

# Disaster Preparedness for Academic Libraries in Malaysia: An Exploratory Study

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**Abstract**—Academic libraries in Malaysia are still not prepared for disaster even though several occasions have been reported. The study sets out to assess the current status of preparedness in disaster management among Malaysian academic libraries in the State of Selangor and the Federal Territory of Kuala Lumpur. To obtain a base level of knowledge on disaster preparedness of current practices, a questionnaire was distributed to chief librarians or their assignees in charge of disaster or emergency preparedness at 40 academic libraries and 34 responses were received. The study revolved around the current status of preparedness, on various issues including existence of disaster preparedness plan among academic libraries in Malaysia, disaster experiences by the academic libraries, funding, risk assessment activities and involvement of library staff in disaster management. Frequency and percentage tables were used in the analysis of the data collected. Some of the academic libraries under study have experienced one form of disaster or the other. Most of the academic libraries do not have a written disaster preparedness plan. The risk assessments and staff involvement in disaster preparedness by these libraries were generally adequate.

**Keywords**—Academic libraries, disaster preparedness plan, disaster management, emergency plan.

## I. INTRODUCTION

NOWADAYS, libraries have become important institutions that provide information to users including academic libraries. Each day, the statistics of users who come to the library to search for information for research is increasing. It is vital for the management of a library in making sure that the building and library premises are safe for public to come and for the staff to work and provide services. Disaster happens without warning. It is crucial for libraries to be ready for unexpected event and always be prepared to respond to any disaster or emergency. The Library of Congress defines disaster as “an emergency, which is out of control if what we prepare for are emergencies and if our planning is successful we will not have disaster” [1]. It can be summarized from the definition given that preparation for unexpected event is vital in order to curb the destruction of building or human life.

In the last decades, as appeared on news headlines, disaster has emerged as an important issue which gives impact on daily lives. Disasters [2] can be natural or man-made and [3] disasters in the library environment also include happenings

such as acid in paper content, pollutants, insects, flood, fire, earthquakes, humidity and rodents. Disaster causes a sudden phenomenon that has led to disruption of normal livelihood and has impacted negatively on the lives, property and the environment [4]. Terrorist attack is also known as a disaster due to its catastrophic results for an unprepared community [5] and it is considered as man-made because it is caused by human action.

In Malaysia, study on disaster preparedness is still lacking. Most of the studies done were on natural disaster preparedness. In fact, none has been made which involves a library environment in Malaysia, compared with other countries such as in Nigeria [6], [7], United States [8], [9] and in India [10]. Study on library disaster preparedness is vital in order to determine the readiness of library in managing a disaster when it strikes. In Malaysia, disaster is related closely with climate and as climate continues to change, people and property are becoming more vulnerable to disaster incidents. Commonly, disasters that are related with climate in Malaysia are haze, tropical storms and tsunamis [5].

Disaster is defined as any incident that threatens human safety and damages, or threatens to damage a library building, collections, contents, facilities, or services [9]. Based on the same study also, disaster preparedness in an academic library consist of involved personnel, disaster control plan, disaster management team, disaster preparedness, emergency exits, maintenance of electrical infrastructure, availability of fire extinguishers, Carbon Monoxide and smoke detectors, disaster management training, and simulation exercise for staff members.

Throughout history, many libraries and information centers had been destroyed due to disasters whether they were destroyed or seriously damaged by acts of war, bombardment and fire, deliberately or accidentally. It very often comes unannounced and uninvited with disastrous consequences. Disaster cannot be prevented especially natural disaster but measures to reduce the impact can be taken to reduce or avoid the possible effects. In a library setting, disaster preparedness refers to a situation of the libraries in which they are well prepared to prevent any potential disaster from destroying or damaging the libraries. One of the measures is to develop formal written outline recommendations on how to overcome it. According to UNESCO [11], it involves four (4) stages or phases:

- 1) Prevention
- 2) Preparedness
- 3) Responses
- 4) Recovery

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Prevention is the best protection against disaster, natural or man-made. Besides prevention, preparedness phase is also important in making sure institutions reduce and eliminate the impact. This study only focused on the preparedness phase to discover current level of preparedness between academic libraries in Kuala Lumpur and Selangor.

