



**A STUDY OF BANGKOK POPULATIONS' ATTITUDES
TOWARDS STRAY DOG POPULATION CONTROL**

BY

MISS JUTHATIP CHONMAITREE

**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL
FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE PROGRAM IN MARKETING
(INTERNATIONAL PROGRAM)
FACULTY OF COMMERCE AND ACCOUNTANCY
THAMMASAT UNIVERSITY
ACADEMIC YEAR 2017
COPYRIGHT OF THAMMASAT UNIVERSITY**

**A STUDY OF BANGKOK POPULATIONS' ATTITUDES
TOWARDS STRAY DOG POPULATION CONTROL**

BY

MISS JUTHATIP CHONMAITREE



**AN INDEPENDENT STUDY SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF SCIENCE PROGRAM IN MARKETING
(INTERNATIONAL PROGRAM)
FACULTY OF COMMERCE AND ACCOUNTANCY
THAMMASAT UNIVERSITY
ACADEMIC YEAR 2017
COPYRIGHT OF THAMMASAT UNIVERSITY**

THAMMASAT UNIVERSITY
FACULTY OF COMMERCE AND ACCOUNTANCY

INDEPENDENT STUDY

BY

MISS JUTHATIP CHONMAITREE

ENTITLED

A STUDY OF BANGKOK POPULATIONS' ATTITUDES TOWARDS STRAY
DOG POPULATION CONTROL

was approved as partial fulfillment of the requirements for
the degree of Master of Science Program in Marketing (International Program)

on..... 10 MAY 2018

Chairman



(Associate Professor James E. Nelson, Ph.D.)

Member and Advisor



(Professor K. Douglas Hoffman, Ph.D.)

Dean



(Associate Professor Pipop Udorn, Ph.D.)

Independent Study Title	A STUDY OF BANGKOK POPULATIONS' ATTITUDES TOWARDS STRAY DOG POPULATION CONTROL
Author	Miss Juthatip Chonmaitree
Degree	Master of Science Program in Marketing (International Program)
Major Field/Faculty/University	Faculty of Commerce and Accountancy Thammasat University
Independent Study Advisor	Professor Dr. K. Douglas Hoffman
Academic Year	2017

ABSTRACT

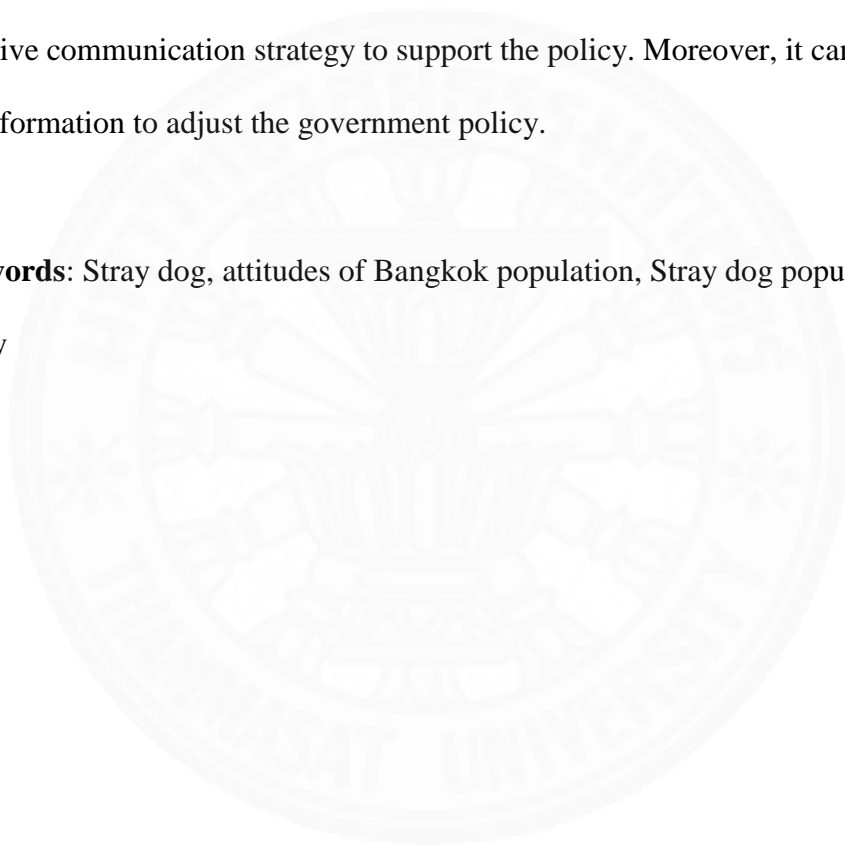
A study of Bangkok populations' attitude towards stray dog population control is a social topic in applied marketing focusing on society. In this project, the study was conducted using ABC model of attitude to define the research objective. The first objective is to identify the affective component of how the Bangkok population feels about stray dog population control in Bangkok. A second objective is to identify the behavior of the Bangkok population with regard to stray dog population control. A third objective is to identify the beliefs of the Bangkok population about stray dog population control. And the last objective is to suggest an effective communication strategy for stray dog population control.

To understand the Bangkok population's attitude toward stray dog population control, market research was conducted in both exploratory and descriptive research forms which focus on both qualitative and quantitative research. Started with exploratory

research by using secondary research and in-depth interviews, followed by descriptive research using online questionnaires. The questionnaire was returned by 181 respondents who were live in Bangkok area. The data analysis was performed using SPSS to analyze the survey data and summarized the outcome.

In conclusion, this study will give a better understanding of Bangkok populations' attitude towards stray dog population control. Also, the suggestions on how to create an effective communication strategy to support the policy. Moreover, it can also be used as the information to adjust the government policy.

Keywords: Stray dog, attitudes of Bangkok population, Stray dog population control policy



ACKNOWLEDGEMENTS

First and foremost, I am very grateful to my advisor, Professor Dr. K. Douglas Hoffman for his support and advice in the accomplishment of this study.

Secondly, I am grateful to all the interviewees and all respondents who spent time in in-depth interviews and responded to the questionnaire survey.

Finally, I am grateful to the Master's degree program in marketing (MIM) at Thammasat University who has provides a wide range of marketing knowledge and education in which I will be able to use in real-life situations.

