

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

Emergency call services play a vital role in public services which can be considered as a basic service for people who request assistance in life-threatening or critical situations that need to be responded to in the shortest possible time by emergency responders, such as police, fire or medical service. In general, democratic countries emergency call service must be provided as a basic public service to guarantee public safety and security for their citizens (Mazerolle, 2001, p.1-1).

Many countries' public telephone networks have a single emergency telephone number, sometimes known as the universal emergency telephone number or the emergency services number. This number enables the caller to contact local emergency services for assistance. Although, the emergency telephone number may differ from country to country, it is typically a three-digit number so that it can be easily remembered and quickly dialed. Some countries have a different emergency number for each of the different emergency services; these often differ only by the last digit.

In most areas, the emergency number is intended to be used only in an emergency. Routine and non-urgent calls as well as hoaxes or prank calls to emergency services numbers waste valuable time of both dispatchers and emergency responders, which could endanger lives. False reports of emergencies are often prosecuted as crimes.

The emergency telephone number is a special number in the country's telephone number plan (www.dps.siu.edu). In the past, calls to the emergency telephone number were often routed over special dedicated circuits. However, with the advent of electronic exchanges these calls are now often mixed with ordinary telephone traffic, though they still may be able to access circuits that other traffic cannot. Often, the system is set up so that once a call is made to an emergency telephone number, it must be answered. Should the caller abandon the call, the line may still be held until the emergency service answers and releases the call.

An emergency telephone number may be replied to by either a telephone operator or an emergency service dispatcher. The nature of the emergency (police, fire, medical) is then determined. If the call has been answered by a telephone operator, they would then connect the call to the appropriate emergency service, which then dispatches appropriate personnel required to handle the crisis. In the case of multiple services being needed on the same call, the most urgent need must be determined, with other services being called in as needed.

Emergency dispatchers are trained to take control of the call in order to provide help in an appropriate manner. The emergency dispatcher may find it necessary to give urgent advice in life-threatening situations. Some dispatchers have special training in telling people how to perform first aid.

In many parts of the world, an emergency service can identify the telephone number that a call has been placed from. This is normally done using the system that the telephone company uses to bill calls, making the number visible even for users who have unlisted numbers or who block caller ID. For an individual fixed line telephone, the caller's number can often be associated with the caller's address and therefore their location. However, with mobile phones and business telephones, the address may be a mailing address rather than the caller's location. The latest 'enhanced' system, such as Enhanced 911, is able to provide the physical location of mobile phones. This is often specifically mandated in a country's legislation (Colston, 2005, p. 3).

In Thailand, the Royal Thai Police is a government agency which is responsible not only for law and order but also for a wide range of public services throughout the country. The main area of responsibility of the Royal Thai Police is crime control and suppression. To enhance the effectiveness of dealing with crimes, a *Police Communication Center* has been established in all provinces to serve as a dispatcher of walkie-talkie communication among relevant officers to whom fixed line phones are not accessible, such as on patrol. In 1978, The Metropolitan Police Bureau developed its *Police Communication Center* to provide people with access to the police in order to report crimes and accidents by dialing the number "191". This is the first time *the Police Communication Center* has changed its role into a *Command, Control and Communication Center (C3I)* with emergency call service, a new concept of emergency

call service by linking all telecom and IT technologies together. This could be a big leap for the Royal Thai Police in terms of public service quality. (เอก ตั้งทรัพย์วัฒนา และ สรวิต นฤปิติ, 2549, น.2-2)

