

Creating Physical Environment for Safety and Feeling Safe from Crime: The Case of Old Residential Communities, Phra Nakhon District, Bangkok

Sasikan Srisopon

Faculty of Architecture, Rangsit University, Thailand
e-mail: sasikan.s@rsu.ac.th

Abstract

This research presents the physical environment for safety including a feeling of being safe from crime in the old residential communities through a case study of Trok Sin–Trok Tuk Din Community and Ban Tuk Din Mosque Community, Phra Nakhon District, Bangkok.

The study focuses on four aspects of physical environments including 1. location, 2. Usage of Land and Building, 3. Shape, Mass and Condition of Buildings, 4. Secondary Space. The data collection method and instrument include in-depth field survey, observation, instructed and unstructured interview, and questionnaire. The research samples are the group of the community inhabitants consisting of the primitive people and migrant workers.

The results indicated both communities have safe environment, and the people's feeling of being safe from crime due to four essential aspects of physical environment characteristics have informally created a system which helps generating a safety and feeling of being safe from crime. The aforesaid aspects have brought about safety management from crime to be proper for environment and way of life in the old zone community to be more safe and livable.

Keywords: *safety, feeling safe, the old residential community, physical environment, secondary space*

1. Introduction

The environment consists of living things, non-living things, things that can be touched (concrete), and something that cannot be touched (abstract) as a significant influence on crime in the area. The environment which is safe from crime should be related with the feelings of the people in the environment. Although there is no crime in the area, the environment in the area may not make people feel safe, or be perceived to security. Then, the area will lack of interaction among the people and become a source of crime in the future.

In 2013, the 20-year Development Plan for Bangkok Metropolis was announced and the Bangkok as a Safe City policy was launched. In Thailand, prior research on safety in urban areas has mostly focused on crime issues. Crime is a problem that has directly affected the quality of life of those living in the city (Yiampisan & Srivanit, 2010). Also, crime is a social phenomenon that has been occurring since the past until now and it will remain in the future. There may be less violent crime in Bangkok than other major big cities in the world such as Rio de Janeiro in Brazil and New York in the USA. Nonetheless, safety from crime is quite important and influential to the lives of people in Bangkok.

Phra Nakhon District is located in the inner area of Bangkok. The current conditions of Phra Nakhon District are comprised of many old communities with a mix of both primitive people and migrant workers whose different nationalities are living together. Therefore, there is a difference in lifestyles, cultures and economic statuses. Moreover, changes in the political, social and economic over time also changed the old neighborhood environment. Currently, most physical conditions of the old communities in Phra Nakhon District, Bangkok are diverse habitats in traditional form of valuable architectures and cultures as well as new form based on the needs. The entire communities have both dilapidated buildings and new stable of buildings. Moreover, the old residential communities have a physical uniqueness that is routes with small lanes and many entrances that allow outsiders to go through the communities at any time.

The Royal Thai Police in 2007 classified the hazardous areas where the crime mostly happened contain following characters: 1. secluded path: it is a wilderness area or in hazardous areas within 50 meters

or more, insufficient lighting day and night, and the user cannot see the route clearly or visible along route 2. surveillance lacking in public space: for example; the street is obscured, the turn of the street is a sharp angle, as well as a secluded area or a separates area from the village or community, and the area may be covered up by trees, making the user not being able to see clearly (Phonkumnerdsab, 2014). Such environments are physical environments that can be seen in many areas of the old communities in Phra Nakhon, especially passages, lanes, alleys and thoroughfares in the communities, which are main secondary spaces in the old residential communities (in Figure1) (This research defined “Secondary Space”: Areas or zones that people or groups can control the occupied territory, including the utilization of strangers. In other words, secondary space is connecting space between primary space and public space. For example, such as lanes, walkways, thoroughfares.).



Figure 1 Environments in Phra Nakhon District, Bangkok

The secondary space of residential communities is another important factor in crime prevention in the levels of community and city. According to the concept of urban and community planning describes about secondary space and crime that are unsystematic expansions of communities and population. The secondary space of residential communities are damaged, it will affect the relationship of people in the community and reduce the usage of secondary area which will lead to an increase of crime (Piumsomboon, 2002).

