FACTORS INFLUENCING THE SUCCESSFUL IMPLEMENTATION OF CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN PROGRAM

NATASHA AZIM BINTI HAJI HUSSIN

A thesis submitted in fulfillment of the requirements for the award of the degree of Master of Science (Urban Regional and Planning)

Faculty of Built Environment
Universiti Teknologi Malaysia

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To my beloved husband Shahli Bin Mohammad Sanusi
   My beloved son Muhammad Rizqy Ramadhan
   My beloved daughter Mulya Raisha
   My beloved mothers Saudah Binti Ahmad and Sa’aunah Binti Nordin
   My beloved fathers Hussin Bin Ahmad and Mohamad Sanusi Bin Yunus
&
   My beloved family members
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ABSTRACT

The rising crime rate in Kuala Lumpur, in line with the implementation of Crime Prevention Through Environmental Design (CPTED) starting from 2004 has sparked questions on the effectiveness of the implementation by the Kuala Lumpur City Hall (KLCH). CPTED is a manipulation of the built environment to prevent the occurrence of crime. It is an effective method to be implemented which is also a cost efficient method for long term period. This study aims to examine factors that will influence the successful implementation of CPTED, as well as to determine the awareness level of the implementers and the implementation level by the KLCH. The scope of this study focuses on the implementation of CPTED by the KLCH implementers who is involved in the developments of Kuala Lumpur. This study applies ‘mixed method’ methodology because of the research objective requires quantitative and qualitative data. Two techniques were used for this study; quantitative techniques using questionnaires and qualitative techniques using semi-structured interviews with ‘content analysis’ method for relevant policy documents. Questionnaires were used to collect data from 321 respondents from ten technical departments and one non-technical department while semi-structured interviews were conducted with three officers from the Top Management Level. Respondents were selected using the ‘purposive sampling’ technique. Questions were designed to explore ten factors that have been formulated from the theoretical framework. Quantitative data and qualitative data were analysed using the interpretation technique. The quantitative data was described using the median value, percentage and frequency. The awareness and implementation level of CPTED by the KLCH was at a moderate level. This was affected by several factors, namely (1) lack of effective communication and five ancillary factors namely (2) lack of awareness, (3) lack of education and knowledgeable staffs, (4) lack of skilled and capable staffs, (5) lack of cooperation and (6) lack of effective monitoring systems. In conclusion, the successful implementation of CPTED by the KLCH can be enhanced by improving the factors identified within this research.
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CPTED  Crime Prevention through Environmental Design
DBKL  Kuala Lumpur City Hall
FDTCP  Federal Department of Town and Country Planning Peninsular Malaysia
RMP  Royal Malaysian Police
CPPS  Centre For Public Policy Studies
DEB  New Economic Policy
DPN  National Development Policy
EPU  Economic Planning Unit
NKRA  National Key Results Area
MCPF  Malaysian Crime Prevention Foundation
NGO  Non-Government Organization
GTP  Government Transformation Program
LA21  Local Agenda 21
MHLG  Ministry of Housing and Local Government
EPU  Economic Planning Unit
MQLI  Malaysia Quality of Life
GPI  Global Peace Indicator
KLSP 2020  Kuala Lumpur Structure Plan 2020
DKLCP 2020  Draft Kuala Lumpur City Plan 2020
CCTV  Closed-Circuit Television
PMD  Prime Minister’s Department
# LIST OF APPENDICES

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CHAPTER 1

INTRODUCTION

1.1 Preface

Almost every day we are shocked by brutal crime reports by the local news and it is unbelievable that such crimes happen in our country. From a street crime to high profile cases, crime happens without any signal of cautions. Figure 1.1 illustrates a better and clear picture of the rising crime index in Malaysia.

![Figure 1.1: Crime Index per 100 000 In Malaysia from 1980 – 2010 (Source: Data obtained from Royal Malaysia Police, 2011)](image)