Even though the Police Communication Center of the Metropolitan Police Bureau (191 Center) has had the C3I system behind emergency service (911) in the USA for over 30 years, the 191 Center is still a model for Provincial Police with regards to Police Emergency Call Service. Today, many provincial police have 191 Centers where people can dial the same phone number for police emergency calls. However, there are different numbers for different emergency services, such as the Highway Police (แจ้งเหตุต่อตำรวจทางหลวง: 1193), the Marine Police (แจ้งเหตุต่อตำรวจน้ำ: 1194), the Traffic Police (รายงานสภาพการจราจร กทม: 1197), Crime Suppression (แจ้งเหตุต่อตำรวจกองปราบ: 1195), the Tourist Police (แจ้งเหตุต่อตำรวจท่องเที่ยว: 1155), the Narcotics Police (แจ้งเหตุต่อตำรวจปราบปรามยาเสพติด: 1688) and the three Southern most Provinces (แจ้งเหตุใน 3 จังหวัดชายแดนภาคใต้: 1340-1). These emergency numbers for different agencies have proven rather difficult for the public to recall, especially during an emergency.

Furthermore, in the age of advanced technology, many government agencies and state enterprises have established their own call center with 3-4 digits phone numbers, known as a hotline, call center or contact center to increase the accessibility of their services. For example, the Food and Drug Agency (คณะกรรมการอาหารและยา: 1556), the Consumer Protection Agency (คณะกรรมการคุ้มครองผู้บริโภค: 1166), Ombudsman (ผู้ตรวจการแผ่นดินของรัฐสภา: 1676), the Bangkok Mass Transit Authority (องค์การขนส่งมวลชนกรุงเทพ: 184), the Metropolitan Electricity Authority (การไฟฟ้านครหลวง: 1130), the Bangkok Metropolitan Administration (กรุงเทพมหานคร: 1555), and the Government Call Center (ศูนย์บริการข้อมูลภาครัฐ: 1111) (www.thailandguru.com/home-phone.html#emergency).

Moreover, many businesses have a welcome call center as part of their businesses, such as mobile phone businesses, food delivery businesses and insurance businesses. Nowadays, there are a large number of hotline numbers of government

agencies, state enterprises and businesses. As a result, the public can neither distinguish the different services nor recognize many of the hotline numbers.

However, the number 191 is one of the few emergency numbers widely recognized by the public. It is the first number people dial if they are at risk or in a critical situation. This is because 191 was the first 3-digit hotline number in Thailand to provide the public with access to police for assistance 24 hours a day throughout the country.

Most local people, whenever they require urgent assistance, dial 191 first, even if that crisis is not the police's responsibility such as fire and medical service. This is because they do not remember the direct numbers of the required emergency service. There are a number of factors that affect the efficiency of all emergency services (police, fire and medical). These include the efficiency of co-ordination between government agencies, as well as non-urgent calls and prank calls to police emergency service, which waste valuable time of both dispatchers and emergency responders.

The record shows that the Police Communication Center of the Metropolitan Police Bureau responsible for Bangkok area received, on average, 10,000 – 15,000 calls per day, in which only about 20% were considered emergency calls. The rest were non-emergencies and prank calls (เอก ตั้งทรัพย์วัฒนา และ สรวีศ นฤปิติ, 2549, น.1-10). For this reason, it is necessary to re-organize the functions, roles and procedures of the “Police Communication Center” so that it will become “National Emergency Call Center,” which would consist of police, fire and medical service. However, this change might affect police officers who work in the Police Communication Center of the Metropolitan Police Bureau. As officers who have worked as emergency dispatchers, they know how to deal with emergency callers, emergency dispatch procedures and emergency responders, it is vital to survey the attitudes of these officers for further feasibility study.

1.2 STATEMENT OF THE PROBLEM

The number of emergency calls differs from country to country. Some countries assign telephone numbers by categorizing them into emergency and non-emergency,

such as the USA using the number “911” for emergency and number “311” for non-emergency, while some countries assign numbers by organization, mission or channel of communication to reach the dispatcher for assistance. For example; tourist police, traffic police, forest fire, road help, missing children, suicide, gas leaks, search and rescue, calls from mobile lines, from fixed lines, voice over IP (VoIP) or fax etc. In addition, there are different numbers in different countries both for emergencies and non-emergencies. As a result, there could be a lot of confusion for tourists or travelers while traveling in different countries.

