THE QUALITY OF LIFE OF ELDERLY JAPANESE RESIDENTS OF CHIANG MAI: A CASE STUDY OF MEMBERS OF JAPANESE ASSOCIATIONS IN CHIANG MAI

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ABSTRACT

This study aims to investigate the quality of life of the elderly Japanese living in Chiang Mai. Chiang Mai is known as a city where many elderly foreigners live. Among them, the ratio of Japanese elderly is very high. Many previous studies have described the reasons for choosing Japanese aged people living in Chiang Mai mainly from the viewpoint of long-stayers. Whereas, the quality of life of the elderly Japanese who living in Chiang Mai did not reveal. The data were collected by using WHOQOL26. By survey method, conducted form 94 Japanese who joined the Japanese organization in Chiang Mai. As a result, in terms of "physical health" was in the range of 27-35, which was considered to be quite "good." Followed by "psychological health" was in the range of 23-30, which was considered to be quite "good." Despite, "social relationships" was in the range of 8-11, which was considered as "moderate." In the other hand, "environment" was in the range of 30-40, which is considered to be quite "good." Lastly, the overall was in the range of 96-130, which is considered to be "good." Therefore, the survey confirmed that the quality of life of the elderly Japanese living in Chiang Mai was generally good.

Keywords: Quality of Life, elderly Japanese people, WHOQOL26, Chiang Mai, long stayer

INTRODUCTION

The Consulate General of Japan in Chiang Mai states that Chiang Mai is a city with the highest number of Japanese long-stay residents in the world. On this subject, the authors acquire data from the Ministry of Foreign Affairs of Japan, on the subject of the statistical report of overseas Japanese residents, both the full report and the brief report; and consider the number of overseas residents in various countries around the world, and categorize them by their ages and genders. The analysis result of such a dataset also confirms that Chiang Mai has the highest number of Japanese long-stay residents in the world.

Table 1: Overseas Diplomatic Establishment of Japan over 60's Japanese ratio

Rank	Foreign Embassy	Country	Total Number of People	Overall Number Ranking	Total Number of over 60's	Over 60's Ratio	Permanent Resident	Permanent Resident Ratio	Number of Long-Term Stay Residents	Long-Term Resident Ratio
1	Consulate General in Curitiba	Brazil	4,451	59	2,891	65%	4,300	97%	151	3%
2	Embassy in Argentina	Argentina	11,460	32	6,965	61%	10,951	96%	509	4%
3	Consular Office in Belen	Brazil	2,481	80	1,504	61%	2,455	99%	26	1%
4	Consulate General in Recife	Brazil	1,201	100	718	60%	1,147	96%	54	4%
5	Consulate General in Sao Paulo	Brazil	38,896	7	21,626	56%	36,317	93%	2,579	7%
6	Embassy in Peru	Peru	3,410	70	1,883	55%	2,661	78%	749	22%
7	Consular Office in Porto Alegre	Brazil	1,136	103	605	53%	979	86%	157	14%
8	Consulate General in Manaus	Brazil	1,128	104	589	52%	843	75%	285	25%
9	Embassy in Brazil	Brazil	716	123	340	47%	587	82%	129	18%
10	Consulate in Chiang Mai	Thailand	3,221	72	1,441	45%	135	4%	3,086	96%

Source: Created from Annual Report of Statistics on Japanese Overseas MOFA 2018

The word 'elderly people' in the context of this research study means individuals of 60 years old and older, according to the statistical data of the overseas Japanese residents acquired from the Ministry of Foreign Affairs of Japan, which categorizes the overseas Japanese residents of 60 years old and over as elderly people. However, the word "over 60 years old and older", as per the Ministry of Foreign Affairs of Japan, is quite too broad. The authors, therefore, categorize the dataset of the people of over 60 years old and older as per the grouping method presented by Mr. Yamagishi, the ex-president of the Society for the Study of care and Support in Chiang Mai (SCC). Mr. Yamagishi created a summary report on Japanese long-stay residents of Chiang Mai, who registered with the Consulate General of Japan in Chiang Mai. The dataset is categorized per the subjects' age groups. This summary report reveals that there were 3,130 Japanese long-stay residents in Chiang Mai. This number is somewhat different from the number depicted in Table 1, which comes from the statistical data of the Ministry of Foreign Affairs. However, this research project will only use the dataset from this summary report only for the method for categorizing the age groups. The age groups depicted in Table 2, categorized with Mr. Yamagishi's method, reveals that elderly people were accounted for 46 percents of all the overseas Japanese residents. The numbers were quite high among elderly people at the age of 61-70 and 71-80 years old. If we focus on the overseas Japanese residents at the age of 60 years old and older, it can be seen that elderly people of 61 – 80 years old were accounted for more than 92.2 percents of all elderly people. Therefore, this dataset reveals that elderly Japanese long-stay residents of Chiang Mai were mostly under 80 years old.