Miss Juthatip Chonmaitree

TABLE OF CONTENTS

	Page
ABSTRACT	(1)
ACKNOWLEDGEMENTS	(3)
TABLE OF CONTENTS	(4)
LIST OF TABLES	(7)
LIST OF FIGURES	(8)
CHAPTER 1 INTRODUCTION	
1.1 Problem statement and Research Propose	1
1.2 Objective	2
1.3 Project Scope	2
CHAPTER 2 REVIEW OF LITERATURE	4
CHAPTER 3 RESEARCH METHODOLOGY	
3.1 Research methodology	11
3.1.1 Exploratory Research	11
3.1.2 Descriptive Research	12
3.2 Sampling Plan	13
3.3 Data collection Plan	13
3.4 Data analysis Plan	13

CHAPTER 4 RESULTS AND DISCUSSION

4.1 Exploratory research	14
4.1.1 Results from Secondary research	14
4.1.2 Results from in-depth interview	14
4.2 Descriptive research: survey	15
4.2.1 Personal information	16
4.2.2 Affective Component	19
4.2.3 Behavioral Component	19
4.2.4 Comparing affective and behavioral component	20
4.2.5 Cognitive Component	21
4.2.6 Awareness, opinion on policy and government actions	22
4.2.7 Comparing differences in attitudes among demographics	25

CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS

Summary and Conclusion	26
Recommendations	27
Limitations of the Study	29

REFERENCES	30
-------------------	-----------

APPENDICES	31
APPENDIX A: THE IN-DEPTH INTERVIEW QUESTIONS	31
APPENDIX B: QUESTIONNAIRE	32
BIOGRAPHY	36



LIST OF TABLES

Tables	Page
Table 4.1 Gender	13
Table 4.2 Age	13
Table 4.3 Education level	13
Table 4.4 Occupation	14
Table 4.5 Personal income per month (THB)	14
Table 4.6 Marital status	14
Table 4.7 Dog raising status	15
Table 4.8 Do the people think stray dogs are a problem for Bangkok?	15
Table 4.9 How people feels when they see stray dogs	15
Table 4.10 How people do or behave when they see stray dogs	16
Table 4.11 Comparing how people feel and how people do	16
Table 4.12 How people believe about stray dog problem	17
Table 4.13 Awareness of government policy	18
Table 4.14 Opinions on the government policy	18
Table 4.15 Opinions on efficiency of the government action	19
Table 4.16 Comparing the effectiveness of government action	20

LIST OF FIGURES

Figures	Page
Figures 4.1: ABC Model of attitudes	12



CHAPTER 1

INTRODUCTION

1.1 Problem Statement and Research Purpose

Thailand has been facing stray dog problems for a long time. The Post Today (2015), commenting on a survey of the stray dog population in Thailand by the Department of Livestock Development in 2014 said there were more than 700,000 stray dogs in the country, Bangkok alone has more than 100,000 stray dogs. The rising number of stray dogs has increased the concerns for human hygiene and public health. Moreover, it causes a bad environment for tourists as stray dogs begging for food on the streets pose a nuisance for foreigners.

The government is trying to tackle this problem as they came up with many policies, such as animal shelters, educational programs, and dog registration. But the problem seems to remain unsolved because the real cause of the problem comes from the pet owners failing to take care of their dogs and abandon them without being spayed or neutered.

Hence, to educate people about the policy, it is crucial to understand people's attitudes toward stray dog population control in order to communicate in an effective way and also acknowledge people about the policy and law to enforce the right action on this problem.

1.2 Objective

This study is a society topic in applied marketing. The purpose of this study is to understand the attitudes of the Bangkok population toward the stray dog population control by using the ABC Model of attitude, which includes the Affective component, the Behavioral component, and the Cognitive component. Then, suggest an effective communication strategy for the stray dog population control policy to support the government.

Research objectives:

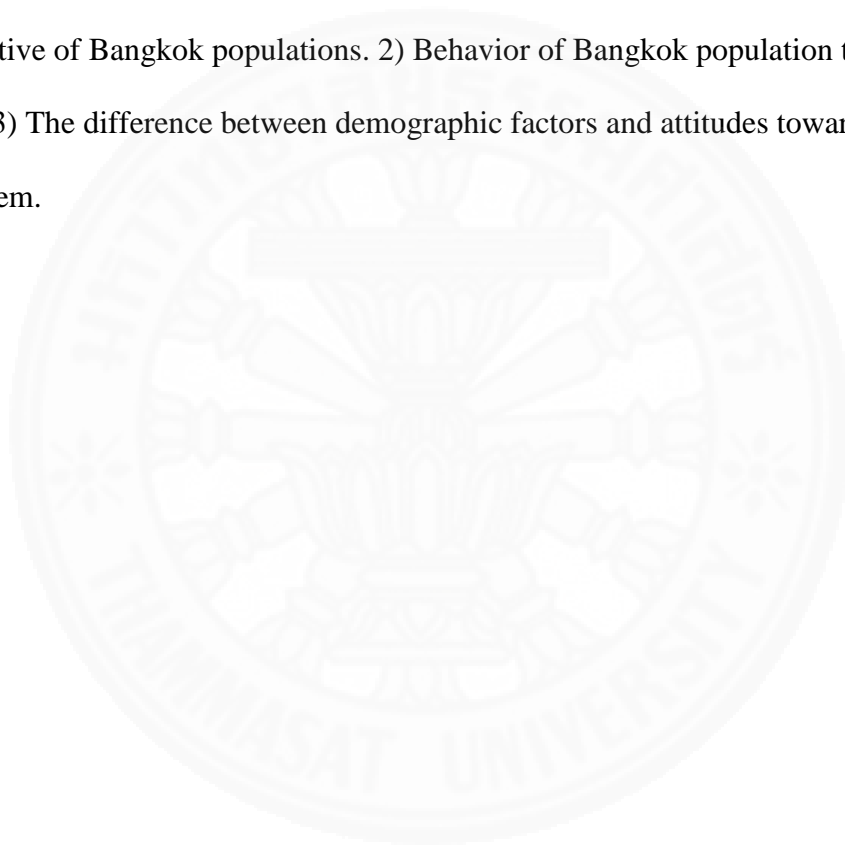
1. To identify the affective component of how the Bangkok population feel about stray dog population control in Bangkok.
2. To identify the behavior of the Bangkok population with regard to stray dog population control.
3. To identify the beliefs of the Bangkok population about stray dog population control.
4. To suggest an effective communication strategy for stray dog population control.

1.3 Project Scope

Primary and secondary data was gathered from in-depth interviews and online questionnaire survey. The respondents are people who lives in Bangkok metropolitan area. For in-depth interview methods, the researcher conducted interviews with ten interviewees.