Not only foreigners or travelers from other countries, but citizens who live in that country could also be confused about the various kinds of hotline services because people cannot remember many phone numbers during a crisis. For this reason, the government should establish the best practice to protect people who are in the crisis.

Normally (also in Thailand), there are three main agencies who are responsible for emergencies; namely the police (191), fire (199) and ambulance or medical service (1669). However, the number 191 is the only number that people can remember when they need assistance from any agency. Also, even though it is a non-emergency or routine, they still call 191, such as for water supply, electricity, complaints, giving crime information, asking telephone numbers, pranks or hoax calls etc. This results in inefficient performance by emergency assistance.

This study, therefore, will focus on factors that affect the efficiency of emergency call service by the Metropolitan Police Bureau through surveying the attitudes of emergency dispatchers of police communication centers toward the conceptual model of National Emergency Call Service, which includes three main-emergency services (police, fire, ambulance or medical service), that might be established in the near future nationwide.

1.3 RESEARCH QUESTIONS

Main Question

What are the attitudes of police officers who work as emergency dispatchers at the Police Communication Centers of the Metropolitan Police Bureau toward the conceptual model of National Emergency Call Service?

Sub-questions

1. What are the attitudes of dispatchers toward “the emergency callers” in the conceptual model of National Emergency Call Service?
2. What are the attitudes of dispatchers toward “the emergency dispatch procedures” in the conceptual model of National Emergency Call Service?
3. What are the attitudes of dispatchers toward “the emergency responders” in the conceptual model of National Emergency Call Service?

1.4 OBJECTIVES OF THE STUDY

Main objective

To survey attitudes of emergency dispatchers toward the conceptual model of National Emergency Call Service.

Sub-objectives

1. To survey attitudes of emergency dispatchers toward “the emergency callers” in the conceptual model of National Emergency Call Service.
2. To survey attitudes of emergency dispatchers toward “the emergency dispatch procedures” in the conceptual model of National Emergency Call Service.
3. To survey attitudes of emergency dispatchers toward “the emergency responders” in the conceptual model of National Emergency Call Service.

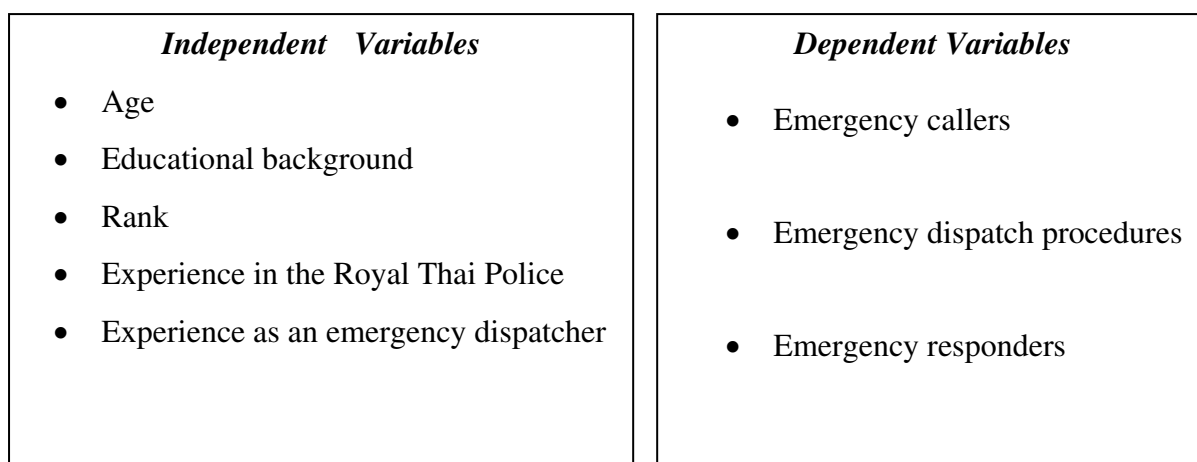
1.5 CONCEPTUAL FRAMEWORK

Based on the attitudes of emergency dispatchers in Police Communication Centers toward the conceptual model of National Emergency Call Service (which has never existed in Thailand), the researcher defined two types of variables as follows:

Independent variables are personal information of emergency dispatchers such as; age, educational background, rank, experience in the Royal Thai Police, and experience as an emergency dispatcher.