**Table 2: 2017 Consulate General of Japan in Chiang Mai Japanese Breakdown
by age group**

By age	Number of People	Percentage	Only Over 61 years old Percentage
Over 91 years of age	15	0.5%	1.0%
81-90 years old	98	3.1%	6.8%
71-80 years old	635	20.3%	44.1%
61-70 years old	692	22.1%	48.1%
Under 60 years of age	1,690	54.0%	
Total	3,130	100%	

**Source: In CCL (Chiang Mai Long Stay Life Club) meeting, September 15th, 2018;
by Hirosho Yamagishi**

On the subject of the situation regarding the lives of elderly Japanese long-stay residents of Chiang Mai, there are many research studies on the subject. However, according to the literature reviewed by the authors thus far, the authors haven't found any research studies that present the analysis result on the quality of life and health of those long-stay residents of Chiang Mai.

Most research studies concerning the quality of life focused on studying related problems with the subject, for example, many studies focused on related illnesses of elderly Japanese long-stay residents. However, there is a recent campaign that promotes a shift of the research focus, from studying the problem to studying what elderly people can do instead. This concept is influenced by the "Successful Aging Theory" which was proposed in the "Science Journal" by J.W. Lowe and R.L. Kahan in 1987. Before this theory was proposed,

the majority of elderly people-related research studies mainly focused on finding the solutions for health-related issues occurred in the daily life of elderly people. However, the Successful Aging Theory changed the perspective of elderly people-related research and shifted the focus to healthy elderly people that are able to support the society, who have highly unique identities.

As a result of the paradigm shift in the research, in 1994, WHO proposed an instrument for measuring the quality of life for general people, known as the WHOQOL. Originally, this instrument was called "the WHOQOL-100." It is comprised of 100 questions, concerning 6 aspects, namely, physical health, psychological, level of independence, social relations, environment, and spirituality/religion/personal believes. Four questions are grouped as one part. The questionnaire has 24 parts for the main 6 aspects and 1 part for the general information, hence 25 parts in total. To answer the questionnaire, participants must rate the answer with 5-point Likert Scale. However, the advantage of this questionnaire was there are too many questions and hence the questionnaire requires too much time to complete. Therefore, the WHO created a new instrument that is easier and faster to use. The new questionnaire was proposed in 1997, known as the QHOQOL-BREF or WHOQOL26. The WHOQOL26 greatly reduces the time required to answer the questionnaire. It is used as the new instrument of the WHO.

There are 4 aspects of the questions, namely, physical health, psychological, social relationships, and environment. It is a multiple-choice questionnaire that perfectly covers every related aspect for evaluating the quality of life of the people who live in the society. The questions are divided into major parts and minor parts, covering the questions on physical health to the environment.

A unique characteristic of the WHOQOL26 is its questions on the environment-related subjects, which allow us to get a clearer picture of the environment where the participants live their lives. For example, "the environment of your residence and sexual activity", "your financial status and general security of your residence", "the accessibility to medical welfare", "the convenience of transportation", etc. The answers provided to this questionnaire allow us to know the participants' environment where they live, and how the environment affects their bodies and minds. This notion is extremely important.

For the level of confidence of the WHOQOL26, the Cronbach's alpha coefficient of the WHOQOL26 is 0.8406. In comparison to 0.6515 of the WHOQOL-100, they are quite similar. For the questions used in this research study, the authors used the translated version of the WHOQOL-BREF in Thai, which is officially recognized and accepted by the WHO.

In this research study, the author created a questionnaire that was based on the WHOQOL26 and used it on the targeted group of elderly Japanese long-stay residents, who were members of the Japanese associations in Chiang Mai; in order to evaluate the quality of life of elderly Japanese long-stay residents of Chiang Mai.

The objectives

This research study intends to evaluate the quality of life of elderly Japanese long-stay residents of Chiang Mai, using the WHOQOL26 created by the WHO as an instrument for the research project. Besides the questions listed on the WHOQOL26, in order to gain general information of the participants that will be used for the result analysis, authors added questions for general information to the first part of the questionnaire, as follow:

Gender
1. Age
2. Hometown (native habitat)
3. How long have you been living in Chiang Mai?
4. Who are you living with?
5. What are characteristics of your residence?
6. Monthly income
7. Monthly rent
8. For the case where your residence will provide specialized services for elderly Japanese residents, how much expense for these services will be satisfiable for you?
9. In general, do you cook your own food or eat out?
10. Types of foods consumed.

