

Article

Effectiveness of Fear and Crime Prevention Strategy for Sustainability of Safe City

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Abstract: Crime is a manifestation of incivility that society attempts to curb, yet faces enormous challenges, as crime is a by-product of urbanization and human advancement. As more agglomeration of the population in cities around the globe, humankind's safety from being threatened by crime needed to be safeguard to sustain everyday living in cities. Humans' co-existence with crime and fear of crime in cities vis-a-vis efforts preventing it from occurring has been widely carried out in developed countries. An increasing trend is showing in emerging and developing countries. Therefore, this article provides empirical evidence regarding a safe city program launched in Malaysia. This study aims to identify the factors contributing to the prevention of crime and fear of crime. This study employed a survey questionnaire to 400 pedestrians' perceptions of Kuala Lumpur city's central business district. The result showed that prevention methods through the actor of "capable guardians" (i.e., authorities) are effective; however, methods through the actor of "suitable victims" (i.e., communities) is ineffective. Further studies should explore perspective of the actor of "likely offenders" (i.e., criminals) to fill in the gap of safe city program's effectiveness and sustainability.

Keywords: broken windows theory; crime prevention through environmental design (CPTED); crime prevention methods through social development (CPSD); criminology; delinquency; routine activities theory; safe cities; safe streets; urban studies

1. Introduction

In tandem with human civilization's advancement and the rapid urbanization trend, urban crimes have always been a threat to urban dwellers [1]. Classic statistics reported an increasing trend in the crime rates of robbery, aggravated assault, forcible rape, and homicide in the United States from 1960 to 1975 [2]. However, more recent data by the United Nations Office on Drugs and Crime [3] showed a decreasing trend in 2003 to 2018 globally, particularly in the category of robbery, serious assault, and cities homicide paradox in sexual violence (Figure 1). Proposed solutions have been implemented to combat society disorders but still seem unable to prevent such from happening in safe city planning [4]. One of the explanations for this phenomenon from a criminology perspective is that crime is a by-product of human civilization, and incivility is a part of the nature of human behavior [5]. Thus, humans must admit and accept living in co-existence with these disorders or evil acts while deliberately finding ways to reduce crime and the fear of crime [6].

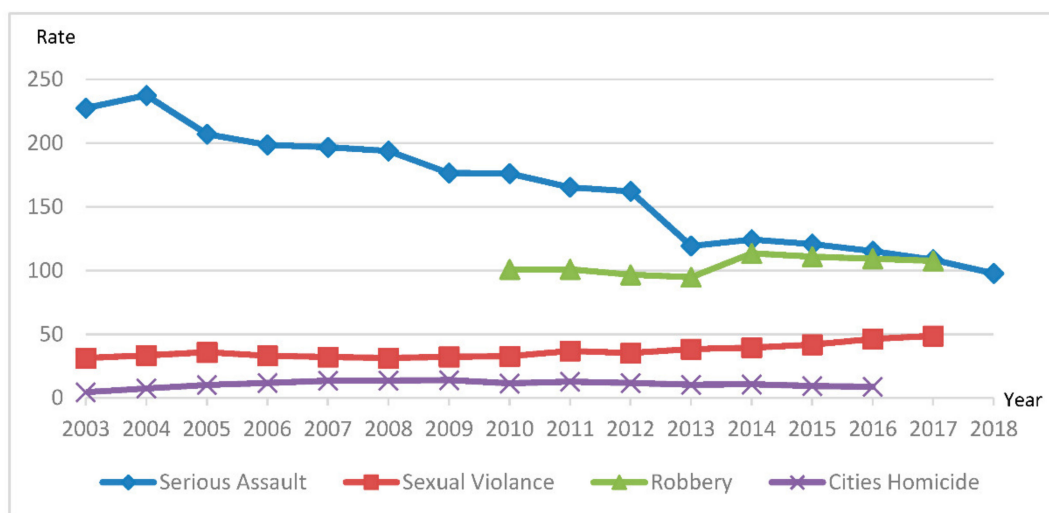


Figure 1. The world crime rate, the selected category (source: plotted from [3]). Note: All data plotted on rates of police-recorded offenses per 100,000 population.

In the United States and most European countries such as the United Kingdom, combating crime has proven to be a long battle for governors, city officers, and police officials [7]. In 1996, the United Nations launched a safe city program due to the increasing crime trends in Africa and throughout the world [8]. Following that, ref [9] has published a guideline on crime prevention for governments. Emerging and developing countries, including Malaysia, have welcomed this idea and launched its Safe City Program in 2004, followed by a revision in 2009 [10,11]. Scholars who have studied the Malaysian case have shown that many local authorities have implemented such programs, but the programs' assessments are still lacking [12,13].

The Safe City Program in Malaysia refers to creating a crime-free environment using strategies under the scope of designing the physical environment, target hardening and management, community involvement, and public awareness [11]. Thus, from this perspective, the crime-free environment is threatened by human-made insecurity, which constitutes mainly property and violent crimes. It excludes the war and terrorism, health and environmental pollution issues, natural disasters, and digital security. This paper does not examine why crimes happen. Instead, it considers crimes as perceived by the respondents in the survey and examines how a safe city program helps people translate crime prevention into routine activities factors. Besides crime, the sense of fear of crime has frequently been highlighted in many studies, and some researchers have even commented that the inner fear of crime has caused more trouble in life than real crimes [14]. Thus, this study aims to identify the factors preventing crime and fear of crime by conducting a case study of the central business district in Kuala Lumpur.

2. Literature Review

2.1. Prevention of Crime and Fear of Crime in Theory

Criminal act is a frequent outcome of interaction between criminally motivated individuals and opportunities for crime [15] (p. xiv). Offenders' motives are considered the root causes of crime, while opportunity refers to the chance afforded to potential offenders to commit crime. Thus, to decrease crime rates, the most effective strategies incorporate the reduction of both motive and opportunity [16]. Broadly, three methods of accomplishing both these tasks have been outlined in the literature. The traditional and earliest strategy involved the threat of arrest and sanction: penal systems in which laws were enforced, and police actions to bring suspects into the courts for judgement and sentencing procedures. The second method focuses on reducing opportunities and possibilities for criminal acts, whereby city authorities prioritize measures involving environmental design.

Thirdly, beyond enforcement and environmental design, alternative motive reduction programs have been introduced covering a range of topics such as education, literacy enhancement, problem-based learning (PBL), conflict resolution, youth mentoring, personal development exercises, job creation, and economic revitalization. Related courses have included parenting and self-confidence skills, emotional intelligence and anger management training, and technical skills acquisition. Under the scope of safe city studies and the responsibility of city authorities, the authors will mainly discuss crime prevention through environmental design (CPTED) and social development (CPSD).

As a place-based crime prevention strategy, crime prevention through environmental design (CPTED) has been promoted since the initial ideas by [17], followed by [18] on defensible space, and consequently formally coined by [19]. This phase is considered as the development of the first generation of CPTED, which draws on environmental and behavioral psychology and consists of seven principles, namely territoriality, natural surveillance, access control, target hardening, legitimate activity support, space management and image, and the influence of geographical juxtaposition [20]. The second generation of CPTED, as promoted by [16,21,22], has added the social aspect of the community, including social cohesion and collective efficacy, in response to criticisms that CPTED was physically deterministic and ignored essential social elements. The importance of social cohesion and collective efficacy has further illustrated in various perspectives and links to crime prevention and fear of crime by scholars such as [23–26].