Important questions to gather results in this study were 1) How Bangkok populations think about stray dog population control? 2) How they behave with stray dogs based on their beliefs? And 3) How well they know about the stray dog population control policy of the government?

Key variables of the study are 1) Psychological factors such as the affection, cognitive of Bangkok populations. 2) Behavior of Bangkok population towards stray dog. 3) The difference between demographic factors and attitudes toward stray dog problem.



CHAPTER 2

REVIEW OF LITERATURE

Rising stray dog population in Thailand causes health risk

Veterinarians of public health have divided stray dogs into 2 types:

1. Semi-stray dogs: dogs that are unofficially supported by surrounding residents.
2. Stray dogs: dogs that have to seek food by themselves.

According to the survey from the Department of Livestock Development regarding dog populations in 2016, 750,000 out of a total of 6.7 million dogs in Thailand are stray dogs. If the government still does not have a serious policy to tackle this, the stray dog population is forecast to increase to around 1 million dogs by 2017.

Bangkok is currently taking care of 6,000 stray dogs. The expense includes shelter, food, neutering or spaying, and vaccinations, which altogether cost around 24.5 million baht per year.

The Center for Emerging Infectious Diseases under The Thai Red Cross Society, Faculty of Medicine, Chulalongkorn University, has revealed that only 23% of the total dog population in Thailand has been vaccinated against rabies and over 40% of stray dogs have been infected by the rabies virus (Read howl, 2016).

Most Thais have misunderstood the true causes of the stray dog population increase according to the article of Post Today, most Thai people believe that the increasing stray dog population stems from people offering food to stray dogs, which allows stray dogs to become healthier and to breed. But in fact, breeding can happen

in both healthy and unhealthy stray dogs. Hence, offering food to stray dogs directly impacts on community hygiene, not the size of the stray dog population.

The root causes of the stray dog population increase come from:

1. Irresponsibility of dog owners who give up and abandon their dogs in public areas.
2. Dog farms letting their dogs go when they close down their business.

As we cannot build enough dog shelters to support all the stray dogs in the country, one solution is to ask the people who offer food to stray dogs regularly to register with the local administration and become volunteers to report to the Bureau of Disease Control and Veterinary Services to track vaccination records or requests for dog neutering. Nowadays, local administrators cannot find every stray dog because they do not know where they usually live or where they hide. If they got this information from the volunteers, it would be much easier to neuter or spay the stray dogs.

If people have problems with stray dogs, they can call the local administration to take care of it since the Prevention of Cruelty and Animal Welfare Provision Act 2014 has been enacted. (Post today, 2017).

Sustainable strategic framework for stray dog population control 2016-2020 by the Bureau of Disease Control and Veterinary Services

The vision is to collaborate with every party to manage the stray dog population in Thailand with morality within 2020, applying 4 Strategic Movements of the framework as follows:

- 1) Integrate all involved parties to manage the stray dog population.
- 2) Use PR to communicate the risk of disease from stray dogs and to cultivate good conscience and responsibility in dog owners.
- 3) Endorse and campaign for substantial law enforcement.
- 4) Manage the database and information of stray dogs (Bureau of Disease Control and Veterinary Services, 2016).

How the Netherlands become the first country with ZERO stray dogs

In 2016, the Netherlands claimed that they had zero stray dogs due to their multi-faceted approach. First, there is legislation from the government that allows free spaying and neutering services for their citizens' pets.

Second, they imposed a high tax on buying puppies along with promoting the 'adopt, don't shop' mentality. This approach stimulates people to adopt a dog from a shelter rather than to buy a new puppy, which can also help to clear out the shelter at the same time.

Third, the animal control team works very effectively. If someone sees a stray dog on the street, they can call the animal control and be assured that the dog will be taken into good care until it is adopted.

Fourth, the mentality of the people is to view dogs as innocent creatures who are living and can feel and suffer. Also, they educate their children to have responsibility, to respect, and to love animals, which has become the norm in the Netherlands (PetGuide.com, 2016).

Bangkok is facing a serious problem from the huge cost of dog shelters

Veterinarian Siwa Maison, Head of a dog shelter in Bangkok, explains that “before sending the stray dog into the shelter, they have to be spayed to control birth. When they get into the shelter, we will feed them with dry dog food once a day which costs around 15 million baht per year. Moreover, we have to train the dog to make sure they can be adopted in the future”.

Dr. Pusadee Tamthai, former deputy Governor of Bangkok, says that more than 3,700 complaints about the stray dog issue have been made. The government officers have to be on location to catch the dogs and send them to the control center for rehabilitation for 2 weeks before they are sent to the shelter.

From the increase of the stray dog population, it can be seen that the cost of running the shelter and the cost of rehabilitation will also have to increase (TNews, 2016).

Eight people in Thailand died from rabies in 2017

Mr. Wisit Tangnapakorn, Director-General of the Health Service Support Department, reported on the rabies situation in Thailand between 1 January - 6 November 2017, stating that 8 people died from rabies. In 2016, only 5 people died from rabies, so there was a 60 percent increase in 2017.

To cope with this problem, the Health Service Support Department has coordinated with the President of the Village Health Volunteers to ask for cooperation from the members of the network, who number around 1.4 million volunteers, to watch over the dogs around their neighborhood as well as to educate people to take their pets for a rabies vaccine every year (MThai News, 2016).

Bangkok has approved the budget of 231 million baht to renovate the Prawet dog control center and shelter

Mr. Taweesak Lertprapan, Deputy Governor of Bangkok, has approved the budget of 231 million baht to renovate the Prawet dog control center and shelter to become a prototype project for the other animal control centers and shelters.

This renovation aims to improve the standard of the facility as well as the clinic to provide a neuter or spay service to support dog owners. In the future, after the renovation has been completed, the Bangkok Metropolitan Administration has a plan to launch a campaign “Find homes for stray dogs” to promote the adoption of stray dogs online (Thairath, 2017).

The Prevention of Cruelty and Animal Welfare Provision Act 2014 was claimed to be very effective after the official enactment

Mr. Teerapong Pangsriwong, the president of Thai Society for the Prevention of Cruelty to Animal (TSPCA), said that TSPCA has campaigned on preventing and solving the animal cruelty problems for more than 22 years with the intention to push the law for animal protection. TSPCA has partnered with more than 90 government and private sector, such as Department of Livestock Development, Lawyers Council of Thailand, and NGO. Finally, the Prevention of Cruelty and Animal Welfare Provision Act 2014 was officially enacted.

