

Research Article

Motivation and Needs of Bangkok Fire and Rescue Department Officials on Further Education in Disaster Management Program

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Abstract

The research aimed at studying and comparing the motivation and needs of Bangkok Fire and Rescue Department officials on further studying in disaster management program. The samples of this research are 327 officials working in 2021. Content validity was examined by experts. The confidence in the knowledge questionnaire, the KR-20 formula is 0.76, and the Cronbach's alpha coefficient is 0.77. The research instrument was a questionnaire consisting of two parts and the results of the study revealed the following.

The results of the motivation and needs for studying in the field of disaster management program were found the overall at high levels ($\bar{X} = 4.06$). They were in all four aspects including personal motivation and needs ($\bar{X} = 4.19$), social motivation and needs ($\bar{X} = 4.16$), occupational motivation and needs ($\bar{X} = 3.99$), academic motivation and needs ($\bar{X} = 3.90$) at high level, respectively. The result of the motivation and needs for comparison in the field of disaster management program, classified by gender; status; domicile; the highest level of education; GPA; average monthly income; and sources of funds used for pursuing a bachelor's degree, was non-statistically different at the .05 level. For further results, those classified by age; distance from residence to Navamindradhiraj University; service life; and job position level, were statistically different at the .05 level. The results show that officers are more likely to participate in disaster management program when they perceive that Bangkok Fire and Rescue Department supports the time and resources to succeed in career paths.

Keywords: Disaster Education, Motivation, Fire and Rescue, Disaster Management

Introduction

The Fire and Rescue Department has the authority to carry out fire suppression operations, formulate safety measures and standards for fire prevention and mitigation, coordinate with government agencies, the private sector and foreign agencies in fire prevention and suppression operations, and all types of disaster relief in the Bangkok metropolitan area or as requested. It also provides relief to victims of disasters, promotes participation of the people's sector in disaster prevention and mitigation, prepares master plans, action plans in accordance with Bangkok and national master plans, trains and practices on disaster prevention and mitigation, public relations and dissemination of knowledge to government agencies, private sectors and the general public, as well as providing, controlling and maintaining machinery, tools, equipment, vehicles and modern information technology for use in disaster work. At present, the Fire and Rescue Department has a total capacity of 2,081 positions.

Currently, candidates employed in civil service positions as in Operational Level and Practitioner Level did not graduate in disaster management, causing a lack of knowledge and understanding of operations. Disaster Management Program, Navamindradhiraj University has curriculum content consisting of academic knowledge and disaster practice, such as firefighting, chemical and hazardous substance rescue, floods, storms, earthquakes, etc. If the Bangkok Fire and Rescue Department officials have studied in the field of disaster management, knowledge and operational capacity will be developed to be able to operate efficiently. If the Bangkok Fire and Rescue Department officials have studied in the field of disaster management, knowledge and operational

capacity will be developed to be able to work efficiently. This is in line with the National Education Act of 1999 (2002, page 2) explaining education means the learning process for personal and social development through imparting of knowledge; practice; training; transmission of culture; enhancement of academic progress; building a body of knowledge by creating a learning environment and society with factors available conducive to continuous lifelong learning.

The above mentioned reasons show the importance of education that Bangkok Fire and Rescue Department officials should continue to develop their knowledge, especially knowledge in the Disaster Management Program. The researcher, as a lecturer in the Disaster Management Program, Navamindradhiraj University and a worker in the Bangkok Fire and Rescue Department, recognizes the importance of education and is interested in studying motivations, needs as well as obstacles, and suggestions in further education on Disaster Management Program of Bangkok Fire and Rescue Department officials to know the level of motivation and the relationship between the variables and study motivation. The results of this research will be useful to agencies and universities that provide disaster education, which can be used as information to develop teaching and learning plans that are suitable for the situation and meet the needs of the students in the future.

Purpose of the Study

1. To study motivation and needs of Fire and Rescue Department officials on further education in Disaster Management Program.
2. To compare motivation and needs of Fire and Rescue Department officials on further education in Disaster Management Program.