According to Amar (2005) the crime rates in Malaysia have got worse since 1991 when it increased to more than 300%. The seriousness of this problem can be concluded in the year 2007 where the sum of crime rate statistics are made of 588 murder cases and 3,177 rape cases which are equivalents to more than one person being murdered (1.6 per day) and more than eight women being raped every day (8.7 per day). According to Amar (2005), the crime index in Malaysia showed an increase of 13.4% and the crime rate has increased by 8.7% between 2006 and 2007 (Mohit and Elsawahli, 2010). The increase of crime rate never stops at any point especially violent crimes that increased by 85% between the years 2003 and 2006. For the first five months of 2007, the crime rate in Malaysia increased by 8.7% and that year was the worst year because the increase of crime index from 156, 315 cases in 2003 to 224, 298 cases in 2007 in which the rise is 45% over the past four years.
(CPPS, 2008; Mohit and Aishath, 2011). Habibullah and Law (2008) explained that common criminal offences in Malaysia are murder, robbery, assault, rape, burglary and theft (Mohit and Aishath, 2011). In addition, Chor (2009) stated that the Malaysian crime statistics by the Royal Malaysian Police (RMP) indicate that in the year 2000, more than 167,000 crime cases were reported and approximately 70% of the cases are still pending for decision. The crime rate increased to 198,622 cases in 2006 (Table 1.1) which can conclude on the sum of 22 criminal cases that occur every hour in Malaysia in that particular year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Violent Crime</th>
<th>Property Crime</th>
<th>Total Crime</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>2,701</td>
<td>24,106</td>
<td>26,807</td>
</tr>
<tr>
<td>1975</td>
<td>5,467</td>
<td>57,695</td>
<td>63,162</td>
</tr>
<tr>
<td>1980</td>
<td>7,474</td>
<td>66,221</td>
<td>73,695</td>
</tr>
<tr>
<td>1985</td>
<td>11,476</td>
<td>82,481</td>
<td>93,957</td>
</tr>
<tr>
<td>1990</td>
<td>9,696</td>
<td>68,566</td>
<td>78,262</td>
</tr>
<tr>
<td>1995</td>
<td>15,252</td>
<td>87,007</td>
<td>102,259</td>
</tr>
<tr>
<td>2000</td>
<td>21,604</td>
<td>145,569</td>
<td>167,173</td>
</tr>
<tr>
<td>2005</td>
<td>22,133</td>
<td>135,326</td>
<td>157,459</td>
</tr>
<tr>
<td>2006</td>
<td>42,343</td>
<td>156,279</td>
<td>198,622</td>
</tr>
</tbody>
</table>

(Source: Chor, 2009)

Rapid urbanization is one of the main factors that contribute to the increase of crime rates and it is now a common trend around the world. This resulted in fear amongst the public at large and the most prominently affected are women and children. Crime prevention has become the National Key Result Area (NKRA) major goal by the Malaysian Government in providing a better and safer environment for the people. A strong police force is needed to combat crime whereas the quality design of urban environment is needed to prevent crime as well as a good community cooperation to create a better living environment and become a strategic approach to make cities in Malaysia safe. Currently, less than 8% of the RMP force directly fights crime (CPPS, 2008) which is not the solution to crime prevention. Householders and communities must learn to help themselves and regain control over their neighborhoods by forming groups such as the Neighborhood Watch. The physical built environment also helps in preventing crime from happening. It has been practiced by many other countries around the world. The concept was first coined by a famous American criminologist, Dr. C. Ray Jeffery in 1971.
“A proper design and effective use of the built environment can lead to a reduction in the fear of crime and the incident of crime as well as an improvement in the quality of life”

(Jeffery, 1971)

The Crime Prevention through Environmental Design (CPTED) strategy is more cost effective because it is a passive method in preventing crime to occur. The utilization and manipulation of urban environment through the planning and design process will enhance the natural surveillance and territory concept of development and it reduce the cost of active program such as police placement at hot spot. CPTED also is a long term planning in which the built environment will sustained with the natural setting of safe city. This research will focus on the factors of successful implementation of CPTED by KLCH and examine the level of KLCH implementers’ awareness and implementation of CPTED.