According to [5], the social aspect in the second generation of CPTED includes an environmental design that suits the human scale and pedestrian-oriented land uses and activities, urban meeting places, resident participation, community culture, neighborhood capacity, community connectivity, inclusion, and identity. Among these elements, the primary concern is on community participation in the self-policing of neighborhoods. These concepts are mainly derived from “eyes on the street” by [27], which recognizes the importance of community “eyes” and their value in promoting the sense of a “caring community.” Further, a study by [28] suggested that environmental designs should consider pedestrian density when designing public spaces and impact the perceived fear of crime among those who use such spaces. In recent developments, another attempt has been made to establish the third generation of CPTED through the theory related to human needs (such as [6,29]). However, these are still in early conceptual discussions and require further empirical testing.

Meanwhile, the strategy of crime prevention through social development (CPSD) arguably overlaps with the second and the proposed third generations of CPTED, except that CPSD is motive reduction-oriented [16]. CPSD recognizes the underlying complicated social, economic, and cultural processes that encourage crime and create an atmosphere of fear of crime [29,30]. CPSD attempts to bridge the gap between criminal justice programs and social support for communities, families, and individuals by preventing the causes that allow crime and victimization to happen. In other words, CPSD refers to social programs designed to solve the fundamental causes of crime: poverty, homelessness, inadequate parenting, issues with individual personality and behavior, poor education, harmful peer associations, unemployment, substance abuse, cultural conflict, family dysfunction, social alienation, and unequal distribution of resources [31,32]. In short, most of the CPSD programs are long-term, large scale strategies and criticized by [29] as not suitable for short term policies and implementations.

To clarify this concept, the authors maintain that only one type of CPTED focuses on environmentally related designs for crime prevention, while the second and third generations of CPTED are actually variations of CPSD which mainly refer to social programs or meetings, and which expand upon CPTED (see example cases of Reno in Nevada, New Haven in Connecticut, San Romanoway in Toronto, the suburb of Eagleby in Queensland, Australia, the aboriginal youth project in the Kimberly region of Western Australia, as in [16]). CPTED prioritizes territoriality control, while CPSD focuses on building social cohesion in specific community contexts. Thus, in this study, initiatives beyond those related to environmental design strategies, such as community policing, are regarded as CPSD initiatives.

Literature on crime prevention strategies from around the globe also reveals evidence that the effectiveness of such methods has encountered both support and criticism. Reference [33] reviewed CCTV surveillance used for crime prevention and concluded that CCTV is associated with both significant and modest decreases in crime. Reference [23] investigated seven U.S. cities (Denver, CO; Des Moines, IA; Indianapolis, IN; Louisville, KY; Providence, RI; San Antonio, TX; and Seattle/White Center, WA) and indicated a positive relationship between perceived social cohesion and informal means of social control in urban neighborhoods. Using data from the Seattle Neighborhoods and Crime Survey, ref [26] critiqued its collective efficacy with the intention of expanding its scope into informing community-based practice. In studying 10 island cases of Cape Verde, West Africa, ref [34] suggested the principles of CPTED should consider neighborhood rehabilitation or design from an early stage. After researching the nature of crime in Nigeria, ref [35] confirmed that crime prevention measures assisted in the continued decline of crime rates. However, ref [35] also observed and reported the emergence of an unprecedented range of crimes, such as human trafficking, kidnapping, abduction, drug sales, thuggery, and terrorism, all recent developments whose intensity has multiplied since 2000 when Nigeria became a democracy. Despite their imperfections, these crime prevention methods are improvements on those which simply ignore safety concerns [36].

From a theoretical perspective, these crime prevention methods are derived from environmental criminal/crime opportunity theories, such as routine activities theory, broken windows theory, rational choice theory, crime pattern theory, and awareness theory [15,37]. The key aspect of environmental criminology is assessing the pattern of crimes, especially in urban areas. It measures how emotion-led behavior is influenced by external factors. These comprise several shifting aspects: spatial/geographical, temporal, and legal. Variables also include the offender, the victim, and the guardian [37]. In this study, the authors selected the two most cited and seminal crime opportunity theories for discussion, namely the routine activities theory by [2] and the broken windows theory by [38].

The arguments of routine activities theory are derived from crime observations and socio-economic statistics trends linked to the theory of human ecology by [39]. Following [39], three important temporal components of community structure—rhythm, representing the actors, namely the offender, victim, and guardian; tempo, representing violation events; and timing, representing the right timing that prompts an event to occur—form the everyday routine activities linked by [2]. This understanding of how spatial-temporal trends and fluctuations in social conditions or crime rates can be constructed and further explored locally helps to improve the Safe City Program in Malaysia. For example, in a specific spatial and temporal structure of routine activities, crime events are most likely to happen in specific patterns. Therefore, one can identify the exact location, type, and quantity of illegal events and educate potential victims and potential guardians in a given society or community. Hence, the timing of work, schooling, and leisure may be of central importance in explaining crime rates [2].

Based on an analysis of longitudinal aggregated data for the United States throughout 1947–1974, Cohen and Felson concluded that household activities were a more significant and positive factor in explaining the official change in crime rates involving homicide, rape, and assault, as compared to age structure (i.e., 15–24 years old) and unemployment rate. Household activities refer to marital status attributes, such as has never been married, married, separated/divorced, or widowed. The separated/divorced status variable showed the highest link to being a victim/crime occurrence, while the married status variable showed the least likelihood of being a victim/crime occurrence. However, over the past 40 years, changes may have occurred, and whether someone is single or married may have a different impact in contemporary society. Somehow, in Malaysia, the authors noticed that the Federal Department of Town and Country Planning (FDTCP) has never zoomed into this household activities factor in drafting strategies for the Safe City Program. Perhaps, this gap provides an opportunity for future research in Malaysia to include collecting and analyzing longitudinal data of

such household structures or activities and suggests more locational or temporal specific solutions to local contexts.

Among the three actors—offenders, victims, and guardians—[2] explained that the “guardians” concept includes the “third eyes of the public.” This “guardians” concept has been adopted in some safe city program strategies, including allowing the conduct of informal activities, such as merchants selling burgers in parks or public spaces or making the sides of pedestrian bridges visible to the public. Indirectly, increasing the public’s eyes as guardians can prevent the occurrence of illegal or unlawful activities. Nevertheless, further research is required to answer whether these guardians are “capable” of preventing crime from happening. Among the three elements that assist in understanding crime rates, namely motivated offenders, suitable targets, and the absence of capable guardians, ref [2] argued that criminologists could have underemphasized the targets and guardians while entirely focusing on the offenders. The authors agree with the argument by [2] and suggest that relevant authorities should look at the perspectives of the targets and guardians in order to curb crimes, and doing so requires zooming into the social routine activities factor. This method is identified as CPSD. It requires a longer time and more investment of resources than CPTED or penal control in the forms of law, punishments, and regulations, which are short-term solutions that mainly focus on offenders’ behavior [29]. The supporting argument for CPSD is that its results could be multiplicative rather than additive, unlike the CPTED strategies.

In the Malaysian context, the authors notice that among the 23 steps of the Safe City Program, the prime focus is on altering the physical environment to reduce the likelihood of offenders committing crimes. Indirectly, the focus is on protecting potential targets from becoming crime victims. For the guardians, the focus is mostly on the police force’s role in setting up police kiosks in neighborhoods, conducting foot-patrol, encouraging community policing activities, and setting up CCTVs as a form of a digital guardian. Other capable guardians, such as the head of the family, are not included as part of the 23 strategies of the Safe City Program. Therefore, while the authors see a gap that the FDTCP guidelines do not consider the role of the “guardians” and changes in social structure, it is noted that these elements could be seen discursively in the initiatives taken by other government agencies.

The second theory adopted in this paper is the broken windows theory. This theory is based on the proposition that small issues should be handled carefully rather than letting them happen and creating significant future problems. Reference [38] has posited that disorder and crime are usually inextricably linked at the community level. Thus, everything, including the environment, should be kept to help reduce crime and the fear of crime. Disorder, e.g., the unattended property, is a fair game for people who are out for fun or to plunder, as it carries a “no one cares” signal [40]. Thus, minor vandalism may begin and culminate in significant destructions. Disorder indicates that untended behaviors will likely lead to the breakdown of community controls. Vandalism occurs once communal barriers, i.e., a sense of mutual regard and civility obligations, are lowered by actions that seem to signal that no one cares.