Questions in the WHOQOL26

Physical health
1. Daily living: do you satisfy with your life or able to live your life normally?
2. Medicine and medical treatment: do you have to take care of your body so you may engage daily routine normally?
3. Strength and fatigue: do you have enough strength to live your daily life?
   a. 4.Mobility: can you walk around your residence?
4. Pain and physical disability: do pain and physical disability prevent you from doing 6. what you need to do?
   b. 7. Sleep and rest: do you have enough sleep?
5. 8. Working capability: do you satisfy with your working capability?

Psychological
1. Body and image: do you satisfy with what you are (external characteristics)?
2. Negative feeling: how often do you have any negative feelings, such asuneasiness, hopeless, concern, dishearten, etc?
3. Positive feelings: how much do you enjoy living your life?
4. Self-evaluation: satisfaction with yourself.
5. Mind, religion, and your own principle: to what extent do you feel your life to be meaningful?
6. Thought, learning, memory, and concentration: how well are you able to concentrate?

Social
1. Interpersonal relationship: do you satisfy with the interpersonal relationships you have at present?
2. Social support: do you satisfy with the help or support provided by your friend?
3. Sexual activity: do you satisfy with your current sexual activity?

Environment
1. Financial status: do you have enough money to buy any necessities?
2. 2. Independence, security, and peacefulness of the environment: the security of your daily life.

3. Health and social welfare: do you satisfy with the social welfare service and the accessibility to the medial equipment and facility?
4. The environment of the residence: do you satisfy with the surrounding environment of your residence?
5. Opportunity to learn new information and technology: the number of information input required for your daily life.
6. Opportunity and participation in hobbies: opportunity to participate in hobbies.
7. The environment of the area used for your daily routine: the relationship of the environment and your daily living and health.
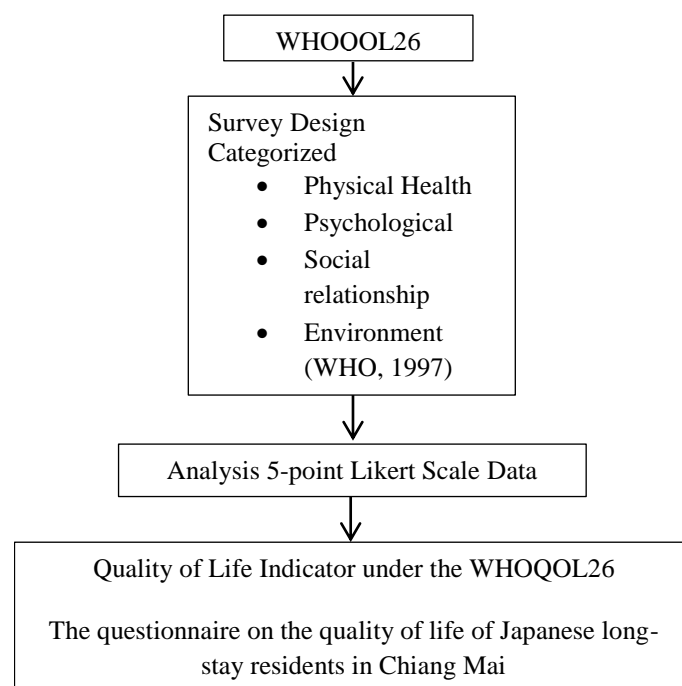8. Mode of transportation: satisfaction with the mode of transportation available in the local area.

Overview
1. What method would you use to evaluate your quality of life?
2. Do you satisfy with your current health?

Expected benefits

The authors expect that answers provided to the WHOQOL26 questionnaire would allow us to learn about the financial situation, psychological health, physical health, and the environment of living of those elderly Japanese long-stay residents of Chiang Mai, a city with the highest proportion of long-stay residents in the world. These answers would also allow us to gain a clearer insight into various problems that these elderly Japanese residents had to face. The result from this research's survey would lead us to find a solution to solve and improve the environment of the long-stay residence as well.