Even though some animal lovers have opposed this act since the definition of ‘cruelty’ should be more specific and the penalty is not adequate, the act aims to make people recognize and understand animal rights and to help prevent animal cruelty.

In the past year, more than 70 complaints on animal cruelty have been delivered to the court and judgments have been received for at least 6 cases while many other cases are in the process of judgment. Many cases can result in immediate penalties for the offender, but the law is just a tool for justice. Everyone should help in changing national values with regard to animal cruelty, to help animals not to be abused and to make animal welfare truly humane (MGR Online, 2016).

To tackle the stray dog problems in Bangkok is costly

Dr. Malinee Sukkhavejjaworakit, Vice-Governor of Bangkok, said there was a policy to neuter or spay 20,000 stray dogs around Bangkok and implant microchips using a budget of 6.5 million baht. This budget will be used to purchase the mobile car for neutering or spaying and injecting rabies vaccines.

Currently, Bangkok has 2 animal shelters: the Prawet Control Center and Tabtan Dog Shelter. These two shelters have supported around 4,000 stray dogs whose care costs around 100 million baht per year (MGR Online, 2011).



CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research methodology

This research was conducted using two methods, the exploratory and descriptive research methods, which focus on both qualitative and quantitative analysis. The study was started with exploratory research by gathering information from published sources and websites and also uses secondary research including primary data from in-depth interviews followed by descriptive research by collecting data from online surveys. After the process of data collection, the analysis was done to understand the Bangkok population's attitudes toward stray dog population control and suggest an effective communication strategy for the government sector.

3.1.1 Exploratory research

The purpose of exploratory research was to understand the situation of the stray dog problems in Thailand and get to know more about the various aspects of the issue in order to develop the questionnaires.

1.1 Secondary Research

The purpose of the secondary research is to understand the situation of the stray dog problems in Thailand. This involved studying the current policy that the government has been using, identifying the possible causes of the increasing numbers of stray dogs in Bangkok, and determining how the Bangkok population thinks about stray dog population control. The data was obtained from both local and international sources, such as the Bureau of Disease Control and Veterinary Services, Post Today, and Pet Guide.

1.2 In-depth interview

The objective was to explore the attitudes toward stray dog population control to design the questionnaire. The ABC attitude model is used for the interview to create the scope of the questions to obtain insightful information. Phone interviews and face-to-face interviews were used for this procedure with 10 respondents

3.1.2 Descriptive research

The descriptive research was conducted using online surveys posted on social media recruiting 181 respondents. The ABC model of attitudes was used to design the questionnaires.

2.1 Independent variables of the study

Demographic characteristics

- Age
- Gender
- Education level
- Religion
- Occupation
- Income level

2.2 Dependent variables of the study

3 Components of attitudes

- Beliefs of the Bangkok population about stray dog population control
- Affective components of how the Bangkok population feels about stray dog population control in Bangkok
- Behavior of the Bangkok population with regard to stray dog population control

3.2 Sampling Plan

Samples were selected using convenience sampling (non-probability sampling) for both in-depth interviews and questionnaires due to the time constraint. The target respondents were characterized as follows:

- Gender: Male and female
- Geography: Bangkok area

3.3 Data collection plan

Qualitative research, ten respondents were recruited to take in depth-interviews. The interviews were based on a face-to-face interview and phone interviews. Each interview took approximately 45 minutes.

Quantitative research, Questionnaire surveys were created in Thai version and were launched in online channel via boosted Facebook posts with geo-targeting in area of Bangkok through link <https://www.surveymonkey.com/r/StrayDogControl>. All of respondents need to pass the screening question on geographic to ensure the right target and attain suitable information for the study.

3.4 Data analysis plan

The research was employed with both qualitative and quantitative analysis. The qualitative data was obtained from in-depth interviews. The quantitative data was acquired from online questionnaire surveys. The collected data was analyzed using the Statistical Package for the Social Sciences (SPSS) using statistical approaches that were deemed appropriate, such as frequency analysis, mean comparison, and associations between variables.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Exploratory Research

4.1.1 Results from Secondary research

Stray dogs have been a big problem in Thailand for a long time. There are many approaches which have been used to solve this problem but it seems to remain unsolved. The recent sustainable strategic framework for stray dog population control 2016-2020 by the Bureau of Disease Control and Veterinary Services is similar to the measures of the Netherlands which recently claimed to be a ZERO stray dog country.

It is apparent that people in Thailand still lack knowledge of the government's policy to reduce the number of stray dogs. Moreover, the cultivation of good conscience and responsibility for dog owners is a task that cannot be done in a short time.

With the limited budget and inadequate capacity of dog shelters together with irresponsible dog owners who were the cause of the increasing stray dog population, this problem seems hard to solve. This problem must not be simply left for the government to solve but must involve everyone in the country.

4.1.2 Results from in-depth interviews

To understand the attitudes of Bangkok population toward stray dog population control, the in-depth interviews were conducted with 10 respondents in January 2018. The research could also explore the insights and attitudes towards stray dog population control.

All respondents do not know the current Bureau of Disease Control and Veterinary Services' policy on stray dog population control. Most of them think that the cause of the stray dog problem comes from irresponsible owners and lack of efficiency of Government. Although they think that giving away food to stray dog may support the increasing of stray dog populations but most of them still have positive thinking about people who giveaway food to stray dogs and some of the respondent giveaway food to stray dogs when they eat street food with beliefs that it will at least make them survive. One of the respondent said, "I know this won't help decreasing the stray dog population but I feel pity for them"

Some of the respondent that claimed that they are animal lovers had once brought the sick stray dog to pet hospital. But after the stray dog was get well, they let the dog stay on the street in the same place because most of them already have their pets at home. One animal lover respondent said, "I can't stand seeing the sick dog on the street but I can't afford to have another pet as I already had 2 dogs at home."