The study of Kernel on density evaluation of the crimes in Phra Nakhon District, Bangkok Metropolis, it found that Phra Nakhon area was vulnerable to crime in a high level in three main areas, namely, Sanam Luang, Khaosan Road and the ferry under Pinklao Bridge. The cases of drug, theft, and murder were often found in public spaces and blind spot areas at night, such as, Sanam Luang, the ferry under Pinklao Bridge, Santichaiprakran Park, etc. The cases of mayhem and murder occurred with high intensity in entertainment areas, including Khaosan Road, Tanao Road and Chakrabongse Road. In addition, the dispersion of the cases occurred during the daytime was different from the cases occurred during the nighttime. The cases occurred during daytime often concentrated in crowd areas that are easy to make crime, such as, the pedestrian area along Ratchadamnoen Road, the Government Lottery Office and Yod Bang Lamphu Market in Soi Rambuttri. Most of the cases were thefts and snatchings. Moreover, the study also found that the crime density was still concentrated in the same areas as previous years (Yiampisan & Srivanit, 2010).

However, there was no conclusive studies about safety in the residential communities in Phra Nakhon District, especially the old residential communities nearby religious institutions or educational

institutions in commercial areas and tourism areas. Besides, there was no explanation about consistency and conflict between safety condition and feeling safe of people living in the communities. That main points were brought into the research by focusing on four aspects of the physical environments: 1. location, 2. usage of land and building, 3. shape, mass and condition of buildings, 4. secondary space: a better understanding of safety and feeling safe from crime with physical environment in the old residential communities is an important aspect to supporting development and management the old residential communities with cultural identity of Bangkok.

2. Objectives

1. To study and analyze the characteristic of physical environments in the old residential communities that creates safety and feeling safe from crime.
2. To study feeling safe from crime of primitive people and migrant workers that leads to proper safety management for lifestyles of both two groups of people.
3. To propose safety management which relates feeling safe of residents through four aspects of the physical environments in the old residential communities.

3. Materials and Methods

This was qualitative research. Therefore, the research method is relevant to a particular set of qualitative procedures. There were six criteria to select study areas comprise of:

1. The eclectic groups of people living in the community: primitive people and migrant workers in equal or nearly equal proportions
2. Entrances- Exits & Community Routing: communities with many entrances and exit lanes and small alley.
3. The role and life of the community: the old residential communities which are old and historic and possess cultural importance.
4. A variety of styles, conditions and characteristics of the buildings: various buildings that are rich in culture and architecture.
5. Adjacent to places with religious significance: temples, churches, mosques and places of worship
6. Access to information and the ability to collect information: communities which the researcher can collect data and explore the area as well as the participation of primitive people and migrant workers living in the communities under the terms of research.

Finally, the study areas were selected and focus on Trok Sin–Trok Tuk Din Community and Ban Tuk Din Mosque Community (in Figure 2). The samples in research were selected using snowball technique and set criteria setting.

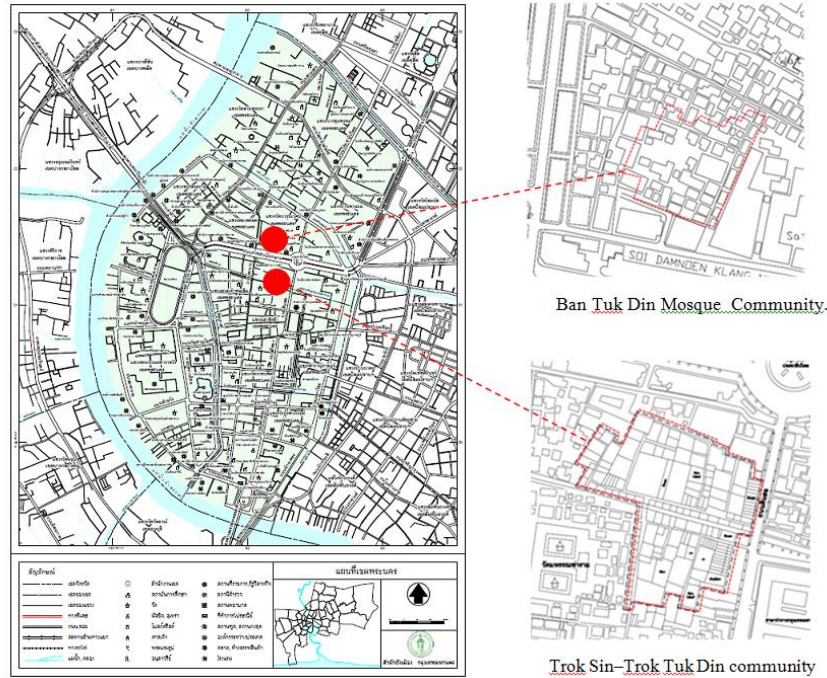


Figure 2 Places - locations of Trok Sin-Trok Tuk Din community and Ban Tuk Din Mosque community

The population selected for this research were primitive people and migrant workers over 18 years of age that had been living in the communities of Trok Sin-Trok Tuk Din and Ban Tuk Din Mosque for more than three years.

