

CHAPTER FIVE

CONCLUSIONS, DISCUSSION AND RECOMMENDATIONS

This chapter presents 1) a summary of the study, 2) a summary of the findings, 3) the discussions 4) conclusions and 5) recommendations for further research.

5.1 SUMMARY OF THE STUDY

Since emergency call service plays a vital role in protecting the rights, security and freedom of people in democratic countries, the results from this study can be used as part of a feasibility study in the development of emergency call service in Thailand. The main objective of this study is to survey attitudes of emergency dispatchers toward the conceptual model of National Emergency Call Service. This conceptual model includes all three types of the emergency calling services (police, fire and medical service) that people can reach by calling for urgent assistance in critical situations. The researcher aimed to explore attitudes of emergency dispatchers in three aspects; attitudes toward emergency callers, attitudes toward emergency dispatch procedures and attitudes toward emergency responders.

The samples used in this study consisted of 120 police officers who worked as emergency dispatchers at the Police Communication Centers of the Metropolitan Police Bureau. The instrument was a form of a questionnaire which included both closed-end and open-ended questions. This questionnaire consisted of five parts which are general information of the respondents, attitudes toward emergency callers, attitudes toward emergency dispatch procedures, attitudes toward emergency responders, and the comments and suggestions from respondents.

After collecting the questionnaires from respondents, the data was analyzed by using SPSS program, and the results are presented in statistical tables in the form of frequency, percentage and mean.

5.2 SUMMARY OF THE FINDINGS

To summarize the findings of this study, this section is divided into five parts; general information, attitudes toward emergency callers, attitudes toward emergency dispatch procedures, attitudes toward emergency responders and respondents' comments and suggestions.

5.2.1 General Information

All respondents were police officers who worked as emergency dispatchers at the Police Communication Centers of the Metropolitan Police Bureau.

Most of the respondents were 26–30 years of age, hold bachelor's degree, with ranks of corporal and experience both as a police officer and a dispatcher for less than five years. This information shows that most emergency dispatchers were at the first step of their career path in the police force.

5.2.2 Attitudes toward Emergency Callers

Most of the respondents strongly believed in the statement “the number of callers who reach the emergency service in the current situation and in the conceptual model would be the same, as well as prank callers reach the emergency service just for fun”.

In terms of other emergency services (fire and medical service) and non-emergency service, callers who reach 191, most respondents believed in the reason of not remembering those numbers.

On the contrary, their views about emergency callers were as follows: (1) most calls were not considered real emergencies, (2) most calls were not limited to only criminal matters, (3) in the conceptual model the proportion of emergency, non-emergency and prank callers would not remain the same, and (4) in the conceptual model, they would not work as efficiently as before.

5.2.3 Attitudes toward Emergency Dispatch Procedures

Almost all respondents strongly believed that dispatch procedures play an important role in emergency call service.

Most of respondents' attitudes were uncertain when they were asked if the current dispatch procedure would be suitable for collecting, analyzing data and dispatching the message to emergency responders in the conceptual model.

Most of respondents thought that the current procedures were not sufficient for the current workload and were uncomfortable with the current dispatch procedures.

5.2.4 Attitudes toward Emergency Responders

Most respondent's attitudes toward all kinds of emergency responders (police, fire and medical service) were positive in all aspects.

In terms of efficiency of each emergency responders, most of them believed that all emergency responders would be able to understand the messages they relayed accurately, would be able to reach the scene or patient rapidly and would be able to manage the crisis in appropriate ways.

Surprisingly, most respondents who were police officers believed that the fire fighter team is the fastest team to reach the scene while the ambulance team is the team who can best understand the messages relayed by dispatchers accurately.

5.2.5 Respondent's Comments and Suggestions

According to respondents' attitudes toward emergency dispatch procedures in chapter 4, their comments were similar their attitudes in table 15, stating that the procedures were not sufficient for the current workload. From their point of view, not only the emergency call service should maintain a balance between the number of dispatchers and the workload, but a variety of necessary training courses should be also provided for all dispatchers who work in shifts to attend courses. Additionally, they felt that all equipment and advanced technologies should be updated, emergency dispatch procedures must have the same standard nationwide and should work well with the telecom systems as well as be appropriate for the workload and emergency situation. Also, they needed to participate in the management of emergency call service, particularly in sharing ideas to improve performance.

5.3 DISCUSSIONS

5.3.1 Overview of the Study

As we discussed in chapter 1, there are many hotline numbers, also known as call centers, in Thailand, which are 3 or 4 digit numbers. These services range from emergency services provided by government agencies to marketing service provided by private firms.

The government hotline numbers are provided to the public in several areas according to their responsibilities. These can be categorized into emergency and non-emergency call services. Emergency call services are only meant to be used in real emergencies such as when an individual is in a crisis ranging from a crime in progress, a fire and severe injuries or illnesses. It can be seen that most of the situations mentioned are life-threatening and require immediate assistance.

Emergency call services in Thailand, which include police, fire and medical services, are under different government agencies with their own hotline numbers. To complicate matters further, they also have different operational protocols. Despite differences in operational protocols and areas of responsibilities, in many cases, it is inevitable that they have to work together on the same scene such as terrorism, hostage situations, traffic accidents, natural disasters, riots, fire and so on.