4.2 Descriptive Research

Results from questionnaire survey

The questionnaires received 181 qualified questionnaires, the researcher did data cleaning and coding, and the data was imported to the SPSS Program. With screening question, the researcher choose only the respondents that live in Bangkok area. The key findings from descriptive research could be explained by ABC Model of attitude and summarized as follows:

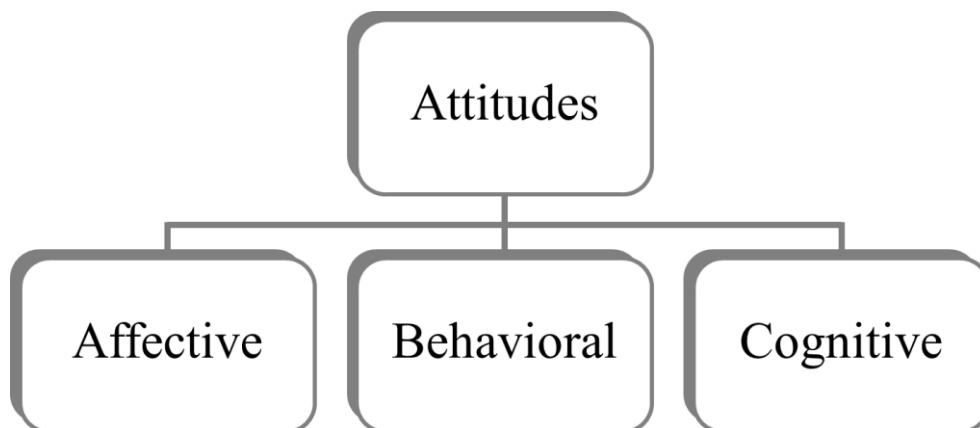


Figure 4.1 ABC Model of attitude

Section 4.2.1 Personal information

Table 4.1 Gender

Gender	Number	Percentage
Male	24	13.3%
Female	157	86.7%
Total	181	100.0%

Table 4.2 Age

Age	Number	Percentage
Under 18	7	3.9%
18-30	35	19.3%
31-40	28	15.5%
41-50	41	22.7%
Above 50	70	38.7%
Total	212	100.0%

From the data in table 4.1 and 4.2, Most of the respondents are female accounted for 86.7% and 13.3% are male. Age under 18 years old is 3.9%. Age 18-30 years old is 19.3%. Age 31-40 years old is 15.5%. Age 41-50 years old is 22.7% and Age 50 years old above is 38.7%.

Table 4.3 Education level

Education Level	Number	Percentage
Lower than Bachelor Degree	52	28.7%
Bachelor Degree	97	53.6%
Master degree or higher	32	17.7%
Total	181	100.0%

Table 4.4 Occupation

Occupation	Number	Percentage
Employee	45	24.9%
Entrepreneur	17	9.4%
Government officer or Stage enterprise officer	42	23.2%
Freelancer	19	10.5%
Housewife	31	17.7%
Student	25	13.8%
Total	181	100.0%

From the data in table 4.3 and 4.4, the majority of the respondents' education level is Bachelor degree accounted for 53.6% followed by 28.7% with lower than Bachelor degree and 17.7% graduated with Master Degree or higher. For occupation, 24.9% is employee. 9.4% is entrepreneur. 23.2% is government officer or stage enterprise officer. 10.5% is freelancers. 17.7% is housewife is 13.8% are student.

Table 4.5 Personal income per month (THB)

Personal income per month	Number	Percentage
Less than 15,000 THB	59	32.6%
15,001-30,000 THB	71	39.2%
30,001-50,000 THB	35	19.3%
50,001-100,000THB	11	6.1%
Above 100,000 THB	5	2.8%
Total	181	100.0%

Table 4.6 Marital status

Status	Number	Percentage
Single	93	51.4%
Live with partner or roommates	68	37.6%
Married	12	6.6%
Divorce	8	4.4%
Total	181	100.0%

From the data in table 4.5 and 4.6, 32.6% has less than 15,000 THB for personal income per month. 39.2% has 15,001-30,000 THB income per month. 19.3% has 30,001-50,000 THB income per month. 6.1% has 50,001-100,000 THB income per month and 2.8% has above 100,000 THB income per month. For relationship status, accounting for 51.4% is single. 37.6% is living with partner or roommates. 6.6% is married and 4.4% is divorced.

Table 4.7 Dog raising status

Pet raising status	Number	Percentage
Raising	115	63.5%
Used to raise but not anymore	47	26.0%
Never	19	10.5%
Total	181	100.0%

From the table 4.7, the majority of the respondents are pet owners that still raising dog accounted for 63.5% followed by the people who used to raise a dog but not anymore accounted for 26.0% and 10.5% never raise a dog.

Section 4.2.2 Affective component

Table 4.8 Do the people think stray dogs are a problem for Bangkok?

Answer	Number	Percentage
Yes	126	69.6%
No	55	30.4%
Total	181	100.0%

Table 4.9 How people feels when they see stray dogs

Affective component	Number	Percentage
Feel pity and want to giveaway food	140	77.3%
Afraid that the dog will bite	13	7.2%
Want to take them home or find them a new owner	94	51.9%
Feel annoying, uncomfortable and not hygiene, causing the bad environment	3	1.7%
Want the government agencies take them to the appropriate place such as shelters	135	74.6%
Feel nothing	1	0.6%

As the data in table 4.8, 69.6% of respondents think that stray dog is a problem for Bangkok. From table 4.9, most of the people feel pity and want to giveaway food to stray dogs when they see stray dogs which accounted for 77.3% followed by want the government agencies take them to the appropriate place such as shelter which accounted for 74.6% and 51.9% want to take them home or find them an owner.

Section 4.2.3 Behavioral component

Table 4.10 How people do or behave when they see stray dogs

Behavioral component	Number	Percentage
Giveaway food	145	80.1%
Walk away	17	9.4%
Take them home or find them a new owner	32	17.7%
Drive away	0	0.0%
Contact the government agencies to take them to the appropriate place such as shelters	18	9.9%
Do nothing	42	23.2%

The data in table 4.8 shows that 80.1% of respondent giveaway food to stray dog. 23.2% do nothing and 17.7% take them home or find them an owner.

Section 4.2.4 Comparing affective and behavioral component

A paired-samples t-test was conducted to compare how people feel when they see stay dog and how they do or behave.

Table 4.11 Comparing how people feel and how people do

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	A1 – B1	-.028	.476	.035	-.098	.042	-.780	180	.436
Pair 2	A2 – B2	-.022	.278	.021	-.063	.019	-1.069	180	.286
Pair 3	A3 – B3	.343	.531	.039	.265	.420	8.678	180	.000
Pair 4	A4 – B4	.017	.128	.010	-.002	.035	1.742	180	.083
Pair 5	A5 – B5	.646	.502	.037	.573	.720	17.322	180	.000
Pair 6	A6 – B6	-.227	.420	.031	-.288	-.165	-7.260	180	.000

*A = Affective, B = Behavior

There was a significant difference in the scores for following components:

1) Want to take them home or find them an owner and Take them home or find them an owner conditions; $t(180) = 8.678$, $p = 0.005$. The result shows that even the respondents feel that they want to take stray dogs home or find a new owner for them but only around one-third of the respondent take actions.