1.1.1 Malaysia Development in General

On 31 August 2013, Malaysia will celebrate its 56th year of independence. Since the independence and formation of Malaysia on 16 September 1963, Malaysia has developed rapidly in all aspects and sectors to provide a better quality of the living and working environment for the citizens. The backbone of Malaysia’s successful development process throughout the 56 years is the implementation of comprehensive policies drafted and planned by the government. These development policies target to ensure that Malaysia will be a newcomer in a developed nation. Some of the development policies implemented since the establishment of Malaysia include the New Economic Policy (DEB) beginning 1970 to 1990) continued with the National Development Policy (DPN) from 1991 to 2000 and Vision 2020. The major goal was on the development of the country. Development should be intended for the people and to be enjoyed by all walks of life as drafted in the Ninth Malaysia Plan, 2006. Malaysia and other developing countries experienced rapid growth in terms of physical, social and economic since the 1970s and it is said to be the fastest developing country in the South East Asia in the 1980s (Kamariah and Khairul, 2012). Malaysia is one of the most rapidly urbanizing countries in the Southeast Asia (Wong, Shaw and Goh, 2006). Urbanization process in Malaysia involves
various economic activities, movement of goods and people and it is often associated to the increase of crimes in urban areas (Mohammad and Mohamed, 2011). The increasing crime rates are one of the challenges faced by the nation. High levels of crime index in the urban area can lead to a complex set of factors, including rapid urbanization, persistent poverty and inequality, social exclusion, political violence, organized crime, post-conflict cultures, emergence of illegal drug use and drug trafficking and authoritarian family structures, among others (The World Bank, 2008). Uncontrolled urban growth, development and disorganized urban system in the early stage of its formation resulted in a range of issues especially in major cities such as Kuala Lumpur, Selangor, Penang and Johor Bahru (Tan, 2011). According to Zainuddin (2000) the increased development has also made the urban area narrow and the ideal environment to live is limited for the living population. Judy (2008) explained that the increased development affects the city life which presents the conditions of overcrowded living, congestion, unemployment, lack of social and community networks, stark inequalities, and social problems such as crime and violence. The implication of the physical changes in urban spaces will definitely affect the quality of social life. In addition, it also affect the ecosystems and ecological parts of the city itself. It also gives impacts on the health and safety of residents as well as minimizing comfortable living environment and influences the social values (Jamaludin, 2007; Kamariah and Khairul, 2012). Planning and development of a safe environment should be implemented in a timely manner. The challenges in the planning aspects should not only focused on the economic growth but also on ensuring solidarity and peace based on the security principles.

1.1.2 Cities Development in Malaysia

The city development should be well-planned and in accordance with the current developments and changes of the globalization of the world attributable to its potential as a maximum contributor to the development of the country. The city functions as an agent to the growth of economic development and serves a significant role towards achieving the vision of becoming a developed country by the year 2020. As emphasized in the Total Planning Doctrine, the quality of township needs to be preserved to ensure human development with good and positive values such as justice, courtesy, trust, knowledge, tolerance, friendliness and care (Lukman, Nor
Development is a very important catalytic agent for the progress of a country. It must be carefully planned, taking into consideration the balance of physical, economic and social aspects. Cities without a well-planned development will trigger so many problems that affect people and the surroundings such as crime, poverty, hunger, overcrowding settlements, illiteracy, and pollution and consequently, it gives an impact to the decline of quality of life in the cities. Today, the world is facing a crisis resulting from the unplanned development. According to Rahimah, currently the existing cities are facing various physical and social problems arising from uncontrolled and imbalance urban development (Jamaludin, 2007). Issues such as spontaneous settlements, traffic congestion, flash floods, landslides, air and water pollution and crime are current problems encountered by all cities today. The involvement of various parties with their own agenda and a city development with a lack of direction are considered the contributing factors of the problem.

The progress of economic development promotes the process of urbanization. A study by Ahmad and Mohammad (2011) discovered that the factor of urban poverty occurs due to the increase of rural-urban migration. It is also considered a factor of rural poverty in urban areas attributable to unemployment causing the urbanization process in Malaysia since 1970 to 2000. Agreed by Ceccato and Lukyte (2011) poverty and social exclusion affect the criminal offenders’ distribution in urban areas where safety and security factors become major human needs throughout history (Cozen, 2007a, 2008).

