

Terms of Use

The copyright of this thesis is owned by its author. Any reproduction, adaptation, distribution or dissemination of this thesis without express authorization is strictly prohibited.

All rights reserved.

FEAR OF CRIME AMONG OLDER PERSONS:
AN EXPLORATORY QUALITATIVE STUDY
IN DIFFERENT ENVIRONMENTS IN HONG KONG

CHAN ON FUNG

MPHIL

LINGNAN UNIVERSITY

2008

FEAR OF CRIME AMONG OLDER PERSONS:
AN EXPLORATORY QUALITATIVE STUDY
IN DIFFERENT ENVIRONMENTS IN HONG KONG

by
CHAN On Fung

A thesis
submitted in partial fulfillment
of the requirements for the Degree of
Master of Philosophy in Social Sciences
(Sociology)

Lingnan University

2008

ABSTRACT

Fear of Crime Among Older Persons: An Exploratory Qualitative Study in Different Environments in Hong Kong

by

CHAN On Fung

Master of Philosophy

Fear of crime among various groups has long been studied in Western societies. Many studies have concluded that older persons tend to exhibit higher levels of fear of crime than other age groups even though they are generally at a lower risk of being victims of crime. However, there have been relatively few studies on fear of crime and associated reasons amongst older persons in Asian cities and Chinese societies. Moreover, most existing studies have generally utilized quantitative methods to examine the possibly causal relationships between fear of crime and its underlying factors, and subjective evaluations by older people themselves of factors related to the fear of crime are very few. This study aimed to investigate factors related to fear of crime by exploring older persons' perspectives on their living environments and their own situations.

A qualitative research design was used to explore how and why fear arises in spite of considerable objective evidence that older persons are at relatively low risk of falling victim of crime. The study employed eight focus group discussions (FGDs) and two individual interviews. To provide a range of typical HK residential environment, participants were drawn from two main categories of housing (traditional village housing and purpose-built housing) and four different types of physical living environment in Hong Kong (a village, an island, old-town housing, and new towns).

Environmental factors, individual factors and moderators of fear of crime have been identified in this study. First, the qualitative findings suggest that environmental factors can be categorized as three dimensions, which include vulnerability (defect of the living

environment), defensibility (level of protection that provided by the environment) and supportability (availability of social support that older persons can get when they are at risk). Vulnerability appears to be positive associated with fear of crime, but defensibility and supportability appear to be negatively associated with fear of crime. Second, the findings on individual factors enrich the Vulnerability model proposed by previous researchers, in which physical, psychological and behavioural weakness of older persons can be discussed. Third, moderators of fear of crime (e.g. people who have adjusted to a dangerous place by knowing the latest local crime event or figure.) which concentrate on the cognitive and behavioural adjustment among older persons, have been identified. Finally, policy recommendations for the welfare of older persons in Hong Kong are suggested based on the findings of the research.

DECLARATION

I declare that this is an original work based primarily on my own research, and I warrant that all citations of previous research, published or unpublished, have been duly acknowledged.

(CHAN On Fung)
July 2008

CERTIFICATE OF APPROVAL OF THESIS

FEAR OF CRIME AMONG OLDER PERSONS: AN EXPLORATORY
QUALITATIVE STUDY IN DIFFERENT ENVIRONMENTS IN
HONG KONG

by

CHAN On Fung

Master of Philosophy

Panel of Examiners:

_____ (Chairman)
Dr. Annie CHAN

_____ (External Member)
Dr. Raymond CHAN

_____ (Internal Member)
Prof. David R. PHILLIPS

_____ (Internal Member)
Prof. William K. M. LEE

Chief Supervisor:

Prof. David R. PHILLIPS

Co-supervisor:

Dr. Kevin H.C. CHENG

Approval for the Senate:

Chairman, Research and Postgraduate Studies

Committee

Date

TABLE OF CONTENTS

TABLE OF CONTENTS.....	i
LIST OF FIGURES.....	iii
ABBREVIATIONS.....	iv
ACKNOWLEDGEMENTS.....	v
CHAPTER ONE: INTRODUCTION	
1.1 Background.....	1
1.2 Rationale for the Study.....	6
1.3 Objectives of the Study.....	11
1.4 Significance of the Study.....	12
CHAPTER TWO: LITERATURE REVIEW: ENVIRONMENT, OLDER PERSONS AND FEAR OF CRIME	
2.1 Environment and Older Persons.....	14
2.2 What is Fear of Crime.....	16
2.3 Fear of Crime: Measurement.....	19
2.4 Research on Older persons and Fear of Crime.....	24
2.5 Fear of Crime: Models.....	30
2.5.1 The Victimisation Model.....	30
2.5.2 The Vulnerability Model.....	34
2.5.3 The Disorder / Broken Windows Model.....	39
2.5.4 The Social Integration Model.....	41
2.6 Fear of Crime: Consequences.....	45
CHAPTER THREE: METHODS	
3.1 Pilot Studies.....	48
3.2 Research Procedure.....	50
3.3 Research Sites.....	60
3.4 Data Analysis and Data Processing.....	66
CHAPTER FOUR: RESULTS	
4.1 Fear of Crime: Cognitive and Emotional Aspects.....	71
4.2 Person-Environment Model of Fear of Crime for the Older Persons.....	72
4.2.1 Environmental Factors of Fear of Crime.....	74
4.2.2 Individual Factors of Fear of Crime.....	78
4.2.3 Cognitive-Behavioural Adjustment.....	79

4.3	Environmental Factors	80
4.3.1	Vulnerability	82
4.3.2	Defensibility.....	105
4.3.3	Supportability.....	112
4.4	Individual Factors	117
4.4.1	Physical Vulnerability	118
4.4.2	Social Vulnerability.....	122
4.4.3	Cognitive-Behavioural Vulnerability	126
4.4.4	Individual Factors in Relations to Environmental Vulnerability....	133
4.4	Moderators of Fear of Crime.....	135
CHAPTER FIVE: CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS		
5.1	Summary of Findings.....	156
5.2	Conceptual Contributions	158
5.3	Practical and Policy Recommendations	161
5.3.1	Policies that Concentrate on Environmental Factors	162
5.3.2	Policies that Concentrate on Individual Factors	168
5.3.3	Policies that Concentrate on Cognitive-Behavioural Adjustment..	170
5.4	Discussion.....	171
5.5	Limitations to the Research and Recommendations for Further Study...	175
Appendix I:	Interview Guide (English Version).....	179
Appendix II:	Maps and Photo of Cheung Chau.....	180
Appendix III:	Maps and Photo of Siu Sau Tsuen.....	182
Appendix IV:	Maps and Photo of Wong Uk	185
Appendix V:	Maps and Photo of Fortune Estate.....	187
Appendix VI:	Maps and Photo of Sham Shui Po.....	191
Appendix VII:	Maps and Photo of Tin Shui Wai.....	194
BIBLIOGRAPHY		197

