Mix is a tool used by businesses and marketers to help determine a product or brands offering. The 4 Ps have been associated with the Marketing Mix since their creation by E. Jerome McCarthy in 1960 (McCarthy, 1960). In the late 70's it was widely acknowledged by Marketers that the Marketing Mix should be updated in order to cover not only product but also services. This led to the creation of the Extended Marketing Mix in 1981 by Booms & Bitner which added 3 new elements to the 4 Ps Principle. This now allowed the extended Marketing Mix to include products that are services and not just physical things. The 7 Ps includes 1) Product 2) Price 3) Place or distribution channel 4) Promotion 5) People 6) Process, and 7) Physical evidence (Professional Academy, 2022). This research applied 7Ps concept in order to explain all service dimensions of the coworking spaces in Chiang Mai.

Methodology

Research framework

1. Content

This study is a quantitative study. It focuses on the customer preferences for coworking spaces in Chiang Mai. The study oriented around the customer preference concept along with service marketing mix (7Ps) concepts. The service marketing mix includes product, price, place or distribution channel, promotion, people, process, and physical evidence.

2. Population and sample

The population in this study included people who had used or have been using coworking space services in Chiang Mai. As the exact number of populations was unknown, the researcher applied W.G. Cochran formula to calculate the appropriate number of sample size at 95 percent confident level and allow 5 percent randomization error. Consequently, the retrieved appropriate sample size was 385 (Uakarn et al., 2021). The researcher then applied purposive sampling by collecting data only from those who, had used or still using coworking space services during May 1, 2021 – August 16, 2021. The data collection was taken place in August – November, 2021.

Research tool

The research instrument used in the study was a questionnaire which consists of 4 parts as follows:

- Part 1 General information about the respondents which includes gender, age, level of education, occupation, and average monthly income.
- Part 2 Customer practices in using coworking space services
- Part 3 Customer preferences toward service marketing mix of coworking spaces in Chiang Mai
- Part 4 Suggestions to improve the coworking space business

Questionnaire development

The researcher developed questionnaire by reviewing related documents and observing coworking spaces in Chiang Mai and develop the first draft of questionnaire. Then, the researcher presented the questionnaire to the 3 experts to check for content validity and to find the Index of Item Objective Congruence (IOC). The 3 experts include a professor who is specialized in research tool development and two frequent coworking space customers who understand coworking spaces services well as they have direct experiences in using the services. Based on the criteria for determining IOC, to accept the content validity, the index must be greater than 0.5 (Rovinelli & Hambleton, 1977). The analysis revealed that all of the IOC values of each question in the questionnaire range from 0.67 to 1.0 which were considered acceptable to use as they indicated the consistency between the questions and the objectives of the questionnaire. Subsequently, the researcher measured confidence or internal concordance with Cronbach's Alpha Coefficient, using the expert-recommended questionnaire tested on 30 informants by the selection criteria questions with an α value of 0.70 or higher were considered confident (Tirakanant, 2012). The analysis obtained Cronbach's alpha coefficient on customer practices and on each of the service marketing mix factors, the obtained values range from 0.72 -0.99 and the average value is 0.88. Hereafter, all questions are considered confident and can be appropriately used. The researcher then created an online questionnaire and collect data.

Data analysis

Data collected from the questionnaire were analyzed by using descriptive statistics consisting of frequency, percentage and mean. In the part of customer preferences, the preferences of service marketing mix towards coworking spaces in Chiang Mai were rated into 5 levels according to the Rating Scales Method. The scores were interpreted for each level as follows: 4.21-5.00 means highest; 3.41-4.20 means high; 2.61-3.40 means medium; 1.81-2.60 means low and 1.00-1.80 mean lowest.

Results

Part 1 General information of informant

The researcher collected data from 385 informants. The results showed that most of the respondents were female (62.0%), aged 21 -25 years (35.0%), bachelor's degree (67.0%), students (43.1%), and earned average monthly income between 10,000-20,000 baht (34.0%).

Part 2 Customer practices in using coworking space services

Regarding customer practices in using coworking space services, it was found that the majority of the informants had used the coworking service within the past 6 months (52.7%), the frequency of using coworking space range around 1-5 times per month (44.2%), and they spent about 1-3 hours per each visit (56.1%). The most popular usage hours were 9:01-12.00 hours. Most of the informant did not pay to rent the space (45.5%) but they paid for other additional services such as food, beverage, and high-speed internet around 101-150 Thai Baht per visit (22.08%). The main purpose of most informants to use the coworking spaces was to do business contact (23.1%). The informants usually visit the coworking space with 2-5 people

at a time (44.0%). The top priority to select coworking space was an appropriate place to work conveniently (22.9%) and they usually chose a space to be able to work privately such as a solo working desk which provide a sense of private space (49.1%).

Part 3 Customer preferences toward service marketing mix of coworking spaces in Chiang Mai

Regarding customer preferences toward service marketing mix of coworking spaces in Chiang Mai, the informants ranked all the service marketing mix (7 Ps) at the highest level. The top 3 preferences toward service marketing mix consists of product (4.58), place or channel (4.51), and price (4.46). The Standard Deviation (SD) is the measure of dispersion or variation of a set of data from its mean. The higher SD reflects the greater dispersion or greater deviation of the value from its mean. For the 5-rating scale, SD above 1.75 means highest dispersion; 1.25-1.75 means somewhat high dispersion, and below 1.25 means low dispersion. The results in table 1 revealed that the SDs of all service marketing mix factors range between 0.4-0.7 which mean the data are low dispersion from the mean.

Table 1 Customer preferences toward service marketing mix of coworking spaces in Chiang Mai

Order	Service marketing mix	Mean	SD	Interpretation
1	Product	4.58	0.446	Highest
2	Place or Channel	4.51	0.439	Highest
3	Price	4.46	0.548	Highest
4	Process	4.42	0.520	Highest
5	Physical evidence	4.38	0.535	Highest
6	Promotion	4.30	0.602	Highest
7	People	4.21	0.715	Highest

To illustrate the research result in more detail, the researcher presents the top 3 sub-factors of each service marketing mix factor. Such data would provide ideas of what service marketing mix the service providers shall pay particular attention to and in what ways to enhance the strategy. The top 3 sub-factor of each service marketing mix are shown in table 2.

Table 2 Top 3 sub-factors of customer preferences toward service marketing mix of coworking spaces in Chiang Mai

0.1	Service marketing mix /	M	CD	T 4 4 4	
Order	Sub-factors of service marketing mix	Mean	SD	Interpretation	
	Product				
1	The service hours are appropriate	4.67	0.521	Highest	
2	Necessary facilities such as high-speed	4.66	0.587	Highest	
	internet, printer, copy machine are provided				
2	The place is neat and clean	4.66	0.511	Highest	
	Price				
1	The price is worth the service received	4.55	0.631	Highest	
2	There are a variety of service price range.	4.51	0.621	Highest	
3	Service rates are clearly displayed.	4.50	0.633	Highest	
	Place or Channel				
1	The location is easy to access (e.g. located near	4.60	0.548	Highest	
	residential areas, workplaces, or in the center of				
	the city).				
1	There is sufficient parking space for customers	4.60	0.562	Highest	
2	It is convenient to get access to information	4.54	0.620	Highest	
	(e.g. contact details, tracking missing items,				
	etc.)				
	Promotion				
1	Promotional arrangements are organized	4.47	0.648	Highest	
	regularly (e.g. discount, special privileges for				
	members, etc.)				
2	A variety of communication channels are	4.34	0.701	Highest	
	accessible (e.g. online media, social media,				
	roadside publicity signs, etc.)				
3	Publications are reliable and interesting (e.g.	4.30	0.699	Highest	
	user reviews, PR on social media, etc.)				
	People				
1	Employees are attentive in providing good	4.35	0.747	Highest	
	service to customers.				
2	Staff are courteous and friendly.	4.30	0.769	Highest	
3	Employees are reliable and able to solve	4.16	0.870	Highest	
	problems.				

Order	Service marketing mix / Sub-factors of service marketing mix		SD	Interpretation
	Process			
1	The security system and theft protection are in	4.50	0.629	Highest
	place.			
2	Service delivery is quick, easy, and	4.42	0.616	Highest
	uncomplicated (e.g. payment process,			
	troubleshooting for equipment usage, etc.)			
3	The regulations, terms and conditions for using	4.35	0.648	Highest
	the service are appropriately displayed.			
	Physical Evidence			
1	The facilities are neat and clean.	4.45	0.564	Highest
2	The lighting system in the coworking space is	4.43	0.610	Highest
	good.			
2	The temperature is suitable for customers to sit	4.43	0.609	Highest
	and work for a long time.			

Besides knowing the customer preferences toward service marketing mix of coworking spaces in Chiang Mai, the researcher also analyzed the data to see whether customers of different occupation have different preferences. As they could be classified as different customer sectors, if their preferences are differed, the coworking space service providers shall consider designing different service marketing mix strategy to meet their different demand. By applying Analysis of Variance (ANOVA), it was found that when classified by occupations, the customer preferences toward service marketing mix, there are 3 factors that are different at a significant level of 0.05, which are price, promotion, and people. The results are shown in table 3.

Table 3 Comparison of customer preferences toward service marketing mix of coworking spaces in Chiang Mai, classified by occupation

		C	Occupations				
Service		-					
marketing mix	Student	Government officer	Private company employee	Business owner	Freelance	F	Sig.
Product	4.56	4.53	4.54	4.67	4.55	1.173	0.322
Price	4.52	4.20	4.30	4.51	4.41	2.776	0.027*
Place or Channel	4.54	4.40	4.38	4.58	4.45	2.293	0.059
Promo- tion	4.39	3.97	4.16	4.37	4.21	3.814	0.005*
People	4.34	3.97	4.04	4.27	4.02	4.490	0.001*
Process	4.46	4.30	4.32	4.46	4.35	1.494	0.203
Physical evidence	4.43	4.21	4.22	4.43	4.34	1.970	0.098

^{*}Different at significant level of 0.05

Part 4 Suggestions to improve the coworking space business

This part presents suggestions from the informants to improve the coworking space business. The top 3 suggestion was for the coworking space service providers to provide frozen food, snacks, and beverage for sale in the coworking space building (4.41%), to allow food to be delivered to the venue and spaces for dining (2.34%), and to keep the venue quiet and not play loud music as it would disturb the user's concentration (2.08%), respectively. The suggestions are shown in table 4.

Table 4 Suggestions to improve the coworking space business

Suggestions	Count	Percent
Provide frozen food, snacks, and beverage for sale in the	17	4.41
coworking space building.		
Allow food to be delivered to the venue and spaces for	9	2.34
dining.		
Keep the venue quiet and not play loud music as it would	8	2.08
disturb the user's concentration.		
Provide enough chairs for all customers.	7	1.82
Provide sufficient electricity sockets available.	6	1.56
Provide common printer for service.	4	1.04

Discussions

In this research, it was found that most of the respondents were female, aged 21 -25 years old, and hold a bachelor's degree. This finding differed from the statistics from Color Business Center in Luxembourg which stated that coworking space members are typically 36 years old. However, some findings were aligned, as the Color Business Center indicated that the majority of people who work in coworking spaces are highly educated, with 86 percent having earned a higher education degree. Although the number of women using coworking spaces is steadily increasing, men still make up the majority of users (Color Business Center, 2022).

Regarding the findings of customer practices in using coworking space services in Chiang Mai in this research, it was found that most of the informants used coworking space range around 1-5 times per month. This finding is different from the data from Statista (2022a), which indicated that the frequency of coworking space usage worldwide in 2016 and 2017 was only one or two times a week. However, it shall be noted the year different of the two data sets. This study found that most popular usage hours was 9:01-12.00 hours, whereas the data from the 2017 Global Coworking Survey by Deskmag (2017) stated that most coworking space members work traditional office hours which starts at 9am and ends around 6pm (Deskmag, 2017). This study found that the customers usually chose a space to be able to work privately such as a solo working desk which provide a sense of private space. This result contradicts with the 2017 Global Coworking Survey by Deskmag (2017) which reported that 74% of users used public working areas (Deskmag, 2017). This research indicated that the top priority for the customers to select coworking space was an appropriate place to work conveniently. This information seemed to align with the Global Coworking Survey by Deskmag (2017) which described that most users would prefer a window with a view in front of their computer (70%), only every fourth member would like to face other people in front of their desk, and the most unpopular option is workspaces that are located directly at a wall (Deskmag, 2017).