Reference [38] mentioned that “foot patrolling” by police officers, while not having been proven to reduce the crime rates, has reduced the fear of crime, and improved trust in the police force, thus enhancing the police-citizens relationship. Due to the close contact between police officers and local residents, the “regulars”, such as panhandlers, loiterers, and some strangers, would understand and agree that there are hidden “informal rules” to be observed by all parties, which will maintain order in the neighborhood. These informal rules form part of the custom of the local residents even without legal backing. This order maintenance would reduce the fear of crime and make it possible to integrate social cohesion in the community [41].

As explained by [38], social order maintenance is partly the role of the police officers in maintaining the local order in extension to fighting crime. People will have a good impression if they frequently meet the police officers on the street. However, suppose the police officers always arrive in a police car (i.e., motorized-patrol officers). In that case, people tend to have a negative impression that they are “acting” and not sincere in preventing or solving crime and helping the victims. Therefore, there is a relationship between crime prevention and order maintenance. This order maintenance has hidden, informal rules

abided by the regulars, and it is viewed as “community relations building” activities that happen on the ground. It indirectly builds trust in the police force and boosts their image. This approach could be applied in the Safe City Program in Malaysia by involving police officers in frequent foot-patrolling activities and manning the police station or patrolling in vehicles. Another practice to learn from the broken windows theory is promoting community policing projects that benefit the police-citizen relationship. This is a form of informal social control mechanism, and it is suitable for building trust and developing better local order maintenance rules in Malaysia.

2.2. Formulating the Factors of a Safe City Program in Malaysia

According to the Royal Malaysia Police (RMP), the crime index rose significantly from 1980 to 2009. The worst index was recorded in 2007, in which RM2.04 billion was allocated for crime prevention programs in Malaysia [42]. After the March 2008 elections in Malaysia, the Federal Government, through its Government Transformation Program, took measures to address the people’s demand for a safer environment urgently. In 2009, the Safe City Program was formally included in the Malaysia Government Transformation Program as one of the strategies under the National Key Results Areas (NKRAs). The Reducing Crime NKRA (CRI NKRA) was implemented to address public safety issues concerning crime and policing [43]. Two National Key Performance Indicators (NKPIs) were identified under the CRI NKRA, namely “reducing street crime through a safe city program” and “crime prevention through environmental design” [11].

Through the National Urban Policy, the Malaysian government has defined a safe city as “an integrated program to the creation of cities where the population is free from all physical, social, and mental treats” [44]. The safe city features that have been determined for crime prevention are environmental design, the roles of safety-related agencies such as the police force, and community development. In December 2009, the Safe City Program was redefined into three main strategies consisting of 15 steps from the 23 crime prevention measures in the first version that was introduced in 2004 [11]. This exercise was done after considering the effectiveness of the initiative at the local authority level as well as opinions of the Ministry of Home Affairs, the RMP, State Town and Country Planning Department, and members of the Crime Lab (NKRA). Academic studies on the Safe City Program in Malaysia have flourished since 2004. Most of the studies rate the effectiveness of the program as between intermediate and low, as well as highlighting citizens’ perceptions on relying on the government as the party responsible for curbing crimes; undeniably, more efforts are needed to promote community participation, including community policing activities [45–47].

Following the review of the safe city programs that were launched in Malaysia in 2004 and 2009, and understanding on main actors in crime and fear prevention theories, the authors found these factors can be primarily grouped under the two main categories of CPTED and CPSD, and further divided into seven sub-categories and 27 indicators (Table 1). Under the category of CPTED, all factors are solely related to the role of the actor of guardian, i.e., the authorities, and none were related to the actors of victims and offenders. Under such grouping, four sub-categories derived included (a) real barriers design initiatives, (b) symbolic barriers design initiatives, (c) Information and Communication Technology (ICT) and mechanical surveillance design initiatives, and (d) image and human activities’ legitimacy initiatives. On the other hand, under the category of CPSD, the prevention factors are under the role of the guardians (authorities) and potential victims/communities (engagement). Only one sub-category was derived under the role of guardians, such as the management’s legitimacy. In contrast, two sub-categories were found under the community’s role, such as community involvement and public awareness factors.

Table 1. Factors in a Safe City Program (source: items were derived from the Safe City Program (SCP) year 2004 and 2009 in Malaysia and regrouped with the insights from [2,5,16,38,48]).

Actor	Sub-Category	Item
<i>1st Category: CPTED (territoriality control), with 18 items</i>		
Guardians (Authorities)	Real barriers design initiatives	1. Separation of pedestrian walkways from motorized lanes
		2. Access control
		3. The appearance of building, street, and city
		4. Landscaping
	Symbolic barriers design initiatives	5. Safety Mirror
		6. Signage of location/direction
		7. Crime prevention signage
		8. Unobstructed view of public walkways
	ICT and mechanical surveillance design initiatives	9. Establish of GIS mapping for crime and SCP
		10. Safety alarm (Panic button)
		11. Installation of CCTV in commercial premises and public places
		12. Lighting
	Image and human activities' legitimacy initiatives	13. Generate appropriate activities at vulnerable crime spots
		14. Cleaning/tidying concealed and unkempt areas
		15. Mix development/land use
		16. Police post/mobile station/patrolling
		17. Security guard services
		18. Prohibition of business/parking on the walkways and pedestrian footpaths

Table 1. Cont.

Actor	Sub-Category	Item
<i>2nd Category: CPSD (Social development and program), with 9 items</i>		
Guardians (Authorities)	Management's legitimacy	1. Improve surveillance in the CBD areas
		2. Fixed agenda on safe city program at the full council meeting (inter agencies)
		3. Set up city status websites at local authority on safety issues
		4. Victimization/safety survey
Potential Victims/Communities (Engagement)	Community Involvement	5. Teenager development in fear and crime prevention activities
		6. Private and corporation participation
		7. Community policing
	Public Awareness	8. Education, public awareness, and publicity
		9. Watch group

Note: CBD stands for central business district, CCTV stands for closed-circuit television, CPTED stands for crime prevention through environmental design, CPSD stands for crime prevention methods through social development, GIS stands for geographic information system, ICT stands for information and communication technology, and SCP stands for safe city program.

2.3. A holistic Safe City Thesis

The authors have attempted to form a holistic safe city program thesis (Figure 2). In this thesis, the safe city program has the objectives of reducing crime that affects either individual victims or subjects such as properties, as well as the fear of crime.

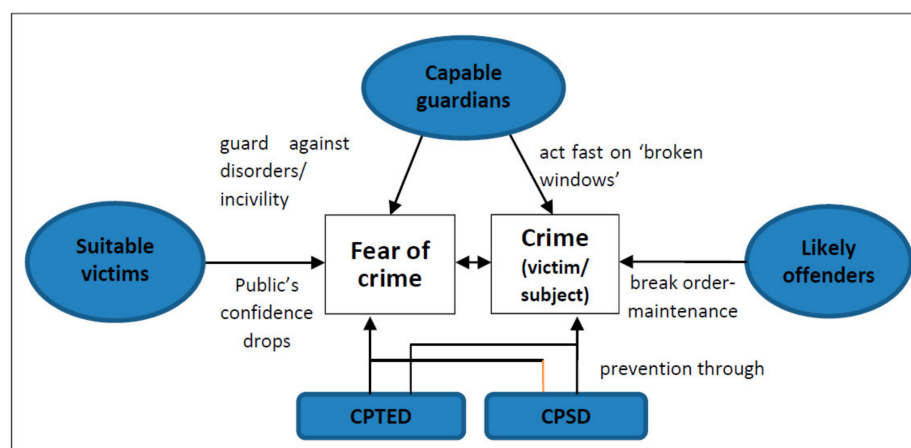


Figure 2. A holistic safe city thesis (source: authors).