The instruments used to collect research data that was a survey, observation, and in-depth interview. The procedure comprised:

3.1 Conduct literature review on safety from crime, feeling safe and crime prevention.

3.2 Data Collection

3.2.1 Preventing crime in the communities and urban in Bangkok.

This research collects data about crime preventions and management approaches by studying from Plan and Policy for crime prevention, namely, an in-depth interview technique, in direct and indirect Government Agency and the communities; Bangkok Metropolitan Administration, Phra Nakhon district office, Metropolitan Police Station, Chanasongkram Metropolitan Police Station, Trok Sin-Trok Tuk Din community, and Ban Tuk Din Mosque community.

3.2.2 Communities data

To study from documentary data and field data by survey, observation and in-depth interview technique in Trok Sin-Trok Tuk Din community as well as Ban Tuk Din Mosque community. The survey began within the following contents:

- The physical, economic, and social environment
- Four aspects of physical environments (in Figure 3)

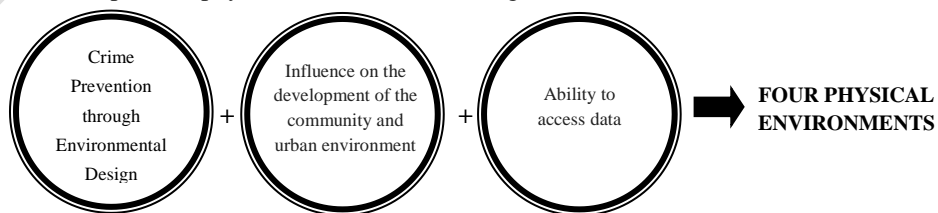


Figure 3 The process of defining physical environments for research

- Crime patterns in communities.
- Feeling safe from crime of natives and migrant labors.

3.3 Data analysis

3.4 Conclusion

3.5 Discussion and recommendations

4. Results and Discussion

The Trok Sin–Trok Tuk Din community and Ban Tuk Din Mosque community are under control of Chanasongram and Samranrat Metropolitan Police Station. There are Crime statistics in 2007- 2014 from Chanasongram and Samranrat Metropolitan Police Station as following: (in Figure 4-5)

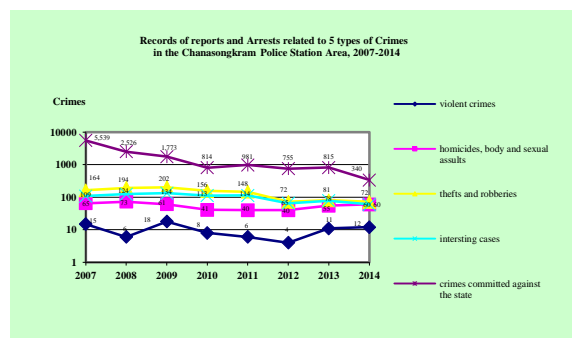


Figure 4 Records of reports and Arrests related to 5 types of crimes in the Chanasongram police station area, 2007-2014

Source: Chanasongram police station (2015)