According to [12], on behalf of UNESCO and IFLA, in World War I (1914-1918), during German invasion, over 300,000 books, manuscripts and incunabula in Library of the University of Louvain in Belgium were all destroyed. In 1923, The Imperial University Library in Tokyo was destroyed and most of its contents, amounting to about 700,000 volumes were lost due to earthquake. In 1966, Biblioteca Nazionale Centrale in Florence, Italy was flooded with water and mud and this destroyed nearly 1,200,000 volumes and pamphlets in the flood. In 1994, Norwich Central Library in Great Britain, a fire destroyed over 350,000 books and historical documents. Hurricane Katrina [7] wiped out initially some libraries at New Orleans like those at Dillard University, Southern University of New Orleans and Delgado Community College's main City Park Campus and the collective damages to academic library collection have been enormous. Unfortunately, the very recent earthquake and the tsunami tragic disasters in 2011 in Japan which was reported by the National Diet Library [13], the disaster affected libraries at Miyagi, Fukushima and Tokyo Main Library of the National Diet Library. This event further extends the long list of library disaster.

The danger associated with disasters, therefore, makes it imperative for the library to ensure that disaster preparedness and ability to manage it becomes part and parcel of its core activities. Therefore, this research reports upon the current status of disaster preparedness level in libraries in Selangor and Kuala Lumpur and it can be used as a baseline for future improvements. The research aimed to create more awareness and consciousness about the problem studied that might lead to a better policy for preparedness plan by libraries and organizations.

## II. METHODOLOGY

The main data collecting instrument adopted for this study was the questionnaire. Data for this study were collected in the month of May 2013 by the authors. The population of this study involves chief librarians or directors or executives of the libraries as the subjects of this study, because they are the key person in introducing and implementing the policy in the library management. It was the chief librarian or their assigned designees who completed the survey. The questions consist of closed and open-ended questions and the respondents were required to choose an answer whether a yes, no or don't know or one of more responses from a checklist of possible replies and fill in the blank provided. The questions sought information in areas such as library background, existing of formalized written plan, risk assessment activities done by the institutions involved and existing of Emergency Response Team (ERT) and staff involvement during disaster strike.

The purposive sampling technique was used for the selection of the respondents. These comprised academic libraries in Kuala Lumpur and Selangor based on a list from the Ministry of Higher Education Malaysia's website or Public Institutions of Higher Education (PIHE) and private Institutions of Higher Education (PvIHE) [14]. The respondents are academic libraries of 16 institutions in Kuala Lumpur and 24 in Selangor which total up of 40 institutions.

In all 40 questionnaires distributed to academic libraries in Selangor and Kuala Lumpur, 34 were collected and returned, giving a response rate of 85.0%. Therefore, this analysis is based on 34 respondents who represented their respective libraries. Data analysis is analyzed based on respondent's library background and three research questions that were designed to guide the study. The Statistical Package for the Social Sciences was used for the analysis. Descriptive statistics were used to summarize the data. The data were presented in percentages using simple tables and figures where appropriate.

Education is the most important investment a country has to spend in order to promote human development and economic growth. In Malaysia, the education system starts from pre-school to university. At university level or tertiary education, institutions of higher learning are categorized into 2 groups known as Public institutions which are funded by the government and Private institutions [14] such as private universities, private university colleges and so on which their funding through many different sources such as endowments and tuition fees.

For the purpose of the research, the study only focused on the tertiary education level at public and private academic libraries in Kuala Lumpur and Selangor areas because the number of tertiary institutions in these two states is more than any tertiary institutions in any other states in Malaysia

## III. FINDINGS

This section presents and discusses findings generated during the process of evaluating the current status of disaster preparedness among academic libraries in Kuala Lumpur and Selangor. To accomplish the objectives of this study, the following research questions were designed:

- 1) Is there a written disaster plan created and implemented in these academic libraries?
- 2) What are the risk assessment activities that have been conducted to assess vulnerabilities in the libraries?
- 3) Is there staff responsible to manage disaster in these academic libraries?

The findings are categorized into four main sections:

- 1) The first section describes the background information of the respondents which are the libraries.
- 2) The second section describes the existence of the disaster preparedness written plan which also cover disaster experienced by the respondents as an overview information to seek respondent's understanding of disaster.
- 3) The third section deals with risk assessment activities that libraries might had taken and currently available in the

libraries in order to monitor and control the disaster from happening or minimize the impact if it does occur.

- 4) The fourth section presents staff's training and involvement during disaster and existence of Emergency Response Team (ERT) in libraries. The last section also covers emergency communication that is being used during disaster and also communication with local authorities.