LIST OF FIGURES

Figure 3.1	Profile of respondents in individual interviews	53
Figure 3.2	Profile of respondents in focus group interviews	53
Figure 3.3	Reported crime in four selected districts in HK	61
Figure 3.4	Example of open coding	67
Figure 3.5	Example of memo writing	68
Figure 4.1	Person-Environment model of fear of crime for older persons	72
Figure 4.2	Relationship between environmental factors and fear of crime	74
Figure 4.3	Relationship between individual factors, fear of crime and vulnerability	78
Figure 4.4	Relationship between cognitive-behavioural adjustment, fear of crime and environmental factors	79
Figure 4.5	Relationships between environmental factors and fear of crime	81
Figure 4.6	Relationship between individual factors, fear of crime and vulnerability	111
Figure 4.7	Relationship between cognitive-behavioural adjustment, fear of crime and environmental factors	136

ABBREVIATIONS

CC	Cheung Chau
CCGs1	Cheung Chau Focus Group 1
CCGs2	Cheung Chau Focus Group 2
CCTV	Closed Circuit Television
FE	Fortune Estate
FEGs1	Fortune Estate Focus Group 1
FEGs2	Fortune Estate Focus Group 2
SSP	Sham Shui Po
SSPGs1	Sham Shui Po Focus Group 1
SSPGs2	Sham Shui Po Focus Group 2
SST	Siu Sau Tsuen
SSTI	Siu Sau Tsuen Individual Interview
TSW	Tin Shui Wai
TSWGs1	Tin Shui Wai Focus Group 1
TSWGs2	Tin Shui Wai Focus Group 2
WU	Wong Uk
WUI	Wong Uk Individual Interview

ACKNOWLEDGEMENTS

I would like to acknowledge numerous people for their support during my MPhil study. My sincere gratitude goes to my supervisors, my family, respondents and friends.

My deepest and most sincere gratitude goes to my chief supervisor, Professor David R. Phillips. It is my luck and pleasure to have such a knowledgeable and supportive supervisor for both of my undergraduate and postgraduate studies. He is a professional in Gerontology and backbone of this research. This research would not have been done without his expert guidance and unlimited support. His professional ideas and comments are always inspiring and constructive. Professor Phillips gave me a lot of freedom during both of my researches in undergraduate and postgraduate studies, so that I can freely explore and develop the interests and scope of my research. His encouraging attitude gave me a lot of emotional support as well as confidence enabled me to go through these two tough but valuable years. I have learned and got a lot from him.

I would also like to express my gratitude to my co-supervisor, Dr. Kevin Cheng. He gave me a lot of ideas for this research. He provided me the insight of environmental psychology and helped me to incorporate the concept of psychology into this study, which made this research more innovative. Dr. Cheng gave me many inspiring comments which had stimulated my analytical thinking a lot. He is always available to help and allocates his time to me, so that I can cope with the problems I faced throughout the research efficiently.

Besides, I would like to thanks Prof. Peter Baehr, Prof. Alfred Chan, Prof. Siu, Dr. Annie Chan, Dr. Lu and Dr. Lucia Siu. They have provided me with a lot of useful and insightful suggestions to improve my research.

My research cannot be done without the help of 12 older respondents in pilot studies and 48 older respondents in this research, who did not hesitate in sharing their experience of crime and their fear. I express my sincere thanks to each respondent who graciously give his/her time to my research. I am also grateful to the NGOs that have recruited the respondents for me and allowed me to do focus groups in their centres.

I have been accompanied and supported by many of my friends who I have got

known to during my study. Special thanks to my roommate Tony Lai. He proofread my thesis and helped me a lot throughout these two years. We shared a lot of joy and fun and made my MPhil study colourful. Special thanks to Sharon Chan, Connie Yong, Little Cheng and Sam Choy. They shared their MPhil study experiences with me whom gave me valuable comments on both my research and teaching. I would like to thank Chad Chan who gave me a lot of support during the study. And we shared a lot of challenges and fun together during these two years. Many thanks to Pamela Lee, Jeffrey Cheung, Zhendong, Sissi Lu, Miki Man, Crystal So, Kelly Tam, Cyrus Lee, Willy Huang, Lisa Wang, and Ula Guo. Staying with them in the office is one of the best experiences in this two years time. I would also like to thank the secretariats of the department office, Grace Wong, Ivy Tsang and Bo Bo Tsang. They deserve special mention for being abundantly helpful.

Last but not least, I have to thank my mother who has provided me with a lot of emotional support. Thanks for her consideration that allowed me to stay at campus even in public holiday. I am indebted to my mother for her care, understanding and love.

Chapter 1: Introduction

The introductory chapter discusses the background, rationale, significances and objectives of the present study.

1.1 Background

Population ageing is receiving increasing attention worldwide. Owing to social, technological and medical improvements over many years, human life expectancy has increased in most countries of the world. Low mortality rates coupled with the low fertility rates have caused ageing populations to increase, often rapidly, almost everywhere. According to the United Nations Population Division (2007), approximately 8% of the world's population was aged 60 or over in 1950. In 2007, the amount of people aged 60 or over increased by 3%, totalling 11% of the world population. Projections to 2050 suggest there will be 2 billion people aged 60 or over (some 22% of the world population), which means more than one out of every five people will be aged 60 or over by 2050.

Hong Kong faces this challenge too. According to the Census and Statistics

Department of the Hong Kong Government (2008), the average annual growth rate of older persons aged 65+ from 1961 to 2006 has been 5.1%. Older persons aged 65 and over increased from 8.7% of the total population in 1991 to 12.4% in 2006. In 2036, older persons aged 65+ are expected to make up 26% of the total population. The life expectancy of Hong Kong people is also increasing and has grown from 72.3 years in 1981 to 79.4 in 2006 for males and 78.5 to 85.5 years for females (Census and Statistics Department, 2007). As older persons will constitute an ever-larger proportion of Hong Kong's population, their needs and wants should be considered in order to make their lives more enjoyable and for social equity. However, crimes and fear of crime, to a large extent, affect the lives and well being of older persons, and can impact on their families and friends, and thus these are essential aspects worth investigating.