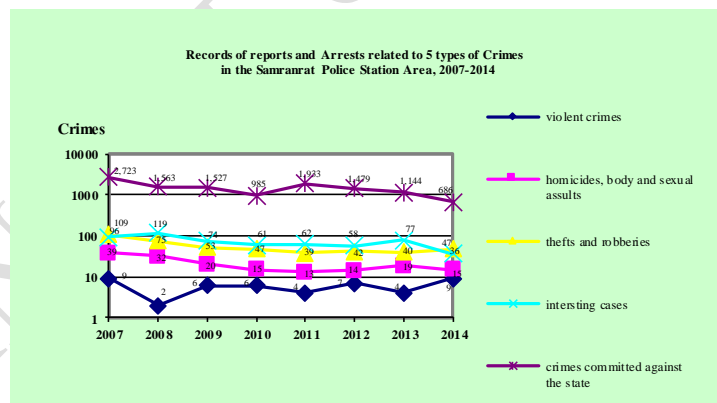
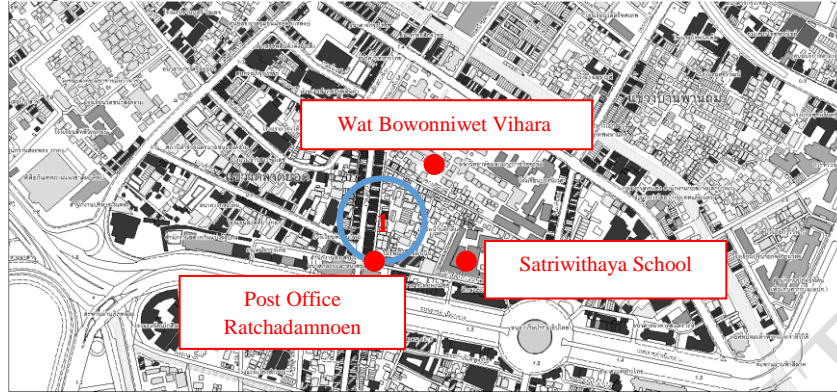


Figure 5 Records of reports and Arrests related to 5 types of crimes in the Samranrat Police station area,2007-2014

Source: Samranrat police station (2015)

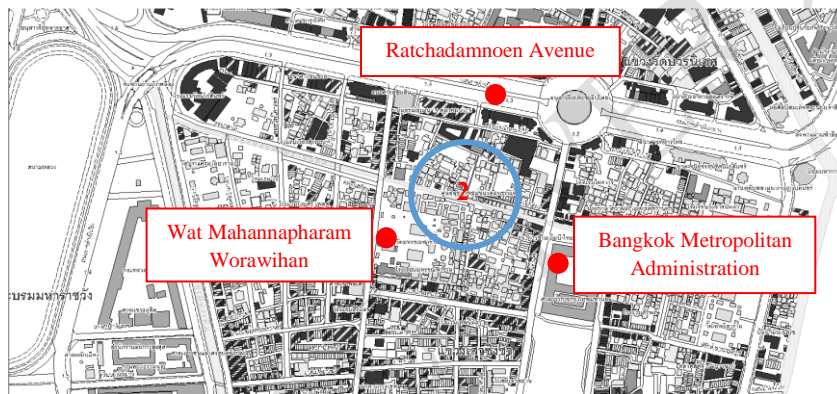
According to the statics and researches, both Trok Sin–Trok Tuk Din community and Ban Tuk Din Mosque community are quite safe which we can see from the decline in criminal rate in the areas. Even if there are some crimes that still happen in both communities, but the four physical environment factors in communities influence the safety and feeling of being safe are as following:

4.1 Location (in Figure 6-7)



1 : Ban Tuk Din Mosque community

Figure 6 Location: Ban Tuk Din Mosque community



2 : Trok Sin-Trok Tuk Din community

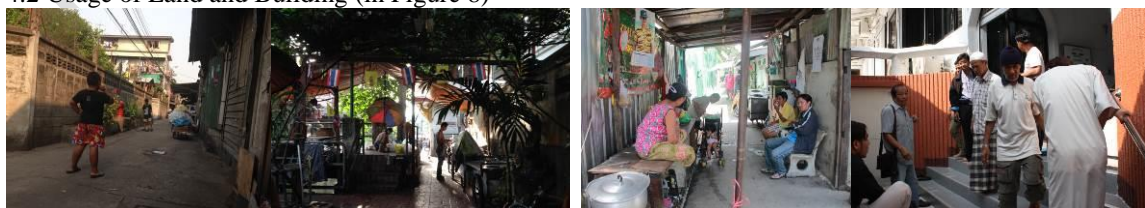
Figure 7 Location: Trok Sin-Trok Tuk Din community

4.1.1 Located in an important area where will be directly and indirectly looked after by police officers and other government units.

4.1.2 Located next to places with low criminal risk (such as temple, government office, school) where there are many positive activities which lead to a decrease in any misconduct. They will also cause good social influences and bounds to nearby areas and communities.