When considering the customer preferences toward service marketing mix of coworking spaces, the result of this study showed that the top 3 sub-factors of service marketing regardless of the main factors includes: the service hours are appropriate, necessary facilities such as high-speed internet, printer, copy machine are provided and the place is neat and clean, respectively. This finding is different from the study of Appel-Meulenbroek (2021) which indicated that the accessibility of the location is the most important coworking space attribute for coworkers in the Czech Republic and Germany. For coworkers in the Netherlands, the type of lease contract is more important. When these two main attributes meet one's preferences, layout and diversity of tenants are also important for choosing between alternatives. However, other factors seem to align such as reception and hospitality, atmosphere and interior aesthetics and diversity of supply spaces were found to be the least important when choosing between alternative coworking spaces Appel-Meulenbroek (2021).

As this study found some statistical differences among various customers of different occupation in term of their preferences toward coworking space; there are no other research findings revealed direct result on this scenario. However, there are indications that this issue is important. Many coworking space service providers classified their customers by membership types such as corporate customers, small teams, startup teams, hybrid workers, freelance entrepreneurs, remote workers, digital nomad and people on workation, and students and interns. The coworking space service providers offer each type of members with different service and fee packages upon their demands (Moreno, 2022; True, 2022). Moreno (2022) suggested that generic services to all types of members cannot make members happy as they do not resonate their personal and business interests. In turn, they would lose their loyalty to the place. Therefore, to select a target customer and identify the brand positioning is crucial for this business.

Conclusion and suggestions

From the results of the study, it could be concluded that most of the respondents were female, aged 21 -25 years, hold a bachelor's degree, and earned average monthly income between 10,000-20,000 baht. Most of them had used the coworking service within the past 6 months, visit coworking space around 1-5 times per month, spent about 1-3 hours per each visit, and usually visit during 9:01-12.00 hours. It is notable that most of the informant did not pay to rent the space, instead, they pay for other additional services such as food, beverage, and high-speed internet around 101-150 Thai Baht per visit. They usually come to the coworking spaces for business contact purpose and always come with 2-5 people. They chose which coworking space to work at based on its convenience. When in the coworking space, they prefer private space such as individual desk.

The customer preferences toward service marketing mix of coworking spaces in Chiang Mai are product, place or channel, price, process, physical evidence, promotion, and people, respectively. It is interesting to learn that the customer rated all of the service marketing mix factors at the highest level. The result also discovered that the top 3 sub-factors of service marketing mix that the informants rated the highest level belongs to "product" factor which includes the service hours are appropriate; necessary facilities such as high-speed internet, printer, copy machine are provided; and the place is neat and clean. In addition, when making a comparison of customer preferences among different occupation, it was found that there are 3 factors that showed the statistically significant difference which include price, promotion, and people.

From the research result, the researcher provides suggestions as follows:

- 1. Suggestions for the coworking space service providers in Chiang Mai and others interested in coworking space business
 - 1.1 From the result of the study, it was found that many customers are 21 25 years old and earned income around 10,000 20,000 baht per month. The coworking space service providers may consider offering affordable prices for them as well as match the generation Z lifestyle. For example, they may supply coffee and snack vending

- machines to locate in the building. In addition, they may provide spaces for customers to sit and eat their food in which they order from delivery services.
- 1.2 The coworking spaces should provide vibrant atmosphere with nice and clean facilities so that the customers could sit and work comfortably as the research results indicated such customer preferences. Moreover, the coworking spaces which are well equipped with office working appliances such as high-speed and stable internet, good quality printer, and copy machine would make them superior to their competitors.
- 1.3 As it was found that the customers of different occupations have different preferences for coworking spaces in some service marketing mix factors, the service provides may consider classifying their customers and design different service packages for them. From the literature review, many coworking spaces in Europe realized such differences. Therefore, instead of trying to meet all users' preferences, they aim to target for a specific customer group in order to provide appropriate service marketing mix that meet their tastes.

2. Suggestion for future research

- 2.1 There should be a study focusing on the preferences towards the coworking spaces focusing on different groups of customers such as corporate customers in which the companies purchase memberships for their employees to work at instead of working at the companies' premises. From the literature reviews as well as the researchers' finding, it was found that there are increasing number of this type of customers.
- 2.2 There should be a comparison study on coworking spaces in other provinces as the business is expanding and well accepted among customers in big cities.
- 2.3 There should be future research applying gap model of service quality to identify areas for coworking business owners to enhance their customer experiences.

New knowledge and the effects on society and communities

This research generated new knowledge about customer preferences toward service marketing mix of coworking spaces in Chiang Mai. The coworking space business owners in Chiang Mai and other provinces can apply the results of this study to enhance their business marketing strategies. In addition, the growth of coworking spaces would plays an important part for the economics of the country.

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References

- Appel-Meulenbroek, R., Weijs-Perrée, M., Orel, M., Gauger, F., & Pfnür, A. (2021). User preferences for coworking spaces; a comparison between the Netherlands, Germany and the Czech Republic. *Review of Managerial Science*, *15*, 2025–2048 https://doi.org/10.1007/s11846-020-00414-z
- Color Business Center. (2022). *How many of you use a coworking space?* Retrieved from https://coworkers.lu/en/how-many-of-you-use-a-coworking-space/
- Coworkingspace. (2022). Find coworking space in Chiang Mai. Retrieved from https://www.coworker.com/thailand/chiang-mai
- Dan. (2022). *What is a coworking space?* Retrieved from https://www.halfhalftravel.com/remote-work/what-is-a-coworking-space.html
- Deskmag. (2017). *The Members: How, When & Why Do They Work in Coworking Spaces?*Retrieved from https://www.deskmag.com/en/coworkers/coworking-space-members-how-when-why-are-people-working-in-coworking-spaces-statistics-market-report?limitstart=1
- Katharangsiporn, K. (2018). *Expanding space for co-working*. Bangkok Post. Retrieved from https://www.bangkokpost.com/business/1474061/expanding-space-for-co-working
- McCarthy, E. J. (1960). Basic marketing, a managerial approach. Homewood: R.D. Irwin.
- Moreno, H. (2022). *Key Coworking Space Audiences to Target*. Retrieved from https://www.andcards.com/blog/member-experience/coworking-audiences-types/#1-corporate-customers
- Professional Academy. (2022). Marketing Theories The Marketing Mix From 4 Ps to 7 Ps. Retrieved from https://www.professionalacademy.com/blogs/marketing-theories-the marketing-mix from-4-ps-to-7-ps/
- Rovinelli, R. J., & Hambleton, R. K. (1977). On the use of content specialists in the assessment of criterion-referenced test item validity. *Dutch Journal of Educational Research*, 2(2), 49-60. https://psycnet.apa.org/record/1979-12368-001
- Statista. (2022a). Frequency of coworking space usage worldwide in 2016 and 2017.

 Retrieved from https://www.statista.com/statistics/797652/frequency-of-coworking-space-usage-worldwide/
- Statista. (2022b). *Number of coworking spaces worldwide from 2018 to 2020 with a forecast to 2024*. Retrieved from https://www.statista.com/statistics/554273/number-of-coworking-spaces-worldwide/
- The Workplace Co. (2021). *What is a coworking space?* Retrieved from https://www.theworkplacecompany.co.uk/what-is-a-coworking-space.html
- Tirakanant, S. (2012). *Research Methodology in Social Sciences: A Guide to Practice*. Bangkok: Chulalongkorn University. (In Thai)

- True, B. (2022). *Who Uses Coworking Spaces, and Why Are They Beneficial?* Retrieved from https://www.thecannon.com/blog/who-uses-coworking-spaces-and-why-are-they-beneficial
- Uakarn, C., Chaokromthong, K., & Sintao, N. (2021). Sample Size Estimation using Yamane and Cochran and Krejcie and Morgan and Green Formulas and Cohen Statistical Power Analysis by G*Power and Comparisons. *Apheit International Journal*, 10(2), 76 88. https://so04.tci-thaijo.org/index.php/ATI/article/view/254253
- Wikivoyage. (2022). *Chiang Mai*. Retrieved from https://en.wikivoyage.org/wiki/Chiang_Mai Williams, W. (2022). *What are Concepts and Assumptions of Consumer Preference?*Retrieved from https://study.com/learn/lesson/consumer-preference-concept-assumptions.html

The Integration of Community-Based Technology Transfer using the KWL Plus Technique for the Acceleration of Sustainable

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Community Enterprises in Phetchabun Province

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Abstract

This study aims to create and develop technology transfer and local wisdom through community involvement in the production of the rice-based Thai dessert known as Krayasart while also monitoring and evaluating the technology transfer and local wisdom processes. The sample group for this study consists of Ban Na Ruamjai Women's Community Enterprise and a total of 40 participants who are enthusiastic about taking part in the manual transfer project on fusing technology and local expertise to advance community enterprises about producing Krayasart using the KWL Plus technique. The following research resources were employed: (1) data recording of conversations with community business groups regarding the Krayasart, (2) the KWL Plus technology transfer methodology, and (3) a satisfaction survey for the KWL Plus technique manual's use of local knowledge, using which project participants are questioned. The findings indicate that the handbook on technology transfer using the KWL Plus technique is a manual that is appropriate for both technology transfer and local wisdom, and it includes information on nine distinct knowledge areas. The IOC result is 0.93, which is a helpful number that fits within the assessment range of 0.5 to 1.00 for the IOC efficiency. In order to improve community enterprises that educate people how to construct the Krayasart using the KWL Plus app application, the researcher has created a handbook for fusing technology with local expertise. Results of the transfer showed that, with a mean of 4.73 and a standard deviation of 0.45, the project's participants were satisfied with their participation in the manual transfer of technology integration and local knowledge for the advancement of community enterprises in the highest-quality Krayasart production using the KWL Plus technique.

Keywords: Integration, KWL Plus technique, Community enterprise, Krayasart, Phetchabun

Introduction

A classic dessert called "Krayasart" was derived from the Phuen, Mon, Lao, and Thai cultures. However, these sweets are utilized in auspicious events because they carry the history of "Sart Thai Day," which is how the community interacts with the environment, this makes them a special representative of local delicacies. In order to continue the tradition and earn merit at the temple, the villagers help stir Thai Krayasart dessert and mix it with bananas in the tenth month. This type of regional dessert is known as a traditional dessert tradition on Sart Thai Day, and it is thought to be a reflection of the wisdom in the development of regional food products since ancient times and has been derived from nature. Since pandan leaves have properties that help nourish the heart, nourish the lungs, and help refresh the throat, using them as an ingredient to make something smell good will make it taste appetizing, for instance, this is a reflection of the community's wisdom from each era, which has been preserved. (Wongprateep, 2014) Additionally, "Krayasart" is regarded as a dessert that derives from the knowledge of the Thai people who mix different grains with sugar and sugarcane juice to create a dessert that can be kept for a long time and is a nice dessert. It takes a lot of time and work for many people to make agitation, therefore agitation necessitates family togetherness. Important components include popped rice, Khao Mao, beans, sesame, and sugar, by combining them all, they may be cooked and then formed into balls or sheets. It is clear that the essence of the Sart Thai Day tradition is not only about desserts used in making merit, but also in the intention of creating happiness unity within the family, filial piety to the ancestors, and the act of kindness among neighbors as well. The villagers will take the dessert to make merit and distribute it to neighbors after it has finished stirring. (Orthom, 2012)

As a result, Krayasart dessert can be seen as a dessert that has been passed down through the cultures and traditions of Thailand and many other peoples. It is frequently used in auspicious ceremonies and is thought to be unique in the traditions it has inherited. Most Sart Thai Days are made late in the early rainy season or at the start of winter, when the first crops of the year are harvested, and it is also a day for making merit. Krayasart is a fine dessert made from fresh ingredients because it uses the produce from beans, rice, and sesame as its main ingredients. Additionally, there is a belief that making merit with the first produce from the rice fields during the harvest season is considered a merit for the prosperity and prosperity of the rice fields and agricultural crops. (Department of Cultural Promotion, 2016)

In the province of Phetchabun, the majority of people work in agriculture, and the majority of their income is generated by this industry. With the government's help, however and as part of the "One Tambon One Product (OTOP) project", which has now brought together numerous groups of people, the government has focused on encouraging people to have a part-time job in order to increase their income from production product. For instance, a group of housewives and members of a community enterprise have come together to produce OTOP products. (Nuengkratok, 2007) "Krayasart" a local food that is valuable, is highly conserved, and should be valued as a distinctive product of the community, is one of the products

distributed as an OTOP type of food. Phetchabun is a province where Krayasart desserts are made both for eating and for distribution as souvenirs, Ban Na Ruam Jai Women's Community Enterprise of Na Ngua Sub-district in Phetchabun Province is one of the manufacturers and distributors in Phetchabun Province and other provinces. Which aims to expand the use of affordable, locally available, and nutrient-dense rice as a raw material for export manufacturing, this rice has a mellow flavor that sets it apart from food produced in other regions, notably Krayasart. In any case, being able to distribute goods that embody Thai people's wisdom and are known throughout the world plays a significant role in the local economy, as well as the economy and society of the entire nation. This results in income distribution to the community and raises the potential of both the local and national economies.