THE CONCEPTUAL FRAMEWORK

WHOOOL26

↓

Survey Design
Categorized
- Physical Health
- Psychological
- Social relationship
- Environment (WHO, 1997)

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Analysis 5-point Likert Scale Data

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Quality of Life Indicator under the WHOQOL26

The questionnaire on the quality of life of Japanese long-stay residents in Chiang Mai

THE RESEARCH METHODOLOGY

The authors created 11 general questions and 27 specific questions, based on the WHOQOL26, for a total of 38 questions. The questionnaire was distributed online, using the Google Form. The WHOQOL26 requires participants to rate their answers under the 5-point Likert Scale, whereas 1 represents 'negative' and 5 represents 'positive' or 1 represents 'strongly disagree' and 5 represents 'strongly agree.' The participants who answered the questionnaire were members of the Chiang Mai Long Stay Club (CCL), which regularly arranges the meeting for its members; members of Chiang Mai Japanese Resident Association (CJRA), and members of the Study of care and Support in Chiang Mai (SCC), the latter is currently no longer operational.

Initially, the authors intent to distribute the questionnaire using the online questionnaire distribution system. However, after actually distributed the questionnaire, the authors found that a direct, face-to-face, distribution allowed us to gain a better insight into the participants' feeling. Therefore, the authors changed the distribution to handing out hard copies instead. Authors distributed the questionnaire to members of CCL on February 16th, 2019, during the member meeting at Chiang Mai Orchid Hotel, where there were 47 participants who answered the questionnaire. Authors distributed the questionnaire to members of CJRA on February 15th, 2019, with the help of Mr. Masayoshi Norikura, the representative of the YMCA conference, whereas 37 participants returned the answered questionnaire. For members of SCC, authors acquired the support from Mr. Hiroshi Yamagishi, the ex-president of the association, and distributed the questionnaire from January 24th to February 21st of 2019, whereas 8 participants returned the answered questionnaire. Therefore, the authors acquired answered questionnaires from 94 Japanese long-stay residents of Chiang Mai.

The method used for analysis the items of WHOQOL26 was based on the WHOQOL-BREF-THAI; whereas 23 items represented positive issues and 3 items represent negative issues, namely, item no. 2, 9, and 11. Each item presented a question where the participant must choose his answer from the 5-point Likert Scale.

FINDING OF STUDY

The questionnaire was recorded in a Google Form. It contained 10 pages and a total of 38 questions. The response rate was 96.5 percents. The result can be summarized, as follow.

In term of the participants' gender, there were 70 male participants (74.5 percents) and 24 female participants (25.5 percents). There were more male participants than female participants. This questionnaire did not require participants to directly specify their ages but no choose the range of their ages instead. The result revealed that most of the participants were of 70-79 years old, or a total of 48 participants (51.1 percents). The rest of the participants were of 60-69 years old, or a total of 31 participants (37 percents.)

In term of their hometowns, 43 participants came from Kanto region (45.7 percents) and they were accounted for almost one-half of all participants. The rest were 16 participants from Kansai (16.8 percents), 15 participants from Chubu region (16 percents, which were quite close to participants from Kansai region; 10 participants came from Kyushu and Okinawa region (10.6 percents), 5 participants from Hokkaido region (5.3 percents), and one participant each from Tohoku and Shikoku region (1.1 percent).

In term of the duration of time they stayed in Chiang Mai, 55 participants stayed in Chiang Mai for over 7 years (61.1 percents). It can be seen that most participants were long-

stay residents of Chiang Mai for a very long time. The rest, 11 participants, stayed in Chiang Mai for 5-7 years Z12.2 percents), 10 participants stayed in Chiang Mai for 1-3 years (11.1 percents). The number of participants who stayed in Chiang Mai for shorter than 1 year was the lowest, of only 5 participants (5.6 percents).

In term of the participants' co-habitants, 49 participants lived with their spouses (53.8 percents), 22 participants lived alone (24.2 percents), 8 participants live with their mates but weren't yet married (8.8 percents), and 6 participants lived with their children or their spouses' children (6.6 percents.)

In term of their residences, 30 participants owned condominiums or single houses (33 percents), 28 participants rented condominiums (30.7 percents), 23 participants rented apartments (25.3 percents), and 10 participants rented their houses and lived alone (11 percents).

In term of their monthly income, 32 participants earned more than 70,000 Baht a month (37.6 percents), 28 participants earned 50,000 – 70,000 baht a month (32.9 percents), 17 participants earned 30,000 – 50,000 baht a month (20 percents), 2 participants earned 10,000 – 30,000 Baht a month, and 6 participants earned less than 10,000 Baht a month (7.1 percents).