Fear of crime is 'an emotional response of dread or anxiety to crime or symbols that a person associates with crime' (Ferraro, 1995, p.23), and has roused policymakers' and researchers' attention since the 1960s. With its widespread nature and negative impacts, fear of crime has been considered a problem, especially for older persons, and even as serious as crime itself (Hale, 1996). Moreover, fear of crime is often unsubstantiated by actual crime occurrence. Weatherburn, Matka and

Lind (1996) studied fear of crime in terms of perceived risk in Australia and found that respondents highly exaggerated their risk of victimisation. Another study of fear of crime in Alberta, Canada found that 26% of older persons in Canada expressed high or fairly high levels of fear of crime, despite the fact that their victimisation rate was actually reported as 'too small to be meaningful' (John Howard Society of Alberta, 1999).

Undoubtedly, fear of crime also has numerous implications for quality of life. It has been found that the fear of crime has negative effects on people's physical, psychological and behavioural states. Stafford, Chandola and Marmot (2007) found that people with high levels of fear of crime have double the risk of becoming depressed, and are 50% more likely to suffer from other common mental disorders. Ferraro (1995) indicated that fear of crime can turn people defensive, inducing responses such as keeping a weapon, or creating avoidance behaviour in which people avoid going out to some places.

According to the vulnerability perspective (Jaycox, 1978), which explains how demographic characteristics relate to fear of crime, older persons are believed to be more vulnerable. Because of their generally declining physical health and ability,

older persons are often powerless to resist attackers and they have difficulty recovering after an attack. Moreover, older persons may lack ways to recover their financial losses incurred by victimisation, so the costs of victimisation will be higher for them than other age groups. This model suggests that older persons, with their increased vulnerability, will tend to have higher levels of fear of crime. Researchers have thus turned their attention to them and indicated the serious consequences of fear of crime as it relates to people's well being. For some years, researchers have, for example, pointed out that fear of crime affects the daily routines of older persons and creates stress and anxiety for them (Reynolds and Blyth, 1976). Lawton et al. (1976) and Butler (1975) also found that older persons can restrict the frequency of outings because of this fear. Conklin (1975) claimed that many older people have become 'prisoners in their own homes.' To further understand the impacts of fear of crime on older persons, researchers have sought to identify factors that contribute to their fears.

It seems the role of the environment in the fear of crime is more detrimental for older persons than younger persons. With changes in physical, social and psychological functions, older persons are considered to be less able to control their surroundings. For example, they are less likely to leave an undesirable environment,

while their declining ability creates a barrier for them to adapt to the stressful environment well (Hooyman and Kiyak, 2008). In fact, in Hong Kong, older persons seem less likely to relocate to a different living environment. The proportion of internal migration among older persons was 10.4%, whereas the amount among people aged 5 and over was 15.1% (Census and Statistics Department, 2008). Consistent with that idea, Phillips (1999, p.16) mentions that ‘the activity spaces and patterns of spatial behaviour of older persons are generally much more locally-based than those of other population groups.’ It is conceivable that, due to their physical limitations, older persons may have lower mobility rates than other age groups, and most of them are likely to spend much time in their living community, making them more dependent on what the local environment has to offer. Since older persons have relatively restricted active and action spaces, it is important to have a functional living environment for them, which would include a lower the crime rate in their community and consequently, their level of fear. Therefore, finding out how certain aspects of the living environment affect older persons’ level of fear of crime can lead to an improvement in their quality of life.

1.2 Rationale for the study

Previous researchers have usually adopted a positivist approach with regards to fear of crime, using quantitative data such as surveys and statistics to discover the ‘universal laws of human behaviour’ and to ‘learn about how the world works so that people can control or predict events’ (Newman, 2000, p.66). Much research has been undertaken to determine the significance of different factors affecting levels of fear of crime. However, using the positivist approach to study fear has certain disadvantages. As Fattah and Sacco (1989) indicated, fear of crime research has almost exclusively relied on quantitative research methods, which may ignore the nature of fear as a process with changes and developments. Farrall et al. (1997) reviewed previous fear of crime literature and summarised the criticisms of the quantitative surveys designed to explore fear of crime into four parts. Their criticisms cover problems with epistemology, conceptualization, operationalization, and techniques. They concluded that fear of crime has been ‘significantly misrepresented’ in past studies due to these four problems.

Moreover, although fear is an emotion that is shared among all mankind, to a large extent it is personal. Psychologists argue that fear is considered to be one of our

primary emotions, which means that fear is innate in all creatures. However, the stimulants that cause fear can be learnt by classical conditioning or through observation. For example, Watson and Rayner's (1920 cited in Myers, 2005) study showed that a specific fear can be learned through classical conditioning. Their subject Albert was an 11-month-old infant who feared loud noises but not white rats before the conditioning. After being conditioned (by presenting the rats with a loud noise), Albert linked these two stimulants together. As a result, he became scared if only a rat was presented. More importantly, five days after the conditioning Albert not only feared rats, but also generalized his fear to similar objects such as small rabbits and dogs. This study, which would not be repeatable with an infant these days, showed that fear can be learnt by an individual, and that fear may be transferred to stimuli that share similar characteristics to the original object of fear. Since the fear of crime can be treated as a result of person-person interaction or person-environment interaction, the interpretive approach may be helpful in understanding how people attach meaning to the external environment, and as a result, develop fear.

Surprisingly, however, very few studies have tried to explore and explain the interactions between the fearful individual and the factors of his or her fear from a

social-psychological perspective. Therefore, this study may contribute to determining the criteria used by older persons to evaluate whether their environment is safe or not, and may thus enrich our understanding of environmental characteristics that affect people's level of fear of crime and consequently their quality of life.