Most community affairs are related to the production of goods, services, or other activities carried out by a group of people who have an affinity, have a common way of life, and join together in such business, whether it is a juristic person or not being a juristic person, to generate income and for self-reliance of families, communities, and between communities. The enterprise groups in Phetchabun Province are primarily made up of product groups and professional groups. (Department of Agricultural Extension, 2018) The nature of a community company's production, marketing, accounting, returns, and profits must consider the crucial traits of a community enterprise that contains at least seven components, specifically; 1) operated and owned by the community, 2) community initiatives produce goods. primarily via the use of local labor, resources, and raw materials, 3) start a community invention that promotes creativity, 4) combining universal wisdom with local wisdom as a foundation is step four, 5) a coordinated operation links diverse tasks in a methodical manner, 6) have a process of learning at their core, and 7) community enterprise networks are groups of individuals who have come together to perform any activity for the benefit of the functioning of the community enterprises in the network in order to promote family and community self-reliance. (Department of Agricultural Extension, 2018) The community enterprises of Phetchabun Province, some of which are at a level that is not ready to participate in commerce in order to promote local knowledge and wisdom, have principles to support and promote the community economy, which is the foundation of sufficient economic growth. In order to boost the local economy and foster higher levels of entrepreneurship among business units, community enterprises must include revenue generation, reciprocal aid, the development of management skills, and the growth of their model.

Also, the origin and significance of the research problem was determined from the traditional dessert making of Thailand according to the local tradition of Phetchabun Province. Which according to the belief that Krayasart dessert is used to pay homage to sacred things and is a dessert that has a long story about the ingredients and benefits of Krayasart dessert that people in Phetchabun have believed for a long time Linking the stories and beliefs of local people.

The study discovered that manufacturing Krayasart dessert is now regarded as a specialty that is valued to the community and has an intriguing backstory. When performing anything, a number of stages are involved, yet there is no method for gradually transmitting information. Additionally, there is a paucity of community-based technology that could include

professionals, which makes it difficult for community companies to succeed. Therefore, to solve the problem, the researcher designed an integrated community participatory technology transfer using KWL Plus technique, for learning management KWL Plus, based on KWL technique it consists of 3 main parts: (K) What do I know, (W) What do I want to learn, and (L) What did I learn. The difference is that KWL-Plus adds (Plus) mind mapping and writing summaries from the readings at the end of the KWL process. (Sornin, 2017) It can be said that the KWL-Plus teaching method is a learning management system that can be used to develop skills in knowledge acquisition, critical thinking, and analysis through reading and practice, as well as developing the skill of summarizing from the conclusion writing stage and from the concept diagram. The KWL Plus learning technique is a procedure that focuses on reading abilities; students are trained awareness in the process of self-understanding, planning, aiming, verifying their knowledge, and structuring material for efficient subsequent retrieval (Duangkaew, 1991), by employing the learner's prior knowledge to aid in the interpretation of the material, as well as the learner's involvement in asking questions to enhance learning and memory. Therefore, the goal of this research is to include the expert community in the dissemination of knowledge, technology, and innovation that emphasizes the thinking process. Describe how your recent experiences and prior ones are connected, in order to transfer technology and use it in accordance with sustainable national plans and objectives for the development of strong communities.

Objective

The research focuses on the design and creation of the process of making Krayasart according to the wisdom of the villagers in Phetchabun Province, which will be passed on from generation to generation in order to keep the knowledge of Krayasart baking together with beliefs of local people, as well as to track and assess the process of technology transfer and local wisdom that accelerates community businesses with community involvement.

Methodology

This research is a participatory action research in which the Ban Na Ruam Jai Women's Community Enterprise, Na Ngua Sub-district, Phetchabun Province participated in the research process, whether in terms of knowledge transfer and production, which is the knowledge gained in Research using the KWL Plus technique. The aforementioned community enterprises have taken part in problem identification and analysis, evaluated the views and requirements of the producer community, and assisted in finding solutions to issues that occur when disseminating information about Krayasart.

This research has chosen a participatory research method, which is a research method that fits perfectly with the context of the research title. Local community enterprises that have gathered together to make Krayasart can generate income for members of the community enterprise both as main income and as additional income according to the needs of each member, to select the sample for the research, the researcher used a simple random sampling method by selecting a sample group from 40 members of the Ban Na Ruam Jai Women's

Community Enterprise that made Krayasart desserts in Phetchabun Province, and the study period runs from October 2019 to the end of November 2020. In the research process, a qualitative research method was selected to collect all dimensions from the members of Ban Na Ruam Jai Women's Community Enterprise in Phetchabun Province, dividing the steps into 5 steps in order to facilitate research and to accurately measure the results of each step section as well. The research tool uses thematic interviews, that the researcher has already designed the structure The questionnaire was designed to measure the opinion level, an expert-reviewed 5-point rating for confidence and accuracy (IOC). In any case, the use of participatory action research is justified by the fact that it allows for the collaborative learning of the community and environment necessary to identify problems and solutions. Until the knowledge is generated, this research is carried out in parallel with development activities, and participants actively take part in the various stages of the sample in the activity. However, the statistics used to analyze the data include mean, percentage, standard deviation and IOC values.

Research Process

This research used a qualitative research methodology, divided into 5 steps as follows;

- Step 1: Creating manuals and techniques for KWL Plus learning management from documents, textbooks, and research relevant, to be a study guideline and knowledge transfer manual design, then establishing an area to collect community enterprise data about Krayasart making, studying details about Krayasart, the essence of technology transfer, and local wisdom for the development of community enterprises to advance.
- Step 2: In order to define the content and create a manual that will more effectively and appropriately disseminate knowledge, the researcher collected field data on Krayasart at Ban Na Ruam Jai Women's Community Enterprise of Na Ngua Subdistrict in Phetchabun Province using observations, interviews, participatory practices, and photographs of basic information about Krayasart.
- Step 3: Create a model for technology transfer and local wisdom with community participation about Krayasart making using the KWL Plus technique by first analyzing the issue, need, and basic information. Then, create a manual for the integration of technology transfer and local wisdom for the advancement of community enterprises.
- Step 4: Data synthesis, in which the researcher uses the information gleaned from the analysis, was done by taking into account the learning process and content using the KWL Plus technique in the information transfer process. This information was prepared as a manual for technology transfer and local wisdom by community participation, presented as a training project, workshops, and transfer of manuals on integrating technology and local wisdom to create community enterprises to advance about. There is also a project evaluation form, where specialists check the manual and the assessment form to see if the objectives and the questions are consistent (IOC). According to the results, each questionnaire has a score index, and consistency ranges from 0.50 to 1.00, which is regarded as being within the acceptable requirements, with these findings in mind, by enhancing and changing the survey to make it of better caliber. (Thatthong, 1985)
- Step 5: Creating a learning management system and transferring the "The tale of Krayasart a Thai dessert coupled with Thai people" manual are two steps in a project to transfer manuals on the integration of technology and local wisdom to develop community enterprises and advance the

understanding of making Krayasart using the KWL Plus technique. Another step is to complete an assessment form to gauge the workshop participants' progress toward sustainability.

Research Tools

The tools used to collect data according to the research procedures are as follows;

- 1. A data recording form for interviews with community enterprise groups, with data collection, on the subject of the history of the community enterprise group, the history of the Krayasart dessert of Phetchabun Province, its significance, the origin and relationship between the community and the Krayasart dessert, the process of making it, its advantages and values, and the guidelines for promoting and developing.
- 2. A guide for combining technology and traditional knowledge to create community companies that improve Krayasart utilizing the KWL Plus approach in cooperation with a group of community-based businesses (Participatory learning appraisal). By employing the KWL Plus approach to learn how to produce Krayasart, there are speakers who have knowledge and comprehension of the transmission of knowledge, history, and knowledge heritage. Using a guide on fusing local knowledge with technological transfer through a handbook on the fusion of technology and traditional knowledge titled "The tale of Krayasart a Thai dessert coupled with Thai people", there is an interchange of knowledge and involvement with the community in addition to the actual practice.
- 3. A questionnaire with a five-level rating scale based on the Likert principle is used as an assessment form for the integrated handbook on technology transfer and local knowledge for the advancement of a community company to make Krayasart dessert using the KWL Plus approach. Which has passed the quality assessment of three experts, by calculating the consistency index of the objective and the point in question (IOC: Index of item objective congruence) it has a value of 1.00, which means it is valid.

Results

The analysis of data recordings and interviews with community enterprise groups regarding Krayasart formed the basis of the study's findings, and as a consequence, the researcher provides the findings of the two research parts as follows;

Part 1: The findings of the manual's consistency check for integrating technology transfer and local knowledge for the creation of community businesses to promote Krayasart production using the KWL Plus approach. In order to progress community enterprises and the Krayasart dessert-making process using the KWL Plus approach, the researcher has produced a guidebook for the integration of technology transfer and local wisdom. The creation of local wisdom guides was based on information gathered through interviews, the search for pertinent materials and research, and the contribution of subject matter specialists, and people with knowledge of creating Krayasart have evaluated the tool's efficacy using the item-objective congruence (IOC) index to be employed in the creation and development of processes that transfer technology and local knowledge utilizing the KWL Plus approach. It was discovered that all three experts concurred that the information in the manual on the integration of technology transfer and local wisdom

for the development of community enterprises to advance the use of the KWL Plus technique to create Krayasart is suitable and consistent with the objectives, including both suitable for transferring knowledge to the community and interested parties. However, from the efficiency evaluation IOC is in the range 0.5 - 1.00 which is a value that can be used, the efficiency was assessed, and it was determined that the IOC value was 1.00.

Then the researcher revised the local wisdom manual on "The tale of Krayasart a Thai dessert coupled with Thai people", which within the handbook contains all 9 knowledge; (1) Krayasart and desserts dating from ancient times, (2) history of Krayasart, (3) beliefs of making Krayasart, (4) characteristics of Krayasart, (5) Krayasart in modern times, (6) raw materials for producing Krayasart, (7) ingredients and methods for making Krayasart, (8) value of Krayasart, and (9) Thai desserts of the day. Which, based on the preliminary content analysis, has been organized according to content. The researcher used the following knowledge transfer steps to encourage project participants to become active learners and participate in learning, including creating activities under the workshop program that included Carr & Ogle (1987) KWL Plus learning management techniques;

Step 1: Step K (What do I know), in which participants read the story "The tale of Krayasart a Thai dessert coupled with Thai people", the facilitator then poses a question or requests that they brainstorm what they are already aware of participants then organize their knowledge into categories and record their classifications on a piece of paper. In any case, knowledge on the history of the Krayasart desert and beliefs, including local lore, have been researched via the learning process (KNOW).

Stage 2: Stage W (What do I want to learn), during this stage participants will jot down a question about Krayasart that they are interested in learning the answer to and hold it during the reading project, at which point they can add questions and answers, to address the demands of the target group both in the past and in the present, the researcher queried the sample about their want to prepare Krayasart dessert in the W (want) stage.

Stage 3: Stage L (What did I learn), participants in this stage keep a note of the knowledge they have learned through reading and look into unsolved questions. They then talk about the learning objectives they have learned from reading, the knowledge they find fascinating, and keep looking for additional information. However, at stage L (Learn), the researcher focused on the transmission of new knowledge from the younger generation to the community as well as the learning of members of community enterprises who had benefited from the experience of the older generation.