In term of their monthly rent, 30 participants spent 10,000 – 20,000 baht on the monthly rent (33 percents), 28 participants owned their homes hence didn't have to pay the rent (30.7 percents), 18 participants spent 5,000 – 10,000 baht on the monthly rent (19.8 percents), 7 participants spent 20,000 – 30,000 baht on the monthly rent (7.7 percents), 5 participants spent less than 5,000 Baht a month (5.5 percents), and 3 participants spent more than 30,000 Baht a month (3.3 percents).

In term of their acceptable range of expense for the nursing home that provides Japanese meals and a pool in the bathroom, 27 participants stated that they were willing to pay around 20,000 – 30,000 Baht a month (31 percents), 28 participants didn't want to stay in the nursing home (30.7 percents), 18 participants were willing to pay at less than 20,000 Baht (20.7 percents), 14 participants were willing to pay at 30,000 – 40,000 Baht (16.1 percents), and 4 participants were willing to pay at 40,000 – 50,000 Baht (4.6 percents).

In term of their meals, most of them, or 54 participants, cooked their own meals (58.1 percents), 20 participants equally cooked their own meals and ate out (21.4 percents), and 13 participants ate out (14 percents).

In term of their food intake, most participants, or 44 participants, ate Japanese foods (47.8 percents), 38 participants ate Thai and western foods (41.3 percents), and 7 participants ate Thai foods (7.6 percents).

Table 3: Japanese Long Stayer in Chiang Mai, General information about participants number
Survey in January 2019

1	**Sex**		
	man	70	74.5%
	women	24	25.5%
2	**Age**		
	50S	2	2.1%
	60S	31	37.0%
	70S	48	51.1%
	80S	13	13.8%
3	**Hometown in Japan**		
	Hokkaido	5	5.3%

	Tohoku	1	1.1%
	Kanto	43	45.7%
	Chubu	15	16.0%
	Kansai	16	16.8%
	Chugoku	3	3.2%
	Shikoku	1	1.1%
	Kyushu, Okinawa	10	10.6%
4	**How long stay in Chiang Mai**		
	Under 1 year	5	5.6%
	1-3 year	10	11.1%
	3-5 year	9	10.0%
	5-7 year	11	12.2%
	Over 7 year	55	61.1%
5	**Living with**		
	Alone	22	24.2%
	Married couple	49	53.8%
	Partner	8	8.8%
	Child or partner's children	6	6.6%
	Unknown	3	3.3%
	Wife and Wife's children	1	1.1%
	Wife and mother in law	1	1.1%
	Partner and my child	1	1.1%
6	**Housing type**		
	Apartment rental	23	25.3%
	Condo rental	28	30.7%
	House rental	10	11.0%
	Condo or house owned	30	33.0%
7	**Monthly income (baht)**		
	Under 10,000	5	5.5%
	5,000 - 10,000	18	19.8%
	10,000 - 30,000	30	33.0%
	30,000 - 50,000	7	7.7%
	50,000 - 70,000	3	3.3%
	Over 70,000	28	30.7%
8	**Payment of rent housing (baht)**		
	Under 5,000	5	5.5%
	5,000 - 10,000	18	19.8%
	10,000 - 20,000	30	33.0%
	20,000 - 30,000	7	7.7%
	Over 30,000	3	3.3%
	No rent	28	30.7%
9	**Enter fee to retirement home (baht)** "When the morning and evening Japanese food and the nursing home with a large indoor bath could be made Chiang Mai, when how much is it, would you like to move into the month?"		
	Under 20,000	18	20.7%
	20,000 - 30,000	27	31.0%
	30,000 - 40,000	14	16.1%

	40,000 - 50,000	4	4.6%
	Without move in	24	27.6%
10	**Daily meal**		
	Almost cooking myself	54	58.1%
	Almost eat out	13	14.0%
	Half and half of cooking eat out	20	21.4%
	Bread in morning, ready-made at night	1	1.1%
	Almost ready-made cooking	3	3.2%
	Unknown	2	2.2%
11	**Kind of meal**		
	Almost Japanese food	44	47.8%
	Almost Thai food	7	7.6%
	Almost Western food	1	1.1%
	Half and half Japanese food and Thai food or Western food	38	41.3%
	Half and half Thai food and Western food	2	2.2%

The answers from WHOQOL26 were divided per the 4 aspects. The answers where then analyzed, using the method provided in WHOQOL-BREF-THAI. The analysis result is depicted in Table 4.