The three major actors of likely offenders, suitable victims, and capable guardians posited by [2] form the foundation of this thesis's implicit concern. Subject to the right convergence of time and space, the prospective offenders could break the social order maintenance and commit crimes against the suitable victim(s) or properties such as a house. Whether the crime has happened or is likely to happen creates societal signals, mainly a phobic ambiance to the people living close to the crime scene. These decent people who are likely to turn into victims are exposed to the feeling of fear of crime, resulting in a drop of public confidence in the sense of safety. Within this cycle, the third-party guardians such as the police, head of household and community, local authorities, and other "public eyes", among others, play crucial roles in guarding against these disorders and incivility acts. Moreover, as posited by [38], the guardians and all society members should act fast on the "broken windows" or signs that criminal cases are left unattended to prevent further deterioration from occurring, which might culminate in an immense tragedy. Fear and crime are interconnected, since offenders can create and determine fear of crime, while victims can indirectly influence crime. Among the preventive measures suggested by [5], preventions through environmental design (CPTED) and social development (CPSD) are highlighted as suitable acts for curbing crime and the fear of crime.

2.4. Sustainability of Safe City Planning

Safety is an inherent feature in the creation of sustainable built-up environments. This was clearly stated in the United Nations (UN) policy New Urban Agenda (NUA), which advocated "creating safe, resilient, sustainable and inclusive cities" [49]. Meanwhile, the 11th Sustainable Development Goal (SDG) for 2015–2030 stated that the aim was to "make cities inclusive, safe, resilient and sustainable" [50]. Further evidence has identified safety as a continuous and significant indicator of a smart sustainable city when quality of life is measured [51–61].

The concept of safety is the ontological foundation of general and specific social sustainability [62]. In other words, under the umbrella of the sustainability concept, a socially safe environment is essential for existing and future generations. Without such an environment, cities, urban spaces, and streets will be unable to sustain human life. People would constantly migrate from those unsafe environments, cities, or particular streets. By extension, to sustain life, people have the right to not only remain safe but also adopt any measures such as safe city planning directed towards adaptation and security. Safety issues such as crime are framed as social problems of sustainability [36,63]. To investigate the aspect of sustaining urban security, the authors of this study attempted to ascertain the factors of fear and of crime prevention.

3. Methodology

By identifying factors contributing to crime prevention and fear of crime, this article aims to provide empirical evidence regarding a safe city program launched in Malaysia. A quantitative survey questionnaire methodology was employed, in which 400 pedestrians were asked about their perceptions of Kuala Lumpur's central business district. Survey research is probably the optimal method available to the social researcher concerned with collecting any original data that describes a population too large to observe directly [64] (p. 118), in this case, the 1.73 million inhabitants of Kuala Lumpur. The following subsections outline the site, population, and sample size; research framework, variables and research instruments; reliability test and data analysis; and research ethics.

3.1. Site, Population, and Sample Size

The site selection was based on the significance and importance of Kuala Lumpur to Malaysia, accounting for more than 40% of the country's urban population [59]. Kuala Lumpur has been selected as a policing model under Malaysia's new economic model. The police force intends to make Kuala Lumpur a safer city for locals and tourists alike [65]. Besides that, the greater Kuala Lumpur conurbation [66] has also been identified as a National Key Economic Area (NKEA) with projects and initiatives to enhance the city's competitiveness [67].

Recently, Kuala Lumpur has been ranked 35th in the Safe City Index 2019 [57], dropping four places from the year 2017, and most of the category ratings are below average compared to the other 60 cities in the world. Kuala Lumpur recorded approximately 24.37% of the national street crimes for the year 2016, and the Dang Wangi District is home to the main hot spots for street crimes, with about 37.86% of the overall street crime in Kuala Lumpur [68]. Due to such hot sport for street crimes, the Dang Wangi District was selected as the survey area, encompassing four streets: Sultan Ismail Street, Ampang Street, Raja Chulan Street, and Bukit Bintang Street and Imbi Street (Figure 3).

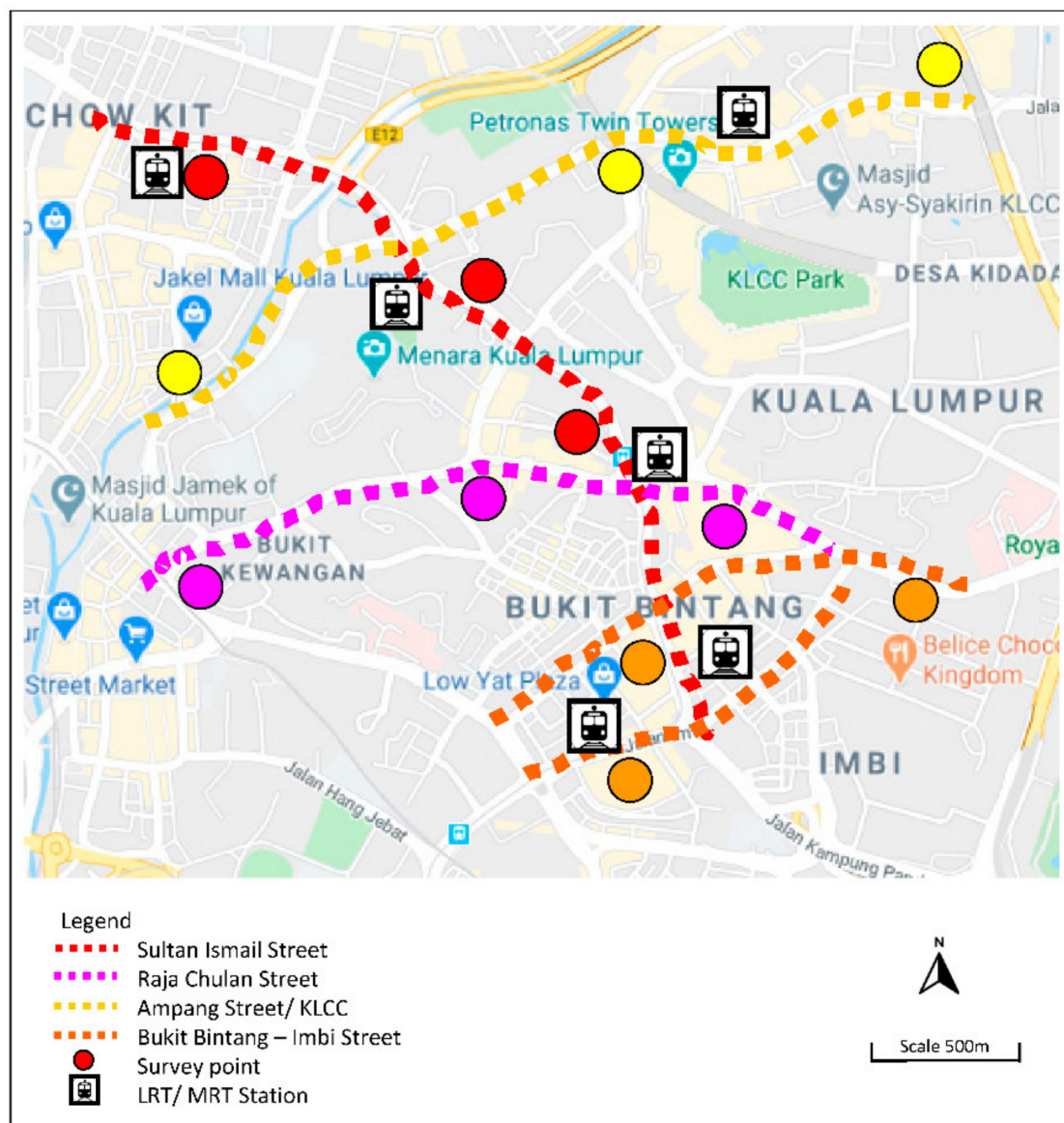


Figure 3. The central business district in Kuala Lumpur and pedestrian survey area (source: authors).