Step 4: PLUS Step facilitators review knowledge by mapping and helping each other to summarize and write a conceptual summary from the mind chart, which is useful for participants to assess their understanding. In any case, PLUS step has been developed by the researcher to assist community entrepreneurs in designing superior mind maps by reviewing existing information and developing knowledge maps.





Figure 1 Demonstrate the process of integrating technology and local wisdom to carry out the community enterprise about making Krayasart using the KWL PLUS technique (Source: Researcher, 2022)

However, using the KWL Plus approach, which fosters the development of transferrable abilities, Krayasart information is linked to community and cultural knowledge of the creating and learning style in the analysis and synthesis process (Suttarin, 2004).

Part 2: After conducting the manual transfer project on the fusion of technology and local knowledge to build community enterprises to promote Krayasart production using the KWL Plus approach, satisfaction is the result. Under a series of research projects on the integration of community-participatory technology transfer using the KWL Plus technique to develop community enterprises for sustainable progress of Phetchabun Province, in order from most to least as follows;

Firstly, the project participants were pleased with their involvement in the manual transfer of technological integration and regional know-how for growing community businesses to enhance the production of Krayasart utilizing KWL PLUS approach with mean = 4.73, S.D. = 0.45. Next, with an average of 4.70, S.D. = 0.46, this project serves as a roadmap for individuals who are interested in extending and contributing to the integration of Krayasart knowledge. This endeavor is the next, there is a guidebook on how to combine technology and traditional knowledge with community involvement, and this project includes speakers with competence in educating about the history of the Krayasart desert, with an average of 4.65 and a standard deviation of 0.53. The next order is this project is consistent with the content and objectives of the project, and this project is a collection of knowledge about Krayasart from the community using the KWL PLUS principle, that is K = Know refers to existing knowledge, W = Want to Know, refers to what you want to know from reading, L = Learned, refers to what you know after reading, P = Plus refers to chart writing and writing a summary, found that the mean was 4.63, S.D. = 0.49. The next step is that this project has an integrated manual with images that clearly correspond to the content, with an average of 4.60, S.D. = 0.55. The next order is This project has a step-by-step instruction manual, the content is easy to understand and suitable for those interested in studying Krayasart and useful for transferring to others, with an average of 4.58, S.D. = 0.50. Finally, this project helps to encourage people who are interested to gain knowledge, the understanding of the Krayasart dessert was increased, with an average of 4.55, S.D. = 0.50.

However, the total assessment of the manual transfer project on the fusion of technology and local knowledge to advance Krayasart using the KWL Plus technique, under the research project on the fusion of community-participatory technology transfer using the KWL Plus technique to drive sustainable community enterprises in Phetchabun Province, with an average of 4.63, S.D. = 0.50, which was evaluated in the highest criterion. The project was good, the material was simple to comprehend, and it promoted Krayasart knowledge while also integrating information into the community to produce sustainable knowledge, according to suggestions from the participants.





Figure 2 Demonstrate the preparation of a manual for the integration of technology and local wisdom for the implementation of community enterprises about making Krayasart using the KWL PLUS technique. (Source: Researcher, 2022)

Discussions

According to study on the use of the KWL Plus approach to integrate community engagement in technology transfer for the acceleration of sustainable community companies in the province of Phetchabun. It was discovered that this research has created a handbook and built a procedure for sharing technology and local understanding about manufacturing Krayasart utilizing the KWL Plus approach via community involvement. For use in transferring knowledge by the community, which has Krayasart dessert experts from the community enterprise group to participate and strengthen the community enterprise, the researcher has created a manual for the integration of technology transfer and local wisdom for the acceleration of community enterprises about making Krayasart desserts using the KWL Plus technique. Consequently, in order to address the issue of the lack of a method of information transmission that is clearly articulated. As a result, the KWL Plus technique was used to design the integration of community-participatory technology transfer, which aims to enable the community's experts to participate in the transfer of technology, wisdom, and innovation that

places an emphasis on the thinking process and links between old and new experiences. Using challenging questions along with actual experience, practicing the preparation of Krayasart desserts with knowledgeable speakers to impart knowledge and understanding, as well as obtaining knowledge from a manual on the integration of charcoal frying technology and local knowledge on "The tale of Krayasart a Thai dessert coupled with Thai people" along with the exchange of learning about one another's opinions regarding Krayasart are all ways to impart knowledge and understanding, have assisted one another in learning and carrying out activities collectively at every stage of creating Krayasart. This has led to the transfer of technology and its use for self-development in learning as well as promoting knowledge. It also helps to build stronger communities by utilizing learning processes that support the sustainable transmission of this knowledge.

According to Chokrattanachai et al. (2017), who investigated the transfer of healthy bakery technology with the involvement of 58 schools under the Nakhon Ratchasima Provincial Administrative Organization, technology transfer is made possible through bakery production workshops with tools machines that use the knowledge gained in integrating with school-based teaching and learning in local development. It is to manage knowledge through reading for comprehension, which helps to review prior experiences, and participate in new experiences or content, using the KWL Plus learning process as part of the integration of technology transfer. The researcher has organized this workshop project to transfer knowledge with a manual that helps the study participants to see clearly. In this regard, in line with Kaewsara (2012) studied the effect of KWL Plus on learning achievement and perceived ability to learn Thai language among grade 6 bilingual students. Because learning management with KWL Plus can occur if new knowledge can be linked to existing knowledge, it was discovered that bilingual students taught with KWL Plus had better academic achievement and perceived ability to learn Thai language after the experiment was higher than the control group students who received normal instruction. Such connections must be made in a way that follows rules to ensure that information is properly retained in the conceptual framework, leading to the process of transferring technology and local knowledge, which aids in the growth of community enterprises and sustained community engagement.

Including in accordance with the research of Khambunlue (2019) who studied increasing efficiency of cutting process Thai enterprises Kanom (Krayasart) of small enterprises Kanom Thai Ban Tak. However, the objective of this project is to reduce the time and fatigue in the process of cutting Krayasart (a type of Thai dessert) for small enterprises Kanom Thai Ban Tak. Traditionally, this process was done by hand by the enterprise members, most of which were the elderly people, applied the ECRS principle by using S (Simpilfy) to improve work process in designing the equipment, and using the mechanical principle to improve ease of use and maintenance to make it suitable for small businesses and low cost for the instruction. The result revealed that Krayasart cutting time was greatly reduced. Before the improvement, it took 6 minutes per piece (126 minutes per 34 kilogram) whereas after the improvement, the cutting time was 0.5 minutes (10.5 minutes per 34 kilogram) which showed that after improvement, the equipment was able to reduce cutting time by 5.5 minutes per piece (115.5 minutes per 34 kilogram). As a result, the equipment can increase the efficiency of the

cutting process by 96.1%. As well as the researcher has found that it is consistent with the research of Rojpaisarnkit (2013) who studied about "participatory action research for improving hygiene standard and packaging of "Kanom Kayasart" of Banwangkhwai small organic agriculture", and found that some of the production procedures of "Kanom Kayasart" not were not clean and not according to the principles of good hygiene practice. The research was carried out to improve the hygienic production process. As regards the packaging of "Kanom Kayasart" it was found that there were no interesting logo and label. Moreover, the paper stickers attached to the bag, if exposed to moisture or heat, could peel off easily and its colors could also easily fade off. The study had developed and designed a logo for the products and suggested materials appropriate and safe for packaging and with aesthetic improvement. In the past, researchers have also found that a Research and Development on Industrial Potential of Krayasart Products, Macacheep (2013), on the other hand, claims that research and development of the potential of krayasart production to industry is gathering information about the beliefs, culture, and traditions of people who have adhered to krayasart stirring in various localities for a long continuous time, so that the new generation will recognize and see the importance of preserving traditions and supporting Krayasart dessert as a partner in Thai society. In order to increase the value of the items, studies have been carried out to investigate different formulae and consumption habits. In response to the changing and expanding social and market requirements, individuals nowadays are increasingly interested in choosing healthy, helpful, and safe foods as they have started to take their health more seriously. As a result, when looking for Krayasart formula, check for high nutritional value and establish a secure manufacturing technique. Nevertheless, if Krayasart is to be manufactured in big amounts, a stirrer is necessary to ensure that the product is created in huge quantities and is of a high standard of quality.

Conclusion and suggestions

This research led to recommendations, which the study of knowledge related to charcoal frying is an integrated handbook for technological transfer and local wisdom named "The tale of Krayasart a Thai dessert coupled with Thai people" comprising all 9 themes, according to the research findings; 1) Krayasart and desserts dating from ancient times, 2) history of Krayasart, 3) beliefs of making Krayasart, 4) characteristics of Krayasart, 5) Krayasart in modern times, 6) raw materials for producing Krayasart, 7) ingredients and methods for making Krayasart, 8) value of Krayasart, and 9) Thai desserts of the day, and has been communicated through the community participatory workshop project by specialists from Ban Na Ruamjai Women's Community Enterprise, using the KWL Plus technique, in which, in addition to the project participants, they will connect their prior knowledge with new knowledge from the manual and expert speakers, as well as exchange knowledge with one another. It also has developed knowledge from practice, which makes it possible to remember and learn better, resulting in the making of Krayasart that was almost lost again, and resulting in the development of community enterprises has progressed sustainably. This is in accordance with the research of Phudang & Wanida (2020), who examined the transfer of production

technology and management in the manufacturing of "Kanom Kong" to the community following the participants' transfer of technology to the community. By setting up a forum for knowledge exchange and interacting with the community, it is possible to gain knowledge of how "Khanom Kong" is made. This knowledge can then be used to advance professional knowledge, generate income, and satiate the participants in high-level production technology transfer activities.

The following recommendations are made for conducting this research: 1) more product development is needed to make it more engaging, 2) for those who are interested in returning to learn how to make Krayasart dessert, integration of the transfer of interesting local knowledge with the transfer of technology should be produced in the form of animation media to show details of the production process, such as electronic media, online media such as YouTube, and Tiktok, and 3) use the knowledge transfer model to integrate community education management that is based on local wisdom with educational institutions in order to identify and address community education issues that are in accordance with community needs.

In this regard, the researcher will examine KWL in relation to the KWL reading strategy, the pinnacle of the "whole language" movement. This reading strategy is a metacognitive one that frequently passes for a KWL comprehension strategy, is frequently abused, and takes precedence over other pertinent and efficient reading comprehension strategies. (Ogle, 1986) KWL is a metacognitive technique because it is a problem-solving method that puts the reader, not the author, at the center and concentrates on thinking about and establishing a language for the thinking (reading) process. When used incorrectly as a reading comprehension approach, they are the disadvantages of this tactic. Because KWL is reader-centered, its restrictions are a product of readers' existing knowledge. Even when their prior comprehension of the K step is much enhanced, students typically contribute irrelevant, incorrect, or incomplete information during group brainstorming that may make their reading more difficult. (Ogle, 1986) The instructor's job in this scenario is to make the student contributions clear by using analogies, filling in the blanks, and synthesizing the students' collective prior knowledge. Yet, it is necessary to consider if this process is useful and whether the work required justifies the benefit. It is sufficient for teachers to choose reading material for the KWL exercise that students are already quite familiar with.

New knowledge and the effects on society and communities

This investigation focuses on a design and development manual for transferring technology and local knowledge about making Krayasart, a dessert with significant social and cultural value that incorporates local knowledge to support learning and makes use of the KWL Plus methodology, Krayasart is a dessert with significant social and cultural value. Which is a method of learning that seeks to review, activate, and enhance the prior knowledge of the participants (readers), as well as creating goals that stress the advantages of participants' (readers) becoming active learners. This KWL Plus teaching method includes K (What you Know), which involves participants checking their understanding of the Krayasart topic, it also makes use of past knowledge due to associations, new information, and fundamental

knowledge. Moreover, it matters what the participants have experienced, W (Want to know more) - What you want to know is the stage when students must consider what they want to learn, what they will read in the book, and the questions that participants had developed before to reading this, it is also a goal to read. What may be anticipated from the manual reading, then? Krayasart is a Thai dessert made by Thai people. In the step L (What you have learned while studying - What you have Learned), participants investigate what they have learned from the reading by locating the answers to the queries they posed in step W and take note of what they discover through a process of inquiry, research, and practice with the help of local expert speakers, and Plus (summarizing knowledge through mind maps), making thought-image charts, and writing summaries after reading, which is organized as a guideline for a communityparticipated workshop project to provide knowledge and understanding, disseminate knowledge, and make the Krayasart intangible cultural heritage of Phetchabun Province known to the locals and those who are more interested. The use of local philosophers to impart information together with practical hands-on activities that result in participants learning from actual things and having done it is also recommended as a way to encourage the development of a new learning style. In any event, producing tangible knowledge that can be utilized to broaden one's field of endeavor, contribute to economic growth, and recognize the worth of indigenous knowledge and use it to strengthen local communities in line with national policies and strategies is important. Nonetheless, the findings of this study may be utilized to expand or improve the distribution policies for Krayasart products, serving as a guideline for decisions about the production model and the distribution policies for the goods produced by community companies as well. This type of research will influence the formulation of guidelines, policies for agencies responsible for determining the direction of promoting business to local members in a sustainable manner in line with the sufficiency economy.

