

## CHAPTER FOUR

### RESULTS

This chapter discusses the data analysis generated from the SPSS program (Statistical Package for Social Science) with regard to the dispatcher's general background, attitudes toward emergency callers, attitudes toward emergency dispatch procedures, attitudes toward emergency responders and lastly, the comments and suggestions. The results of this study are presented in five parts as follows:

- 4.1 General background information
- 4.2 Attitudes toward emergency callers
- 4.3 Attitudes toward emergency dispatch procedures
- 4.4 Attitudes toward emergency responders
- 4.5 Respondents' comments and suggestions

#### 4.1 GENERAL BACKGROUND

*Table 1. Age*

Age	Frequency	Percent
Under 26 years	19	15.8
26-30 years	61	50.8
31-35 years	16	13.3
36-40 years	19	15.8
Over 40 years	5	4.2
Total	120	100.0

More than half of respondents or 50.8% were people aged between 26-30 years, followed by people aged under 26 years (15.8%), 36-40 years (15.8 %), 31-35 years (13.3%) and over 40 years (4.2%).

**Table 2. Education**

Education	Frequency	Percent
Mathayom 6	44	36.7
Vocational	8	6.7
Bachelors' Degree	65	54.2
Graduate and Higher	3	2.5
Total	120	100.0

With regard to the education of the respondents, more than half of them or 54.2% held a Bachelor's degree, followed by Mathayom 6 (36.7%), Vocational (6.7%) and Graduate and Higher (2.5%).

**Table 3. Rank**

Rank	Frequency	Percent
Corporal	102	85.0
Sergeant major	12	10.0
Sub-lieutenant to Captain	4	3.3
Major to Colonel	2	1.7
Total	120	100.0

The majority respondents' ranks were Corporals (85.0%), followed by Sergeant Majors (10.0%) and the rest were Sub-lieutenants up to Captains (3.3%). Only two officers (1.7%) were Majors to Colonels who were possibly supervisors or management officers.

**Table 4. Work Experience in the Royal Thai Police**

Work experience in the Royal Thai Police	Frequency	Percent
Under 6 years	69	57.5
6-10 years	17	14.2
11-15 years	24	20.0
Over 15 years	10	8.3
Total	120	100.0

More than half of the respondents had been with the police force for less than six years (57.5%), followed by 11-15 years (20.0%), 6-10 years (14.2%) and over 15 years (8.3%).

**Table 5. Work Experience as a Dispatcher**

Work experience as a dispatcher	Frequency	Percent
Under 6 years	82	68.3
6-10 years	24	20.0
Over 10 years	14	11.7
Total	120	100.0

More than half of the respondents, had been working as emergency dispatchers for less than six years (68.3%), followed by 6-10 years (20.0%) and over 10 years (11.7 %).

#### **4.2 ATTITUDES TOWARD EMERGENCY CALLERS**

This part shows the score and levels of attitudes of emergency dispatchers toward emergency callers to the emergency service call centers (Police Communication Centers) of the Metropolitan Police Bureau.

The data in this part is presented in the form of statistical tables and descriptive statistics. The results in each table were analyzed by SPSS program and are shown as number, percentage and mean.

**Table 6. Attitude Toward Emergency Callers**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Most calls are considered emergencies	18 15.0%	25 20.8%	27 22.5%	33 27.5%	17 14.2%	2.40	Disagree

In terms of attitudes toward emergency callers, the majority of the respondents (27.5%) disagreed with the statement “*Most call are considered real emergencies*” 22.5% were uncertain, 20.8% agreed, 15.0% strongly agreed and 14.2% strongly disagreed with this statement.

**Table 7. Attitude Toward Emergency Callers**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Most of the emergencies are only about criminal matters	6 5.0%	15 12.5%	29 24.2%	43 35.8%	27 22.5%	2.10	Disagree

When asked if “*most of the emergencies are only about criminal matters*”, more than one-third (35.8%) disagreed with this statement, 24.2% were uncertain,

22.5% strongly disagreed, 12.5% agreed and only 5.0% strongly agreed with this statement.