3. To study difficulties and recommendations on further education in Disaster Management Program.

Research Framework

The theory of Needs/Drives/Temptations of Abraham H. Maslow (Maslow, 1970), leader of Humanism Psychology. Maslow's theory is very useful for understanding various aspects of human behavior. It describes the process that motivation is caused by human needs, which follows a hierarchy of five steps as follows:

1. Physiological needs are basic human needs such as hunger, thirst, sexual needs, air needs, sleep needs, etc.

2. Safety needs mean the need to seek stability, confidence, safety in life; property; family; working status; people show their behavior by intentionally working to collect money, applying insurance, having a stable career, etc.

3. Sense of belonging and love needs refer to the need to be loved by others in society such as family, friends, classmates, colleagues, etc. The need for acceptance as part of society is a natural need because humans are social animals and do not want to be alone; they show empathy, help, and cooperation to show concern for others in society.

4. Self-esteem needs is the need for a feeling of self-esteem. People at this stage seek to gain position, title, prestige, financial status and power for themselves because they can satisfy their own needs to be accepted by society as knowledgeable, useful, important, and dependable ones.

5. Self-actualization needs are the ultimate needs that an individual desires to attain, the ideal level of the individual, meaning his or her true self.

2. Concept of motivation for further study

Education is to develop the potential of the individual and society, along with learning the external and internal environment of the person, in order to achieve prosperity in a happy life. Education is one of the important factors in enabling people to have a good quality of life. A good education not only leads to a good job position, a high salary enough to support oneself and a family, but also gives people the opportunity to advance their social and economic status. Obviously, the efforts of parents to educate their children to the best of their ability, and the motivation to directly affect and influence the individual, is based on achievement motivation.

The Anne Roe Theory (Anne Roe as cited in Orachon 1994:199) states that people choose occupations to respond their needs. How much needs are met depends upon the relationship between the parents and their children. Their upbringing affects the child's personality. How well people are brought up will influence the way people choose their occupations. People choose the occupations that suit to their personality.

The Donald E. Super Theory (Donald E. as cited in Orachon, 1994:199) provides ten fundamental theories for career development. Conclusion in relation to the person who has an influence in choosing a career, namely father and mother. Children with affluent parents have the opportunity to meet a variety of people, creating more experiences. It helps to create a career pattern that is closer to one's desire, and to recognize that the mentor can influence a child's career development, understanding himself and choosing a career according to his needs.

The Robert Hoppock theory (Orachon, 1994:199) outlines the causal factors and influences in a person's career choice regarding the individuals involved in the child's career choices. In general, children are influenced on career choices by close people such as parents, teachers, friends, relatives, siblings, etc.

Eli Gingberg's theory (Eli Gingberg quoted in Paorohit, 1985: 66-67) discusses career choice and career advancement. Socioeconomic status and educational differences will have different influences on career development. Poor children enter the profession earlier than children from wealthy families.

Orachon (1994: 61) said that human beings have to live in the environment; therefore, the environment, including the person, will influence in many ways. In choosing a career as well, students must take all the influential motives into account, and the main motives include the family influence on career choices, especially the wishes of their parents and their appreciation for their relatives, brothers and friends, who succeed in their careers, also creating a desire to imitate them. Parents' desires are more influential than other motivations. Some parents would like their children to choose a career as they wish without considering their children's aptitudes and interests in any way because parents have hopes for their children to progress.

Methodology

Research on motivation and needs of Fire and Rescue Department officials on further education in Disaster Management Program, the researchers used Survey Research methodology, conducting research as follows: determination of population and sample selection; data collection; data manipulation; selection of

statistics used for data analysis; and the conclusion of the research.

1. Population and sample

The population used in this research included 2,081 Bangkok Fire and Rescue Department officials working in 2021. The sample group used in this study included 327 Bangkok Fire and Rescue Department officials operating in 2021.