Survey personnel were stationed along these four streets with three survey points on each street during both day and night time and throughout weekdays and weekends. This method followed [69], which identified “day” interviews as occurring from 9 a.m. to 6 p.m. and “night” interviews as occurring from 7 p.m. to 10 p.m. In this study, “weekdays” was defined from Monday to Friday, and “weekends” from Saturday to Sunday. Sunday to Thursday nights were defined as “weeknights”, while Friday and Saturday nights were “weekend nights”.

According to Table 2, 400 samples were collected using proportionate stratified random sampling from June to December in 2017. The purpose of stratification is to categorize a population into

subgroups based on homogeneity. Different subsets are heterogeneous. Next, a suitable number of units from each subset is chosen for sampling. The representative character of each sample is increased through this process, at least where stratification variables are concerned [64]. For each street, 100 samples were collected, with equal samples of 25 each during weekday and weekend, by day and night. In order to prevent bias, every 10th person in the stratified arrangement was selected for the sample. Those who confirmed that they had not visited the city previously were disqualified from the survey. Four hundred samples are adequate for study areas like Kuala Lumpur. A population of 1.73 million people requires a sample size of 386 people to represent the population at a 95% confidence level and a 5% error [70].

Table 2. Distribution of survey respondents (source: authors).

Study Area/Street	Weekday		Weekend		Total
	Day	Night	Day	Night	
Sultan Ismail	25	25	25	25	100
Raja Chulan	25	25	25	25	100
Ampang	25	25	25	25	100
Bukit Bintang-Imbi	25	25	25	25	100
Total	100	100	100	100	400

3.2. Research Framework, Variables, and Research Instrument

The survey questionnaire was designed mainly upon the effectiveness of the prevention items towards street crime and the fear of street crime.

Acknowledging that a cross-sectional survey can only measure the items at the occasion factor (i.e., at one point in time) [71], to measure the effectiveness (cause and effect), the items were designed such that respondents compared their experiences at the point of survey (the year 2017) with the previous year (2016 as the control variable). All variables which involve perceptions of fear or street crime in the Kuala Lumpur's central business district (KL CBD) are compared to the previous year (Table 3).

Each survey had an average duration of 20 to 30 min, including the time taken to explain the purpose of the survey to the respondent. The survey questionnaire was developed based on studies by [69,72], which are concerned with a safer city and have been proven to be effective.

The design of the questionnaire covered firstly the respondent's background. Five basic demographic items were included: gender, age, monthly income (in Ringgit Malaysia, RM), educational level, as well as their usual reason for visiting KL CBD.

Second, for the main research items, two dependent variables (DV) identified for securing a safe city program are Street Crime and Fear of Street Crime. For the first dependent variable, street crime was measured through the average perceived security level in the central city following time from 6 a.m. morning to after 10 p.m. for both weekdays and weekends, compared to last year. The 5-point Likert scale used ranged from 1 as being very dangerous to 5 as being very safe. While the second dependent variable, the fear of crime, was measured through the average perceived fear of crime compared to last year. The 5-point Likert scale used ranged from 1 as being much worse now to 5 as being much safer now.

Third, for the independent variables (IV), 27 items/factors, which are summarized in Table 1, were applied in this study, which also mainly comes from two main categories, namely the CPTED with 18 items, and the CPSD with nine items (Figure 4).

Table 3. Definitions and descriptive statistics of the variables (source: authors).

Variables		Description	Mean	S.D.	Skewness	Kurtosis
<i>Dependent Variable</i>						
Street crime, Y1		The average perceived security level in the central city follows time from 6 a.m. morning to after 10 p.m. for both weekdays and weekends, compared to last year. The reference group is “last year.”	3.52	0.88	−0.214	0.324
Fear of crime, Y2		The average perceived fear of crime compared to last year. The reference group is “last year.”	3.11	1.01	−0.288	0.056
<i>Independent variables</i>						
<i>CPTED</i>						
Real barriers design initiatives, X1	Separation of pedestrian walkways from motorized lanes, X1	The reference group is “no separation of walkways”	3.75	0.98	−0.296	0.211
	Access control, X2	The reference group is “no access control”	3.60	0.90	−0.116	0.345
	Appearance of building, street, and city, X3	The reference group is “non-appearance of building, street, and city”	3.31	0.99	−0.151	0.086
	Landscaping, X4	The reference group is “no landscaping”	3.26	1.02	−0.006	−0.057
Symbolic barriers design initiatives, X2	Safety mirror, X5	The reference group is “no safety mirror”	3.38	1.04	−0.040	0.901
	Signage of location/direction, X6	The reference group is “no signage of location/direction”	3.53	0.96	−0.227	0.429
	Crime prevention signage, X7	The reference group is “no crime prevention signage”	3.31	1.08	−0.179	−0.204
	Unobstructed view of public walkways, X8	The reference group is “obstructed view”	3.61	0.96	−0.147	0.344
ICT design and development initiatives, X2	Establishment of GIS mapping for crime and SCP, X9	The reference group is “non-availability of GIS mapping for crime and SCP”	3.46	0.95	−0.074	0.706
	Safety alarm (Panic button), X10	The reference group is “no safety alarm”	3.90	0.95	−0.393	0.356
	Installation of CCTV in commercial premises and public places, X11	The reference group is “non-installation of CCTV in commercial premises and public places”	4.04	0.99	−0.840	1.051
	Lighting, X12	The reference group is “no lighting”	4.01	0.97	−0.668	0.747

Table 3. Cont.

Variables		Description	Mean	S.D.	Skewness	Kurtosis
Image & human activities' legitimacy initiatives, ×3	Generate appropriate activities at vulnerable crime spots, ×13	The reference group is “non-availability of appropriate activities at vulnerable crime spots”	3.49	1.01	−0.109	−0.151
	Cleaning/tidying concealed and unkempt areas, ×14	The reference group is “no cleaning/tidying concealed and unkempt areas”	3.45	1.03	−0.213	0.856
	Mix development/land use, ×15	The reference group is “singly land use development”	3.15	1.04	−0.031	0.345
	Police post/mobile station/patrolling, ×16	The reference group is “no police post/mobile station/patrolling”	3.95	0.99	−0.922	1.108
	Security guard services, ×17	The reference group is “no security guard services”	3.75	1.00	−0.495	0.807
	Prohibition of business/parking on the walkways and pedestrian footpaths, ×18	The reference group is “no control of business/parking on the walkways and pedestrian footpaths”	3.40	0.98	−0.124	0.635
CPSD						
Management's legitimacy, X5	Improve surveillance in the CBD areas, ×19	The reference group is “non-improve surveillance in the CBD areas”	3.70	1.00	−0.394	0.322
	Fixed agenda on SCP at full council meeting (inter agencies), ×20	The reference group is “no fixed agenda on SCP at full council meeting”	3.33	0.98	−0.129	0.102
	Set up city status websites at local authority on safety issues, ×21	The reference group is “no set up of city status website at local authority on safety issues”	3.25	1.09	−0.115	0.099
	Victimization/Safety survey, ×22	The reference group is “no victimization/safety survey”	3.27	1.06	−0.087	0.412
Community Involvement, X6	Teenager development activities, ×23	The reference group is “no teenage development activities”	3.64	1.11	−0.471	0.536
	Private and corporation participation, ×24	The reference group is “no private and corporation participation activities”	3.49	0.97	−0.076	0.152
	Community policing, ×25	The reference group is “no community policing”	3.64	0.98	−0.394	0.456
Public Awareness, ×7	Education, public awareness, and publicity on safety issues, ×26	The reference group is “no education, public awareness, and publicity on safety issues”	3.78	0.95	−0.410	0.652
	Watch group, ×27	The reference group is “no watch group”	3.44	1.02	−0.406	0.411
N = 400						

Note: CBD stands for central business district, CCTV stands for closed-circuit television, CPTED stands for crime prevention through environmental design, CPSD stands for crime prevention methods through social development, GIS stands for geographic information system, ICT stands for information and communication technology, SCP stands for safe city program, and S.D. stands for standard deviation.