The rate of population growth in urban areas has increased tremendously compared to the increase in population throughout the country. Statistics revealed by the Department of Statistics Malaysia in year 1995 projected that in 1970, 26.8% of people lived in the city and the percentage rose to 34.2% in 1980 and continued to increase with a faster pace to 50.6% in 1991. The population growth in urban areas occurred rapidly due to the attractiveness of the city such as employment opportunities in industries and construction sectors that attracted youths to migrate to urban areas. These sectors grew rapidly, especially at the end of 1980s and early 1990s and it has become a factor to attract rural residents to migrate to the city. Their migration is often associated with the relocation of existing poverty in rural
areas and spreading throughout the cities across the country (Jamaludin, 2007). With rapid population growth and increased development of the country from year to year, the crime rate is also affected (Kamariah and Khairul, 2012). As contended by Massoomeh et.al. (2011) the worldwide concern on population growth and rapid urbanization will continue by addressing crime as a social problem. Until today, the crime rate does not decline and it has now become important in the second half of this century (Erdal, 2004). Becker (1968) pointed that crime becomes more important during the last forty years as it is discussed all over the world and safety becomes a central dimension for contemporary debate on urban sustainable development (Ceccato and Lukyte, 2011). In Malaysia, the trend of urbanization increases annually according to the population growth. According to Mohit and Elsawahli (2010), the current urbanization rate in Malaysia is 63% (EPU, 2006,p. 361) and projected by FDTCP to be 75% by the year 2020. Since 1991, the percentage of urban population in Peninsular Malaysia has increased from 54.3% (8.8 million) to 65.4% (13.7 million) in 2000 and the population in 2010 is 63.8% (26.75 million) (Table 1.2).

<table>
<thead>
<tr>
<th>YEAR</th>
<th>TOTAL POPULATION</th>
<th>URBAN POPULATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>23.49</td>
<td>62</td>
</tr>
<tr>
<td>2005</td>
<td>26.75</td>
<td>63</td>
</tr>
<tr>
<td>2010</td>
<td>28.96</td>
<td>63.8</td>
</tr>
</tbody>
</table>

(Source: The Department of Statistic Malaysia, 2011)

In the 21st century, the tasks of managing and developing the city center are more complicated and challenging. This development should be viewed in the context of how the residents can reach the standard of living appropriate to the developed nation status to be achieved by the year 2020. In this context, there is a need to continuously evaluate and improve the ability of the community in the urban environment towards a more comfortable life for the city residents. This can be achieved by providing and encouraging efforts to create awareness on the quality of life in the city and providing equal opportunities among various descendants of urban communities, classes and regions to improve their quality of life.
1.1.3 Safe City Concept And Crime Prevention Through Environmental Design in Malaysia

Implementation of the Safe City Program has become a major agenda in the development of the country at present. Without safety aspects in the life of a city, it will be difficult for people to enjoy their well-being. The former Prime Minister, Tun Abdullah Ahmad Badawi in the Cabinet meeting on January 28, 2004 has expressed his concerns over the increasing number of crimes in this country. In response to the previous meeting, the Cabinet has proposed for the creation of safe cities and towns as an effort to prevent crime. A new plan development of new towns and cities should impose the safety aspect in the design process. The National Council for Local Government has outlined 23 steps of crime prevention to be implemented by the local authority (FDTCP, 2005; Kamariah and Khairul, 2012). The implementation of the Safe City Program was certified by the National Council for Local Government on October 11, 2004 (Figure 1.2). The Ministry of Housing and Local Government has also recommended for the implementation of the Safe City program to involve federal agencies such as the Federal Department of Town and Country Planning Peninsular Malaysia Peninsular Malaysia (FDTCP), Royal Malaysia Police (RMP), Malaysian Crime Prevention Foundation (MCPF) and local authorities to play a role towards the direction of achieving a safe city. On July 2009, the Malaysia Prime Minister, Datuk Seri Najib Tun Abdul Razak has adopted the objective of crime reduction as one out of the six features of the National Key Results Area (NKRA). The Safe City Program was expended to 149 of local authorities across the country for immediate implementation prior December 2010 to achieve the goal of reduction of the rate of street crime of 20% and lower the crime index by 5%.

Figure 1.2: Article on Safe City Program
(Source: Berita Harian, 2006)
The achievement of the crime prevention program has shown a result where according to the latest statistics released by the government that in the fourth quarter of 2009 the street crime rate has fallen by 7.6% and the KL crime rate has dropped by 30% in the first two months of 2010.