According to the researcher's point of view, there are three major factors which affect the overall efficiency of the performance of emergency call services in Thailand. These are callers, dispatch procedures and the responders who offer relief to the public and manage predicaments. Taking into account the distressed situation the callers are in, it is understandable that many callers do not recall the correct number or whether it is an emergency service number or non-emergency service number. To make matters worse, prank calls are also prevalent. These calls waste valuable time and effort of the officers. They also divert precious resources which might be needed in a real emergency.

Emergency dispatch procedures also play a vital role in the efficiency of emergency call service. The process commences when the dispatcher takes a call. Then, the dispatcher assimilates and analyzes the information received from callers. The

information is then recorded and relayed to the appropriate responders. The dispatchers will also monitor, control and co-ordinate the field operation. They would also have to report the results of the operation. However, depending on the emergency call centers, there may be several variations to the procedures. The operation of each emergency call center will depend on their responsibilities, workload, technologies, and the urgency of the situation, etc.

The emergency responders also play a vital role in the emergency operation. Their action directly affects the efficiency of emergency call services. Needless to say, emergency service is non-existent without emergency responders. Conversely, the emergency response team would cease to function if it could not get in touch with emergency dispatchers at the call center. Hence, effective communication between the responders and the dispatchers is paramount. The response teams are equipped with communication technologies which allow them to communicate with the dispatchers.

To study whether or not it is feasible to improve the efficiency of the emergency call services in Thailand, the researcher would have to set up the model of National Emergency Call Service, and then start surveying the attitudes of the dispatchers in police emergency call centers of the Metropolitan Police Bureau since these are the dispatchers with the heaviest workload. This would need to be completed before other agencies with their own emergency call centers, such as fire and medical emergency services, were surveyed.

5.3.2 Personal Information of the Respondents

All respondents of this study were police officers working as dispatchers at the Police Communication Centers of the Metropolitan Police Bureau. It is generally acknowledged that dispatchers who work in shifts, (since emergency call centers must be open 24 hours a day) should be male officers. This is due to the fact that the late shift is more convenient for male officers and that they are arguably better able to handle a variety of situations than their female counterparts. However, gender, career and income information was not gathered by the researcher.

From this study, it can be seen that more than half of the respondents were younger than 26 years old and that their work experience as police officers was less than five years. More than half were Corporals and hold bachelor's degrees.

From the information, this job is possibly their first one since they had only recently graduated. The lack of experience in this field could be problematic when it comes to coordinating operations with a crucial of messages and situations. This highlights the importance of efficient communication between the dispatchers and the responders. Mistakes or delays in dispatching information to the responders, no matter how slight, could cost lives. Therefore, it is advisable that the dispatch team should be comprised of a number of experienced officers since they can share their experience with younger officers and assist them in situations that are beyond their level of expertise.

5.3.3 Attitudes toward Emergency Callers

As can be seen from the summary in the previous section, the dispatchers organized the callers into four categories since they believe that the callers could have a number of reasons for calling the emergency call service.

1) *Emergency Call in police service*: These callers require urgent response to criminal matters. This group of callers is the only group who is offered the service of the police. Unfortunately, the dispatchers are unable to dispatch the message to the emergency responders promptly. This is due to the fact that the dispatchers must follow every step of the dispatch procedures. To ensure that the message received by the responders is uncorrupted and that the service needed is in their area of responsibility, the message being dispatched to the response team must be concise and unambiguous in meaning, especially when it comes to crucial information.

2) *Emergency Call Service in other emergency services*: These are callers who also require an urgent response; however, the assistance cannot be offered by the police. The reason that callers call police emergency service even though they need a different emergency call service is that they do not recall the number of the required emergency call center. This is understandable since most people when confronted with a crisis start to panic and it is only natural that they would dial the first emergency number they can think of, which in this case is the police emergency number 191. The

consequence of this is that callers call the police dispatchers requesting non-police assistance for tsunamis, flash floods, collapsed buildings, snake bites, plane crashes, shipwrecks, riots and other crises. If this is the case, dispatchers must carefully follow the procedures to identify and classify the incident. In some cases, police officers may be required at the scene while on other occasions the message must be dispatched to other emergency services which are unrelated to the police.

3) *Non-Emergency Call Service*: These are callers who reach 191 and require assistance from police officers but not urgently. Some callers require police services, while others require other services such as a response to power supply and water supply problems, municipal problems, lodging complaints against police officers, consulting about criminal cases, reporting criminal activities, as well as requesting telephone numbers of government agencies. As a result, this not only wastes the time and of dispatchers, it also prevents them from responding to callers with valid emergencies who require urgent assistance.

4) *Prank Calls or Hoax Calls*: These callers reach the emergency services just for fun. Prank calls to 191 accounts for more than half of the calls the dispatchers receive daily. The frequency of prank calls rises dramatically during public holidays and festivals (เอก คั้งทรัพย์วัฒนา และ สรวีศ นฤปิติ 2549, น.1-10). The respondents believed that prank callers intentionally reach the emergency call centre just to trick and annoy officers by making up tall tales. Although prank callers believe their actions are harmless, these calls could endanger lives since they take up the time and resources of both dispatchers and responders.