The sample size was determined to use Krejcie & Morgan tables, with 5% acceptable margin of error, 95% confidence level from a population of 2,200 people, and then cluster random sampling are divided the population into 9 groups consisting of: Office of the Secretary; Office of Disaster Prevention Strategy; Office of Disaster Management; Fire and Rescue Operations Division 1; Fire and Rescue Operations Division 2; Fire and Rescue Operations Division 3; Fire and Rescue Operations Division 4; Fire and Rescue Operations Division 5; and Fire and Rescue Operations Division 6, and then sampled each group proportionately to the population until 327 people were reached.

2. Research instrument

The research instrument was a questionnaire consisting of two parts as follows: Part 1, to study the motivation and needs for studying in the field of disaster management; Part 2, to compare the motivation and needs for studying in the field of disaster management; Part 3, to study the problems, obstacles, and recommendations for Fire and Rescue Department officials on further education in Disaster Management Program.

3. Data collection

The researcher collects the following data:

1. Issue a letter requesting assistance to the Director of Fire and Rescue Department officials granting permission to submit a questionnaire

to 327 Fire and Rescue Department officials operating in 2021.

2. Verify the correctness and completeness of the returned questionnaires; there were 327 respondents.

4. Data analysis

1. Information from the questionnaires: the researchers analyzed by frequency distribution, mean, percentage, standard deviation, T-test and One-way Analysis of Variance.

2. The scoring criteria in the questionnaire Part 2: it was determined as follows: highest score 5, high score 4, moderate score 3, low score 2, and lowest score 1.

3. Interpretation of scores: The researchers used the results of the questionnaires to find the mean and standard deviation by specifying the interpretation of the score as follows:

Mean between 4.50-5.00 means the highest level.

Mean between 3.50-4.49 means high level.

Mean between 2.50-3.49 means moderate level.

Mean between 1.50-2.49 means low level.

Mean between 1.00-1.49 means the lowest level.

Research Findings

Research on motivation and needs of Fire and Rescue Department officials on further education in Disaster Management Program, the researcher presented the results of the data analysis into three parts as follows:

Part 1: Data analysis results of motivation and needs of Fire and Rescue Department officials on further education in Disaster Management Program

Table 1

Results of data analysis on motivation and needs for further study in the field of disaster management

(n=327)

Motivation and needs in various fields	motivation level			
	\bar{X}	S.D.	level	order
1. Personal motivation and needs	4.19	.622	High	1
2. Occupational motivation and needs	3.99	.587	High	3
3. Academic motivation and needs	3.90	.627	High	4
4. Social motivation and needs	4.16	.567	High	2
Total	4.06	.514	High	

From Table 1, the results of data analysis of motivation and needs for studying in the field of disaster management were at high levels ($\bar{X} = 4.06$, S.D. = 0.514). They were at high level in all four aspects: 1) Personal motivation and needs ($\bar{X} = 4.19$, S.D. = 0.622);

2) Social motivation and needs ($\bar{X} = 4.16$, S.D. = 0.567); 3) Occupational motivation and needs ($\bar{X} = 3.99$, S.D. = 0.587); and 4) Academic motivation and needs ($\bar{X} = 3.90$, S.D. = 0.627), respectively.

Table 2

Results of data analysis of personal motivation and needs for further study in the field of Disaster Management

(n=327)

Personal motivation and needs	motivation level			
	\bar{X}	S.D.	level	order
Have a passion for the field of disaster management	4.13	.770	High	7
Disaster management disciplines are suitable for one's own abilities	4.09	.772	High	9
Disaster management disciplines are suitable for one's own knowledge	4.11	.781	High	8
Want to achieve something	4.32	.716	High	3
Want to develop their own potential	4.42	.704	High	2
Want to have new knowledge never been studied before	4.43	.713	High	1
Want to be productive and achieve desirable goals	4.25	.765	High	5
Want to spend free time usefully	4.24	.756	High	6
Want to apply the knowledge gained in daily life	4.30	.749	High	4
The location of the university is convenient	3.58	.929	High	10
Total	4.19	.622	High	