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References

- Carr, E., & Ogle, D. (1987). "K-W-L Plus: A Strategy for Comprehension and Summarization." *Journal of Reading*, *30*(7), 626-631. https://www.jstor.org/stable/40031872
- Chokrattanachai, W., Romnukool, P., Chaiyawong, H., & Apairat, M.. (2017). Transfer of bakery technology for health. by participating of the schools under the Nakhon Ratchasima Provincial Administrative Organization. *Area Development Research Journal*, *9*(*4*), 257-273. https://so01.tci-thaijo.org/index.php/abcjournal/article/view/106374 (In Thai)
- Department of Agricultural Extension. (2018). Summary report of community enterprise activities/community enterprise networks classified by area. Community enterprise handbook department: Phetchabun. (In Thai)
- Department of Cultural Promotion. (2016). *Culture, way of life and wisdom about Krayasart in the tradition of making merit from the ancestors*. Ministry of Culture, Bangkok. (In Thai)
- Duangkaew, N. (1991). Geography learning management. by using the KWL Plus technique to develop students' analytical thinking skills Wat Chang Khian School Chiang Mai Province. (Thesis. Master of Education Program Department of Teaching Social Studies, Chiang Mai University.) (In Thai)
- Kaewsara, W. (2012). Effects of KWL Plus on Learning Achievement and Self-Efficacy in Thai Subject of Bilingual Grade Six Students. (Thesis (M.A. (Psychology))--Prince of Songkhla University.) (In Thai)
- Khambunlue, C. (2019). *Increasing Efficiency of Cutting Process Thai Enterprises Kanom (Krayasart) of Small Enterprises Kanom Thai Ban Tak.* (Department of Industrial Engineering, Faculty of Engineering, Rajamangala University of Technology Lanna Tak.) (In Thai)
- Macacheep, S. (2013). A Research and Development on Industrial Potential of Krayasart Products. Rajamangala University of Technology Suvarnabhumi. (In Thai)
- Nuengkratok, S. (2007). *Making Krayasart*. Chokchai District Learning Center: Nakhon Ratchasima. (In Thai)
- Ogle, Donna. (1986). K-W-L: A Teaching Model That Develops Active Reading of Expository Text. *Reading Teacher*, *39*(6), 564–570. https://www.jstor.org/stable/20199156
- Orthom, T. (2012). Thai desserts. Bangkok: Rungthiwa printing. (In Thai)
- Phudang, T., & Wanida, P. (2020). Transfer of production technology and production management of "Kanom Kong" to the community. *Journal of Education*, *14*(1), 9-16. https://edujournal.bsru.ac.th/publishes/16/articles/267 (In Thai)

- Rojpaisarnkit, K. (2013). Participatory action research for improving hygiene standard and packaging of "Kanom Kayasart" of Banwangkhwai small organic agriculture.

 Department of Health Education, Faculty of Public Health, Burapha University.

 (In Thai)
- Sornin, P. (2017). A study of the reading and writing abilities of Thai language students.

 Primary Education 1 by KWL-Plus Learning Management. (Master's Degree Thesis in Educational Administration, Faculty of Education. Far Eastern University.)

 (In Thai)
- Suttarin, S. (2004). The Effects of KWL-Plus Instruction on Reading Comprehension and English Writing Comprehension of Mathayomsuksa 3 Students at Mengrai Maharat Wittayakhom School. (Master of Education Thesis Department of Curriculum and Teaching Secondary School. graduate school Chiang Rai Rajabhat University.)

 (In Thai)
- Thatthong, N. (1985). *Applied Statistics in Education 1 (revised edition)*. Khon Kaen: Faculty. Education, Khon Kaen University. (In Thai)
- Wongprateep, N. (2014). Added Value and Development of Seasoned Krayasart by Housewives in Phichit Province. Research Report. Pibulsongkram Rajabhat University. Phitsanulok. (In Thai)

Contextualizing Conceptual Foundations: Educational Citizenship Curriculum Development in Chiang Mai Peri-Urban Schools

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Abstract

This article forms part of the dissertation on Development the English Language Curriculum Base on Culturally Relevant Pedagogy for Students in Chiang Mai Peri Urban Area. In this paper, I analyze data collected from a school and its community in a peri-urban area of Chiang Mai to understand better the cultural context for curriculum development of a migrant population. The paper synthesizes general and practical concepts within a cultural context to provide a better foundation for developing curricula for creating educational citizenship for learners in the suburbs of Chiang Mai. Specifically, this paper aims to: 1) present general concepts for developing a curriculum framework for creating citizenship for grade 8 students in a suburb of Chiang Mai; 2) present operational concepts in the daily life of secondary students to understand better how these concepts affect their practical lives both within in the school, and the larger suburban community.

The researcher employed a phenomenological, qualitative methodology, including data from documents and observations of various school and classroom activities. Additionally, indepth interviews were conducted with key informants, including three teachers, twenty-three students, and five parents from October 2021- February 2022. To test for accuracy and reliability, the researcher used methodological triangulation. The results revealed that educators could transform contextual concepts at both general and practical levels into foundations for a curriculum framework for educational citizenship at two levels: 1) the general contextual concept, which is a physical environmental issue; migration and loss of community are all affecting the learning ecology of learners in classrooms and schools in suburban areas, where these learners are new educational citizens who live at the seams 2) Contextual concepts at the practical level become practical in everyday life because of the Community Cultural Wealth (CCW) capital knowledge within the learners, culminating in the family-specific contexts and suburban community areas in which the learners lived and grew up. The operation

from CCW knowledge capital is, therefore, support--or scaffolder-to create hope and encouragement for meaningful and valuable learning for learners. Furthermore, it facilitates the setting of goals for living for oneself and negotiating with the expectations or demands that clash with the family and surrounding society.

The conceptual consideration of the contextual conceptualization from the general concept to the relationship with the concept of the operational level can create conceptual foundations for defining the components of the curriculum framework development to create educational citizenship, which is: a comprehensive learning concept with spatial facts and correlation with the social background and cultural wealth of the learner's community. As a result, the curriculum implementation aims to develop life skills for coexistence with others and a broader understanding of social relationships.

Keywords: Conceptualization, Contextual concept, Community cultural wealth, Educational citizenship curriculum framework, Peri-urban schooling, Student

Introduction

Chiang Mai's historical background and social dynamics can be characterized as a "melting pot" of language, ethnicity, and culture. The city evolved from the colonial era to the present as a part of the globalized capitalist economy with flexible and liberal ways of life. Chiang Mai is the cultural capital of Northern Thailand, and its dynamism is driven in large part by attracting people from various settlements, either from within the nation or from neighboring countries. Chiang Mai is also the center of economic activity in Northern Thailand. It supports the cross-national movement of people (transnationalism), which gives rise to "newcomers" who are absorbed into the agricultural, industrial, and service production sectors. (Nawarat, 2016; Nawarat & Yimsawat, 2017) In a short period, this growth has led to the city's expansion from the inner city to suburbs or peri-urban areas. Over the past twenty years, former rural regions, which emphasized agricultural use, have been overtaken by other economic activities, including housing allotment, markets, shopping malls, industrial plant buildings, and so forth. (Yenbumrung, 2018; Nawarat et al., 2019)

Even though Chiang Mai has come to rely on workers from nearby nations, it pushes migrant workers, especially the Shan (Thai-Yai), outside the structures of political and cultural communities into so-called "ethnic enclaves." (Vongphantuses, 2014) The existence of these enclaves testifies to the diversity and otherness of the Shan, as well as the increasingly transnational and cross-cultural conditions in the Chiang Mai region. But both the "ethnic border" and the "cultural border" have led to greater social friction between visitors and residents. Nevertheless, Shan workers represent a diverse social, cultural, and economic asset, which is crucial to the commercial and cultural industries of Chiang Mai.

The migration of Shan workers, especially to the suburbs, usually involves members of the worker's family. There are often many school-age children in each household. As a result, many schools in the suburbs or nearby areas have opened up educational service areas for Shan children at the early childhood, primary, and secondary education levels (Buadaeng, 2011; Nawarat & Yimsawat, 2017).

The economic, social, and cultural contexts have implications for the construction of educational citizenship. There are more words related to citizenship, such as economic citizenship, cultural citizenship, transnational citizenship, global citizenship, post-national citizenship, flexible citizenship, etc. The focus of civic issues is complex and flexible depending on interpretation from context or position; at the same time, Chiang Mai is a tangible territory of citizenship with complex characteristics and identity building. The differences in cultural dimensions and economic class are also important factors affecting the quality of life between cities and suburbs—especially between schools in urban areas and schools in suburban areas.

For Chiang Mai suburbs especially, the area that is the boundary between the city are the suburbs along the National Highway No. 118 (Chiang Mai to Chiang Rai). It is an important part of absorbing labor workers who move into the area, thus causing ethnic and cultural borders and increasing transnational and inter-ethnic.

According to the economic conditions, these societies and cultures are important factors that require reconsideration from teachers or educational practitioners, known as "cultural workers," so they might understand some of the perspectives. Students born and raised under increasingly complex and multicultural socio-cultural conditions may face conflict, bias, prejudice, stereotyping, or otherness in education policy, curricula, teaching, and learning. This could cause an assortment of problems. The Thai state, adhering to the principles of compassion and human rights, has implemented a policy that provides access to public education for children of migrant workers or anyone who otherwise can afford it. Many resources have been devoted to increasing access to primary and secondary education, motivated by a goal of sustainable development, which requires all children to receive education by 2030 (Nawarat & Yimsawad, 2017; UNICEF Thailand, 2019)

According to UNICEF Thailand (2019), there are approximately 14,500 migrants and stateless students enrolled in government schools in Chiang Mai, while their parents work in the labor market and economic areas spread throughout both the city and suburbs. (Anansuchartakul, 2011; Nawarat et al., 2019) Not long ago, some areas in Chiang Mai had policies to exclude Shan children from pre-kindergarten. Some elementary schools even refused to accept Shan children. Migrant workers were frequently discriminated against and looked upon as "other" by local people, thus setting up a dynamic that challenged the educational services of schools located in the peri-urban in Chiang Mai (Nawarat, 2016; Wongjanta, 2019)

There are many studies on education for new educators in both urban and suburban area schools of Chiang Mai, especially in the aspect of ethnicity and transnationalism Anansuchartakul (2011); Nawarat (2012); Nawarat (2016) and Paisaltham (2016). Nasee (2021) also stated that the above group, which emphasizes socio-cultural adaptation, places them as hybrid identities described through a political-cultural perspective, cultural adaptation of learners. They are considered deficient, with deficiency-based approaches. Disadvantaged

or marginalized social groups are often viewed as at-risk and educationally vulnerable, at risk of losing ethnic identity.

There is research that plays a role in enhancing the learning, context, and environment for learners under the belief that knowledge, lifestyle, and culture, as well as the language they use in everyday life, can be a bridge between the learner's sociocultural world, and the classroom and school spaces where they can achieve. Some of this research also includes proposals for how to improve so that these students can learn better while maintaining their respective ethnic identities amidst Thai society (Sanghong & Rattana (2019), Nawarat et al. (2019) Wongjanta (2019) and Watthanawara . (2020). The research focuses on integrating knowledge, knowledge capital and cultural stories into curricula and learning management, thus filling the deficit that previously prevented them from achieving greater learning outcomes. Urban or suburban socio-cultural contexts lack sources of knowledge about the social-cultural life of learners who grow and live in modern urbanized socio-cultural conditions. Culture, in a sense, is at the superficial level of 3F-Model: Food Fashion & Festival. The researchers also pointed out that deficit-oriented sociocultural analysis of fairness in education lacks a dimension in learners' perception as actors. Students, as agents, can negotiate unfair social structures and visualize being learners over time.