**Table 8. Attitude Toward Emergency Callers**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Other emergency callers do not remember the required emergency number.	51 42.5%	31 25.8%	25 20.8%	7 5.8%	6 5.0%	4.10	Agree

With regard to the statement “*Other emergency callers do not remember the required emergency number.*”, almost half of the respondents(42.5%) strongly agreed with this statement, followed by 25.8% who agreed, 20.8% who were certain, 5.8% who disagreed and only 5.0% who strongly disagreed with this statement.

**Table 9. Attitude Toward Emergency Callers**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Non-emergency callers do not remember other numbers.	48 40.0%	29 24.2%	28 23.3%	12 10.0%	3 2.5%	3.80	Agree

Most of respondents (40.0%) strongly agreed with the statement “*Non-emergency callers do not remember other numbers*”, followed by 24.2% who agreed, 23.3% who were certain, 10.0% who disagreed and 2.5% who strongly disagreed with this statement.

**Table 10. Attitude Toward Emergency Callers**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Prank callers intentionally reach emergency service just for fun.	75 62.5%	29 24.2%	11 9.2%	4 3.3%	1 0.8%	4.30	Strongly agree

More than half of the respondents (62.5%) strongly agreed with the statement “*Prank callers intentionally reach emergency service just for fun*”, followed by 24.2% who agreed, 9.2% who were uncertain, 3.3% who disagreed and 0.8% who strongly disagreed with this statement.

**Table 11. Attitude Toward Emergency Callers**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
In the conceptual model of National Emergency Call Service, the number of callers would remain the same.	78 65.0%	22 18.3%	17 14.2%	2 1.7%	1 0.8%	4.60	Strongly agree

The attitudes of the respondents were also similar to the one mentioned above “*In the conceptual model of National Emergency Call Service, the number of callers would remain the same*”. Almost two-thirds of respondents (65.0%) strongly agreed, followed by 18.32% who agreed, 14.2% who were uncertain, 1.7% who disagreed and only 0.8% who strongly disagreed with this statement.

**Table 12. Attitude Toward Emergency Callers**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
In the conceptual model of National Emergency Call Service, the proportion of emergency, non-emergency and prank callers would remain the same.	25 20.8%	28 23.3%	32 26.7%	17 14.7%	18 15.0%	2.00	Disagree

On the contrary, with regard to the statement “*In the conceptual model of National Emergency Call Service, the proportion of emergency, non-emergency and prank callers would remain the same.*”, the majority of the respondents (26.7%) who were uncertain, followed by 23.3% who agreed, 20.8% who strongly agreed, 15.0% who strongly disagreed and 14.7% who disagreed with this statement.

**Table 13. Attitude Toward Emergency Callers**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
In the conceptual model of National Emergency Call Service, you will be able to work as efficiently as before.	19 15.8%	33 27.5%	34 28.3%	21 17.5%	13 10.8%	2.00	Disagree

The attitudes of the respondents were also similar to the one mentioned above with regard to the statement “*In the conceptual model of National Emergency Call Service, you will be able to work as efficiently as before.*”, the majority of the respondents (28.3%) were uncertain, followed by 27.5% who agreed, 17.50% who disagreed, 15.8% who strongly agreed and 10.8% who strongly disagreed with this statement.

Tables 6-13 indicate that the level of attitudes of respondents toward emergency callers were as follows:

(1) The statement of “*In the conceptual model of National Emergency Call Service, the number of callers would remain the same.*” (Mean 4.60)

(2) The statement of “*Prank callers intentionally reach emergency service just for fun.*” (Mean 4.30)

(3) The statement of “*Other emergency callers do not remember the required emergency number.*” (Mean 4.10)

(4) The statement of “*Non-emergency callers do not remember other numbers*” (Mean 3.80)

(5) The statement of “*Most calls are considered real emergencies*” (Mean 2.40)

(6) The statement of “*Most of the emergencies are only about criminal matters.*” (Mean 2.10)

(7) The statement of “*In the conceptual model of National Emergency Call*

*Service, the proportion of emergency, non-emergency and prank callers would remain the same.” (Mean 2.00)*

(8) The statement of “*In the conceptual model of National Emergency Call Service, you will be able to work as efficiently as before.*” (Mean 2.00)

Generally, the respondents’ attitudes toward emergency callers in all aspects were at the uncertain level (Mean 3.16)

#### 4.3 ATTITUDES TOWARD EMERGENCY DISPATCH PROCEDURES

This part shows the levels of attitudes of emergency dispatchers toward emergency dispatch procedures. “Emergency Dispatch Procedures” refer to all procedures and regulations that emergency dispatchers must comply with and perform in the same manner, with regard to speaking, questioning, summarizing, recording and coordinating all efforts from different agencies.