From Table 2, the results of an analysis of information on personal motivation and need for studying in the field of Disaster Management, they were at high levels ($\bar{X} = 4.19$, S.D. = 0.622). It was found that 1) want to have new knowledge never been studied before, at

high level ($\bar{X} = 4.43$, S.D. = 0.713); 2) want to develop their own potential, at high level ($\bar{X} = 4.42$, S.D. = 0.704); 3) want to achieve something, at high level ($\bar{X} = 4.32$, S.D. = 0.716), respectively.

Table 3

Results of data analysis of occupational motivation and needs for further study in the field of Disaster Management.

(n=327)

Occupational motivation and needs	motivation level			
	\bar{X}	S.D.	level	order
Want to apply the knowledge gained to develop their current career	4.47	.616	High	1
Want to use the knowledge gained to earn extra money	3.81	.918	High	8
Want to increase knowledge and experience to lead a new career	3.94	.888	High	6
Want to advance in a job position	4.33	.731	High	3
Want to increase more chances of choosing a career	4.05	.839	High	4
Want to increase skills and proficiency in the profession	4.41	.649	High	2
Want to change careers after having graduated	3.35	1.003	High	10
Want to use a degree certificate for applying for promotion	4.02	.881	High	5
Disaster management major is popular in the labor market	3.82	.818	High	7
Disaster management major is related to family careers	3.74	.931	High	9
Total	3.99	.587	High	

From Table 3, the results of the data analysis of occupational motivation and needs for studying in the field of Disaster Management, they were at high levels (\bar{X} = 3.99, S.D. = 0.587). It was found that 1) Want to apply the knowledge gained to develop their current career, at high

level (\bar{X} = 4.47, S.D. = 0.616); 2) Want to increase skills and proficiency in the profession, at high level (\bar{X} = 4.41, S.D. = 0.649); 3) Want to advance in a job position, at high level (\bar{X} = 4.33, S.D. = 0.731), respectively.

Table 4

Results of data analysis of academic motivation and needs for further study in the field of Disaster Management

(n=327)

Academic motivation and needs	motivation level			
	\bar{X}	S.D.	level	order
It is a university that offers educational opportunities	4.03	.711	High	3
It is a field of study that is related to the current work	4.37	.670	High	1
It is a field to work in the future	4.09	.730	High	2
The university has an interesting publicity	3.78	.823	High	8
The university is known for its standards and quality in educational management	3.94	.753	High	4
The university provides students with basic facilities	3.83	.737	High	6
The university supports scholarships	3.80	.813	High	7
The university is known for the quality of its teaching staff	3.85	.789	High	5
There are scholarship sources for loans	3.67	.834	High	10
The cost is acceptable	3.68	.790	High	9
Total	3.90	.627	High	

From Table 4, the results of data analysis of academic motivation and need for studying in the field of Disaster Management, they were at high levels (\bar{X} = 3.90, S.D. = 0.627). It was found that 1) It is a field of study that is related

to the current work, at high level (\bar{X} = 4.377, S.D. = 0.670); 2) It is a field to work in the future, at high level (\bar{X} = 4.09, S.D. = 0.730); 3) It is a university that offers educational opportunities, at high level (\bar{X} = 4.03, S.D. = 0.711), respectively.

Table 5*Results of data analysis on social motivation and needs for further study in Disaster Management*

(n=327)

Social motivation and needs	motivation level			
	\bar{X}	S.D.	level	order
Have the opportunity to meet new friends or new environments	4.15	.661	High	7
Have the opportunity to talk and exchange ideas with others	4.20	.652	High	4
To enhance life experience and adaptation to others	4.18	.655	High	5
Want to build friendships with others	4.21	.641	High	3
Want to be accepted by society	4.05	.692	High	8
Want to know people from different professions	4.17	.650	High	6
Want a new experience in addition to current workplace	4.27	.664	High	2
Want to bring professional knowledge to help society	4.37	.660	High	1
Want to change social roles	3.98	.713	High	9
Navamindradhiraj University is well known and accepted by society	4.05	.705	High	8
Total	4.16	.567	High	