4.1.3 Small area and boundaries which are easy for primitive people and migrant workers in the communities to control, take care of, and suddenly help each other when anything wrong happens. Further, the small area with a comfortable space will create a happy living community, lead to an interaction among people in the community, and decrease any mistrust between each other.

4.2 Usage of Land and Building (in Figure 8)



Trok Sin-Trok Tuk Din community

Ban Tuk Din Mosque community

Figure 8 Usage of land and building

4.2.1 Mainly for a residential purpose where people own the property and many permanent activities happen. The feeling of living together and being in a residential area can reduce a risk to crime.

4.2.2 As a passageway in different timeframes which make the area dynamic during the usage, and then leads to physical and social safety including the feeling of being safe from crime during that timeframe.

4.2.3 Mixed-use of some buildings for both residential and commercial purposes where people can socialize and be familiar with each other, and cause a social network among the users who will help watch out for unusual things not to happen.

4.3 Shape, Mass and Condition of Buildings (in Figure 9)



Trok Sin-Trok Tuk Din community

Ban Tuk Din Mosque community

Figure 9 Shape, mass and condition of buildings

4.3.1 Various Shape and Mass (with a maximum of four floors) which leads to different activities and protections. The various usage and activity for each building is an obstacle to a crime, and also interesting to have a mixed cultures in one place.

4.3.2 Medium to Good Condition of Building which helps drawing a positive activity, reducing crime and a shelter for criminals, creating a good perception toward the area, and lessening a fear for crime.

4.3.3 Support the lifestyle of primitive people and migrant workers in the community which will lead to continuous use of area and reduce the unused area.

4.3.4 Create a uniqueness and value for the area which makes the local people see the value of their area and protect the crime not to happen. Also, this will draw the attention of involving government unit to take care of the area.

4.4. Secondary Space (in Figure 10)



Trok Sin-Trok Tuk Din community

Ban Tuk Din Mosque community

Figure 10 Secondary space

4.4.1 Unclear system which obstructs the unfamiliar people to the community.

4.4.2 Small and narrow road and passageway which is easy for people to watch out, and see what happens around the community.

4.4.3 Convenient networking roads which increase an ability in using a subsidiary area and lead to continuous usage of area.

4.4.4 Different usage of area in different timeframes by both local and outside people which will generate a good atmosphere to the area.

After an analysis of physical environment with theory and relating information, recommendations and guidelines to create safety and feeling of being safe from crime for the communities are concluded as following (in Table 1)

Table 1 Guideline to safety and feeling of being safe from crime & stakeholders

Substantial Environment	Guideline to Safety and Feeling of Being Safe from Crime	Stakeholders
1. Location	1. Maintain and support a role between area and community, and make sure that both will support each other.	- Bangkok Metropolitan Administration Office - Phra Nakhon District Office
	2. Encourage a usage of area; support all activities among temples, government offices and nearby communities; and make it convenient for people in the communities to reach the temples and government offices.	- Temples and government offices near communities - Community Committee
	3. Strictly and carefully control a number and design of building as well as regularly inspect the area.	- Bangkok Metropolitan Administration Office - Phra Nakhon District Office - Community Committee
	4. Encourage to have a study and learning of community and area history; systematic data collection; publicizing the information to both people in and outside community to understand the importance of the area.	- Bangkok Metropolitan Administration Office - Phra Nakhon District Office - Community Committee
	5. Manage a time and responsibility of local people and police officers to reduce a problem of manpower shortage.	- Metropolitan Police Station in the area - Community Committee
2. Usage of Land and Building	1. Support the usage of residential area, and residential activities as a main purpose.	- Phra Nakhon District Office - Community Committee
	2. Encourage and create a quality living for local people in the community by improving public utility, assistance and area in the community.	- Bangkok Metropolitan Administration Office - Phra Nakhon District Office - Community Committee
	3. Reassure the usage of area for small business and activity of people in the community; and make sure it well managed.	- Phra Nakhon District Office - Community Committee
	4. Encourage to have a community committee; install CCTV at the entrance-exit of community; and set up an alarm to community committee and police officers when there are a dangerous incident.	- Metropolitan Police Station in the area - Community Committee
	5. Set up reasonable rules and regulations for a usage of building and area in the community which support a lifestyle of people in the community.	- Community Committee
3. Shape, Mass and Condition of Buildings	1. Propose a guideline for improvement and development of a residential area as well as different way of protection for each household.	- Phra Nakhon District Office - Community Committee
	2. Publicize and promote the buildings with physical and cultural value.	- Phra Nakhon District Office - Community Committee
	3. Financial support for a building or construction with physical and cultural value, and regularly usage and maintenance.	- Phra Nakhon District Office - Community Committee
	4. Educate people in the community to have a knowledge about community history, architect, and buildings.	- Phra Nakhon District Office