2) Want the government agencies take them to the appropriate place such as shelters and Contact the government agencies to take them to the appropriate place such as shelters condition; $t(180) = 17.322$, $p = 0.005$. This result shows the big

different between affective and behavioral component. 74.6% of the respondent want the government to do something but only 9.9% take actions.

3) Feel nothing and do nothing condition; $t(180) = -7.260$, $p = 0.005$. This result shows that some of the respondents felt something but they still did nothing about it. Only 0.3% of respondent felt nothing but 23.2% did nothing.

Section 4.2.5 Cognitive component

Table 4.12 How people believe about stray dog problem

Cognitive component	Mean	Std. Deviation
Stray dog annoy the daily life	1.88	1.024
Stray dog causing the bad environment, low hygiene	2.44	1.266
Stray dog causing a health risk such as rabies	3.30	1.207
Stray dog makes the area looks disorganized	2.66	1.314

A cognitive component was created based on five points Likert scales to determine. The meaning of each scale as followed: 1 = strongly disagree, 2 = disagree, 3= neither, 4 = Agree, 5 = strongly agree.

As table 4.12, most of the respondents believed that stray dog causing a health risk such as rabies (M=3.30) followed by the belief that stray dog makes the area looks disorganized (M=2.66) which was already below the center of Likert scale (M=3). This implied that the rest cognitive component do not perceived as a problem for the respondents' beliefs.

Section 4.2.6 Awareness, opinion on policy and government actions

Table 4.13 Awareness of government policy

	Government policy	Number	Percentage
1	Abandon or free the dog to public area is prohibited	127	70.2%
2	Do not pet the dog in public area or just feed them without taking care of their welfare	67	37.0%
3	Government take stray dogs to sterilize and send back to the same neighborhoods	73	40.3%
4	The mobile veterinary unit to offer vaccine or sterilization	125	69.1%
5	Establish a volunteer in the neighborhoods to coordinate with government to take care of the problem	51	28.2%
6	Dog registration	75	41.4%
7	Catch a stray dog and bring it to the shelter	117	64.6%
8	Stray dogs can be adopt at the shelter	139	76.8%

As table 4.13, the top three policy that has the highest awareness are Stray dogs can be adopt at the shelter 76.8%, Abandon or free the dog to public area is prohibited 70.2% and the mobile veterinary unit to offer vaccine or sterilization 69.1%. The three policies that has the lowest awareness are establish a volunteer in the neighborhoods to coordinate with government to take care of the problem 28.2%, do not pet the dog in public area or just feed them without taking care of their welfare 37.0% and government take stray dogs to sterilize and send back to the same neighborhoods 40.3%.

Table 4.14 Opinions on the government policy

	Opinion on the government policy	Mean	SD
1	Abandon or free the dog to public area is prohibited	4.61	.771
2	Do not pet the dog in public area or just feed them without taking care of their welfare	3.18	1.0411
3	Government take stray dogs to sterilize and send back to the same neighborhoods	3.87	1.236
4	The mobile veterinary unit to offer vaccine or sterilization	4.85	.387
5	Establish a volunteer in the neighborhoods to coordinate with government to take care of the problem	4.85	.357
6	Dog registration	4.65	.687
7	Catch a stray dog and bring it to the shelter	3.77	1.292
8	Stray dogs can be adopt at the shelter	4.86	.382

An opinions on the government policy was created based on five points Likert scales to determine. The meaning of each scale as followed: 1 = strongly disagree, 2 = disagree, 3= neither, 4 = Agree, 5 = strongly agree

From table 4.14, the results show that the respondents think that the Stray dogs can be adopted at the shelter is the best policy (M=4.86) followed by The mobile veterinary unit to offer vaccine or sterilization and Establish a volunteer in the neighborhoods to coordinate with government to take care of the problem with the Mean at 4.85 equally.

The policy that the respondent feel least agree is Do not pet the dog in public area or just feed them without taking care of their welfare (M=18).

Table 4.15 Opinions on efficiency of the government action

	Opinions on efficiency of the government action	Mean	SD
1	Effective law enforcement to the people who abandon their dog in a public	3.76	1.497
2	Legal action was taken when people pet the dog in public area or just feed them without taking care of their welfare	2.56	1.330
3	The government agency sterilizes the stray dogs which reduce the numbers of stray dog noticeably	3.76	1.253
4	You see the mobile veterinary unit to offer vaccine or sterilization which reduce the numbers of stray dog noticeably	3.67	1.345
5	Your neighborhoods have the volunteer to coordinate with government to take care of the problem	3.47	1.474
6	You or people that you know was taken by legal action from not register their dog	3.04	1.499
7	Dog shelters have enough capacity to support the stray dogs	2.96	1.675
8	Stray dogs in the shelter is in a good condition and are ready to be adopt	4.25	.999

An opinion on efficiency of the government action was created based on five points Likert scales to determine. The meaning of each scale as followed: 1 = strongly disagree, 2 = disagree, 3= neither, 4 = Agree, 5 = strongly agree

As table 4.15, most of the respondents think that the most effective action is to have good stray dogs shelter that stray dogs are ready to be adopted (M=4.25) and the least effective action is the legal action taken when people pet the dog in public area or just feed them without taking care of their welfare (M=2.56)

Table 4.16 Comparing the effectiveness of government action

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	GA1 – GP1	-.856	1.599	.119	-1.091	-.622	-7.205	180	.000
Pair 2	GA2 – GP2	-.619	1.503	.112	-.839	-.398	-5.538	180	.000
Pair 3	GA3 – GP3	-.105	1.478	.110	-.322	.112	-.956	180	.340
Pair 4	GA4 – GP4	-1.177	1.355	.101	-1.375	-.978	-11.687	180	.000
Pair 5	GA5 – GP5	-1.381	1.492	.111	-1.600	-1.162	-12.455	180	.000
Pair 6	GA6 – GP6	-1.613	1.477	.110	-1.830	-1.397	-14.690	180	.000
Pair 7	GA7 – GP7	-.807	1.892	.141	-1.084	-.529	-5.736	180	.000
Pair 8	GA8 – GP8	-.608	1.003	.075	-.755	-.461	-8.150	180	.000

*GA = Government action, GP = Government policy

A paired-samples t-test was conducted to compare the opinions on efficiency of the government action and opinions on the government policy. There was a significant difference in every pair except for the pair 3, government take stray dogs to sterilize and send back to the same neighborhoods and the government agency to spay and neuter the stray dogs to noticeably reduce the numbers of stray dogs.