From Table 5, the results of data analysis of social motivation and need for studying in the field of Disaster Management, they were at high levels (\bar{X} = 4.16, S.D. = 0.567). It was found that 1) Want to bring professional knowledge to help society, at high level (\bar{X} = 4.37, S.D. = 0.660); 2) Want a new experience in addition to current workplace, at high level (\bar{X} = 4.27, S.D. = 0.664); 3) Want to build friendships with others, at high level (\bar{X} = 4.21, S.D. = 0.641), respectively.

Part 2: Data analysis results of motivation and needs on further education in Disaster Management Program compared with general information of the respondents.

The analysis of comparative data on the relationship of motivation and needs in the further study on Disaster Management Program with the variables studied at the statistical significance level of .05, there were 7 variables that were not related to the motivation levels. Since it has a Sig greater than .05, it contains: Different genders had a Sig. value of .702; Different stats had a Sig. value of .773; Different domiciles had a Sig. value of .945; Different education levels had a Sig. value of .891; Different highest GPA had a Sig. value of .945; Different average monthly incomes had a Sig. value of .324; and different source of funds

used in the study had a Sig. value of .247. And, there were 4 variables that correlated with the level of motivation. Since it has a Sig value of less than .05, it contains: Different ages had a Sig. value of .001; Different distance from residence to university had a Sig. value of .032;

Different service years had a Sig. value of .029; Different job title levels had a Sig. value of .018. The researcher would like to present the details of the variables that are significantly related or different statistically as follows:

Table 6

Results of data analysis comparing the level of motivation and needs for further study in Disaster Management Overview & ages

(n=327)

Level of motivation and need to study Disaster Management	Age	Quantity	\bar{X}	S.D.	t.	Sig.
Overview	under 31 years old	11	3.95	.358	5.461	.001*
	31-40 years old		137	4.14	.509	
	41-50 years old		154	4.05	.509	
	over 50 years old	25	3.71	.469		
Total		327	4.06	.514		

From Table 6, the results of an analysis of data comparing the level of motivation and needs for studying in the field of disaster management as an overview, classified by age, using One-way statistics ANOVA, Scheffe. In the test, it was found that the level of motivation and needs for studying in the field of Disaster

Management from the officials with different age ranges had the Sig. value of .001, which was less than .05. It means that Fire and Rescue Department officials of different ages had statistically different levels of motivation and needs for further study in the field of Disaster Management at the .05 level.

Table 7

Results of data analysis comparing the level of motivation and needs for further study in Disaster Management Overview & distance from residence to Navamindradhiraj University

(n=327)

Level of motivation and needs to study Disaster Management	Distance from residence to Navamindradhiraj University	Quantity	\bar{X}	S.D.	F	Sig.
Overview	Less than 6 kilometers	41	4.02	.518	2.681	.032*
	6 – 10 kilometers	64	4.17	.515		
	11 – 15 kilometers	46	4.19	.479		
	16 – 20 kilometers	64	3.93	.585		
	More than 20 kilometers	112	4.04	.466		
Total		327	4.06	.514		

From Table 7, the results of an analysis of data comparing the level of motivation and needs for studying in the field of disaster management as an overview, classified by the distance from residence to the university, using One-way statistics ANOVA, Scheffe. In the test, it was found that the level of motivation and needs for studying in the field of Disaster

Management from the officials with different distance from residence to the university ranges had the Sig. value of .029, which was less than .05. It means that Fire and Rescue Department officials with different distance from residence to the university had statistically different levels of motivation and needs for further study in the field of Disaster Management at the .05 level.