Besides measurement methods, there are other limitations to the existing fear research which may hinder the understanding of fear of crime. As pointed out by Fattah and Sacco (1989, p.211), the fear of crime has been conceptualized as an enduring trait, which is 'an emotional or psychological property which some people have and others do not.' For example, most of the studies on age (Yin, 1980; Clarke and Lewis, 1982; Lindquist and Duke, 1982; Yin, 1982; Clarke, 1984; Ferraro and LaGrange, 1992; McCoy et al., 1996; Greve, 1998; Tulloch, 2000), gender (Smith and Torstensson, 1997; Gilchrist, Bannister, Ditton and Farrall, 1998; Sutton and Farrall, 2004; Fetchenhauer and Buunk, 2005; Schafer, Huebner and Bynum, 2006) and ethnic minorities (Houts and Kassab, 1997; Joseph, 1997; Parker, McMorris, Smith and Murty, 2001) tried to identify the factors that contribute to their subjects' fear of crime. However, most of these research studies ignore the situational characteristics of fear. Gabriel and Greve (2003, p.601) indicated that fear of crime can be separated into situational fear and dispositional fear, in which the former is an

‘affective state that varies within a person according to the situation at hand,’ and will ‘generally pass quickly,’ while the latter ‘is comparatively stable within subjects.’ While the previous literature may successfully identify which groups of people share high levels of fear of crime, they generally fail to indicate the situational factors that affect the levels of fear of crime within the same group of people. In other words, as Fattah and Sacco (1989, p.211) pointed out, these studies allow us to find out ‘who is fearful and who is not’ but their conceptualization of fear ‘precludes a detailed consideration of the ephemeral, transitory and situational nature of fear.’ Therefore, the present study attempts to explore the situational factors in the environment that may have an impact on the fear of crime among older persons. The findings of this Hong Kong study should enrich our understanding of environmental factors’ effects on fear of crime.

Finally, when studying fear of crime among older persons, it is important to consider the notion of vulnerability in relation to their level of fear of crime. Hale (1996, p.95) explained, *‘people who feel unable to protect themselves, either because they cannot run fast, or lack the physical prowess to ward off attackers, or because they cannot afford to protect their homes, or because it would take them longer than average to recover from material or physical injuries might be expected to ‘fear’*

crime more than others'. Similarly, Killias (1990 cited in Hale, 1996) studied fear in a military setting using social psychology and found three key factors to cause it: exposure to non-negligible risk, loss of control, and anticipation of serious consequences. Based on the ideas put forth by Hale and Killias regarding vulnerability, three groups of people are identified to have the highest level of fear of crime as compared to others. Those with the highest potential for fear are older persons, women and the poor. Older persons are thought to be more vulnerable because of their decline in physical ability. Likewise, an injury resulting from victimisation may cause serious harm to an older person, and the healing process usually takes much longer in older persons than in younger age groups (Greve, 1998). Furthermore, research points out that older persons' financial status can cause greater difficulties when suffering the losses a criminal act brings forth (Clarke, 1984; James and Graycar, 2000). For example, 'the theft of a purse containing an entire month's rent can present a danger to the older individual's very existence' (Greve, 1998, p.294). This illustrates older persons' inability to regain financial resources, making their loss of property a serious consequence of victimisation.

Although the vulnerability model explains the effects of physical and social vulnerability on the level of fear of crime, it neglects the psychological and

behavioural factors of older persons that may also contribute to their level of fear of crime. For example, an older person may be more likely to reveal personal information to a stranger because he or she is lonely, increasing their risk of becoming a victim of crime. This study will explore the psychological and behavioural factors among older persons that contribute to their perceived vulnerability, and in this way enrich the vulnerability model.

1.3 Objectives of the Study

This research aims to fulfil two main objectives:

1. To explore and investigate which physical and social aspects of the living environment affect the level of fear of crime among older persons;
2. To explore the subjective evaluation by older people of factors related to the fear of crime.

In order to achieve the above objectives, this research tries to answer the following research questions using a qualitative methodology:

1. In what ways do physical living environments affect levels of fear of crime among older persons?
2. In what ways do social living environments affect levels of fear of crime among older persons?
3. In what ways do individual factors affect the levels of fear of crime among older persons?
4. How do cognitive-behavioural adjustments among older persons relate to their levels of fear of crime?

1.4 Significance of the Study

This research has potential significance at both conceptual and practical levels. At the conceptual level, it enriches and extends the vulnerability model (Jaycox, 1978) by exploring older persons' views on their own vulnerability. As discussed above, the explanation of previous vulnerability perspective studies mainly focused on the physical and social vulnerability among older persons, such as physical frailty and the lack of a social supportive network. This study will explore behavioural components such as self-disclosure and lack of family communication among older persons, as related to their level of fear (Jaycox, 1978).

At the practical level, this study points out factors such as adjustment methods employed by older persons in relation to their levels of fear, which have been neglected by previous studies. For example, the victimisation model indicated that direct or indirect victimisation may increase people's levels of fear of crime. However, this study investigates whether cognitive and behavioural adjustment helps to reduce the level of fear of crime among respondents, even if they had been previously victimised.

Last, based on the study's findings, possible policies are proposed that could help reduce fear of crime among older persons, which can serve as guidelines for policymakers in formulating effective policies and programmes to reduce fear of crime in the public. These are discussed in Chapter 5.

Chapter 2: Literature Review: Environment, Older Persons and Fear of Crime

2.1 Environment and Older persons

In the existing literature, the living environment is usually divided into physical and social environments. The physical environment, according to Birren (2007, p.494), is defined as ‘all that lies outside the skin, that is inanimate, and that is measurable in centimetres, grams or seconds.’ The social environment refers to ‘conditions, circumstances, and human interactions that encompass human being’ (Zastrow and Kirst-Ashman, 2004, p.7).

As suggested by James, Graycar and Mayhew (2003, p.2), the living environment is significant for older persons, and ‘overall physical and mental health benefits can result when people live in accessible, safe, well designed, thoughtful structures and landscapes. The social and built environment can facilitate integration with other resources and other generations.’ In fact, it is believed that the environment plays an even more important role for older persons than for younger persons. With changes in physical, social and psychological functions, older persons

are considered to have reduced abilities in controlling their surroundings. For example, while they are less likely to leave an undesirable environment, their declining ability creates a barrier for them to adapt to the stressful environment well (Hooyman and Kiyak, 2008). Phillips (1999) also argued that older persons generally have lower mobility than other age groups and older persons are likely to spend much time in their local community. Given that social geographers and gerontologists have noted that older persons have relatively restricted activity and action spaces (Phillips, 1999), the findings of the present study can provide policy-relevant data on the designs of a physically and perceptually safe dwelling environment.

Moreover, for instance, living in a poor neighbourhood can increase the propensity to experience crime. This is consistent with what James, Graycar and Mayhew (2003, p.20) mention, 'the quality of the immediate physical environment as well as the social environment influences the health and safety of older people. Access to regular and reliable transport and social support, as well as appropriate housing, is a fundamental determinant of health and well-being.' A well-designed and suitable environment can not only reduce the level of fear, but can also help older persons to have a healthy life. To a certain extent, changing the environment may

lead to the change of some psychological determinants which are related to possible fear. For example, a well-designed park may attract more older people to visit, which can enlarge their social networks, and thus reinforce their social support network and reduce their level of fear.