#### A. Respondents' Background

The participants were asked to respond to questions on type of academic institution the library serve, total number of library's collections, total annual budget, the number of library branches they have, the number of librarians and support staff working and average number of patrons using the libraries. The following details are the participant background information to understand more fully of the libraries involved in the study and to provide point of comparison for future studies.

TABLE I  
DISTRIBUTION OF ACADEMIC LIBRARIES BY INSTITUTION

|         | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------|-----------|---------|---------------|--------------------|
| Public  | 6         | 17.6    | 17.6          | 17.6               |
| Private | 28        | 82.4    | 82.4          | 100.0              |
| Total   | 34        | 100.0   | 100.0         |                    |

From the survey, more than half of the respondents have less than 50,000 collections (55.9%). This is followed by total collections with 23.5% of respondents having collections in the range of 100,000 to 300,000. Only 8.8% or 3 libraries have collections more than 1 million. Larger collections should have cautious and meticulous plan because more valuables with higher cost are at risk. The finding shows that all of the libraries have budget allocation except 1 (2.9%). Budget for the library is dependent on the demand from the lecturers to buy new collections. 29.4% of the respondents have annual budget of more than USD300,000.00. This is followed by 23.5% (8) libraries with budgets ranging from USD150,000.00 to USD300,000.00. This finding indicated that participants have sufficient money to spend on the disaster planning if permitted by the management. Most of the libraries (85.3%, 29) have less than 50 librarians. Only 14.7% (5) libraries have more numbers of librarian working, in the range of 51 to 100.

From the survey also, it was found that not all of the libraries under study have support staff. There were also libraries that do not have support staff at all. About 8.8% (3) libraries are served only by the professional staff. This is because the size of the libraries is small with limited services and collections. These collections are in digitized format and could be accessed through online. Majority of the libraries have less than 50 support staff (73.5%, 25). About 11.8% have support staff in the range of 151 to 200 which indicates that the physical size of the libraries and the volume of the collections are immense.

Knowing the statistics of patrons coming to the library is vital for the management to prepare for any emergency. The higher the statistics, the bigger the size of the library indicated.

The study found that there were 4 (11.8%) libraries that were unwilling to disclose their patron's statistics, but the rest of the respondents were very cooperative in providing the answer. About 32.4% (11) of academic libraries have more than 1 thousand to 5 thousands patrons per month. 11.8% (4) of libraries get the highest range of patron with more than 30,000 thousand patrons in a month. This can be a baseline that disaster preparedness for the academic libraries are crucial in order to minimize the impact of disaster. Essentially, disaster does not just cause catastrophe to collections but will also be a threat to human life.

It was found that 29.4% (10) of libraries in Kuala Lumpur and Selangor do not have library branches. The number of libraries without branch is equivalent with the libraries that have more than 5 branches, 10 (29.4%) academic libraries. Followed by 17.6% (6) of libraries that have 2 branches and 11.8 (4) libraries that have 4 branches. This result shows that preparation for disaster is important not only to the main library, but also for the library branches because library branches can also face the same risk if libraries are not well prepared.

#### B. Research Question 1: Are There Written Disaster Plans Created and Implemented in These Academic Libraries?

Planning for a disaster plan requires allocation of fund [15]-[17]. Table II shows distribution of academic libraries under study by availability of disaster preparedness budget. More than half of the result 58.8% (20) shows that no allocation was allocated for library disaster preparedness. Only 26.5% have the allocation.

TABLE II  
DISTRIBUTION OF ACADEMIC LIBRARIES BY DISASTER PREPAREDNESS ALLOCATION

|            | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Yes        | 9         | 26.5    | 26.5          | 26.5               |
| No         | 20        | 58.8    | 58.8          | 85.3               |
| Don't Know | 5         | 14.7    | 14.7          | 100.0              |
| Total      | 34        | 100.0   | 100.0         |                    |

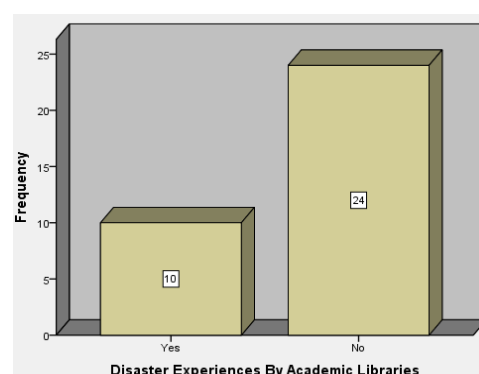


Fig. 1 Disaster Experiences by Academic Libraries

In this part, the survey questions began by asking the library's experience in facing with disaster in their library. The purpose of this question was to get to know if respondents have any experience with disaster. It is expected that the

experience gave them extra knowledge and initiatives in their library disaster management. Fig. 1 shows that 10 out of 34 academic libraries in Kuala Lumpur and Selangor have had experiences in disaster in their libraries.