The mass promotion on the Safe City program began in 2009 and the focus was on the Target Hardening strategy by assigning policemen in each area especially in hot spot areas. The Target Hardening Strategy is still an on-going programme and yet it was claimed successful when the crime rate was reported to decline after two years of its implementation. However, this strategy does give an impact on the government’s expenditure as the new police recruitment needs to be done due to the lack of human resources. This is where the implementation of CPTED is more cost effective than the police recruitment (Gardner, 1981). The CPTED is another Safe City strategy in crime prevention. Massoomeh et al., (2011) also claimed that this approach is one of the most appropriate ways not only to save money and time but also to ensure its sustainability in the long run compared to other Safe City strategies introduced by FDTCP. Architects, designers and planners must therefore include security attributes into the development consideration in the planning, design and construction stages. Designers should utilize the built environment to prevent crime from happening in which according to Massoomeh et al. (2011) the design and arrangement of physical urban elements such as buildings, streets, public facilities and outdoor spaces will influence the opportunity of crime and the level of fear of crime. In general, the Safe City is a city that is free from all forms of crime whether it is physical, social or mental (Jamaludin, 2007). The CPTED will promote the physical surroundings as being always in a protected condition and the atmosphere favorable to the occurrence of a negative condition and peaceful environment can be enjoyed by the local community. In addition, the residents will live in peace and prosperity, happiness, healthy and able to lead their lives with confidence. Efforts to establish a safe city has been implemented by several NGOs such as the MCPF since the early 90’s. A safe city will create a prosperous community of life without any interference or restrictions. Indeed, the government has initiated an action by launching the Safe City 2010 program in July 2010 which is aligned with the mission to achieve the developed country status by 2020.
1.1.4 The Role Of Local Authorities in Safe City Program And Crime Prevention Through Environmental Design Implementation

Local authority or in Bahasa Melayu “kerajaan tempatan” or “pihak berkuasa tempatan” is the lowest administrative institution after the federal and state in the government system of Malaysia. Its role is to manage the province or district administration using the income tax imposed on the local population. These local authorities are responsible for the well-being of the local area and community in cities, towns and rural districts. In line with the passage of time and rapid development in district administration, duties and responsibilities, the local authorities’ roles are increasingly becoming more complex and challenging in which the local authorities have expanded their activities and roles (Klink, 2006). Moreover, the profile of urban form changes the urban management itself where the local authorities have to transform themselves from mere implementation agents into promoters and enablers of sustainable urban development services. Creating a comfortable and safe living environment has become a priority to the local authority nowadays. A comfortable and safe living urban environment will generate and create a better community as well as enhancing the urban quality of built environment. FDTCP (2007) reported that 53% that comprises of 38 local authorities implemented the Safe City Program since January 2005 and the rate has achieved 83% in December 2007 (Kamariah and Khairul, 2012). The Safe City Program and CPTED implementation were conducted by the local authorities all over the country and overseen by the FDTCP and KPKT (Tan, 2011). The 5 immediate actions from the 23 listed actions mentioned earlier were to be carried out and implemented by the participating local authorities, and it is claimed as successful rate is between 18% to 100% (Kamariah and Khairul, 2012). The implementation of CPTED is specifically a total responsibility of the local authority. This is because of the way the CPTED is implemented through the aspect of planning and designing either development by the local authority itself or an application from the developer side. Both development aspects need to be monitored regularly by the local authority. All the safety requirements aspects are taken into account under the legalization and condition imposed by the local authority. Several government’s laws and by law such as the Planning Act 1976 (Act 172), Uniform Building By Law 1985 (Federal), Akta Ibu Kota Persekutuan, 1960 (Act 190), fire-safety, street and lighting were used
to manage and control the development constructed by the developers. This power of development control is an essence of the vital role of the local authority in ensuring a successful implementation of the Safe City Program generally and specifically the CPTED concept in creating and providing a quality urban living environment.

1.2 Problem Statement

Nurin was reported missing while on her way to the night market near her house in Section 1, Wangsa Maju on Aug 20, 2007. Her naked body was found stuffed in a sports bag and left in the stairwell of a shop lot in Petaling Jaya a month later. Five-year-old Sharlinie was reported missing while playing outside her house in Taman Medan on Jan 9, 2008, not far from where Nurin’s body was found. Both the high-profile cases are believed to be linked to the Kampung Baru molester.

(The Star, August 2009)