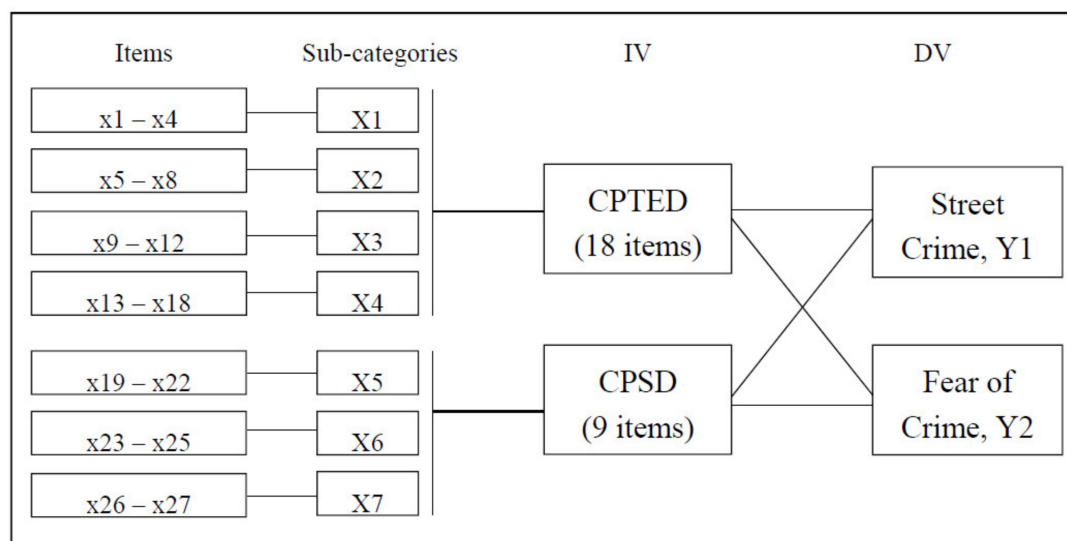


Figure 4. Relationships among variables (source: authors). Note: CPTED represents crime prevention through environmental design, CPSD represents crime prevention through social development, IV represents independent variables, and DV represents dependent variables.

For independent variables, a 5-point Likert scale was used to measure the levels of effectiveness of the 27 items, ranging from 1 as being not at all effective to 5 as being extremely effective. The mean score range values of the scale ratings were used for the descriptive analysis and to identify the effectiveness of the crime prevention steps stated in the safe city program. From the sample of 400 respondents, all mean score for the effectiveness of initiatives in reducing street crime and fear of crime are above 3, which indicated that all respondents have agreed that all twenty-seven initiatives under the safe city program are effective (Table 3). Besides, most of the data showed a skewness or kurtosis value of less than 1.0. If the skewness or kurtosis value is between -1.0 and 1.0 , the distribution is considered normal, and indicate that are almost preferred to be symmetrical [73]. Two exceptional cases of CCTV installation with kurtosis 1.051, and the existence of police post surveillance with kurtosis 1.108, were assumed to contain normal data since their skewness values were in the normal range. Furthermore, the authors intended to measure both of these items, as they are important features in CPTED, as highlighted in [16,33]. Assuming the sample size is sufficient in number, which in this study amounts to 400 samples, no serious issues should arise even if the normality assumption is violated. The implication is that parametric procedures can be used in this study, despite a lack of normal distribution of data [74].

3.3. Reliability Test and Data Analysis

All the collected data from the public survey involving 400 respondents were checked for quality using the Statistical Package for the Social Sciences (SPSS) software by conducting reliability tests to verify the consistency of all the measurements.

Cronbach's alpha (α) was utilized in running the reliability test. A Cronbach's alpha value < 0.6 is considered poor, 0.61 – 0.7 is considered questionable, 0.71 – 0.8 is acceptable, 0.81 – 0.9 is considered good, while more than 0.9 represents an excellent level with high reliability [75]. Based on reliability tests, all data used for measuring the effectiveness of Safe City initiatives in reducing street crime and fear of crime are excellent, with Cronbach's alpha values ranging from 0.912 to 0.959 (see Table 4). These values indicate that all the scales contain internal consistency, and are therefore considered reliable for use.

Table 4. Reliability and internal consistency of data in reducing street crime and fear (source: authors).

Variables		Cronbach's Alpha (α)	Reliability Level
CPTED			
Real barriers design initiatives, $\times 1$	Separation of pedestrian walkways from motorized lanes, $\times 1$	0.940	Excellent
	Access control, $\times 2$	0.959	
	Appearance of building, street, and city, $\times 3$	0.933	
	Landscaping, $\times 4$	0.924	
Symbolic barriers design initiatives, $\times 2$	Safety Mirror, $\times 5$	0.913	
	Signage of location/direction, $\times 6$	0.933	
	Crime prevention signage, $\times 7$	0.955	
	Unobstructed view of public walkways, $\times 8$	0.912	
ICT design and development initiatives, $\times 2$	Establish of GIS mapping for crime and SCP, $\times 9$	0.937	
	Safety alarm (panic button), $\times 10$	0.954	
	Installation of CCTV in commercial premises and public places, $\times 11$	0.918	
	Lighting, $\times 12$	0.912	
Image and human activities' legitimacy initiatives, $\times 3$	Generate appropriate activities at vulnerable crime spots, $\times 13$	0.920	
	Cleaning/tidying concealed and unkempt areas, $\times 14$	0.934	
	Mix development/land use, $\times 15$	0.936	
	Police post/mobile station/patrolling, $\times 16$	0.926	
	Security guard services, $\times 17$	0.914	
	Prohibition of business/parking on the walkways and pedestrian footpaths, $\times 18$	0.941	
CPSD			
Management's legitimacy, $\times 5$	Improve surveillance in the CBD areas, $\times 19$	0.925	Excellent
	Fixed agenda on SCP at full council meeting (inter agencies), $\times 20$	0.938	
	Set up city status websites at local authority on safety issues, $\times 21$	0.951	
	Victimization/safety survey, $\times 22$	0.945	
Community Involvement, $\times 6$	Teenager development activities, $\times 23$	0.937	
	Private and corporation participation, $\times 24$	0.950	
	Community policing, $\times 25$	0.951	
Public Awareness, $\times 7$	Education, public awareness, and publicity on safety issues, $\times 26$	0.937	
	Watch group, $\times 27$	0.941	
Significant level of 0.000			

Note: CBD stands for central business district, CCTV stands for closed-circuit television, CPTED stands for crime prevention through environmental design, CPSD stands for crime prevention methods through social development, GIS stands for geographic information system, ICT stands for information and communication technology, and SCP stands for safe city program.

Subsequently, Pearson's Correlation through Bivariate Analysis was generated to test the relationship between the variables [75]. A value that measures the strength of a relationship is the correlation coefficient, r , otherwise known as Pearson's r . The r values between 0.3 and -0.3 indicate a weak relationship, values from 0.3 to 0.7 and from -0.3 to -0.7 indicate a moderate linear relationship, and values from 0.7 to 0.9 and from -0.7 to -0.9 are considered strong.