2.2 What is Fear of Crime?

One of the major concerns in the past fear of crime literature rested on its conceptualization and measurement. The concept of 'fear of crime' and the way to measure it has long been questioned and criticized by numerous researchers (see, for example, Yin, 1980; Ferraro, 1995; Hale, 1996; Garofalo, 1979; Farrall et al, 1997; Jackson, 2005; Lupton and Tulloch, 1999). For instance, Garofalo and Laub (1978, p.246) asserted that 'what has been measured is simply not fear of crime.'

Pantazis (2000) indicated the two main limitations in the existing literature defining fear of crime. The first one is the equating of fear with anxiety. As suggested by Ohman (2000), fear and anxiety should be distinguished in which fear can be occurred without any external threat, but anxiety is the result of threats that are perceived to be unavoidable. Moreover, past literature had simply defined fear of

crime as the 'levels of worry and anxiety about becoming a victim of crime' (Pantazis, 2000, p.417). More importantly, the types of crime to which they referred are mostly street crimes such as mugging, but corporate and white collar crime is rarely included (Hale, 1996; Pantazis, 2000). The second limitation of the fear of crime definition is the failure to distinguish fear of crime with perceived risk. Ferraro (1995) shares the same view. He indicated that previous research on fear of crime does not differentiate between perceived risk and fear. Some of the definitions even combine perceived risk and fear together. For instance, while risk entails a cognitive judgment, and some types of 'risk assessment' have a scientific basis, fear is far more emotive in character. From this he deduced fear of crime is 'an emotional response of dread or anxiety to crime or symbols that a person associates with crime' (Ferraro, 1995, p.4). In Ferraro's view, perceived risk is the main stimulus which elicits the fear reaction, and he defines it as 'a recognition of a situation as possessing at least potential danger, real or imagined' (Ferraro, 1995, p.4).

Robinson (1998) shares a similar notion with Ferraro in defining fear of crime. He separated the concept of perceived risk from fear of crime. In this, Robinson (1998) indicated that fear of crime is a feeling of forthcoming harm to one's well-being, and the harm can be real or imagined. However, perception of risk is a

judgment, in which people evaluate the chance of their victimisation. From a psychological point of view, the definition of fear of crime refers to emotion, whereas perceived risk refers to cognition. However, other authors like Rountree (1998) share a different view towards the definition of fear of crime. She thinks that fear of crime combines both cognitive and emotional elements and she operationalizes fear as worry of victimisation.

In addition to differentiating perceived risk from fear of crime, some authors have tried to separate fear of crime into state versus trait components. For example, Gabriel and Greve (2003) distinguished fear of crime into situational fear and dispositional fear. Situational fear may be aroused under certain circumstances, such as walking in a poor lighting place and talking to a stranger etc. This fear is relatively short, and will pass quickly. However, situational fear may contribute to dispositional fear especially when a person experiences it repeatedly. Dispositional fear, by contrast, describes a person's 'tendency to experience fear of crime in certain situations; it is comparatively stable within subjects, but varies between subjects' (Garbriel and Greve, 2003).

Although there have been studies which have attempted to distinguish fear of

crime according to cognitive and emotional aspect, the current qualitative study will leave the definition to the older persons and see if their fear can be evaluated in the same way.

2.3 Fear of Crime: Measurement

Ferraro (1995) indicated the difficulties of measuring fear of crime by questionnaire or interview data collecting method as fear 'involves an emotional, and sometimes physiological, reaction to perceived danger' (Ferraro, 1995, p.25). He also noted that surveys can find out the respondent's expressions of imagined fear but not their pure reflections of emotional experience (Ferraro, 1995). Gabriel and Greve (2003) provide another perspective on the measurement difficulties related to fear of crime. They pointed out that fear of crime, in fact, represents a unique mixture: 'it is homogeneous by normative evaluation (crime), but heterogeneous in terms of individual relevance, explanation and consequences' (2003, p.606). Therefore, even though questions are designed to measure fear of crime, the stimulus of a respondent's fear is hard to identify by survey. For example, some respondents may express fear due to the negative impact that crime may bring. However, some may fear because of the higher risk they face.

Fear of crime data have nevertheless long been collected by surveys. Questions such as 'how safe do you feel being out alone in your neighbourhood after dark?' or 'is there any place around here where you feel unsafe walking at night?' have used by many previous studies, academic and official, as well as the General Social Survey and the National Crime Victimization Survey. As these questions make no reference to any specific types of crime, so a term emerged named the 'global' measure in fear of crime study. The global measure received much criticism from different researchers. For example, Pantazis (2000) indicated that one problematic feature with this type of question is that 'it is not sufficiently clear whether people's answers are referring to an emotional reaction to crime that is characterized by a sense of danger and anxiety, or judgements about perceived risks of personal victimization' (Pantazis, 2000, p.418). Hale (1996) also points out several weakness of the global measuring method of fear of crime. First, those questions fail to mention crime specifically and the reference to crime in such question is implicit rather than explicit (Hale, 1996). Secondly, the term neighbourhood is not well defined in the question so that different people may have different interpretations (Hale, 1996). Thirdly, these questions are asking about respondents' perceived safety when out alone, which may be an activity that lies outside their own normal

experiences (Hale, 1996). As a result, these questions can only reflect respondents' anticipated fear rather than actual fear (Fattah and Sacco, 1989).

Due to the apparent limitations of the global measure, researchers started to incorporate the measurement of specific types of crime into the questions. Garofalo and Laub (1978) suggested that fear of crime could start to be distinguished as 'concrete fear' and 'formless fear'. The first is the fear of being the victim of acts of violence and the latter one is the vague threat to one's security. (Hale, 1996). The global measure was used to measure 'formless fear' among respondents, whereas 'concrete fear' was 'evaluated on a Guttman Scale as the extent of a subject's concern at being a victim of six types of aggression' (Hale, 1996, p.87).