These are only a few cases reported by the newspaper regarding crimes that happened in Kuala Lumpur and it shocked the whole country. Names such as Canny Ong, Nurul Huda Abdul Ghani, 10 year old Hasirawati Saridi, Chee Gaik Yap, 9 year old Siti Syazwani, 21 year old Irmaliana Irazal, Sharlinie Mohd Nashar, Asmawi and many others appeared in the local newspaper headlines due the tragic crimes that happened to them. A survey conducted by the Merdeka Center for Opinion Research released in January 2010 revealed that the concern on crime and public safety was listed as one of the top five concerns in Peninsular Malaysia. Opinion polls published in the Home Ministry’s website on November 2009 indicated that 97% or 9,729 out of 10,060 respondents feel unsafe and 95% of them feel that their safety is not guaranteed and this has also been a consistent concern parallel to the rise of crime index over the past 10 years. According to Tan (2011), rape cases increased significantly since 2005 by 95% and it scares the most vulnerable victims who are women and children. Safety and security aspects have become an issue of the country and it is a concern by the Malaysian government. The ministers convergence has decided to create a Safe City Program which involves 38 local authorities in Malaysia beginning 2004 and the FDTCP served as the secretariat to monitor the implementation of this program by the local authorities and
KLCH holds no exception. There are two issues raised by the researcher in this study and will be discussed further in the subsection below and Figure 1.5 will clarify the research problem statements.

1.2.1 Kuala Lumpur Crime Index Increase

The main initiative for crime reduction under NKRA is the Safe City Program that has been implemented by the local authorities particularly focusing on four states with the highest crime rates that are (1) Kuala Lumpur, (2) Selangor, (3) Johor and (4) Pulau Pinang (Tan, 2011). The CPTED implementation that began in 2004 did not yield proper results. In 2004, the crime rate in Kuala Lumpur especially snatch thefts increased and contributed to 18% of the crime index (Ministry of Housing and Local Government, 2012). The increase in crime rates continues from year to year in Kuala Lumpur as projected in Figure 1.6. The decline of the crime rates in 2010 resulted from the initiative taken by the government by making crime prevention as an NKRA in the Government Transformation Program (GTP) 2010. The increase of crime rates since 2004 to 2012 has raised a question of whether the CPTED implementation by KLCH was successfully implemented in Kuala Lumpur.

Figure 1.3: Research Issues Development

Figure 1.4: Crime Index In Kuala Lumpur from 2004 – 2012
(Source: Data obtained from Royal Malaysia Police)
1.2.2 CPTED Implementation in Kuala Lumpur by Kuala Lumpur City Hall

The first 23 steps and 15 steps of crime prevention for the Safe City program launched in 2004 were partially using the CPTED strategies. It means that the CPTED implementation has started earlier than the Target Hardening strategy that began in 2009. However, crime rates obtained from the RMP by the researcher did not show positive results compared to the years of CPTED implementation. An interview with FDTCP officer was done to reinforce the key issues of this research. According to FDTCP officer, KLCH was unsuccessful in its Safe City implementation, specifically the CPTED since 2004. The statement was supported with data of RM1 million from a total of RM6 million allocations subsidized by the government that was spent by KLCH for the Safe City program in Kuala Lumpur in 2010.

This matter has prompted the researcher to examine on the factors that hinder a successful implementation of CPTED by KLCH in Kuala Lumpur. In this study, four research questions are formed to answer the issues mentioned above.

1.3 Research Agenda

In this section, the researcher elaborated on the aims, research questions and objectives of this study.

1.3.1 Research Aims

The Kuala Lumpur City Hall (KLCH) plays a big role in planning and designing the city to be safe for the people. Thus, the aim of this research is to establish the factor of successful implementation of CPTED aspect for an effective Safe City program.

1.3.2 Research Assumption

The success of CPTED implementation in Kuala Lumpur can be achieved by increasing the understanding and awareness of the implementers in KLCH.
1.3.3 Research Questions

There are four (4) research questions developed in this study:

(i) **Primary Question 1**
Why does the Crime Prevention through Environmental Design (CPTED) not successfully implemented by Kuala Lumpur City Hall (KLCH)?

(ii) **Subsidiary Question 2:**
What are the factors hindering the implementation of CPTED by KLCH?

(iii) **Subsidiary Question 3:**
What are the level of awareness and understanding of the KLCH implementers in implementing the CPTED?

(iv) **Subsidiary Question 4:**
What is the level of the CPTED implementation by KLCH?

1.3.4 Research Objectives

(i) To identify factors that contributes to the unsuccessful implementation of CPTED by the KLCH.

(ii) To determine the factors that hinder the successful implementation of CPTED by the KLCH.

(iii) To examine the level of awareness of the CPTED implementation by the KLCH.

(iv) To study the level of CPTED implementation by the KLCH.