TABLE III  
TYPE OF DISASTER EXPERIENCED BY ACADEMIC LIBRARIES (N=34)

| Type of Disaster | Frequency | Percentage |
|------------------|-----------|------------|
| None             | 21        | 61.8       |
| Fire             | 4         | 11.8       |
| Flood            | 5         | 14.7       |
| Landslide        | 1         | 2.9        |
| Heat             | 1         | 2.9        |
| System           | 1         | 2.9        |
| Leakage          | 3         | 8.8        |

The result from Table III shows that 61.8% (21) or more than half of the respondents stated that they never had any experience but 38.2% (13) already had some experiences. Major disaster that can be seen from the findings were flood, 14.7% (5), followed by fire, 11.8% (4) and water leakage, 8.8% (3). Even though the number for landslide was small, just 2.9% or only experienced by 1 library but the impact of the disaster is huge compare with others.

Respondents were also asked availability of disaster plan in their libraries. From the findings, 47.1% (16) answered "No" and 41.2% (14) answered "Yes", that they have library disaster plan. The rest, 4 (11.8%) academic libraries answered "Don't Know".

As seen in Table IV, this study also examined accessibility of emergency procedures by library staff. Emergency procedures are part of the disaster plan where it gave a brief step-by-step set of directions for any emergency threats to staff and library patrons. Half of the respondents answered "No", 50% (17), followed by "Yes" (38.2%, 13) libraries provide access to staff 38.2% and 8.8% answered they "Don't Know".

TABLE IV  
DISTRIBUTION OF ACADEMIC LIBRARIES BY EMERGENCY PROCEDURE AVAILABILITY FOR LIBRARY STAFF

|              | Emergency Procedure Available for Staff |       |            |         | Total  |
|--------------|---|-------|------------|---------|--------|
|              | Yes                                     | No    | Don't Know | Skipped |        |
| Public       | 4                                       | 2     | 0          | 0       | 6      |
|              | 11.8%                                   | 5.9%  | 0.0%       | 0.0%    | 17.6%  |
| Private      | 9                                       | 15    | 3          | 1       | 28     |
|              | 26.5%                                   | 44.1% | 8.8%       | 2.9%    | 82.4%  |
| <b>Total</b> | 13                                      | 17    | 3          | 1       | 34     |
|              | 38.2%                                   | 50.0% | 8.8%       | 2.9%    | 100.0% |

As shown in Table V, respondents were also asked availability of emergency procedures for library patrons through library's website. Unfortunately most of the respondents answered "No", 76.5% (26). Only 11.8% (4) libraries answered "Yes", 5.9% (2) from the public academic libraries and 5.9% (2) private academic libraries. Respondents were also asked availability of disaster plan in their libraries. From the findings, 47.1% (16) answered "No" and 41.2% (14) answered "Yes", that they have library disaster plan. The rest,

4 (11.8%) academic libraries answered "Don't Know".

TABLE V  
DISTRIBUTION OF ACADEMIC LIBRARIES BY EMERGENCY PROCEDURE AVAILABILITY FOR LIBRARY PATRONS

|              | Emergency Procedure Available for Patrons |       |       |       | Total |
|--------------|---|-------|-------|-------|-------|
|              | Yes                                       | No    | Yes   | No    |       |
| Public       | 2   | 4     | 2     | 4     | 2     |
|              | 5.9%                                      | 11.8% | 5.9%  | 11.8% | 5.9%  |
| Private      | 2   | 22    | 2     | 22    | 2     |
|              | 5.9%                                      | 64.7% | 5.9%  | 64.7% | 5.9%  |
| <b>Total</b> | 4   | 26    | 4     | 26    | 4     |
|              | 11.8%                                     | 76.5% | 11.8% | 76.5% | 11.8% |

#### C. Research Question 2: What Are the Risk Assessment Activities That Have Been Conducted to Assess Vulnerabilities in the Libraries?