The data obtained in this part are presented in the form of statistical tables and descriptive statistics. The results in the tables were analyzed by The SPSS program and are shown as number, percentage and mean.

**Table 14. Attitude Toward Emergency Dispatch Procedures**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Current dispatch procedures play an important role in emergency service.	60 50.0%	39 32.5%	17 14.2%	3 2.5%	1 0.8%	4.40	Strongly agree

Form the table, it can be seen that most of the respondents agreed with the statement “*Current dispatch procedures play an important role in emergency service.*” Half of the respondents (50%) strongly agreed, followed by 32.5% who agreed, 14.2% who were uncertain, 2.5% who disagreed. Only 0.8% (or 1 officer) who strongly disagreed with this statement.

**Table 15. Attitude Toward Emergency Dispatch Procedures**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Current dispatch procedures are sufficient for the current workload.	7 5.8%	24 20.0%	30 25.0%	36 30.0%	23 19.2%	2.00	Disagree

The statement “*Current dispatch procedures are sufficient for the current workload,*” produced by an unexpected result. 30.0% of respondents disagreed, 25% were uncertain, 20.0% agreed, 19.2% strongly disagreed and 5.8% strongly agreed with this statement.

**Table 16. Attitude Toward Emergency Dispatch Procedures**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
You feel comfortable with the current dispatch procedures.	3 2.5%	34 28.3%	35 29.2%	32 26.7%	16 13.3%	2.30	Disagree

The result from the statement “*You feel comfortable with the current dispatch procedures.*” echoed the findings from the above table. 29.2% of respondents were uncertain, 28.3% agreed, 26.7% disagreed, 13.3% strongly disagreed and 2.5% strongly agreed with this statement.

**Table 17. Attitude Toward Emergency Dispatch Procedures**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Current dispatch procedures would be suitable for collecting data in the model of National Emergency Call Service.	9 7.5%	39 32.5%	28 23.3%	34 28.3%	10 8.3%	2.70	Uncertain

When asked “*Current dispatch procedures would be suitable for collecting data in the model of National Emergency Call Servic.*”, almost one-third or 32.5% agreed, 28.3% disagreed, 23.3% were uncertain, 8.3% strongly disagreed and 7.5% strongly agreed with this statement.

**Table 18. Attitude Toward Emergency Dispatch Procedures**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Current dispatch procedures would be suitable for analyzing data in the model of National Emergency Call Service.	9 7.5%	41 34.2%	32 26.7%	30 25.0%	8 6.7%	2.70	Uncertain

Regarding the statement “*Current dispatch procedures would be suitable for analyzing data in the model of National Emergency Call Service.*”, 34.2% of the respondents agreed, 26.7% were uncertain, 25.0% disagreed, 7.5% strongly agreed and 6.7% strongly disagreed with this statement.

**Table 19. Attitude Toward Emergency Dispatch Procedures**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Current dispatch Procedures would be suitable for dispatching messages in the model of National Emergency Call Service.	9 7.5%	41 34.2%	38 31.7%	27 22.5%	5 4.2%	2.50	Uncertain
Total						2.77	Uncertain

When it comes to the statement “*Current dispatch procedures would be suitable for dispatching messages in the model of National Emergency Call Service.*”, 34.2% of the respondents agreed, 31.7% were uncertain, 22.5% disagreed, 7.5% strongly agreed and 4.2% strongly disagreed with this statement.

Tables 14-19, indicate that the levels of attitudes of respondents toward emergency dispatch procedures were as follows:

(1) The statement of “*Current dispatch procedures play an important role in emergency service.*” (Mean 4.40).

(2) The statement of “*Current dispatch procedures would be suitable for collecting data in the model of National Emergency Call Service.*” (Mean 2.70).