The issues that the researcher mentioned above brought attention to the development of a curriculum framework used to create educational citizenship for Chiang Mai suburban learners through an Asset-based Approach. This occurs in a peri-urbanization environment where they were shaped and nurtured by Cultivated with Community Cultural Wealth grants from the context of families and suburban areas in which these learners lived and grew up.

This article aims to synthesize contextual concepts at both general and practical levels to create conceptual foundations for developing a curriculum framework that builds educational citizenship for learners in the suburbs of Chiang Mai. This study questions how these schools have taken action to create educational citizenship for secondary school students whose ethnic identity, language and culture are characterized by ambiguity and instability. How are those who are considered as living a "life in between" in the suburbs of Chiang Mai creating an action to help themselves to support learning in the school area and lifestyle?

Objectives

- 1) To present general concepts as basic concepts for curriculum development for educational citizenship of grade 8 students in Chiang Mai the suburban school
- 2) To present the operational concepts in everyday life arising from the Community Cultural Wealth (CCW) knowledge capital embedded in Grade 8 students in the suburban school area and communities of Chiang Mai

Methodology

Phenomenological Research

This study employs phenomenological research, whereby the researcher attempts to distill the essence of the phenomenon by investigating the deeper meaning behind appearances, as well as questioning those who have first-hand experience of the phenomenon under investigation in the school area and communities in the suburbs of Chiang Mai to find out what lies behind the educational citizenship action in Chiang Mai's suburban schools to learners who live at the seams. Also, finding tools that help support their learning in the school area and life in the suburbs of Chiang Mai (Phothisita, 2019). Phenomenological research studies explore real environments in all their dimensions and strive to find connections between phenomena and the environment in which they occur by paying attention to people's feelings, thoughts, meanings, values, or ideologies (Chantavanich, 2012, 13). The study uses an analytical framework for understanding the construction of educational citizenship in a Chiang Mai periurban area by collecting and analyzing data and synthesizes them into contextual concepts.

Research area:

This research looked at an "expanding opportunities school" so designated under the office of the basic education commission located in Chiang Mai. This school is in a peri-urban area where economic, social, and cultural meet. Some of the people in the community have connections to urban areas, such as going to the city on day trips or people in comfortable economic conditions sending their children to go to school in Chiang Mai city. As a result, the primary education institutions in the community provide educational services as well as social support to underprivileged children like Shan migrant children, as well as ethnic students from the highlands and a small number of local Thai children.

There has been a long and continuous migration of people from other regions to Chiang Mai because of the expansion of trade, the economic development of Chiang Mai, and the emergence of the housing project resulting in employment for migrant workers. Most of them are construction workers and have temporary residences in the area so that their children receive educational services from an educational institution.

The characteristics of the peri-urban location of the school are that of a multicultural community, which made it a research site suited to purposive sampling (Buosonte, 2013, 67-68). Furthermore, the researcher was allowed to get directly involved in the study.

Data collection Data Processing and Data Analysis

The researcher used qualitative data collection and divided the data collection into three parts:

1) Documentary research focused on data from the National Education Act (No. 4) 2019 (Chiang Mai area education policy), as well as documents and educational reports of the academic department and NGOs about multicultural and transnational learners in the Chiang

Mai city area. Also, the researcher analyzed the education core curriculum in 2008 and related documents in the school's teaching and learning management. The researcher recorded the data obtained from the study and analyzed essential documents in a consistent record form.

- 2) Field Research: the researcher engaged participants in the school area, the classroom, and school-sponsored events. Additionally, by playing the role of (Observe & Immerse) as an English language teacher aiming to create interaction between students and teachers, she was able to monitor the environment and possibilities in the school continuously. The researcher analyzed the phenomena inside the classroom, both while in class and while participating in school activities, and recorded details of the phenomena during the field process from October 2021-February 2022. The researcher chose purposeful sampling as the primary aim to acquire information at a deeper level (Phothisita, 2019).
- 3) The researcher used in-depth interviews with key informants: 3 teachers, 23 students and five parents. To put them at ease and better facilitate the interview, they were given two sets of questions. The first question obtained general information relevant to the learners' multicultural socio-economic context and background. Further, it revealed the general teacher's beliefs and perceptions of citizenship in the school. This first set of questions was used to synthesize general concepts. The second set of interviews was aimed at understanding the cultural wealth of the community. The interviews were flexible with the interviewer responding to the context of the conversation. The results of these interviews were synthesized into operational concepts.

The researcher used the triangulation method to verify and organize the data systems for the accuracy and reliability of the obtained content and analytic induction analysis data (Subang Chantawanich, 2012: 103; Buason, 2013, 149).

Results

The in-between life of Shan students in Chiang Mai peri-urban area as new educational citizens

1.1 The context of Chiang Mai's suburbs and the learning of students in the suburbs

Tubtim (2014) indicated that the areas in the suburbs of Chiang Mai are the areas that gather people from different groups from rural and urban areas to live together. These people, therefore, have diversity in their identity and their cross-sections, class differences, and values of understanding of the area, including the differences in occupation. The school and community in which the researcher chose to conduct the study are in a comfortable area on National Highway No. 118 (Chiang Mai - Doi Saket - Chiang Rai), connecting the area from the city to the school. Yet there is a disadvantage when the highway is cut in the middle, separating the original community into two sides, with the primary school on the other side and the south-of-the-road part of the secondary school. Resources, including teachers and administrators, are shared.

In addition, the suburban area of the school has been growing due to the increasing number of housing estates to accommodate people who are either the urban middle class or those from rural areas in the north to seek work opportunities in the area. Also, people who work in the city have moved into the local community that used to be the area of economic activity, mainly from the agricultural sector. The urban expansion coincides with the change in the agricultural society, where production from the agricultural sector has become less important to the villagers in the area.

Thailand shares a border with Myanmar, and many provinces in northern Thailand, including Chiang Mai, have become a destination for migrants, especially the Shan people. For the past two decades, Shan laborers have been an essential labor force in the construction, agriculture, industrial, and service sectors. In Chiang Mai peri-urban areas, Shan migrant workers are employed in the construction of housing projects, which are common in many projects located in the suburban area. Initially, they chose to establish a temporary community during the implementation of the housing project. However, field data showed that some communities lived for ten years or more without migrating. Some Shan children grew up in a temporary community and studied in a nearby school. Five years ago, many housing projects were completed resulting in a change in their lives, with more residences being moved from worker camps to renting simple rooms in community areas. Some have switched their careers to work as daily employees in the marketplace. Some are grouped as sub-contractors and work in a small trade in the community where their children also receive educational services in nearby schools in the area. Later those schools have become a space to support and provide educational services to Shan students, other ethnic students, and poor Thai students or their families.

In contrast, local students with excellent socioeconomic status attend city or private schools with expensive tuition fees. Bringing children into the free school system, where they can stay in Thailand for ten years, has resulted in students being instilled and transformed into Thai through the education system. These children are de facto given citizenship in education but do not have legal citizenship rights. As they grow up in Thailand, it is difficult for them to relate to their birth land or parents' background. Amid changes in urban areas, ways of life, and livelihood in the new land, many Shan children never consider returning to the country their parents left. Thailand has become the home they know and with which they are familiar. They become educated citizens of Thailand and live a life as an in-between in Chiang Mai. However, stereotypical ideas about citizenship in Thai society place them in an uncertain status.

1.2 The construction of educational citizenship of the in-between life of Shan students in the Chiang Mai peri-urban area

The researcher sees the school as an area of crucial ideological action. For Shan students in peri-urban or suburban areas of Chiang Mai who receive educational services from state schools, the Thai state continues to dominate and reproduce Thai citizenship. The Shan students, as objects of citizenship construction, are, therefore, a reflection of the interests and experiences of practitioners, school administrators and teachers striving to dominate and refine them through a series of experiences, courses, lessons, and incentives (Thanosawan, 2002: 7; Siwarom, 2008: 92).

Both the teachers and the student's parents were consistent in identifying information on issues related to access to education for children of migrant workers. The overall situation is now much better than before. In the past, children could not attend school because they had no identification documents. Shan students were a large group, and teachers frequently didn't distinguish between individual students. In contrast, the educational citizenship practices of the school have become a 'joint' that connects with Thai citizenship in the civil service or Thai cultural citizenship in the central region.

For this reason, the school system in Chiang Mai peri-urban area reveals the political and cultural politic of fusion and cultural politic of assimilation that emerge in the school's educational citizenship practice through the following three operational areas:

- 1) Policy area for school administrators and teachers is a political area in policy formulation that is important to direct the construction of educational citizenship among Shan students. The administrators and teachers are the critical mechanisms in driving the policy into action.
- 2) The curriculum and subject areas are selected and organized by the state to obtain a knowledge set that has norms, values, and expressions that are representative of society. An educational institution's curriculum, teaching and learning management, and materials are planned in a well-organized sequence.
- 3) The hidden curriculum, school culture, and environment areas beyond the regular content. It does not appear in the class schedule and is a lesson not taught. But everyone has to learn from sight and touch and become parts of life, such as physical artifacts and interpersonal interactions in daily life. These issues are discussed in the next section.

The construction of educational citizenship through policy

The school's policy is essential to defining the behaviors, thoughts, beliefs, and values of the school. Teachers and students reformed the education of the Thai state and the signing of an international declaration related to education. It has resulted in the opening of policy and operational areas that increase the opportunity to provide educational services or to accommodate the stateless students in the area so they can study without creating any barriers to nationality and status of the individual. The school the researcher studied has followed the policy since 2007 and can be attributed mainly to the Education for All policy, the 1989 Convention on the Rights of the Child, the National Education Act 1999, and the Cabinet Resolution of July 5. 2005. The school administrators have informed the researcher on the issue of admission to both national and stateless students, emphasizing the principle that every school has to accept all children who apply if there is no proof of identity required. The school or teacher must take the children and then coordinate with the district to issue an individual ID card that does not have civil registration status (ten-year card) for the children to benefit from government subsidies in the same amount as all Thai children. The school also has a guideline to coordinate with the local administrative organization to support the budget for lunch, milk, and two free shuttle buses. The sub-district municipality supports a budget of 1 million baht per year for the school so that the money can be used to carry out activities for the school and its students. Such area and school policies fill the social gaps in which school administrators have a vision and know the limitations of their migrant students and their families. They are many students in the school who have an unstable economic status, which may lead to blocked educational opportunities for Shan. The school also has a network between teachers and outside stores or public charities. It is another vital channel in obtaining scholarships for some Shan students who are in critically low status. Also, there is a channel and support for further education at higher education levels by requesting an attendance quota from a vocational institution. The opportunity to study further reflects the effort to create "social capital" through networks and relationships of individuals (Yanyongkasemsuk, 2007, 39-40). The construction of educational citizenship through the school's policies towards Shan students is based on the idea of being compassionate. This can be achieved by encouraging entrepreneurs in the area surrounding the school to join, embrace, and create opportunities for Shan students as members of the community. The operation is therefore carried out with the expectation that the school will have the policy to maintain its educational citizenship as a member of the school organization without falling out of the educational system.

The construction of educational citizenship through the curriculum

Currently, the core curriculum of basic education 2008 is used as an ideological framework and the primary mechanism for implementing educational citizenship in suburban schools. In the preparation of the curriculum for educational institutions, the state has established 76 learning standards and 4,330 indicators for the use of educational management in each school nationwide to create a better understanding of education and to ensure that all students have the knowledge and essential life skills (Ministry of Education, 2010: 3). Sivarak Siwarom also stated that the content of knowledge in the core or official curriculum is to assure the state that the ideologies and understanding of the country are embedded in the daily experience and practice of the students as citizens of the state throughout their lives. The government, therefore, calls for the status of citizenship in education that is loyal to the Thai state (Siwarom, 2008).