Table 8

Results of data analysis comparing the level of motivation and needs for further study in Disaster Management Overview & job position level

(n=327)

Level of motivation and needs to study Disaster Management	Position Level	Quantity	\bar{X}	S.D.	F	Sig.
Overview	Operational	75	4.15	.507	2.775	.018*
	Experienced	119	4.09	.523		
	Senior 12	3.79	.412			
	Practitioner	47	3.87	.525		
	Professional	70	4.08	.483		
	Senior Professional	4	4.28	.461		
Total		327	4.06	.514		

From Table 8, the results of an analysis of data comparing the level of motivation and needs for studying in the field of disaster management as an overview, classified by job position level, using One-way statistics ANOVA, Scheffe. In the test, it was found that the level of motivation and needs for studying in the field of Disaster Management from the officials with different job position level ranges had the Sig. value of .018, which was less than .05. It means that Fire and Rescue Department officials with different job position level had statistically different levels of motivation and needs for further study in the field of Disaster Management at the .05 level.

Part 3 The results of data analysis, problems, obstacles, and suggestions for motivation and needs of Bangkok Fire and Rescue Department officials on further study in disaster management program are as follows:

3.1 Time Aspect: Because the time for official work is the same as the university's study time, it is impossible to go to study. Administrators should encourage personnel to work or stop working to suit their study time. This is because disaster prevention and mitigation workers must have both professional knowledge and work experience. If experienced operators are encouraged to have the opportunity to increase their professional knowledge, it will be effective personnel development and further strengthening professional standards. As well as, it takes several hours to travel from the residence to the university, because traveling from outer areas such as Lat Krabang District, Nong Chok District, Nong Khaem District, Bang Khun Thian District, the university is located in the Dusit area with a long distance, etc.

3.2 Finance Aspect: Most civil servants have the burden of taking care of their families, such as their wives, children, parents, and

having regular expenses such as mortgage payments, cars, and children's tuition fees, as well as raising their parents. If the agency has a budget or funding to support undergraduate students, those who are ready to study should be encouraged to receive scholarships; student loan grants; or other capital. In the initial stage, conditions may be set for length of employment, graduation grade point average, salary rate for junior civil servants, which are insufficient to cover expenses.

3.3 Study Aspect: Since the university's normal study time from Monday to Friday coincides with the working time of civil servants, if unable to manage the time on duty or exchanging shifts with colleagues, it will be an obstacle to study, then planning and management are required. Most civil servants have graduated for a long time. If entering further studies, one must be enthusiastic and constantly seek additional knowledge. Various academic contents that have been studied may be forgotten, including current teaching and learning that focuses on English subjects. Some of the older civil servants may have difficulty learning the new curriculum content that is not the same as when they used to study. Class groups should be divided into only those who have already worked, because their time off from work is uncertain and they may not be able to attend full time. In addition, there are many differences in teaching and learning with regular students, such as previous academic knowledge, work experience, communication technology skills, modern teaching aids, which may be divided into groups of those who study only on Saturday-Sunday or public holidays for suitability for the students.

3.4 Other recommendations are as follows:

3.4.1 Classes should be organized only on Saturdays and Sundays in order to be suitable for civil servants to support the development of the Bangkok Fire and Rescue Department officials by reducing study hours or practical subjects by using work experience instead.

3.4.2 Scholarships should be allocated to develop personnel for Bangkok Fire and Rescue Department officials or reduce the tuition fee rate to be lower than the normal tuition fee, in order to motivate civil servants to continue their studies, or have scholarships from Navamindradhiraj University to civil servants.

3.4.3 The university should publicize more disaster management courses, apart from Bangkok Fire and Rescue Department officials, may publicize them to Bangkok civil servants, district offices, civil servants under the ministry, bureaus, other departments, to know and be interested in joining Bangkok Fire and Rescue Department officials, because the work of disaster prevention and mitigation has agencies covering all over the country.

3.4.4 The semester fee should be paid in installments until the end of the academic year, if not paid, the degree certificate will not be received, to jointly develop disaster prevention and mitigation personnel to be on par with foreign countries, jointly reforming disaster operations to be up-to-date in the professional field, such as reducing work time to work more efficiently, adapting online learning to reduce travel and work time.