(3) The statement of “*Current dispatch procedures would be suitable for analyzing data in the model of National Emergency Call Service.*” (Mean 2.70).

(4) The statement of “*Current dispatch procedures would be suitable for dispatching messages in the model of National Emergency Call Service.*” (Mean 2.50).

(5) The statement of “*You feel comfortable with the current dispatch procedures.*” (Mean 2.30).

(6) The statement of “*Current dispatch procedures are sufficient for the current workload.*” (Mean 2.00).

Generally, the respondents’ attitudes toward dispatch procedures in all aspects were at an the uncertain level (Mean 2.77).

#### **4.4 ATTITUDES TOWARD EMERGENCY RESPONDERS**

Emergency responder refers to a team of officers who respond to the situation to handle the crisis, rescue people or perform a number of activities to return the situation to normal. The emergency responder is a major key to the success of emergency service. In the conceptual model of National Emergency Call Service, emergency responders are comprised of police, fire and medical or ambulance services under the authority of different agencies. In a critical situation, it is possible that a number of communication problems between these numerous agencies could occur.

The data in this part are attitudes of emergency dispatchers toward emergency responders in the conceptual model of National Emergency Call Service. This data is presented in the form of statistical tables and descriptive statistics. The results were analyzed by SPSS program and are shown as number, percentage and mean.

**Table 20. Attitude Toward Emergency Responders**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Police emergency responders would be able to understand the messages you relay accurately.	25 20.8%	48 40.0%	40 33.3%	4 3.3%	3 2.5%	3.90	Agree

The majority or 40% of the respondents agreed with the statement “*Police emergency responders would be able to understand the messages you relay accurately,*” 33.3% were uncertain, 20.8% strongly agreed, 3.3% disagreed and 2.5% strongly disagreed with this statement.

**Table 21. Attitude Toward Emergency Responders**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Police emergency responders would be able to reach the scene rapidly.	25 20.8%	41 34.2%	43 35.8%	10 8.3%	1 0.8%	3.90	Agree

35.8% of respondents were uncertain of their attitude regarding the statement “Police emergency responders would be able to reach the scene rapidly.” 34.2% agreed, 20.8% strongly agreed, 8.3% disagreed and only 1 officer or 0.8% strongly disagreed with this statement.

**Table 22. Attitude Toward Emergency Responders**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Police emergency responders would be able to manage the crisis in appropriate ways.	16 13.3%	45 37.5%	50 41.7%	6 5.0%	3 2.5%	3.50	Agree

41.7% of respondents were uncertain of their attitudes regarding the statement “Police emergency responders would be able to manage the crisis in appropriate ways.” and 37.5% agreed and 13.3% strongly agreed with this statement, while 5.0% disagreed and 2.5% strongly disagree with this statement.

**Table 23. Attitude Toward Emergency Responders**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Fire emergency responders would be able to understand the messages you relayed accurately.	16 13.3%	48 40.0%	45 37.5%	9 7.5%	2 1.7%	3.50	Agree

When respondents were asked about fire service, 40% of them agreed with the statement “*Fire emergency responders would be able understand the messages you relay accurately.*” while 37.5 % were uncertain, 13.3% strongly agreed, 7.5% disagreed and only 2 officers or 1.7% strongly disagreed with this statement.

**Table 24. Attitude Toward Emergency Responders**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Fire emergency responders would be able to reach the scene rapidly.	22 18.3%	40 33.3%	44 36.7%	13 10.8%	1 0.8%	4.10	Agree

Regarding the statement “*Fire emergency responders would be able to reach the scene rapidly*” 36.7% were uncertain, 33.3% agreed, 18.3% strongly agreed 10.8% disagreed and 0.8% strongly disagreed with this statement.

**Table 25. Attitude Toward Emergency Responders**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Fire emergency Responders would be to manage the crisis in appropriate ways.	18 15.0%	41 34.2%	49 40.8%	10 8.3%	2 1.7%	3.90	Agree

With regard to the statement “*Fire emergency responders would be able to manage the crisis in appropriate ways.*” 40.8% of the respondents were uncertain, 34.2% agreed, 15.0% strongly agreed, 8.3% disagreed and only 2 officers or 1.7% strongly disagreed with this statement.