This section provides the answer to research question 2 based on the analysis on risk assessment activities done by the academic libraries. In this part, respondents were given options to tick appropriate answer which best described their libraries. Table VI shown availability disaster preparedness measures of fire extinguishers, audible alarms for fire, pull style or break glass alarm, fire sprinklers, first aid kits, water/moisture alarms, utilities maintenance and 'you are here' map.

TABLE VI  
DISASTER PREPAREDNESS MEASURES

|                                 | Respondents' Answer |    |            |           | Total |
|---------------------------------|---------------------|----|------------|-----------|-------|
|                                 | YES                 | NO | Don't Know | No Answer |       |
| Fire Extinguishers              | 32                  | 1  | 1          | 0         | 34    |
| Audible Alarms Fire             | 31                  | 1  | 2          | 0         | 34    |
| Smoke Detectors                 | 32                  | 1  | 1          | 0         | 34    |
| Pull Style or Break Glass Alarm | 28                  | 4  | 2          | 0         | 34    |
| Fire Sprinklers                 | 25                  | 8  | 1          | 0         | 34    |
| First Aid Kits                  | 21                  | 12 | 1          | 0         | 34    |
| Water/Moisture Alarms           | 10                  | 20 | 2          | 2         | 34    |
| Utilities Maintenance           | 26                  | 5  | 3          | 0         | 34    |
| "You Are Here" Map              | 23                  | 11 | 0          | 0         | 34    |

#### D. Research Question 3: Is There Any Staff Who Is Responsible to Manage Disaster in These Academic Libraries?

This section provides the answers to research question 3 based on analysis of survey for staff and emergency response team in the questionnaire.

Fig. 2 shows the distribution of academic libraries by availability of disaster response team in the libraries. Disaster response team is an in-house squad appointed by the libraries to deal with emergency situation [18]. More than half of the respondents, 19 (55.9%) responded that libraries do not have disaster response team. 14 (41.1%) libraries answered "Yes", they have. Only 1 (2.9%) answered "Don't Know".

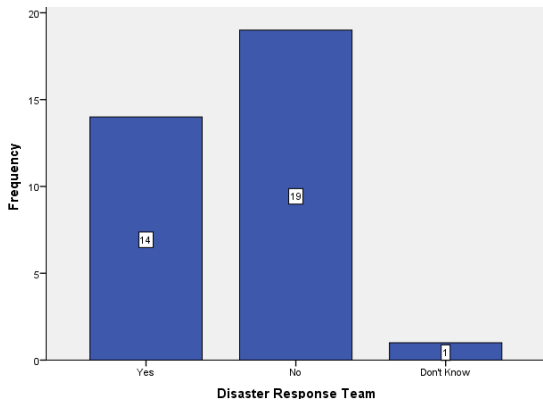


Fig. 2 Existence of Disaster Response Team

TABLE VII  
EMERGENCY COMMUNICATION ALERT WITH LIBRARY STAFF

| Communication         | Frequency | Percentage |
|-----------------------|-----------|------------|
| Phone calling         | 31        | 91.2       |
| Mobile phone texting  | 21        | 61.8       |
| Emails                | 24        | 70.6       |
| Others : Face to face | 1         | 2.9        |
| Others : PA system    | 1         | 2.9        |

Table VII presents type of communication used by libraries to alert their staff. In this question, respondents were given several options and were asked to indicate and tick answers which best described their practices. They may give more than one answer. In responding to the survey question on how library alert and communicate with staff during emergency, most of the respondents chose "Phone calling" (91.2%, 31) as a communication method to alert library staff of any emergency or disaster. Other communication method includes "Emails" (70.6%, 24) and "Mobile phone texting" (61.8%, 21). There were also an option for respondents to give other options that they have, 2 libraries tick "Others" as an answer and specified that they communicate with staff through "Face to face" (2.9%, 1) and make announcement through "Public Announcement system" (2.9%, 1).