3.4.5 Managing a 2 or 3 year bachelor's degree program, accepting those who already have a bachelor's degree or a high vocational certificate, in order to reduce the burden of education costs and reduce the study time.

3.4.6 Government officials who are ready and suitable should be encouraged to receive scholarships, and upon completion of the course, such government officials should be encouraged to pass on the academic knowledge learned as a teacher in that course.

Discussion

1. Bangkok Fire and Rescue Department officials had high level of motivation and needs for further education in disaster management. This is because the Bachelor of Science program in Disaster Management established by Navamindradhiraj University is related to the current work in addition to demanding to have new knowledge; increase skills and proficiency in the profession; and bring professional knowledge to help society. The results of this research are consistent with the motivation theory. Rogers' study found that occupational motivation is an important motivation in enabling adults, especially early adults, to seek further education. One of the reasons is that it helps promote career advancement opportunities in practice. It is also consistent with the concept of motivation for adult enrollment in the United States by famous adult educator Houle, who found that adults come to school with different motivations, categorizing them into three categories: 1) Goal Oriented: increase knowledge of professional skills with the hope to apply knowledge to work or daily life. 2) Activity Oriented: like the atmosphere of education, like to socialize, want to interact with others or want to have friends. 3) Learning Oriented: have a passion for learning and want to use learning abilities as much as possible. The researcher would like to present a discussion of the motivation and needs for further education in disaster management as follows:

1.1 Personal motivation and needs:

The results showed that Fire and Rescue Department officials had high level of motivation and needs for further education in disaster management. (1) Want to have new knowledge never been studied before; (2) Want to develop their own potential; (3) Want to achieve something. This is consistent with the research of Taithani (2014), which studied the motivation for enrolling in short-term vocational courses among students at the Bangkok Vocational Training Center. It was found that the students' overall motivation for attending vocational training in the Bangkok Vocational Training Center was at high level, with the students having personal motivation first.

1.2 Occupational motivation and needs:

The results showed that Fire and Rescue Department officials had high level of motivation and needs for further education in disaster management. (1) Want to increase skills and proficiency in the profession; (2) Want to increase more chances of choosing a career; (3) Want to advance in a job position. This is consistent with the research of Kittiya Petchdee (2015), which studied the motivation of studying for a Master's degree of students in the Faculty of Geoinformatics, Burapha University. According to the information obtained from the interviews with the sample group on occupational issues, it was found that the most important thing was this could be practical in their careers.

1.3 Academic motivation and needs:

The results showed that Fire and Rescue Department officials had high level of motivation and needs for further education in disaster management. (1) It is a field of study that is related to the current work; (2) It is a field to work in the future; (3) It is a university that offers educational opportunities. This is inconsistent

with the research of Petchdee (2015), which studied the motivation of studying for a Master's degree of students in the Faculty of Geoinformatics, Burapha University. According to the information obtained from the interviews with the sample group on the issue of educational institutions, it was found that a good institution with standards was the most important thing.

1.4 Social motivation and needs: The results showed that Fire and Rescue Department officials had high level of motivation and needs for further education in disaster management. (1) Want to bring professional knowledge to help society; (2) Want a new experience in addition to current workplace; (3) Want to build friendships with others. This is consistent with the research of Phoklang & Waichalad (2018) which studied motivation for admission to the Bachelor's degree in the Faculty of Environment and Resource Studies, Mahidol University. It was found that the students had a high level of motivation in choosing to study at the Faculty of Environment and Resource Science, Mahidol University in terms of economic and social aspects.