1.4 Research Methodology

There were five (5) stages of the study planned in conducting this research. The stages were (1) Preliminary study, (2) Literature review, (3) Data collection, (4) Analysis and (5) Findings and summary.
1.4.1 Stage 1: Preliminary Study

The early stage of this research is to identify the issues and problems. The issues and problems were generated from the interviews and discussion with FDTCP, RMP and KLCH. The issues and problems helped the researcher to determine the design of study and methods to be adopted when carrying out this research. In addition, the objectives and research questions are designed to guide the study.

1.4.2 Stage 2: Literature Review

There are two ways in conducting the literature review method. They are:

(i) **Theoretical Study on Policy Implementation** - This method is focused on previous studies and researches by other researchers and fundamentalists on successful policy implementation theories. Holistic evaluation of previous studies has helped researchers to produce a specific theoretical framework as a guide to choose the types of research methodology and data analysis technique for this study.

(ii) **Literature Review on Safe City and CPTED concepts** - This method is done by analyzing the theories written by experts in the field of Safe City and CPTED concepts. This study included theories that related to the issues of crime, safe city concept, CPTED and the safety of urban. The data were gathered to compose the survey instruments that are the questionnaire and interview questions. It was also used to discuss the research findings.

1.4.3 Stage 3: Data Collection

This stage involves the collection of primary and secondary data;

(i) **Primary Data** - The main data were obtained via interviews and questionnaires on the agencies involved with the implementation of CPTED and Safe City Program such as KLCH and FDTCP. Interviews with related professionals who are directly involved in the implementation of CPTED in KLCH such as architects, urban planners, engineers, architect assistants, urban planners assistants, engineers assistants and technicians were done to review their perception and understanding of
the safe city concept and implementation of CPTED. Selected techniques were chosen in conducting this research for primary data collection. The two data collection techniques employed are:

- **Technique 1: Questionnaire Survey** - The questionnaire was used as the primary instrument of data collection. It was distributed to all KLCH implementers from all the technical departments involved in the urban development. The details of the questionnaire and respondent selection technique are elaborated in Chapter 4.

- **Technique 2: In Depth Interview Survey** - This method was adopted obtaining qualitative data. In depth interviews with related individuals in KLCH were done to study their understanding and knowledge on the CPTED implementation and to support the main data collected using the questionnaire method. These techniques were performed by selecting three (3) Heads of Departments from the main technical department involved in the development of KL. Interviews with other government agencies were carried out to seek for the respondent’s views on the related issues of the research. This included their views in regards to the current safety policies and guideline imposed through the responsibility and work task in each agency to achieve the safety aims of the community.

(ii) **Secondary Data** - The data were obtained through reading on issues related to the research. References used were books, journals, newspapers, reports and websites. The information on the history and background of study area, agency, crime problem and the Safe City 2010 program were gathered as a secondary data. Some studies on the local authorities in other countries that practiced the CPTED concept were selected and used as comparison to the CPTED by KLCH. The evaluation on the effectiveness of the CPTED concepts by KLCH is also determined.

1.4.4 **Stage 4: Method of Analysis**

There were three (3) methods used in analyzing the data obtained in this study. The following techniques are;
(i) **Quantitative method**

A quantitative technique was selected as a main method used in this study because it is well accepted in the social sciences research (Chua, 2006). The data was analysed and structured using frequencies and percentages to represent the data collected for this study to achieve the research objectives. Questionnaire has become a main survey instrument for the collection of quantitative data in this research. The detail is explained in Chapter 4.

(ii) **Qualitative method**

Qualitative method was used to gather in depth understanding of human behavior and the reason that govern such behavior. Data collected in this study was a perception related with elements of understanding and effectiveness and to seek the reason on a phenomenal. Qualitative method used in this study to support conclusions produced by data analysis using quantitative methods. In depth interviews were selected as a technique for data collection in this method and it is one way to collect qualitative data as described by Trochim (2006).

(iii) **Content Analysis**

Techniques of content analysis are used to analyze the focus interview data obtained in this study. This technique is often used by researchers in the field of social science to analyze recorded transcripts in any medium of communication such as interviews, books, paintings and websites as indicated by Babbie (2002). According to Babbie, content analysis can be defined as "the study of recorded human communications" (Kohlbacher, 2006). This technique is closely related with the qualitative analysis technique and used primarily in the social sciences. The focus of this study was on the KLCH implementers’ views, opinions and understanding. Thus, the selection of this technique is deemed appropriate (Stemler, 2001). The choice of these three methods for data collection in this study will mutually support each other to strengthen the findings of this study.
1.4.5 Stage 5: Findings and Summary

This research identified factors and level of the successful CPTED implementation by KLCH. Some of the improvements and recommendations will be suggested to the KLCH to make the CPTED implementation process more effective. The proposal generated is aimed to ensure the effectiveness, successful and cost effective CPTED implementation by KLCH in creating Kuala Lumpur as a safe city through its urban environment.