There was a significant difference in the scores for you or people that you know was taken by legal action from not register their dog ($M=3.04$, $SD=1.499$) and dog registration policy ($M=4.65$, $SD=.687$) condition; $t(180) = -14.690$, $p = .000$. These results implied that there's a huge gap between what the respondents expect and the performance that the government should improve.

Section 4.2.7 Comparing differences in attitudes among demographics

There was no significant difference in the affective, cognitive and behavior among demographic variables since the topic is a general issue and also the bias of a samples

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

Summary and Conclusion

Most of the Bangkok populations think that stray dog issue is a problem in Thailand. They feel pity for the stray dogs and want the government agencies take them to the appropriate place such as shelters or want to take the stray dogs to raise at their house or find them an owner but they act differently in some aspects. Although they wanted the government agencies to take them to the appropriate places but they do nothing about it because they do not have awareness regarding government policies or responsible agencies who are taking care of this issue. The most concern that respondents have about stray dog problem is the health risk and decease and wellness of their own.

In terms of government policies, people knew only a few policies such as the government stray dog adoption, Abandon or free the dog to public area is prohibited and the mobile veterinary unit to offer vaccine or spay and neuter which they quite agree with these policies. However, they were not satisfied with the government actions to solve the issue especially for the dog registration which they agreed that these policies could solve the issue.

According to this study, the analysis was based on the 181 respondents living in Bangkok area. Most of the respondents are female. The majority age above 50 years old. The majority of education level is Bachelor degree. The attitudes of Bangkok population towards stray dog population control results revealed that all demographic groups did not have significantly differences.

The suggestion for an effective communication strategy for stray dog population control would emphasize on the key message or the policy to be communicated. Thus, the recommendations were from secondary research results such as Prevention of Cruelty and Animal Welfare Provision Act 2014 combined with the results from the descriptive research.

Recommendations

Two topic of recommendations are addressed based on research findings as follows:

- 1. The communication plan** which was divided into 3 stages according to the key findings from primary and secondary data in the research.

Stage 1: Educate the right mindset to people

From the research, people are misunderstanding about the way to help solving this issue. They do not know that giving away food to stray dog on the street is prohibited and also causing the bad environment which could be the cause of health risk. Also, it can support the increasing in population of stray dogs. For this stage, the government should communicate to the people not only the roadmap of the policy so everyone can act appropriately to this issue and also the law enforcement.

Stage 2: Stimulate and support to action

The results showed that people think and feel they want this problem to be solved but they did not do anything with this. So, after people know about the roadmap of the government, the government should communicate on how to response to this issue to stimulate people to take action for example, communicate to people on

how to register their dog or responsible agencies contact number they have to call if they want the government officer to catch stray dogs in their neighborhood.

Stage 3: Progress report

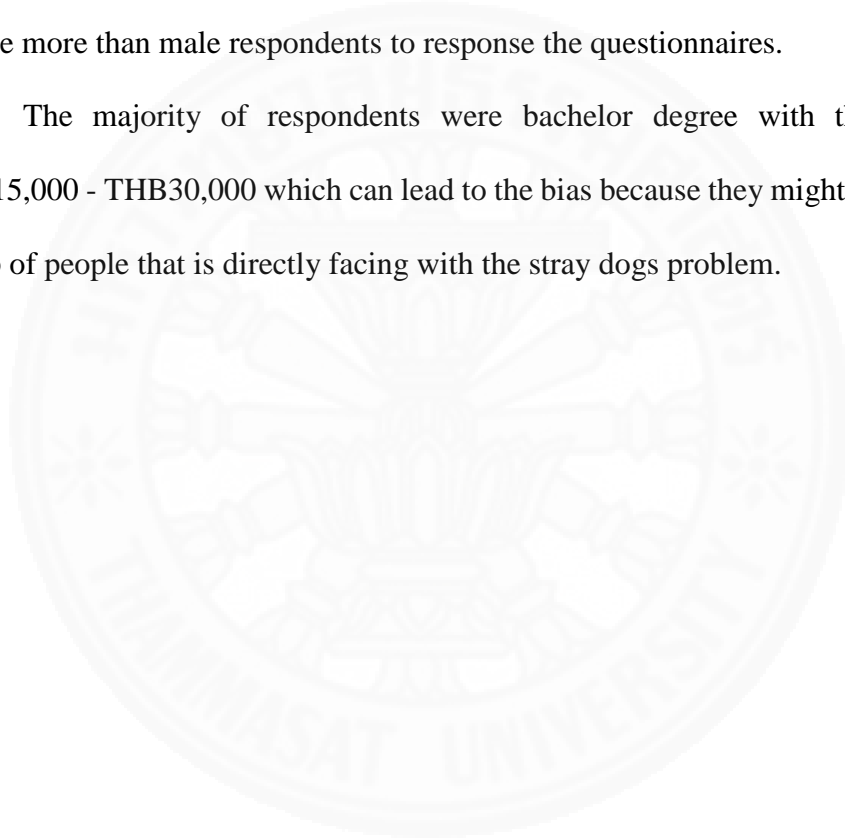
The progress report regarding stray dog management publishing about the serious actions that government took to create awareness and cultivate cooperation to fully solve the problem effectively between government and its citizen.

2. Improvement on discharge and operations

The results showed that people are not satisfied with the government actions to solve the issue. The government should prepare enough resources and budget to improve operational process along with public communications. For example, establish the stray dog hotline to report the problem easily for people. Also, the government should be serious with law enforcement.

Limitations of the Study

1. The study applied the non-probability sampling method by judgmental sampling type due to time and cost considerations. Thus, the findings and results from qualitative research might not represent the majority of entire population.
2. The majority of the respondents were female since the interface of the questionnaires via boosted Facebook post was a stray dog picture which could attract female more than male respondents to response the questionnaires.
3. The majority of respondents were bachelor degree with the income of THB15,000 - THB30,000 which can lead to the bias because they might not be a major group of people that is directly facing with the stray dogs problem.