Next, inferential analysis in the form of regression analysis was performed to test the significant contributing factors of preventing crime and the fear of crime. The statistical significance was examined

at the traditional p -value of less than 0.05. Multiple correlation coefficient, R , measures the quality of the prediction of the dependent variable. In other words, simple linear regression was used to estimate the dependent variables or outcomes of reducing street crime and fear of crime based on the Safe City initiatives as the independent or predictor variables. This analysis also determined the overall fit or variance explained of the model and the relative contribution of each Safe City initiative.

3.4. Research Ethics and Survey Research

In the majority of cases, survey research incorporates requests for respondents to offer personal information which is probably otherwise unavailable [64]. Furthermore, underage respondents were also involved in this study. Therefore, all the data collected from respondents will not be publicly disclosed in order to protect their privacy, and to avoid any possible psychological distress. Moreover, respondents were given an information sheet to read, and signed a consent form guaranteeing the confidentiality of data provided to this survey. The study received ethical approval from the Royal Malaysia Police.

4. Results

4.1. Pedestrian Profile

The respondents' background information reflects the commercial and business status of Kuala Lumpur and the variety of justifications or attractions for residents to reside in and for tourists to visit the city (Table 5).

Table 5. Respondents profile (source: authors).

Characteristics		Frequency	%
Gender	Male	189	47.30
	Female	211	52.70
Age	13–19	51	12.80
	20–29	198	49.50
	30–39	76	19.00
	40–49	44	11.00
	50–59	28	7.00
	60 and above	3	0.80
Monthly income (RM)	Less than 1000	57	14.30
	1001—2000	40	10.00
	2001—3000	140	35.00
	3001—4000	69	17.30
	4001—5000	53	13.30
	5001 and above	41	10.30
Education level	Primary school	2	0.50
	Secondary school	23	5.80
	College	99	24.80
	Undergraduate degree	227	56.80
	Postgraduate	47	11.80
	No qualification at all	2	0.50
Usual reason visits KL CBD	Work/business	160	40.00
	Shopping	70	17.50
	Entertainment/recreation	108	27.00
	Tourist/visitor	25	6.30
	Resident	24	6.00
	Other	13	3.30

Note: RM represents Ringgit Malaysia, KL represents Kuala Lumpur, and CBD represents central business district.

The male and female genders are almost equally represented at 47.3% and 52.7%, respectively. The 20–29 years old age group has the highest number of respondents (198 or 49.5%). For monthly income, the group with the highest number of respondents is the RM2001–RM3000 income group (140 or 35%). Most of the respondents hold at least a first degree (56.8%). The three most cited reasons for visiting Kuala Lumpur CBD are for work/business purpose (40%), followed by entertainment/recreation (27%), and shopping (17.5%).

4.2. Perception of Fear and Street Crime Level

The Safe City Program and its initiatives can be divided into two major categories, namely CPTED and CPSD. In correlation analysis, the authors found that CPTED had a stronger relationship with reducing street crime (0.592) compared to CPSD (0.562). CPTED and CPSD had the same level of moderate relationship with reducing fear of crime, with both obtaining a Pearson's correlation value of 0.628.

In detail, the results show that each of the independent variables had a significant relationship ($p < 0.01$) with the dependent variables, which are reducing crime and reducing the fear of crime. The three CPTED variables that had the strongest relationship with reducing street crime are landscaping (0.690), the appearance of the building, street, and city (0.686), and generate activities (0.675). Meanwhile, the three CPSD variables that had the strongest relationship with reducing street crime are full council meeting (0.654), watch group (0.653), and city status website (0.62). Overall, most of the relationships can be considered as moderately linear with the r values falling between 0.498 and 0.690.

Next, the three CPTED variables that had the strongest relationship with reducing the fear of crime are safety mirror (0.698), the appearance of the building, street, and city (0.692), and generate activities (0.679). Meanwhile, the three CPSD variables of city status website (0.673), watch group (0.656), and victimization/safety survey (0.653) had the strongest relationship with reducing the fear of crime. The range of r values for reducing the fear of crime (0.522–0.698) is slightly narrower than that for reducing street crime (0.498–0.690).

4.3. Effect of CPTED and CPSD

In regression analysis, the R values of 0.630 and 0.638 for reducing street crime and reducing the fear of street crime, respectively, indicate a moderate level of prediction. The coefficient of determination (R^2) is the proportion of variance in the dependent variable that can be explained by the independent variables. The R^2 value of 0.396 for reducing street crime indicates that the set of independent variables can explain only 39.6% of the variability in the dependent variable. Similarly, the R^2 value of 0.408 for reducing the fear of crime shows that the set of independent variables can explain only 40.8% of the variability in the dependent variable.

As for the results for the statistical significance of the regression models, the independent variables significantly predicted the dependent variables of reducing street crime ($F(27,372) = 9.047, p < 0.0005$) and reducing the fear of crime ($F(27,372) = 9.483, p < 0.0005$). Both regression models are a good fit for the data. However, the statistically significant level for the coefficient of each independent variable needs to be referred to.

Table 6 shows the estimated multiple regression model. Only three Safe City initiatives as the independent variables made a good prediction of Reducing Street Crime as the dependent variable, which can be statistically significantly predicted as:

“Reducing Street Crime,” $F(27, 372) = 1.124 + (0.109 \times \text{access control}) - (0.091 \times \text{full council meeting}) + (0.021 \times \text{city status website}), \text{ with } p < 0.05.$

Table 6. Multiple regression results (source: authors).

Independent Variables	Reducing Street Crime			Reducing Fear of Crime		
	β	T	Sig.	β	T	Sig.
<i>CPTED</i>						
Separation of walkways	−0.17	−0.447	0.655	0.048	1.251	0.212
Access control	0.109	2.794	0.005 *	0.031	0.800	0.424
The appearance of building/street	0.009	0.250	0.803	−0.026	−0.728	0.467
Landscaping	0.049	1.240	0.216	0.014	0.352	0.725
Safety mirror	−0.018	−0.454	0.650	0.006	0.151	0.880
Signage of location/direction	0.063	1.619	0.106	0.058	1.456	0.146
Crime prevention signage	0.015	0.445	0.656	0.029	0.814	0.416
Unobstructed view	0.052	1.506	0.133	0.019	0.514	0.608
GIS mapping	0.007	0.203	0.839	−0.046	−1.238	0.216
Safety alarm (panic button)	0.029	0.778	0.437	0.077	1.962	0.051
CCTV	0.026	0.656	0.512	0.053	1.504	0.133
Lighting	0.045	1.165	0.245	0.042	1.112	0.267
Generate activities	0.058	1.712	0.088	0.032	0.948	0.344
Cleaning unkempt areas	−0.007	−0.188	0.851	0.039	1.056	0.292
Mix development	−0.011	−0.281	0.779	0.074	1.959	0.051
Police post/mobile station	0.018	0.420	0.675	0.036	0.865	0.387
Security guard services	0.021	0.510	0.610	0.004	0.102	0.918
Prohibition of business/parking	0.061	1.854	0.065	0.036	1.037	0.300
<i>CPSD</i>						
Improve surveillance	0.043	1.110	0.268	0.020	0.486	0.627
Full council meeting	−0.091	−2.274	0.024 *	−0.007	−0.169	0.866
City status website	0.021	4.994	0.000 *	0.074	1.943	0.053
Victimization/safety survey	−0.049	−1.166	0.245	0.030	0.762	0.446
Teenager development activities	−0.024	−0.593	0.553	−0.036	−0.838	0.402
Private participation	0.008	0.209	0.835	−0.004	−0.117	0.907
Community policing	0.034	0.847	0.398	0.034	0.805	0.422
Education	−0.003	−0.073	0.942	0.031	0.734	0.463
Watch group	−0.016	−0.463	0.643	0.003	0.086	0.931
Constant		1.124			0.800	

Note: * significant level < 0.05. CCTV stands for closed-circuit television, CPTED stands for crime prevention through environmental design, CPSD stands for crime prevention methods through social development, and GIS stands for geographic information system.