Also, the official curriculum is an essential ideological space focused on creating political, economic, social, and cultural domination through the content and lessons of that course selected and organized by the state and the educational authorities at both the central and local levels. The Shan children in the school are therefore passed over the gaps of knowledge regarding history, society, and culture that do not correlate with the status of otherness and collective memory. Also, there are vast knowledge gaps in their daily life that appear through textbooks, teaching materials, and experiences that teachers convey. (Nawarat & Yimsawat, 2017)

The researcher also found that the school emphasized the quality of teaching and learning in line with the national education management policy and the state-defined core curriculum because the school had to be assessed—so new students who do not yet read or write Thai. The school used screening methods and arranged for those learners to start in grade 1. Then there were examinations for promotion or promotion according to the student's ability. Some students could move from grade 1 to grade 4 or 5, depending on their knowledge and skills. The school has another effort to promote students with academic and sports abilities to participate in various arena and regional competitions. Also, non-governmental organizations, such as Shan Youth Power, volunteer to teach the Tai Yai (Shan) language as a subject of

additional learning. The school provided a classroom, and a teacher's desk, including teaching materials and materials under the support of the parents of Shan students. However, this was unsuccessful, so the additional subject arrangement was replaced by the English language course. The school believed it would improve the average score on the National Academic Study or O-NET. In this regard, the construction of educational citizenship through the school's formal curriculum focused on improving academic achievement and literacy. Although the content of learning does not indicate the learners' social and cultural backgrounds, in some areas of learning, such as social studies, citizenship or the Thai language, the researcher found that teachers applied the stories of Shan students as material for discussion, either during the lesson or during the class.

Also, the school emphasized vocational training for students in occupational learning, technology, and art by bringing Shan food, handicrafts, or artifacts reflecting their culture into the classroom area. These facilitate meaningful learning for transnational and cross-cultural learners such as Shan students.

The construction of Educational Citizenship through hidden curriculum areas, operating through teaching and doing regular curriculum activities that the school arranged The researcher also understood the school's educational citizenship for Shan students through physical artifacts, mottoes, activities, and culture of the school, as well as the interactions between students, teachers, and administrators through the hidden curriculum that permeates and appears in the school area.

The researcher analyzed the motto of the school "Good morality, passion for sports, developing into learning." The school administrator stated that the school's teaching must focus on morality, regardless of ethnicity. The researcher also believed that the school must be the area for creating discipline, unity, belief in Buddhism, and a feeling of pride in being Thai.

It also reflected the value of promoting and developing students in competencies in sports for Shan students who leveraged to improve their competencies to travel and compete for achievements for the school. However, for some students at the school who won sports (and even received the first prize at the regional level), it wasn't easy to have the opportunity to compete at a higher level. This was because the students did not have documents showing the status of their civil registration. Nor did they have documents granting permission to leave the area due to the bureaucracy of the Ministry of Interior. It was overly complicated and not easy.

At the same time, the researcher saw that educational citizenship status that overlaps with Thai citizenship status is related to "Officially being Thai or being Thai in a central culture." The researcher noticed operations that contend with the Thai government or Thai citizens' ideology—for example, having the Shan alphabet posted in the classroom and having a Shan language classroom in the school that reflected their cultural identity. Also, students dress in national costumes to come to school on Fridays. The interaction between students and teachers found that teachers play a role in providing educational assistance for students in the school. They also encourage students to have hope for the future through academic progress at a higher level.

The researcher found that most students who have completed junior high school wanted to advance to vocational education. Many male students dream of studying in the field of mechanics, and female students dream of studying in the field of tourism, hospitality or business at a scholarship-supported vocational education institution in Chiang Mai. The guidance of teachers in encouraging them to continue their education at a vocational school that would lead them to success and easy entry to economic citizenship significantly influenced their thinking. However, it takes more time and money for Shan students to study at the high school and university levels.

1.3 The Construction of Educational Citizenship: The In-between, Tumultuous Life of Shan Students

Several studies indicate that many Chiang Mai suburban schools have made efforts regarding learning management based on the Shan student's culture, such as language, toys, costumes, arts, and traditions. Yet the effectiveness of these programs is subject to limitations that arise due to a superficial understanding of the culture. Some Shan students remain culturally authentic by taking advantage of the social and cultural experiences they have from their families and bringing them as tools to access learning opportunities. They also show their identity in their performances which can be useful in specific courses or subject areas. Also, schools benefit from the use of art, craft, home economics, or cultural projects created by these students in school competitions.

The researcher believes that the above educational process is an accurate representative image of the culture that is inclusive of defying the stereotypical experience of the students, which does not connect learners' real-life cultural experiences. The researcher found that most Shan students lack identity, security, and social and cultural costs from home. Family is one of the reasons that lead to the ineffectiveness of having Shan language activities in the school. Some students are unable to speak or communicate in the Shan language. Some of them may not be familiar with the terminology and do not understand the worldview or cultural way of thinking of their parents.

Moreover, the researcher found that Shan students were raised in urban or suburban socio-cultural settings and contexts. They are not like Shan students in the traditional Shan communities or the border areas, but they grew up in the middle of the city or the suburbs. They may not have a sense of place or sense of belonging to the land where their parents are from. However, this realization is better in Thailand or Chiang Mai. As a result, their "self" is suspended without civil registration status and limited life opportunities in many ways. Dimensions such as receiving government funding, having higher education, or being reserved from certain types of occupations or businesses are limited. The researcher calls this image status. "Life in-between" or life on the seams that penetrate the peri-urban area of Chiang Mai

Finding 2) Contextual concepts at the operational level through Community Cultural Wealth (CCW) knowledge as tools to support the journey of life and learning

Analysis of contextual concepts as a tool to support the journey of suburban life and school education relies on knowledge capital as a practice in students' daily life through selecting any action or strategy. It works well for them to develop or support achievement social inclusion, overall confidence and their future for study and work. This process is a dynamic social learning process in which knowledge capital as the action takes part in shaping each other up, which is known as the concept of Community Cultural Wealth (CCW) proposed

by Yosso (2005). The researcher adopted this concept as the main idea in the analysis to point out the importance they have tools for support. This will encourage and create hope for social life in schools and communities. Aspirational capital is the ability to nurture hope in the face of institutional inequality, even though the researcher cannot see a way to make that hope come true. Aspiration develops within the context of migrant communities that communicates through language, whether storytelling or advice, to determine the path to the goal, which has implications for challenging oppressive social conditions. Aspirational funding overlaps with other funding areas such as society, family, goal setting, language, and resistance to challenges. Anti-challenging capital is soft and flexible. Flexible examples include the need for a shift in social attitudes towards Shan migrants and their descendants including restructuring their lifelimiting legal structures, such as different types of cards reserved for occupations. Thus, this form of scholarship is the driving force behind their decision to enter education and want to be successful (Yosso, 2005). Aspirational capital serves to support decision-making to enter education and anticipate success. The second generation of heirs demonstrated that this scholarship is for them to imagine the possibilities of future higher education at the same time. It is often described as the ability to sustain hopes and dreams for the future, but many obstacles exist (Yosso, 2005). Learners' CCW grants are the costs that create meaningful and valuable learning for them, to set goals for social life and schooling for themselves, as well as to be the cost of living that is used to negotiate with the expectations or demands that the family and surrounding society strongly influence.

CCW knowledge scholarship of learners, the researcher used interview methods to obtain voices, narratives, and experiences from the interpretation and creation of new meanings to their own life, having passed the process of creating and reflecting thoughts from their parents, teachers, and learners. Autobiographical reflections tell stories about their lives and their future life expectations, allowing the researcher to listen. Under the terms of trust, conducting and analyzing the data obtained from the above process is related to Working or writing a curriculum document that has the status of writing people's lives, which is formed from stories told, narrative, and experience, which creates a solid foundation. Course developers can extract words containing the story and meaning in people's lives. These learning points and concepts can be upgraded and developed into a curricular framework that integrates and extends thought-provoking experiences. The students' hopes and imaginations lead to a broader understanding of social relationships. Therefore, the emphasis is placed on designing a curriculum framework to contain concepts or concepts covering spatial facts concerning the social, cultural and psychology of learning the backgrounds of students in suburban areas. Emphasis is placed on reducing stereotypes and prejudices to create an open-mindedness, acceptance, and respect for the differences seen and the students, to develop an attitude rather than a cognitive aspect as an important basis for laying a foundation for development. Life skills in coexistence with others in the cross-cultural understanding of society. This is a major cost for multinational and cross-cultural learners to be able to run on the treadmill of the course from a critical point of view. This framework-guided learning process aims to create a learning practice that will lead them to see the relationship between self-understanding and knowledge in their socio-cultural lives. Education for transnational and cross-cultural learners in suburban

areas that are based on the idea of, or build on, CCW grants is also an educational citizenship practice that can be upgraded to economic and cultural citizenship in future.

The researcher analyzed the area of the San Na Meng community and found that this area has the potential to design activities through data collection on CCW model knowledge capital from family and suburban community contexts to explore knowledge and learning activities in the classroom, which can be defined into six learning topics: Dream, Career, Family, Culture, Victimization and Environment. Each learning issue is based on information from both documents and local contextual information obtained from the researcher's observations, which reflected "CCW knowledge capital." It is embedded in the students and is related to the consideration of contextual concepts (Contextual Conceptualization), both at the general level and the practical level in the students' daily lives.

In addition, the learning issues in each topic are related to the CCW. The researcher designed the topics under the content framework for using in teaching and learning English subjects according to the culturally relevant pedagogical concepts, which have the following components

Definition of Concept is a definition or conceptual explanation under the subject of learning. It aims to make students see the relationship between concepts and generalization in the context of suburban and other social areas.

Vocabulary is vocabulary and meaning of words that students should know contained under the subject of learning

Learning Issue is an issue and topic in sub-learning that exists in each learning issue in each form

Learning Process is a learning process that the researcher used in each learning point
Learning Outcome is the co-intension or what the researcher expected students to learn
in each learning area

The learning issues are the contextual concept synthesized from the bottom up of information, for example, the stories and phenomena that occur in the school and communities related to CCW knowledge capital. It can support the action of creating citizenship in education, which is the development of the curriculum. The learning process guided by this curriculum framework aims to create learning practices that lead them to see the relationship between self-understanding through knowledge in their own sociocultural life. Education for migrant and cross-cultural students in suburban areas based on or built on CCW is also an educational citizenship action that can be upgraded to economic and cultural citizenship in the future.

For this reason, the principles of the curriculum of CCW-based learning issues are as follows:

The English subject in this research, therefore, focuses on promoting positive results in terms of language for communication. English is considered a tool to create jobs, cross-border trading business, and multinational and cultural working patterns in ASEAN or other regions.

Proficiency in the English language increases the competitiveness of the workplace and expands the socio-economic position of migrant and cross-cultural students. Therefore, developing the capacity of students to communicate with people from other cultures effectively ensures that students succeed and have good academic achievements not only in the short term but encourages students to be successful in the long term and encourages students to have social and political consciousness as well. It also helps students understand being a global citizen.

Discussions

The findings presented by the researcher in the two issues can be linked to the discussion of these findings:

1) Discussion on the In-between Lives of learners as a context of educational citizenship operations in suburban schools

The cultural identity of learners who grew up within the socio-economic context of urbanization is a major challenge to the educational citizenship practice of suburban schools. Learning management for transnational and cross-cultural learners, especially Shan children, to gain access to knowledge and achieve learning is not a limitation. Only the dimension of education for cultural inheritance alone, but teachers and school administrators need to expand their imaginations in designing educational management following the conditions that children are free. These megalopolises were not born and raised in traditional Shan or Shan communities in the border areas. Instead, they grew up during a peri- urbanization socio-cultural environment with social conditions and contexts. As such, Shan students in suburban schools have a state of insidiousness to maintain the Shan identity, and there is no ethnic identity. The language and culture are strong enough, but if it becomes a Thai with no civil registration status or legal citizenship, the educational citizenship formed by suburban schools, therefore, reflects the interests and experiences of the operators. The ideologies above the individual status of the state and society seek to build dominance and purify them to live "in-between" the cultures that operate to create educational citizenship. Being able to lead Shan students in school begins by analyzing a series of life and social experiences that they bring from home as well as their future urbanization expectations of how to learn to live, to create opportunities and good quality of life.