REFERENCES

- 1) Read howl. *“Information about stray dog in Thailand that you should know”*, accessed Nov. 17, 2017 at: <http://www.readhowl.com/2016/12/08/straydog-data/>
- 2) Post Today. *“Give food to stray dogs in public” dog lovers become a victim*, accessed Nov. 4, 2017 at: <https://www.posttoday.com/analysis/interview/480737>
- 3) Bureau of Disease Control and Veterinary Services. *“(Draft 1) Sustainable strategic framework for stray dog population control 2016-2020”*, accessed Nov. 12, 2017 at: <http://dcontrol.dld.go.th/dcontrol/index.php/topstories/478-2559-2563>
- 4) PetGuide.com. *“No Strays In The Netherlands – How Do They Do It?”*, accessed Dec. 5, 2017 at: <http://www.petguide.com/blog/dog/no-strays-in-the-netherlands-how-do-they-do-it/>
- 5) TNews.com. *“Who made this karma? Bangkok office wail. Serious problem of stray dog with a huge expense of 15 million Baht”* accessed at Dec. 5, 2017 at: <http://www.tnews.co.th/contents/192309>
- 6) MThai News. *“Rabies has killed 8 Thai people this year”* accessed at Dec.5 2017 at: <https://news.mthai.com/general-news/530823.html>
- 7) Thairath. *“Renovate the Prawet control center, Bangkok office throw a budget of 231 million to reach the standard”* accessed at Dec.5 2017 at: <https://www.thairath.co.th/content/1086712>
- 8) MGR Online. *“CONFIRMED! Prevention of Cruelty and Animal Welfare Provision Act 2014 is good and appropriate”* accessed at Dec.11 2017 at: <http://www.manager.co.th/south/viewnews.aspx?NewsID=9590000073111>
- 9) MGR Online. *“Bangkok throw budget of 6.5m to spend on spaying and implanting microchips to 20,000 stray dogs”* accessed at Dec.11 2017 at: <http://www.manager.co.th/Daily/ViewNews.aspx?NewsID=9540000105055>

APPENDICES

APPENDIX A

THE IN-DEPTH INTERVIEW QUESTIONS

Screening Questions

Q.1 Do you live in Bangkok?

Section 1: Affective Component

Q.2 Do you own a dog or do your house have a dog?

Q.3 How do you feel when you see stray dogs?

Q.4 Do you think stray dogs are the problem of Bangkok?

Q.5 What is the cause of stray dogs problem in your opinion?

Q.6 Do you support the private organization for stray dogs?

Q.7 How do you feel when you see people giveaway food on the streets?

Section 2: Behavioral Component

Q.8 How do you behave when you see stray dogs?

Q.9 Have you ever report to the government agencies about stray dogs issue?

Q.10 Have you ever visit the dog shelter?

Q.11 Have you ever join the activities about helping stray dogs?

Section 3: Cognitive Component

Q.12 What is your suggestion on the way to help reduce stray dog populations?

Q.13 Who would be the main responsible for this issue?

Section 4: Opinion on government policy and actions

Q.12 Do you know what is the current policy to reduce the stray dogs population?

Q.13 What do you think about the policies?

APPENDIX B

QUESTIONNAIRE

Questionnaire: A study of Bangkok populations' attitude towards stray dog population control

Screening Question:

Q.1 Where do you live?

- Bangkok (Go to Q.2) Other province (End of questionnaire)

Section 1: Questions on attitudes and opinions on government policy

Q.2 Do you or your family ever raise a dog?

- Yes, and still have a dog
 Yes, but now did not have anymore
 Never have a dog before

Q.3 How do you feel when you see the stray dogs without someone taking care of?

(Can choose more than 1 answer)

- Feel pity and want to giveaway food
 Afraid that the dog will bite
 Want to take them home or find them a new owner
 Feel annoying, uncomfortable and not hygiene, causing the bad environment
 Want the government agencies take them to the appropriate place such as animal shelters
 Feel nothing

Q.8 What you think about these government policies for stray dog population control?

(1 = strongly disagree, 2 = disagree, 3= neither, 4 = Agree, 5 = strongly agree)

Policy	1	2	3	4	5
Abandon or free the dog to public area is prohibited	1	2	3	4	5
Do not pet the dog in public area or just feed them without taking care of their welfare	1	2	3	4	5
Government take stray dogs to sterilize and send back to the same neighborhoods	1	2	3	4	5
The mobile veterinary unit to offer vaccine or sterilization	1	2	3	4	5
Establish a volunteer in the neighborhoods to coordinate with government to take care of the problem	1	2	3	4	5
Dog registration	1	2	3	4	5
Catch a stray dog and bring it to the shelter	1	2	3	4	5
Stray dogs can be adopt at the shelter	1	2	3	4	5

Q.9 What you think about the government's efficiency for stray dog population control?

(1 = strongly disagree, 2 = disagree, 3= neither, 4 = Agree, 5 = strongly agree)

Policy	1	2	3	4	5
Effective law enforcement to the people who abandon their dog in a public	1	2	3	4	5
Legal action was taken when people pet the dog in public area or just feed them without taking care of their welfare	1	2	3	4	5
The government agency sterilizes the stray dogs which reduce the numbers of stray dog noticeably	1	2	3	4	5
You see the mobile veterinary unit to offer vaccine or sterilization which reduce the numbers of stray dog noticeably	1	2	3	4	5
Your neighborhoods have the volunteer to coordinate with government to take care of the problem	1	2	3	4	5
You or people that you know was taken by legal action from not register their dog	1	2	3	4	5
Dog shelters have enough capacity to support the stray dogs	1	2	3	4	5
Stray dogs in the shelter is in a good condition and are ready to be adopt	1	2	3	4	5

Section 2: Demographic

- Q.10 Gender Male Female
- Q.11 Age Below 18 18-30 31-40 41-50 Above 50
- Q.12 Education Level
- Lower than Bachelor Degree
 - Bachelor Degree
 - Master degree or higher
- Q.13 Occupation
- Employee Entrepreneur
 - Government officer or Stage enterprise officer
 - Freelancer Housewife Student
 - Other..... (Please specify)
- Q.14 Personal income per month
- Less than 15,000 THB 15,001-30,000 THB
 - 30,001-50,000 THB 50,001-100,000THB
 - Above 100,000 THB
- Q.15 Marital Status
- Single Live with partner or roommates
 - Married Divorce

BIOGRAPHY

Name	Miss Juthatip Chonmaitree
Date of Birth	March 12, 1989
Educational Attainment	2017-2015: Master's Degree Program in Marketing (MIM) Thammasat University 2011-2007: Bachelor of Business Administration in Marketing, Thammasat University
Work Position	Assistant Marketing Manager at Thai Broadcasting (Workpoint Group)
Work Experiences	2014 - Current: Assistant Marketing Manager at Workpoint Entertainment 2013 - 2014: Creative Marketing Executives at Workpoint Entertainment 2011 - 2013: Marketing Executives at Workpoint Entertainment