Meanwhile, notably, none of the independent variables could make a good prediction of Reducing the Fear of Crime at a significant level > 0.05. Therefore, no regression formula was formed to predict the outcome of Reducing the Fear of Crime.

5. Discussion

5.1. Reduction of Crime at a Moderate Level

The Safe City Program is capable of reducing street crime at a moderate level and is less sensitive in predicting the outcome of all the good efforts made by various agencies. Amongst the 27 initiatives

in the Safe City Program, only “access control”, “full council meeting”, and “city status website” could predict the outcome of reducing street crime significantly. However, the impacts of these three initiatives were not powerful enough in reducing street crime with β coefficient values 0.109, -0.091 , and 0.021 , indicating low sensitivity. In detail, “access control” is an important concept emphasized in CPTED [18]. Controlling the accessibility of a road or an area contributes to a sense of territoriality, resulting in effective crime prevention [19]. This result is in line with [76], which tested the relative effects and found the strongest direct effect of territorial variables on crime prediction. Humans are used to establishing hierarchies or territories that range from private to semi-private to public space by marking their turf using fences, signs, and plain border definition. The most common are fencing and walling for separating physical space to create safety as well as a sense of safety [19].

For “full council meeting”, the authors note that it is crucial to hold the meetings to sustain the Safe City Program because important decisions are usually made during council meetings. Out of the 27 initiatives, most of the respondents were unaware of the “fixed agenda on Safe City Program at full council meeting” at the local authority level as a platform for inter-agency discussions and collaboration planning. The Federal Government has defined the Safe City Program in Malaysia as city-based, involving cross-ministry and agency partnerships, being led by the mayor of each local authority with a fixed agenda for the monthly council meetings, and having the aim of reducing street crime through target hardening, physical initiatives, and public involvement [7]. For the “set up city status websites at local level”, the result affirming its significant contribution to crime prevention suggests that this initiative should be included in future safe city programs, as this initiative was ignored in the second version of the Safe City Program 2009 in Malaysia. Besides, it can create online awareness by providing a long-term reference with favorable impacts.

5.2. Reduction of Fear of Crime at a Weak Level

None of the elements in the Safe City Program was able to predict the outcome of reducing the fear of crime significantly in multiple regression modelling. Hence, the study concludes that the Safe City Program is acceptable at a weak level in increasing perceived pedestrian safety and reducing the fear of crime, particularly among city users in the Kuala Lumpur CBD area.

The purpose of the study was to identify effective general factors concerning fear and crime prevention within a Safe City Program. Thus, demographic variables like gender were not set as control variables in the regression analysis, even though female respondents revealed higher levels of fear and tended to be actual victims of street crime.

Based on the holistic safe city program thesis formed in Figure 2, the authors suggest that the Safe City strategies should be well integrated since separate implementations of each initiative will not be able to reduce crime or the community’s perception of disorder.

5.3. Offenders’ Perspectives of Curbing Crimes and Fear of Crime

Among the three significant factors, i.e., “access control”, “full council meeting”, and “city status website”, all of these are from the efforts of the guardians such as the local authorities, and police forces. In terms of efforts from the potential victims from communities, none of the strategies is significantly found in this study. Thus, a question arises to what other contributing factors that will be able to fill in the gap of sustaining safe city program. Since the factors in reducing fear and crime may not be lying under the factors of “capable guardians” (authorities), and “suitable victims” (community), but possible strategies could be view/search from the factors of “likely offenders”. This suggestion is derived from [2] who mentioned that guardians, victims, and offenders are three important actors in everyday crime prevention theories. Thus, from the offenders’ perspective, it could be divided into two groups, namely those are potential, and those already an offender. Education to the former group is essential, such as cultivating ideas of living in a harmonious life, family, and society, and understanding of the punishment to offenders and wrong social impression on those criminals. If lesser people do not/potentially perform crimes, then it will not/be less likely to impose fear to the community, or deeply

commit any crimes. As for the already-offenders, support and rebuild after-criminal life is essential such as counselling support in jail, social support, acceptance, and opportunity in having decent jobs for everyday expenses and living [13].

5.4. *Victims/Communities Perspective Needed to Be Enhanced*

The authors posited that indicators for victims and communities might be under-explored in the limited literature covering CPSD [29–31,77]. The authors suggest that for those “already victims”, society needs to study the social problems that lead to crime, build more robust psychological health, heal from fear, accept fear reality, positively face life after the crime, and help them back to a safe society. Since the deeper issue facing is although statistics showed that crime rate decrease, but fear is deepening. In other words, the real quantity of crimes happening might be low, but other none “real” crime or non-police reported cases such as harassment, threatening will “impact” on third parties. Meaning, a direct victim might be one single person, but the people around that victim, such as those family members, and the victims’ communities, may face “fear in the heart”, as though they will be mentally more cautious and preventing themselves from becoming a real victim. Thus, the topic of “fear of crime” should be highlighted more in a safe city program and solutions from responsible communities should be explored further than the existing superficial engagement of communities in sustaining a safe city environment.

6. Conclusions

It is not surprising that this study hardly obtained one or two individual initiatives which strongly influenced the dependent variables of reducing street crime and reducing the fear of crime. Cities exist in a dynamic, complex environment and securing their prosperity through protecting the population, assets, and reputation is a significant challenge [13]. Few strategies by guardian authorities are effective; however, they may not be total in curbing crime and fear of crime in the city. More strategies should be explored from the other actors such as victims/community and offenders. The Safe City Program works only when a combination of initiatives from all the perspective of guardians, victims, and offenders is integrated well.

There are several limitations to the present study. From a theoretical perspective, only routine activities and broken windows theories were selected for review. Other theories of crime opportunity such as rational choice, crime patterns, awareness, and crime opportunity theory might be explored in future studies to reveal evidence of fear and crime prevention items. From a methodological perspective, the data collection method is less likely to ascertain whether respondents were fully aware of all the measures included in the survey. This creates the potential for measurement bias if levels of familiarity relating to instrument items were not investigated. Further methodological limitations could arise from generalizing the effectiveness of the safe city program from the cross-sectional survey design at the occasion factor, although the respondents were asked to compare their perceptions of fear and street crime with the previous year.

From a practical point of view, this case study looked at only a part of (street crime in commercial area) the whole Safe City Program that integrates different strategies. Therefore, all the initiatives from different approaches and concepts need to be rethought to be more effective in reducing street crime and the fear of crime. Crime patterns are not static, and the Safe City Program needs to adapt its initiatives quickly to tackle new problems as they arise. In doing so, the Safe City Program aims to remain relevant to public concerns, thus alleviating the fear of becoming a crime victim.

The strength of the findings may depend on other factors beyond the scope of this investigation, such as the community’s engagement and the offender’s perspectives. CPSD is also notably a relatively young field of academic study, and it may take some time to learn how to execute the CPSD principles and obtain results. A suggestion for future research is to study the prevention strategies from community and offenders’ perspective, the relationship between fear of crime, social interaction, and community configuration in different types of study areas. An additional suggestion is to develop

and analyze longitudinal data from household structures or activities and to suggest more locational or temporal specific crime prevention solutions for local contexts. This study focused on the factors of a Safe City Program from the perspective of pedestrians without detailing the CPTED and CPSD specifically. There may remain many undecided hurdles in the effort to identify effective ways to approach the multiplicity of risk factors connected to crime and victimization, not to mention the fear of crime.

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