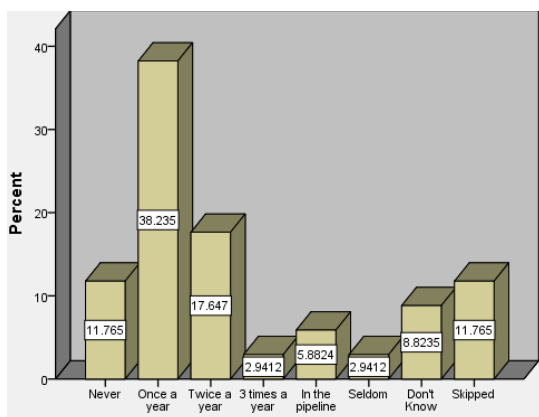


Fig. 3 Frequency of Fire Evacuation Drills

Fig. 3 shows distribution of academic libraries by frequency

of exercising evacuation drills. Majority of respondents conducted evacuation drills "Once a year" (38.2%, 13). Other, exercised "Twice a year" (17.6%, 6) and "3 times a year" (2.9%, 1). Besides that, there were also libraries that answered library in the process of planning to exercise the drill (5.9%, 2) and seldom (2.9%, 1). The rest of the respondents, answered that they either never done it before (11.8%, 4), don't know (8.8%, 3) or even skipped from answering the question (11.8%, 4). It can be concluded that 67.65% (23) of the respondents have exercised fire evacuation drills in their building.

TABLE VIII  
DISTRIBUTION OF ACADEMIC LIBRARIES BY TYPE OF TRAINING

| Training              | Frequency | Percentage |
|-----------------------|-----------|------------|
| Fire Extinguisher Use | 28        | 82.4       |
| First Aid             | 24        | 70.6       |
| Building Evacuation   | 17        | 50.0       |
| CPR                   | 16        | 47.1       |
| Don't Know            | 2         | 5.9        |

To gain more detailed insights, the respondents were asked to list all the trainings that had been given to the staff. They were given permission to choose more than one answer as deemed necessary. As shown in Table VIII, training of handling disaster was offered to library staff. Majority of respondents replied that the staff was offered training on "Fire Extinguisher Use" (82.4%, 28), "First Aid" (70.6%, 24), "Building Evacuation" (50.0%, 17) and "CPR" (47.1%, 16). Only 2 (5.9%) respondents answered they "Don't Know".

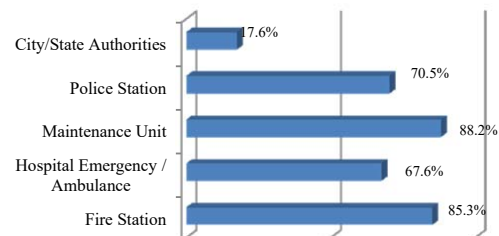


Fig. 4 Frequency of Fire Evacuation Drills

For this question, respondents were given several options and were asked to indicate and tick answers which best described their practices. They may choose more than one as answers. In responding to the survey question on list of number of emergency services library staff can have easy access, as shown in Fig. 4, most of the respondents chose "Maintenance Unit" with 88.2% (30), followed by "Fire Station" (85.3%, 29), "Police Station" (70.5%, 24), "Hospital and Ambulance" (67.6%, 23) and "City/State Authorities" (17.6%, 6).

#### IV. DISCUSSION

This study focused on the current status of disaster preparedness in academic libraries in Kuala Lumpur and Selangor. There are three constructs in determining the status

of disaster preparedness. The first construct is related to the existence of written disaster plan within each academic library which includes the emergency procedures and the need for appropriate funding. The second construct is the risk assessment activities that have been conducted by the libraries. The assessment involved existence of fire extinguishers, smoke detectors, audible alarms, pull-style or break glass-style alarm, automatic fire sprinklers, emergency kits, water/moisture alarm, regular building maintenance and "You are here" maps. The third construct is based on staff involvement in Emergency Response Team (ERT), who actively involved in evacuation building exercise, fire evacuation drills exercise frequency, training for library staff and accessibility of staff on emergency services telephone numbers. Three research questions were developed based on three research objectives to guide the study.

#### *A. Existence of Written Disaster Plan*

The findings in this study showed that less than half 47.1% of the academic libraries do not have the library disaster plan. This indicates that disaster preparedness level is still low among academic libraries in Kuala Lumpur and Selangor. In addition, 11.8% of the academic libraries do not even know about the plan. This finding implicates that most academic libraries in Kuala Lumpur and Selangor will not be able to manage disasters efficiently in case it happens. This is supported by [19] which mentioned that a readily available disaster manual is important so that libraries can immediately refer to the plan and make effective and timely decisions during disaster response.