According of the conceptual model of National Emergency Call Service, the respondents strongly believed that the number of callers would remain the same. This means that once the model is set up to include all kinds of emergency services, the number of callers would be similar to prior to this change. In contrast, the dispatchers did not believe that with the conceptual model the proportion of emergency, non-emergency and prank callers would change. They also did not believe that they would be able to work as efficiently if the change was implemented.

In brief, the respondents believed that the total number of all callers would remain constant. However, the overall proportion of emergency, non-emergency and prank callers would change. Dispatchers were also uncertain with regards to the efficiency of their performance. This sentiment might be caused by the uncertainty of the future. Furthermore, most dispatchers fear changes in their procedures since they would have to become accustomed the new conceptual model encapsulating fire and medical services with nationwide coverage.

5.3.4 Attitudes toward Dispatch Procedure

Almost all respondents thought that the dispatch procedures form an important part of emergency call service with *50% strongly agreeing* and *32.5% agreeing* to this statement. Conversely, they did not believe that the current dispatch procedures were sufficient for the current workload. Respondents also felt uncomfortable with the current dispatch procedures.

As for the conceptual model of National Emergency Call Service, they remain uncertain of the suitability of the current dispatch system, especially with regard to collecting and analyzing data, as well as dispatching the message to emergency responders. The attitudes displayed by these dispatchers are in the same direction with the previous section which shows that they were unsure of the efficiency of this conceptual model. With regard to this point, the dispatch procedures depend on the complexity of each emergency and the technologies available to the team as well as the infrastructure, etc. These factors have already been discussed in Chapter 2.

5.3.5 Attitudes toward Emergency Responders

The term ‘Emergency Responders’ refers to a team or officers who respond to the situation in order to handle the crisis and rescue individuals (the exact definition has already been discussed in Chapter1). In this study, there are three kinds of emergency responders; police, fire, and medical. Despite the differences in the tasks being performed by each emergency responder, they all have three principles in common when it comes to their performance. The responders must understand the relayed message accurately, reach the scene or the patient rapidly and finally manage the crisis using appropriate methods.

According to the findings, the attitudes of the respondents toward all kinds of emergency responders were quite positive. The respondents agreed that of all of the aspects mentioned above were fulfilled. Even though all the respondents were police officers, they unexpectedly thought that fire emergency responders were the fastest team to the scene.

5.3.6 Comments and Suggestions

It can be seen from the respondents' comments and suggestions that they primarily commented on the current procedures and management. This is possibly as a result of their working environment or the level of job satisfaction they had. These factors could ultimately affect the efficiency of the emergency call service. Nonetheless, their comments and suggestions are valuable for the conceptual model of National Emergency Call Service in the future, particularly the suggestions on technology, training and management.

5.4 CONCLUSIONS

Form the findings of this study, it can be seen that the attitudes of dispatchers who work at the Police Communication Centers of the Metropolitan Police Bureau toward the conceptual model of National Emergency Service are organized into three categories; the emergency callers, the emergency dispatch procedures and the emergency responders.

Regarding the dispatchers' attitudes toward emergency callers, most people felt that the overall number of callers would remain the same even if there is a switch from the current model to the new conceptual model. However, they believed that the proportion between emergency, non-emergency and prank calls would change if the conceptual model is implemented. Furthermore, dispatchers believed that non-emergency callers called the police emergency number simply because they could not remember the number of the required service.

When it comes to the attitudes toward dispatch procedures, the respondents believed that this is a vital part of an emergency call service because it is the initial step in the emergency response process. However, they did not have much confidence in the

current dispatch procedures, and whether they would be suitable for use in the conceptual model.

On the contrary, their attitudes toward emergency responders, comprised of police, fire and medical services, were quite positive. The dispatchers had confidence in all kinds of emergency responders' performances. They felt that all emergency respondents were able to understand the dispatched message accurately, reach the scene or the patient rapidly and manage the crisis appropriately.

To sum up, the attitudes regarding whether or not the conceptual model is suitable remain separated. However, the respondents agreed that the most important thing that should be improved is the emergency dispatch procedures. They also have confidence in the capacity of all types of emergency responders. These attitudes echo the findings of Suchart Kangwanchit (สุชาติ กังวารจิตร์, 2548) who stated that most countries have only one emergency service number which encompasses all kinds of emergency service. This is so that the public can conveniently access all kinds of emergency services using one number.

5.5 RECOMMENDATIONS FOR FURTHER RESEARCH

Based on the findings, discussion and conclusions of this study, the following comments and recommendations are proposed for further research.

5.5.1. Further study should include all types of emergency call service.

5.5.2. Further study should include a comparison of the efficiency of all kinds of emergency call service.

5.5.3. Further study should focus on the feasibility of establishing non-emergency call service in Thailand.

5.5.4. Further study should cover all related matters. For example, the job satisfaction of dispatchers, appropriate technologies, emergency categorization, emergency call service management and social problems related to emergency call services, as well as laws and regulations.