**Table 26. Attitude Toward Emergency Responders**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Medical emergency Responders would be able to understand the messages you relay accurately.	13 10.8%	56 46.7%	45 37.5%	4 3.3%	2 1.7%	4.00	Agree

With regard to the statement “*Medical emergency responders would be able to understand the messages you relay accurately.*” 46.7% agreed, 37.5% were uncertain, 10.8% strongly agreed, while 3.3% disagreed and 1.7% strongly disagreed with this statement.

**Table 27. Attitude Toward Emergency Responders**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Medical emergency responders would be able to reach patients rapidly.	13 10.8%	47 39.2%	52 43.3%	6 5.0%	2 1.7%	3.80	Agree

Regarding the statement “*Medical emergency responders would be able to reach patients rapidly.*” 43.3% of the respondents were uncertain, 39.2% agreed with this statement, while 10.8% strongly agreed, 5.0% disagreed and only 1.7% strongly disagreed with this statement.

**Table 28. Attitude toward emergency responders**

Description	Level of Attitude					Mean	Level
	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree		
	Frequency/ Percent						
Medical emergency responders would be able to manage the crisis in appropriate ways.	14 11.7%	46 38.3%	51 42.5%	7 5.8%	2 1.7%	3.90	Agree

Furthermore, 42.5% were uncertain, 38.3% agreed and 11.7% strongly agreed to the statement of “*Medical emergency responders would be able to manage the crisis in appropriate ways,*” while 5.8% disagreed and only 1.7% strongly disagreed with this statement.

Tables 20-28, indicate that the level of attitudes of respondents toward emergency responders were as follows:

(1) The statement “*Fire emergency responders would be able to reach the scene rapidly.*” (Mean 4.10).

(2) The statement “*Medical emergency responders would be able to understand the messages you relay accurately.*” (Mean 4.00).

(3) The statement “*Police emergency responders would be able to understand the messages you relay accurately.*” (Mean 3.90).

(4) The statement “*Police emergency responders would be able to reach the scene rapidly.*” (Mean 3.90)

(5) The statement “*Fire emergency responders would be able to manage the crisis in appropriate ways.*” (Mean 3.90).

(6) The statement “*Medical emergency responders would be able to manage the crisis in appropriate ways.*”(Mean 3.90).

(7) The statement “*Medical emergency responders would be able to reach patients rapidly.*” (Mean 3.80)

(8) The statement “*Police emergency responders would be able to manage the crisis in appropriate ways.*” (Mean 3.50).

(9) The statement “*Fire emergency responders would be able to understand the messages you relay accurately.*”(Mean 3.50).

Generally, the respondents’ attitudes toward emergency responders in all aspects were the agree level (Mean 3.83)

## **4.5 COMMENTS AND SUGGESTIONS**

The respondents also provided additional comments and suggestions regarding problems they have encountered.

### **4.5.1 Number of Dispatchers**

Most of respondents suggested that the number of dispatchers was insufficient for the current workload. This made dispatchers unable to perform their tasks effectively and promptly

### **4.5.2 Equipments and Technologies**

Before purchasing new equipment, the respondents would like to be asked for ideas or comments so that the equipment being purchased would be efficient and capable of fulfilling their work objectives.

### **4.5.3 Training Courses**

Several aspects of training were proposed by respondents. Firstly, training should be provided in various aspects ranging from emergency dispatching operation to improving relevant knowledge and skills of all dispatchers, such as communications, laws and regulations, social problems, psychology, new technologies

and so on. Secondly, each training course should be repeated several times so that dispatchers who work in shifts can choose the most suitable and most convenient course for them. Thirdly, field trips should be encouraged in order to enhance the dispatchers' problem-solving skills so that they are accustomed to real situations and know how to command the response team. Moreover, seminars involving various emergency case studies could improve dispatchers' skills in coping with dispatching effectively. And lastly, new dispatchers should be trained in basic knowledge and necessary skills about their tasks to ensure that they have enough ability to perform emergency dispatching tasks in critical situations effectively .

#### **4.5.4 Management Participation**

A large number of dispatchers needed more information about current situations that affect their performance, both inside and outside of the organization. Furthermore, they want to participate in management, particularly in improving dispatching performance.