Fattah and Sacco (1989) further noted that fear is both a physiological and emotional response to a threatening stimulus, but prior researchers who studied fear of crime tended to almost exclusively emphasise the emotional aspects. Therefore, they suggest that empirical measures may be grouped into three broad categories including cognitive, affective and behavioural measures. The cognitive measure attempts to measure fear by establishing respondents' beliefs regarding of their perceived risk of victimisation. In this category, questions regarding on the level of

local crime as well as respondents' subjective assessment of their probability of becoming victim of different types of crime will be asked. However, affective measure includes the global measure of formless fear, and also questions to measure concrete fear. Unlike cognitive measures, affective measure will not include questions related to the 'objective' external environment (crime rate), so respondents are not required to compare their level of fear of crime with the objective crime rate in the community. Finally, the behavioural measure tries to measure fear of crime by revealing people's actions. For example, questions asking people if they have restricted their activities or perform avoiding behaviour. However, the behavioural measure received several critics. For example, this measure fail to reveal the actually (ultimate) behaviour of the respondent but reveals only the behaviour told by the respondent (Hale, 1996). Furthermore, many criminologists argue that 'these measures are consequences rather than indicators of fear' (Hale, 1996, p.90). People's behaviour may affect their level of fear on one hand whilst their behaviour can also be affected by their level of fear on the other. Therefore, it is hard to measure fear of crime by a respondent's stated behaviour.

Quantitative measures in studying fear of crime have also received criticisms.

For example, Mahony and Quinn (1999, p.232) pointed out that due to the constrains

of the survey method, 'respondents with very different experiences and feelings about crime must necessarily express their concern within the terms used in the questionnaire. This may result in respondents being forced to use the same language to express very different feelings.' Besides, Farrall and his fellow (1997, p. 660-662) published a paper in 1997, in which they criticized the survey methodology only 'offering a view from the outside', 'turning processes into events' and 'reducing experiences to decontextualized snapshots'. Croake and Hinkle also find the problem in assessing the intensity of fears and anxieties. However, the qualitative approach helps us to have a deeper understanding of the people being studied. Because the qualitative method collects data from the respondents' perspective rather than the perspective of the researcher (Hammersley, 1999), it can help the researcher to understand how people construct meaning to their action as well as to understand how people experience their daily life (Newman, 2000). As the current Hong Kong research aims to investigate how older persons perceive the external environment in relation to their levels of fear of crime, this study will use the qualitative method which allows us to have a deeper and better understanding on fear of crime from respondents' interpretation.

2.4 Research on Older Persons and Fear of Crime

Numerous research studies on the fear of crime and older persons have been conducted to address their levels of fear of crime, causes of their fear, and the impact towards them. Fear of crime has been viewed as a serious problem among older persons in the past. According to a study of ageing in America, 'fear of crime' among older persons are 8% higher than people younger than 65 (Harris and associates, 1977). 'Fear of crime' is the most serious problem for the public aged 65 and over personally. The following two are 'poor health' and 'not having enough money to live on' (Harris and associates, 1977). However, later research studies discovered that the levels of fear of crime among older persons are overestimated. And fear of crime should not be viewed as the most serious problem facing by older persons (Ferraro and Lagrange, 1992; McCoy, Wooldredge, Cullen, Dubeck, and Browning, 1996; Tulloch, 2000; Yin, 1982). Older persons, in fact, are believed to be more likely to express their fear comparing to other age groups rather than living with high level of fear of crime (Braungart, Braungart and Hoyer, 1980). Although Bazargan's (1994) study on black older people found that more than 53.2 percent of his sample reported fear of crime as a serious problem for them personally, this study may only reflect the situation of black older persons as their race and social status are taken into

consideration.

In addition to identifying the level of fear of crime among older persons, past research studies have also tried to investigate the factors of their fear of crime. They found that both personal factors and environmental factors will affect older persons' levels of fear of crime. Vulnerability, including both physical and social dimensions, is one of the main individual factors that affects older persons' fear of crime. It is suggested that physical frailty creates direct impacts on fear of crime as it makes older persons unable to defend themselves or escape when facing a threat. Moreover, they are more likely to suffer physical (and perhaps psychological) harm during the victimisation due to their frailty. Braungart, Braungart and Hoyer (1980) earlier indicated that physical decline and illness creates feeling of weakness among older persons. Tulloch (2000) more recently suggests that fear of victimisation and its consequences among older persons are part of their overall experience of physical deterioration.

Individual perceptions towards one's neighbourhood have been found to be positively related to the level of fear of crime. Research suggests that older persons who are satisfied with their neighbours or perceive their neighbourhood as supportive

and helpful may reduce their level of fear of crime. Ward, LaGory, and Sherman (1986) suggested that people who were happier about the kinds of people in the neighbourhood might feel safer. Clarke (1984) indicated that older persons are less likely to fear when they perceived their neighbours as concerned about others and concerned about the community in general, and this is noted by some respondents in the current study. Bazargan's (1994) study on black elderly people also found that older persons who believe their neighbour to be trustworthy and watchful against crime may have low levels of fear of crime

Social networks and interaction appear to have association with fear of crime among older persons too. It suggests that older persons with supportive social networks and active interaction with others have lower levels of fear of crime, whereas social isolation can result in higher levels of fear. Braungart, Braungart and Hoyer's (1980) study supported the contention that people who appeared to be fearful are those who are particularly vulnerable and isolated. Bazargan's (1994) study on black older persons shared similar results and suggested that lonely people shared higher level of fear of crime. Donder, Verte, and Messelis (2005) also found a significant relationship between loneliness and fear of crime. However, some research has revealed that the relationship between social network and interaction

and fear of crime is weak. Clarke and Lewis's (1982) and Clarke's (1984) study found that fear of crime is not simply a result of social isolation, because those experiencing fear of crime did not have fewer social contacts than the non-fearful. Yin (1982) also suggested that social support offsets the effects of stress but it does not counteract the effects of fear of crime among older persons. Consistent with Yin (1982), Ward, LaGory, and Sherman (1986) concluded that social supports are a mediator which can reduce the stress associated with life events, such as coping with criminal victimisation. However, they have little impact in coping with fear of crime.

This review of the literature on the fear of crime and older persons suggests that environmental factors (both physical and social) also play an important role in relation to their levels of fear. Location and types of housing does matter for fear of crime. For example, to one extreme, it is suggested that people who live in rural areas have lower levels of fear of crime than people who live in urban areas. This may be because rural dwellers have relatively close relationships with their neighbours, and they are more familiar with the place they live. Lee (1982) studied fear of crime in terms of walking alone after dark near respondents' homes and found rural elderly residents are less fearful than those who live in urban areas, because rural elderly residents know perfectly well their living environments which are not high-risk

situations. More importantly, they have relatively high levels of community integration. Some research has indicated that older persons who live in sheltered housing or age-homogenous housing have lower levels of fear of crime than people who live in non-sheltered housing or age-heterogeneous housing (Clarke and Lewis, 1982; Clarke, 1984; Bazargan, 1994). It was found that older persons may have a cohesive social support network in sheltered housing and were more certain of having assistance from their neighbours or a warden in times of need. Older persons may also develop a sense of common identity when living with people of a similar age. All of these factors may contribute to their lower levels of fear of crime (Clarke and Lewis, 1982; Clarke, 1984). Similar results were found by Akers, La Greca, Sellers, and Cochran (1987) who pointed out that the more homogeneous the community, the less fear of crime older persons share.