Funding is another issue which undeniably can be a factor contributing to the lack of disaster plan in the academic libraries under study. Based on the finding, more than half of the academic libraries in Kuala Lumpur and Selangor (58.8%, 20) do not have allocation for library disaster planning. Only 26.5% have the allocation. It is essential that adequate funds is given to the libraries because as proven in the case of University of South Carolina (USC) when School of Medicine (SOM) Library had to appoint experts to plan for disaster preparedness because they lack disaster experience and they need to buy supplies for emergency [17].

The study also finds that emergency procedures were also not accessible for library staff. 50% of the academic libraries stated that emergency procedure is not accessible for staff. 76.5% of the respondents responded that emergency procedure is also not available for library patrons via the library websites. The objective of emergency procedure made available to staff and patrons is to give them awareness and readiness of disaster which can happen anytime and anywhere. It is also aim to reduce the potential for injury or damage when disaster hit.

#### *B. Existence of Risk Assessment Activities*

The study proves that all the disaster preparedness measures such as fire extinguishers (94.1%), smoke detectors (70.6%), audible alarm (91.2%), pull style or break glass-style alarms (82.4%), automatic fire sprinklers (73.5%), emergency kits

with first aid kits and flashlights (61.8%), regular building maintenance (76.5%), "You are here" map were all in placed by the academic libraries under study. Looking at the respondents' rates above, it is conspicuous that academic libraries in Kuala Lumpur and Selangor have sufficient response materials for rapid disaster response in their libraries. Except for water/moisture alarms, more than half (58.8%) of the academic libraries under study do not have this response material. Most of the disasters in libraries were caused by water [15]. Therefore it is crucial that libraries are equipped with water/moisture alarms to alert staff of any leakage which may affect library collections and equipment. This implies that academic libraries in Kuala Lumpur and Selangor are prepared for fire and smoke hazards but not for water.

The findings also show that selected academic libraries have done all the risk assessment listed by the researcher which to some extent shows that the libraries are prepared.

#### *C. Existence of Staff Responsible to Emergency Preparedness*

Disaster or emergency planning is incomplete without the participation of staff. Training is seen as a critical component of disaster planning [20]. Study suggested that staff with sufficient training can manage and even prevent disaster effectively. Unfortunately in this study, the survey finds that more than half of the academic libraries (55.9%) in Kuala Lumpur and Selangor do not have Disaster Response Team in house. The same result also goes to existing of current list of staff for emergency roll call. This implies that in case of emergency, there is no person in charge that can be contacted.

In terms of staff role, the study has proven that more than half of the surveyed libraries (64.7%) staff played active role during evacuation process by directing occupants out of the library building to a safe area, even though without the Disaster Response Team. Another important aspect that could not be missed is the appointment of Safety Marshal by the academic libraries under study. It was noted that 58.8% of the respondents already had safety marshal in their libraries. It can be concluded that based on this findings that is why Disaster Response Team is not required in the academic libraries.

Training for disaster management was also offered to those who were involved with disaster management. The training includes fire extinguisher use (82.4%), first aid (70.6%) and building evacuation (50.0%). With adequate training provided by the academic libraries, staff is expected to be well-prepared and disaster can be minimized if not avoided.

The study also discovers that fire evacuation drills were practiced and exercised even though not so often by the academic libraries under study. About 67.65% of academic libraries have exercised fire evacuation drills.

#### *D. Suggestions for Future Work*

The following further work is recommended to elaborate issues addressed and uncovered in this study:

- (a) An issue that is worth for further research is on the disaster management plan policy. Disaster management plan policy is an important document should be in place

when disaster preparedness plan is being developed so that it can be exploited and further discovered for the problems at hand.

- (b) Further research is required to find out the reasons why academic libraries in the Kuala Lumpur and Selangor do not have written disaster management plan.
- (c) For the next research, it will be also a challenge to discover library disaster response and recovery among academic libraries in Kuala Lumpur and Selangor that have had experienced facing a disaster, mentioned earlier in this study.

#### V. CONCLUSION

The literature addressing disaster preparedness planning is a numerous but to find a specific disaster preparedness plan for libraries is exceptional. To date, researchers have found no model for disaster preparedness planning that contains specific instrumentation to assist librarians in assessing the efficacy disaster preparedness processes and plans once implemented.

It is hoped that based on this findings, a better understanding of the extend and existence of disaster preparedness plan in the library context can be used for future study because what the researchers are trying to find here is very basic especially when the study of library disaster preparedness plan in Malaysia currently is very rare or non-existence..

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