For the quality of life, the mean score for physical health was 27.61, with the standard deviation of 3.93, in the range of 27-35, which is considered to be quite "good." The mean score for psychological health was 24.56, with the standard deviation of 4.44, in the range of 23 – 30, which is considered to be quite "good." The mean score of social relationships was 11.40, with the standard deviation of 3.99, in the range of 8-11, which is considered as "moderate." The mean score for environment was 31.17, with the standard deviation of 4.19, in the range of 30-40, which is considered to be quite "good." The overall mean score was 103.84, with the standard deviation of 25.77, in the range of 96-130, which is considered to be "good."

Table 4: The QOL score and level of the Japanese who belongs to Japanese group in Chiang Mai

Domain	Raw scores	QOL scores		Quality of life (QOL) level		
		Mean	S.D.	Poor	Moderately	Good
Physical health	2071	27.61	3.93			✔
Psychological	1842	24.56	4.44			✔
Social relationship	855	11.40	3.99		✔	
Environment	2338	31.17	4.19			✔
Overall	7788	103.84	25.77			✔

According to our survey of the Japanese long-stay residents, who were members of various Japanese associations in Chiang Mai, for a total of 94 participants; after considering the general information of the samples, we were able to summarize that most of elderly Japanese long-stay residents of Chiang Mai were at the age of 60-79 years old. Most of them came from the Kanto region and most of them were couples who stayed together in Chiang Mai. Majority of them stayed in Chiang Mai for over 7 years and they owned condominiums or homes in Chiang Mai. Most of the samples earned approximately 50,000 – 70,000 Baht a month or over. For those who still rented their residences, they paid around 10,000 – 20,000

Baht a month as rents. If a specialized nursing home that managed in a Japanese style is available in this province, most of the samples would be satisfied to pay the expense of 20,000 – 30,000 Baht a month for staying at such nursing home. However, this item also revealed that many participants didn't want to live at a nursing home. In term of their food consumption behavior, most of them consumed Japanese foods and usually cooked their own foods.

Pertaining to the aforementioned survey result, the samples lived their lives quite comfortably. Most of them owned homes or condominiums and therefore faced reduced cost of rents. In term of their food consumption behavior, most of them cooked their own foods. Therefore, they lived their lives quite comfortably and free of any problems.

The result from evaluating their quality of life, using the WHOQOL26, revealed that every aspect was quite "good", except for the social-related aspect, which was "moderate." The survey result revealed that Japanese long-stay residents of Chiang Mai, who were members of Japanese associations of Chiang Mai, had quite a good quality of life. The social-related aspect was "moderate" and it involved 3 items. The question of interpersonal relationships and acquiring the help or support from their friends yielded the mean scores of 3.68 and 3.64, respectively. These scores were quite high. However, items regarding their sexual activity yielded quite a low score, namely, at 2.88. If we are going to remove this item from the list, the social-related score will be "good" as other aspects. Moreover, merely 72 participants provided an answer to this question and this item had the least amount of answers, comparing to other questions. Some samples even stated that "there is no need for sexual activity." Therefore, for elderly people, whose sexual performance is deteriorating with their ages, the question regarding sexual activity can be unnecessary. The survey result, hence, can be summarized that, for Japanese long-stay residents, Chiang Mai is a comfortable place to live with quite a good quality of life.

CONCLUSION

This research study used the WHOQOL26 to measure the quality of life of elderly Japanese long-stay residents of Chiang Mai. Questions of the WHOQOL26 are divided into different aspects, namely, 7 questions regarding participants' physical health, 6 questions regarding their psychological health, 3 questions on social relationship, 8 questions on the environment-related issue, and 2 general questions. Therefore, if we are considering these aspects separately, the questions on social relationships have the least amount of question. Moreover, this survey also revealed that sexual activity-related questions aren't necessary for elderly people. Authors hence recommend that a more appropriate set of questions should be specifically designed for elderly people, in order to gain better survey result from this group of people.

In term of the total population, there are more than 1,440 elderly Japanese long-stay residents in Chiang Mai, according to the previous survey. However, this research study only studied with samples that were members of various Japanese associations in Chiang Mai. As a result, there were only 94 participants in the survey and they were only accounted for 6.5 percents of all Japanese residents of Chiang Mai. The result of this study, therefore, cannot be used to conclude that the quality of life of Japanese residents in Chiang Mai is quite good. There are many Japanese people that are residents of Chiang Mai but not members of Japanese associations in Chiang Mai. Future research should focus more on this group of population and expand the scope to cover those Japanese residents that aren't members of Japanese associations.

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