Other factors including the impact of the media impact have been discussed in the literature. It is suggested that watching TV may increase the levels of fear of crime among older persons (Bazargan, 1994; Donder, Verte, and Messelis, 2005), perhaps because the media's image of crime is often over exaggerated which may mislead older persons and create fear of crime for them. Consistent with this notion, Bazargan's (1994) study found a statistically significant result towards exposure to

television news and fear of crime outside the home. Moreover, a correlation between watching television and increased fear of crime has been found in Donder, Verte, and Messelis's (2005) study.

Finally, some consequences of fear of crime towards older persons are revealed by the literature. The negative consequences among older persons are mainly focused at the psychological and behavioural levels. They included decreases in psychological well-being as well as restriction of daily activities. For example, Beaulieu, Leclerc and Dube (2003) pointed out the significant relationship between psychological distress and chronic fear of crime among older persons. Moreover, negative impacts on congruence with and sense of control over their environment has been found (McCoy, Wooldredge, Cullen, Dubeck, and Browning, 1996). Besides the psychological impacts, older persons with higher level of fear of crime may limit their activities and even avoid leaving their homes. This notion is supported by numerous researchers. For example, Yin (1982) pointed out that older persons may isolate themselves from social activities due to their fear. Bazargan's (1994) and Joseph's (1997) studies on black elderly also revealed that fear of crime did affect behavioural elements of the lifestyle among their respondents.

By reviewing the past literature on fear of crime among older persons, it is suggested that factors of fear of crime are multi-dimensional including both individual and environmental factors. Although past research studies have successfully located the significance within each factor towards fear of crime among older persons, due to the fragmentary nature of factors they have tested, the overall picture of those factors in relations to fear of crime cannot be clearly understood. More importantly, due to the constraints associated with the use of quantitative methods, used by many past research studies, the individual interpretation and explanation of factors in relation to older persons' fear of crime has generally been missed. Therefore, the current research in Hong Kong will try to explore older persons' evaluation of factors on their levels of fear of crime in an environmental and individual context.

2.5 Fear of Crime: Models

2.5.1 The Victimisation Model

The victimisation model is a model that links level of fear of crime with personal experience of crime (Hale, 1996). It suggests that prior victimisation

experience is positively associated with people's level of fear of crime because it can reflect the vulnerability of an individual and it is believed to reflect personal vulnerability for future victimisation (Gibson et al., 2002). Some studies have found that previous victimisation experience is positively related to fear of crime. For example, Mith and Hill (1991) found that property crime victims, and victims of both property and personal crimes, reported significantly higher levels of fear of crime than non-victims (Fisher et al, 1995). McCoy, Wooldredge, Cullen, Dubeck, and Browning (1996) also pointed out that the victimisation experience was related significantly to fear of crime.

However, some criticism surrounds the model and the prior empirical studies. The most common argument included two dimensions. First, previous studies fail to distinguish different types of victimisation in relation to the level of fear of crime. As different types of crime may cause different level of harm, no matter on physical, psychological or financial level, it is important to reveal the level of fear of crime which may be brought by different kind of victimisation. For example, being a victim of rape is believed to bring more physical and psychological harm to the victim, but victimisation from fraud may create a relatively lower cost for the victim (Hale, 1996). Therefore, the level of fear of being the victim of rape may be greater than

being the victim of fraud. Miethe and Lee's (1984) study found personal experience of victimisation is relevant for fear of violence but irrelevant for victimisation against one's property. Secondly, previous empirical studies on fear of crime failed to investigate the relationship between numbers of victim is in relation to levels of fear of crime. It is believed that the numbers of victims is a crucial for fear of crime. It was hypothesised that level of fear of crime increase with increasing victimisation experience, as it reflects the vulnerability of the individual.

The explanatory power of a direct victimisation model has also received its fair share of criticisms. It has been argued that those who are least likely to be victimized, such as older people, express relatively higher levels of fear of crime than the most victimized groups, such as young men (Fattah and Sacco, 1989). Skogan and Maxfield's (1981) studied fear of crime in three cities and argued that people in their study that reported being victimized were far fewer that people who reported being afraid. As a result, they indicated that personal victimisation experience cannot explain much of the level of fear of crime.

Agnew (1985) suggested that direct victimisation experience does not significantly relate to fear of crime because the impacts of victimisation are varied

from victims' beliefs. Agnew (1985) indicated that victims may use several techniques in reducing the impact of victimisation as well as in reducing their levels of fear of crime. For instance, as illustrated by Hale (1996), these techniques included: *'denial of injury, either physical or emotional ('I wasn't hurt');* *denial of vulnerability ('I now know how to avoid being victimised in future');* *acceptance of responsibility ('I'm at least partly to blame for what happened');* *belief in a just world ('The culprits will get what they deserve');* *and appeal to higher motives ('I was victimised because I was protecting my friend')* (Hale, 1996, p.105). This adaptative style is similar to that used by some criminals to justify their criminality. It can help the victim to cope with their experiences of victimisation (Hale, 1996).

As the direct victimisation model seems problematic and has little explanatory power on fear of crime, indirect victimisation model proliferated. The core idea of an indirect victimisation model indicates that the indirect victimisation experience, such as knowing the crime victim, hearing of criminal events from relative, friend, neighbour, or media, create positive associations with their level of fear of crime. Hale (1996) provides an explanation for this model. He indicated that individuals who have not experienced the victimisation directly, but experience it from hearsay, led to similar experiences without the same urgency to find some coping strategy.

More importantly, if individuals make comparisons between themselves and the victim, it may reinforce their sense of vulnerability (Hale, 1996). Many studies support the indirect victimisation perspective. For example, Arnold (1991) found that direct victimisation experiences had little impact upon fear of victimisation but indirect victimisation experience contributed significantly to the prediction of fear of crime. However, Taylor and Hale (1986) tested the indirect victimisation model and found that not all of the hypotheses in the model are being supported. For example, social networks in the model can predict the ‘worry or anxiety dimension of fear of crime’ but not a more ‘visceral fear dimension’ (1986, p.391).