Dependent variables are attitudes of emergency dispatcher toward emergency callers, emergency dispatch procedures and emergency responders.

Figure 1. Conceptual framework showing relationship between independent and dependent variables



1.6 DEFINITIONS OF TERMS

National Emergency Call Service refers to a conceptual model of National Emergency Call Service. This model includes all kinds of emergency services (police, fire and medical service). With the use of this number, the public can access all emergency services in case of emergency. It is also provided with nationwide coverage.

Emergency refers to a matter of informing or reporting a case of (1) Crime, accident or natural disaster (2) Fire and (3) Sickness or health problem. A Person who faces any of these cases is in critical or life-threatening situations and needs urgent assistance.

Emergency caller refers to someone who accesses emergency call service by phone, both fixed line and mobile line.

Emergency dispatcher refers to police officers who work as emergency dispatchers in the Police Communication Centers, whose work includes taking calls, collecting, analyzing and summarizing data so that a statement can be produced from the message, which would then be dispatched to emergency responders and relevant offices.

Emergency dispatch procedure refers to all procedures and regulations that emergency dispatchers must comply with and perform in the same manner, with regard to collecting, analyzing summarizing, recording and dispatching messages to different agencies.

Emergency responder refers to a team or officers who respond to the situation to manage the crisis, rescue people or perform a number of activities to return the situation to its normal state.

Non-emergency service refers to routine a service which does not require urgent assistance such as filing a case, complaints, reporting crimes or other public services.

Prank calls or hoax calls refer to reporting emergency cases to emergency call service without any real emergency.

1.7 SCOPE OF THE STUDY

There are some limitations in this study, such as a wide range of emergency callers, the complexity of telecom technology in emergency dispatch procedures, the various kinds of emergency cases and emergency responders who are in different agencies and different practices in dealing with emergencies. As a result, this study was limited to only attitudes of emergency dispatchers who worked at the Police Communication Centers of The Metropolitan Police Bureau toward the conceptual model of National Emergency Call Service. In this study, the details are as follows:

(1) The subjects were limited to emergency dispatchers of 10 Police Communication Centers covering all areas of the Metropolitan Police Bureau (Bangkok Province).

(2) The amount of samples was reduced to 120 respondents from 460 emergency dispatchers.

(3) The subjects were asked to respond to the questionnaire by themselves. The questionnaire consisted of both closed-ended and open-ended questions.

1.8 SIGNIFICANCE OF THE STUDY

The results of this research can be applied to the feasibility study of “National Emergency Call Service” with respect to:

1. Creating public awareness on how to use emergency call services effectively.
2. Reducing the level of confusion regarding emergency call service numbers during a critical or panic situation.
3. Improving dispatch procedures, with regard to management of non-emergencies which range from receiving to dispatching the message to emergency responders accurately and rapidly.
4. Enhancing the performance of emergency responders.

1.9 ORGANIZATION OF THE STUDY

This paper is divided into five chapters. The first chapter is the introduction which includes the background, statement of the problem, objectives of the study and organization of the study. The second chapter is review of the literature. The third chapter is the methodology consisting of subjects, materials, procedures, and data analysis. The fourth chapter presents the results and tables of the survey. Finally, the last chapter provides a summary of the study, a summary of the findings, the discussion, conclusions and recommendations for further research.

The questionnaires employed for data collection in this study were in Thai because only a few respondents were able to understand English well in these offices. Both Thai and English versions of the questionnaires are included in the appendix section. The questionnaire was divided into 5 parts: General information, attitudes toward emergency callers, attitudes toward emergency dispatch procedures, attitudes toward emergency responders and finally, comments and recommendations.