School administrators and teachers need to learn to enhance their knowledge of communities and socio-economic conditions in the suburban areas where students live to integrate such knowledge into the policy areas, formal curriculum areas, and hidden curriculum areas of the school. The researcher analyzed the area of the community and found that areas have the potential to design activities by collecting information about CCW grants from families and suburban contexts to lead the survey of knowledge and learning activities in the classroom. This can define Learning topics from issues, dreams, career family culture victimization, and the environment. A solid foundation is synthesized from space-level data in which the researcher considered the concept of contextual conceptualization from a general concept and operational level to create a basic conceptual foundation for the development of a

curriculum framework to create educational citizenship for learners in the suburbs of Chiang Mai. Schools can also organize meetings to share knowledge between teachers and those involved in knowledge, like Shan parents. Knowledge may be the subject they are familiar with in daily life, such as using technology, art and religion, health care and medicine etc. The educational practices that the researcher presented above are a conceptual choice built from the bottom up of information, stories, and phenomena occurring in Chiang Mai suburban schools to support the implementation of civil society-building education, which is "A process along the way" to prepare the economic and cultural citizens of Chiang Mai for a sustainable future.

2) Discussion on the methodological challenges in curriculum development of outsiders/insiders

The researcher will become a tool (Human as a Research instrument). Ornstein & Hunkins (1993, 266) and Pinar (1995, 365-367) argue that curriculum is a relationship that is inseparably related to the teacher. Teachers are responsible for developing curricula. It is completed by applying it to teaching practice. Therefore, the teacher's curriculum is a practice that is suitable for the student's content and real environment (Apple, 2001: Eisner, 2006: Pinar, 1995). As a result, teachers as curriculum researcher and development (Zeichner, 2003; Thoughtew, 2008) Level of self-study subjects which Taylor (2003) identify the role of the teacher as Being a course developer and an important person directly affects by the course development at a high level, as well as being an influencer or the power to induce influence. Public perception, such curricular development approaches are based on categorizing and grouping stakeholders in curricula development according to the dimensions of impact and influence. as well as framing the boundaries of being "outsiders - insiders " who know about the course development process Under the assumption that teachers are close to or know their students well, they must be people who understand the needs of the students, which the researcher considers what the above curriculum development discourse deserves. Challenging and questioning sovereignty in curriculum development at the classroom and school level.

The researchers also positioned themselves through the Researcher as a Teacher methodology to create a methodological challenge in curriculum development, which found that the information and issues critical to the development of the curriculum were the acquisition of voices, stories (Narrative) and experiences (Experience) arising from the interpretation and create new meanings for their own lives. Having passed The process of creating and reflecting thoughts from one's self of parents, teachers and learners (Autobiographical reflect) to tell the researcher to hear Under the terms of the trust (Trust) to tell, to tell a story.

Conclusion and suggestions

Conclusion and suggestions: Challenges and transcendence of the construction of educational citizenship of the in-between life of Shan students in Chiang Mai peri-urban area. The cultural identity of the Shan students growing up in the socio-economic context of urbanization is a significant challenge to constructing educational citizenship in the Chiang Mai peri-urban area. The management of learning for transnational and cross-cultural learners

like Shan students to access knowledge and achieve learning outcomes must not be limited to the educational dimension of cultural inheritance alone. However, teachers and school administrators need to expand their imagination in designing educational arrangements under the conditions that Shan students who are not born and raised in traditional Shan communities or border areas. Therefore, school administrators and teachers must create ways to help these Shan students who grow up in an increasingly urbanized socio-cultural environment. (peri-urbanization) without civil registration or legal citizenship status, maintain their ethnic identity, language, and culture to survive "the life in-between" in the middle of the seam. So the construction of educational citizenship for the in-between life of Shan students in the Chiang Mai peri-urban area must be created and seriously considered so that they can have opportunities and good quality of life in the future. School administrators and teachers must learn to enhance their knowledge of the community and the socioeconomic conditions in the student's suburban areas to integrate the knowledge sets into the policies and both the formal and hidden curriculum of the school.

New knowledge and the effects on society and communities

The researcher analyzed the area of the community and found that it has the potential to design activities by collecting information about families in suburban areas that contribute to the learning activities in the classroom. Schools can also organize meetings to share knowledge between teachers and the parents of Shan students. These discussions may include information about livelihoods, technology, commerce, arts, religion, health care, and medicine. This intelligence can also include networking about family livelihood costs, access to labor market news, capital sources, etc. The conversations and phenomena when the researcher was in the field brought suggestions for moving beyond the persistent stereotypes of Shan migrant families in the community. The teachers should also acknowledge the identity of Shan students in many aspects. The researcher recommends that these types of learning should be based on life, socioeconomic, and future-based education so that the picture of Shan students in the inbetween life of Shan students in the Chiang Mai peri-urban area can be painted differently, without having an entirely frozen ethnic identity framework.

Therefore, the construction of educational citizenship presented above is a conceptual choice built from the bottom up. It includes information, stories, and reasonably accurate accounts of phenomena occurring in the Chiang Mai suburban school. To prepare these economic and cultural citizens for a sustainable future, "the process along the way" of educational citizenship should be vigorously promoted.

References

- Anansuchartakul, B. (2011). Education Models for the Second-Generation Migrants from Myanmar. Bangkok: Thailand Research Fund. (In Thai)
- Apple, M.W. (2001). Curriculum theorizing: The reconceptualists. Troy, NY: Educator's International.
- Buosonte, R. (2013). *Qualitative research in education*. Bangkok: Chulalongkorn University Press. (In Thai)
- Buadaeng, K. (2011). Social and Cultural Reformation of Second-Generation Migrants. Bangkok: Thailand Research Fund. (In Thai)
- Chantavanich, S. (2013). *Qualitative Research Methods*. Bangkok: Chulalongkorn University Printing House. (In Thai)
- Eisner, E. (2006). *Reimagining schools: The selected works of Elliot Eisner*. New York, NY: Routledge.
- Nasee, P. (2021). *The Adaptation of Shan Youth through Education in Thailand*. (Full Research Report, Faculty of Education, Chiang Mai University, Thailand). (In Thai)
- Nawarat, N. (2012). Civil Society's Learning Centre's and stateless children's education rights from Burma. (Full Research Report, Faculty of Education, Chiang Mai University, Thailand). (In Thai)
- Nawarat, N. (2013). Ten years on: A case study of migrant education in urban Chiang Mai. (Full Research Report, Chiang Mai: Centre for Multiculturalism and Education Policy, Social Research Institute, Chiang Mai University). (In Thai)
- Nawarat, N., & Yimsawat, C. (2017). *The education of Tai Yai migrant children in Thai schools, Chiangmai province*. Faculty of Education, Chiangmai University. (In Thai)
- Nawarat, N., Saenghong, N., Intaping, L. Sanpasuk, W., & Nasee, P. (2019). *Multicultural Curriculum Development for Early Childhood in Peripheral Area*. (Full Research Report, Faculty of Education, Chiang Mai University, Thailand). (In Thai)
- Ornstein, A.C., & Hunkins, F.P. (1993). *Curriculum: foundations, principles and issues*. (2nd ed.). London: Allyn and Bacon.
- Paisaltham, C. (2016). Education pathway for Shan migrant children in the city of Chiang Mai. (Master's thesis of science in community development). Faculty of Social Administration Thammasat University.
- Phothisita, C. (2019). *The Science and Art of Qualitative Research*. (8th ed.). Bangkok: Amarin Printing Co. Ltd. (In Thai)
- Pinar, W.F. (1995). Understanding curriculum: An introduction to the study of historical and contemporary curriculum discourses. New York: Lang.

- Sanghong, N. & Ratana, P. (2019). Lessons learned on innovation creation: multicultural education management-based on participatory approach in Chiang Mai area. Chiangmai University, Chiang Mai: Faculty of Education and the Centre for Multiculturalism and Education Policy. (In Thai)
- Taylor, P. (2003). How to design a training course: a guide to participatory curriculum development. London, UK: Voluntary Service Overseas, VSO.
- Thoughhew, S. (2008). Evolution of curriculum theory and frameworks for developing alternative curriculum innovation. *Journal of Education, Naresuan University*, 10(3), 91-124. (In Thai)
- Tubtim, T. (2014). Rural crossroads: class and migration in peri-urban Chiang Mai. Chiang Mai: (Thesis Doctor of Philosophy, Social Science, Chiang Mai University). (In Thai)
- Watthanawara, N. (2020). Deconstruction and Reconstruction of Local Curriculum in Chiang Mai Municipal School. Chiang Mai: (Thesis Doctor of Philosophy, Education). (In Thai)
- Wongjanta, T. (2019). Development of a Learning Experience Model Applying Multicultural Education for Kindergarteners. (Doctoral dissertation in Faculty of Education, Chiang Mai: Chiang Mai University). (In Thai)
- Yenbumrung, N. (2018). The Political Economy of Peri Urban: The case of Khong Sam, Klong Luang District Pathumthani. (Master's thesis of Political Economy Area of Concentration of Political Economy, Faculty of Economics Chulalongkorn University). (In Thai)
- Yanyongkasemsuk, R. (2007). Elites in contemporary Thai politics: A study of Pierre Bourdieu's approach of reproduction of cultural capitalism. (Ph.D. Thesis, Chulalongkorn University, Thailand). (In Thai)
- Yosso, T. (2005). Whose Culture has Capital? A Critical Race Theory Discussion of Community Cultural Wealth. *Race Ethnicity and Education*, 8(1), 69-91. https://doi.org/10.1080/1361332052000341006
- Zeichner, K.M. (2003). Teacher research as professional development for P-12 Educators. *Educational action* research, 11(2), 301-326. https://doi.org/10.1080/09650790300200211

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The case the author is Thai

Author. (Year). *Translated Title of dissertation*. (Doctoral dissertation or Master's thesis, University). (In Thai)

Sunretphol, N. (2004). A Development of Educational Indicators for Lifelong Learning. (Ph.D., Srinakharinwirot University). (In Thai)

The case the author is foreigner

Magyar, C. E. (2014). The discourse of tourism and national heritage: A contrastive study from a cultural perspective. (Doctorial's thesis, University of Madrid).

4. Electronic media (Refer to only up-to-date information/ Up-to-date such as

Population statistic etc.)

Surname. (Year of publication). Title. Retrieved from the title of website

The case the author is Thai

Author. (Year). Translated Title. Retrieved from URL (In Thai)

National Statistical Office. (2019). Survey of Working Situation of Population 2019. Retrieved from http://www.nso.go.th/sites/2014 (In Thai)

The case the author is foreigner

Rankin, E. (2013). Residential school survivor says he was starved CBC NEWS. Retrieved from https://www.cbc.ca/news/canada/british-columbia/b-c-residential-school-survivor-says-hewas-starved-1.1317712

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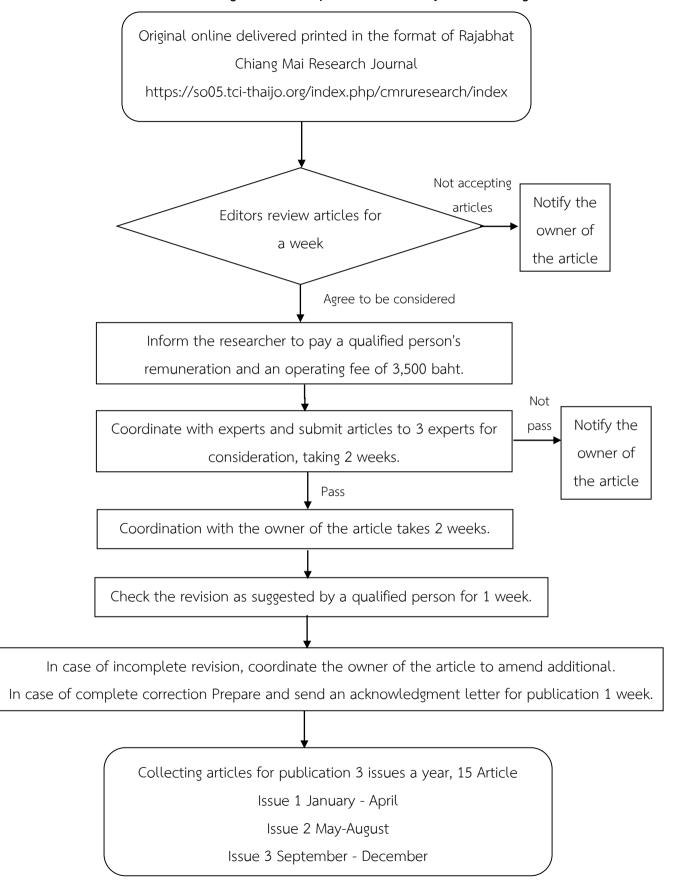
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