1.5 Research Significance

The result of this research will benefit and assist the parties towards to the CPTED implementation. It also determines the factors that contribute to the success of CPTED methods that have been implemented in creating a safe urban environment with a good living quality.

1.5.1 Benefit to the Kuala Lumpur City Hall

The result of this research will assist KLCH in improving the CPTED implementation. This will also guide KLCH in determining the safe urban design by controlling the planning and building approval submitted by the consultants and developers. The CPTED elements will become a requirement in planning approval. A comprehensive CPTED implementation by the KLCH implementers will contribute in making the City of Kuala Lumpur a safe city and a World Class City consistent with the goals and aspiration set out in the Kuala Lumpur Structure Plan 2020.

1.5.2 Benefit to the Public People in Kuala Lumpur

A successful implementation of CPTED will create a safe urban environment for people in the city. This will help in promoting Kuala Lumpur as a preferred city for the people to live and work and also attract foreign investors to invest in this city. It indirectly will give an impact on economic growth to the peoples, Kuala Lumpur and Malaysia.
1.6 **Case Study of Kuala Lumpur City Hall**

The Kuala Lumpur City Hall (KLCH) also known as Dewan Bandaraya Kuala Lumpur (DBKL) is the local authority that is responsible in the administration of Kuala Lumpur. It was selected as a case study as KLCH is the biggest local authority in managing the capital city of Malaysia. This research was conducted to investigate problems that existed in the chain of CPTED implementation process and to identify the existing problems for improvement. The KLCH is an agency under the Ministry of Federal Territories and Urban Wellbeing which is responsible to oversee public health and sanitation, waste removal and management, town planning, environmental protection and building control, social and economic development and general maintenance functions of urban infrastructure. Chapter 5 explained on the function and organization of KLCH.

1.7 **Research Scope**

This research will focus on identifying factors of successful implementation of CPTED concept by the KLCH implementers and determine the level of awareness amongst the KLCH implementers and its implementation in Kuala Lumpur.

For this research, it only focuses on the role of KLCH in implementing the CPTED aspect to make Kuala Lumpur safer. This research presents a literature review on the Safe City and CPTED concepts including other theories that relate to the study. Policy implementation theories and previous studies are reviewed to give an idea for theoretical framework. Meanwhile, the respondents are selected from all technical departments and non-technical departments that are involved in planning, designing and developments approval.
1.8 Thesis Structure

This research contains eight chapters with the first chapter being the introduction of the research background. It also discusses the city development of Malaysia in general and also an introduction to the Safe City concept done by the Malaysian Government and other countries. The problem statement for this research was presented in the second section followed by the research agenda that include the research aims, questions and objectives and research assumption in the third section. The research methodology, research significance, the case study, and research scope was explained in section four, five, six, seven, eight and nine. The review of previous studies and the theory on the crime theories, Safe City Concept, CPTED was highlighted in chapter two. This chapter includes reviews and discussion on previous studies of policy implementation theories. The discussion was supported by empirical study that results in a theoretical framework that represents the overall of this research.

In chapter three, a detailed explanation on the selected methodology used in this research was presented. This chapter highlight on how the data gathered and analyzed using appropriate techniques. SPSS 18.0 was used to run specific test for each data according to the research objectives. Sampling techniques, survey instrument, design process of data collection and data analysis explained in this chapter. Analysis of the research was presented and explained in this chapter including obstacles obtaining the findings. Chapter four focused on the KLCH as the case study in this research. It was including the history, organization and departments of KLCH. The CPTED policy by both the KLCH and FDTCP was reviewed in this chapter. Chapters five and six present the findings of this research. The summary and the conclusion of the whole research process and findings was discussed in Chapter seven. This chapter contains the discussions that conclude the overall research findings and the results of the research objectives and suggestions in improving the implementation of CPTED by KLCH.
1.9 Conclusion

In general, this chapter explains on the background of this research on the successful implementation of CPTED by the KLCH in creating a safe city for the user. Figure 1.7 concludes the whole research in a research structure.
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