Table 1 Guideline to safety and feeling of being safe from crime & stakeholders (Continued)

Substantial Environment	Guideline to Safety and Feeling of Being Safe from Crime	Stakeholders
4. Secondary Space	1. Support a usage of secondary space in different ways which promote the lifestyle and economic of community; and set up fair rules and regulations on how to use the secondary space.	- Community Committee
	2. Educate both primitive people and migrant workers about the community history, architect and important building in the community.	- Community Committee
	3. Support and motivate primitive people and migrant workers to regularly involve in a cleanliness and management of secondary space. A monthly activity for the secondary space are can be arranged.	- Phra Nakhon District Office - Community Committee
	4. Manage to have a public facilities such as lights, benches and trees in the secondary space.	- Phra Nakhon District Office - Community Committee - People in the community
	5. Install an equipment and technology for protecting a crime and danger for secondary space.	- Bangkok Metropolitan Administration Office - Phra Nakhon District Office - Metropolitan Police Station in the area - Community Committee

Researcher notices that both primitive people and migrant workers feel safe from crime with following reasons

1. The crime never directly occurs to both groups, nor any severe crime effects their living.
2. Good interaction and relation among primitive people and primitive people; primitive people and migrant workers; and migrant workers and migrant workers.
3. Both primitive people and migrant workers are familiar with both physical and social environment of the area.
4. They have stayed peacefully in a community for a while without any danger.
5. Both primitive people and migrant workers are satisfied with the physical and social environment.

Although both primitive people and migrant workers in the community generally feel safe from crime, the same groups have differently scored a feeling of safety towards crime in passageway with various factors including 1. Familiarity 2. Lifestyle 3. Gender 4. Age 5. Being a victim of crime-knowing about crime 6. Social and economic status 7. Management of safety in the community

The four physical environments of Trok Sin–Trok Tuk Din community and Ban Tuk Din Mosque community have an ability to create a safe feeling towards crime. An idea of controlling crime suggests that the secondary space should be set up systematically, and should not be used as a shortcut. However, the secondary space of the communities in this research are none of that, and also small and narrow which causes a flexible usage of area and an ownership of area in different way. Once people feel they have an ownership of an area, an interaction among local people will happen, and a protection of area by local people will occur which people own the areas in different ways and feel they have an ownership of the areas. These characters match with the idea of “Defensible space”. The Defensible Space theory explains ideas about crime prevention and neighborhood safety by local people which can control and reduce danger and crime (Newman, 1973). Further, Jane Jacobs also supported the “Diversity” theory which can be seen in *The Death of Life of Great American Cities*. She explained that a city should be diverse, dynamic from people’s activities, and open for people to enjoy their livings. These would decrease the isolation of community which would attract a criminal. However, this research did not explain about why a crime

happened or not happened in the communities because there were also other involved factors to cause a crime (Jacobs, 1961).

5. Conclusion

The purpose of this research was 1.To study and suggest a physical environment which can create safety and feeling of being safe from crime 2.To understand a feeling of being safe of primitive people and migrant workers which can lead to safety management for both groups. 3.To propose how to create safety through four physical environments. We use a quality research methodology through in-depth survey, observation, interview with structure and non-structure, questionnaire, and selection of research sample by snowball technique and criteria. According to the research, both communities have 4 important physical environments which create a safety and feeling of being safe from crime including 1.Location 2.Usage of Land and Building 3.Mass and Condition of Building 4.Secondary Space. The four important environments create an informal system which link together social, physical and other surroundings factors. It then would develop an opportunity for different group of people to live together in diverse environments. Suggestions for further research are given below.

1. This research has studied only four physical environments, and there should be additional study and research in other factors.
2. There can be a further study and research in other communities using same factors with this research to compare and confirm the knowledge of this research.
3. This research and knowledge can be applied and developed for further research and study to create some innovation and creative products for safe communities and nearby areas.

6. Acknowledgements

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