2. Comparison of motivation and need levels of further study in disaster management, classified by gender; status; domicile; age; the highest level of education; GPA; average monthly income; distance from residence to Navamindradhiraj University; service life; job position level; and sources of funds used for pursuing a Bachelor's degree, are as follows:

2.1 Comparison of motivation and need levels of further study in disaster management in overview with general information by using statistical Independent Sample t-test for testing classified by gender, status and using One-way ANOVA statistics; classified by domicile; highest

level of education; highest academic grade GPA; average monthly income; and funding sources used for Bachelor's degree, the motivation of Fire and Rescue Department officials for further education in disaster management was non-statistically different at the .05 level. This is consistent with the research results of Taithani (2014), studying the motivation for enrolling in short-term vocational courses among students at the Bangkok Vocational Training Center. It was found that students of different gender had no different motivation for attending vocational training in the Bangkok Vocational Training Center. However, this is not consistent with the research findings that students with different incomes have different motivations for attending vocational training in the Bangkok Vocational Training Center, and inconsistent with the research findings of Chuchinda et al. (2012). It was found that students with a GPA between 3.00-4.00 had a higher level of motivation for higher education than the other groups at a statistical significance of .05.

2.2 Comparison of motivation and need levels of further study in disaster management in overview with general information classified by age using One-way ANOVA statistics. The motivation of Fire and Rescue Department officials for further education in disaster management was statistically different at the .05 level. This is inconsistent with the research of Chuenkaset (2008), which studied the motivation for further study of graduate students of the Faculty of Information Technology, King Mongkut's University of Technology Thonburi. It was found that students of different ages had no different motives for admission in each aspect and overall.

2.3 Comparison of motivation and

need levels of further study in disaster management in overview with general information classified by distance from residence to Navamindradhiraj University using One-way ANOVA statistics. The motivation of Fire and Rescue Department officials for further education in disaster management was statistically different at the .05 level. This is consistent with the research of Phosuwatthanakul (2000), which studied the motivation for studying at the Master's level of students in private institutions of higher education. It was found that the sample group of business owners tended to focus on the location factor the most, focusing on convenient transportation due to the high work-related obligations and therefore had less time to commute to school. Unlike the sample group of employees of private companies and students, the importance of location and marketing factors may be due to the fact that their income is not very high, which sometimes may not be enough to spend.

2.4 Comparison of motivation and need levels of further study in disaster management in overview with general information classified by service life using One-way ANOVA statistics. The motivation of Fire and Rescue Department officials for further education in disaster management was statistically different at the .05 level. This is inconsistent with the research of Chuenkaset (2008), which found that students with different working experiences had no different motives for further study in each field and overall.

2.5 Comparison of motivation and need levels of further study in disaster management in overview with general information classified by job position using One-way ANOVA statistics. The motivation of Fire and Rescue Department officials for further education in disaster management was statistically different

at the .05 level. This may be because different job positions have different responsibilities, job descriptions, and responsibilities, thus affecting the motivation and needs for further study in disaster management as well.

Recommendations

Implications

1. From the study, it was found that the list of motivations and needs for studying in the field of disaster management that administrators or universities should improve are: ease of access to the university; loan scholarship resources; acceptable cost; public relations of interesting courses; scholarship support to study; basic facilities for learners, in order to increase and enhance learners' motivation and needs for further study in the field of Disaster Management.

2. The study comparing the level of motivation and needs for studying in the field of Disaster Management found that age; distance from residence to university; age of government service; and job position of civil servants had different levels of motivation and needs for education on disaster management that differed statistically at the .05 level. Therefore, administrators of Bangkok Fire and Rescue Department and university administrators should consider these factors in selecting civil servants to study in the field of Disaster Management, including other factors, such as gender; status; domicile; the highest level of education; the highest academic grade GPA; and the different average monthly income. The level of motivation to study in the field of disaster management is non-statistically different at the .05 level, so it may not be effective in the selection of civil servants to study in Disaster Management

Areas of Future Research

1. Research on this subject should be re-examined by covering other variables such as the former institution; the desired course of study; university facilities; and the desired university.

2. The obstacles of Bangkok Fire and Rescue Department officials in their admission to Disaster Management Program, Navamindradhiraj University should be comprehensively examined in all aspects.

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