Using the concept of mediators of fear and direct victimisation experience suggested by Agnew (1985), this study would like to explore if there is any adjusting strategy or technique that impacts on the level of fear of crime among older persons.

2.5.2 The Vulnerability Model

The vulnerability model explains how demographic characteristics relate to fear of crime. Hale (1996, p.95) indicated that ‘any model trying to explain fear will include some notion of vulnerability.’ Under the vulnerability perspective, women,

older persons, ethnic minorities and poor people share higher levels of fear of crime compared to other group of people. For example, Donder, Verte, and Messelis's (2005) study suggests that demographic variables, physical vulnerability and income correlate with fear of crime. They found that women feel less safe than men and people who are physical vulnerable and have low income will increase their levels of fear of crime.

Skogan and Maxfield (1981, p.69) have identified two types of vulnerabilities, physical vulnerability and social vulnerability. According to them, physical vulnerability is 'openness to attack, powerlessness to resist attack and exposure to traumatic physical consequences if attacked'. Most of the prior studies on older persons and fear of crime agree that fear of crime, to a certain extent, is related to the vulnerability of older persons (Garofalo, 1979; Clarke and Lewis, 1982; Lindquist and Duke, 1982; Clarke, 1984; Clarke et al. 1985; Covey and Menard, 1988; McCabe and Gregory, 1998; Greve, 1998; Donder et al, 2005). Skogan and Maxfield have further elaborated three dimensions of physical vulnerability that may impact the level of fear of crime among older persons which included physical ability, recovery and social support.

It is believed that, when people grow old, the physical ability of the body will usually decline. Whether a stereotype or not, this has some inevitable truth and, according to Hooyman and Kiyak (2002, 2008), the physiological composition of the body will change with ageing, in the muscle mass, fat tissue, and water, skin and hair etc. Moreover, certain physical systems will change too, such as the vision or hearing of older persons. These declines in physical health and ability may make older persons feel powerless to resist attack on the one hand. On the other hand, they may have result in higher costs for their victimisation. As Skogan and Maxfield (1981, p.71) indicated, 'elderly may suffer physical disabilities or a general reduction in acuity which makes it difficult for them to evade attack or fend off those who would harass them'. They also indicated that older persons 'think they are less likely to survive an assault or a robbery without severe injury' (Skogan and Maxfield, 1981, p.72). Dussich (1976) has termed the vulnerability caused by physical decline as passive vulnerability. Passive vulnerability is the weakening of physical condition of individuals and this weakness is recognized by potential offenders so that this group of people can be exploited (Skogan and Maxfield, 1981). As passive vulnerability is difficult to change, this may become an enduring trait for these people (Skogan and Maxfield, 1981). Due to physical weakness, older persons may feel helpless when they are facing a threat. Moreover, their perceived costs of victimisation can be

serious and even life threatening. More importantly, they can perhaps do little to change this situation. Therefore, it is not surprising that those people who are passively vulnerable may show higher levels of fear of crime.

Social support networks also contribute to the physical vulnerability among older persons. As Skogan and Maxfield, (1981) indicated that, poor social support may magnify older persons' potential consequences of victimisation, let alone the absence of psychological, emotional or financial support for the elderly victim. Live-alone elderly victims, who have no-one on hand to take care if they are injured, may spend rest of their life in an institution (such as a hospital or elderly home) once the worst situation befalls to them, effectively losing their previous independence.

Social vulnerability, defined by Skogan and Maxfield (1981, p. 78) as 'daily exposure to the threat of victimization and limited means for coping with the medical and economic consequences of victimization' is the second crucial concept of vulnerability model. Social vulnerability has explicitly been applied in the case of ethnic minority members and poor persons, because those people may live in high crime rate areas, and they have limited means to replace their cost of victimisation. As Skogan and Maxfield (1981p. 74) pointed out 'people with little money simply

cannot easily afford to replace stolen items or repair damage to their property', they may suffer a cost for their victimisation which may not be affordable by them. Sacco and Glackman's (1987) study on vulnerability and locus of control provided support for this notion and found that socioeconomic status will affect the sense of control and can result in worry about crime. Therefore, it is believed that people with social vulnerability may likely to have a high level of fear of crime.

Although social vulnerability is often a term applied to ethnic minorities and the poor, to a certain extent, it can be applied to older persons too. Older persons are most likely to be retired, so they have little way to gain extra financial resources. Once they have been victimized, they may suffer relatively higher loss and serious consequences than other age groups, as they lack means to recover their loss. Besides financial damage, the loss of memorable things or some things which have special meaning for older persons, may not be able to regained by them after victimisation. These losses may create negative psychological impacts for older persons too. More importantly, given their decline in physical ability and health, the proportion receiving serious injury during victimisation is high. In consequence, older persons may need extra financial resources in order to pay the high costs of their medical care. All in all, older persons also share the characteristic of social vulnerability, and it

may help to explain why older persons are hypothesised to have higher level of fear of crime than the others.

Although this model provides a useful explanation of demographic characteristics in relation to the level of fear of crime, it encourages a view of fear of crime as a psychological property or an enduring trait but can ignore its transitory and situational nature. Therefore, in this Hong Kong study, situational components in the environmental which may be related to fear of crime will be explored.

2.5.3 The Disorder /Broken Windows Model

The disorder model (incivility model/broken windows model) brings physical and social living environments into consideration in the fear of crime. The disorder model suggests that individual's level of fear of crime is depends on the perceived disorder in the community or the neighbourhood that one's live in. Disorder includes both physical and social forms. Skogan (1990) provided two categories of disorder in his study, social and physical disorder. According to Roh and Oliver (2005, p.672), social disorder refers to 'disruptive social behaviours such as drinking, loitering, rowdy neighbours, and prostitution', whereas, physical disorder refers to disorderly

physical surroundings such as rubbish, abandoned houses, broken streetlights, and graffiti. The level of disorder is most likely to be represented by the presence of social and physical incivilities (Gibson et al, 2002). Incivility is defined by LaGrange, Ferraro and Supancic (1992, p.312) as 'low-level breaches of community standards that signal erosion of conventionally accepted norms and values'. The presence of disorder indicates that the local control, no matter informal or formal, is weak in that particular environment. As a result, it may lead to perceptions of higher risk of victimisation among people (Crank et al, 2003). Therefore, the more of the indicator (incivility) that people find out, the more likely people will be to perceive the place as disordered and, therefore, increase their level of fear of crime.

One of the important things pointed out by prior researchers is that the disorder model stress subjective perceptions by people rather than actual crime rates in their neighbourhoods. For example, Gibson et al (2002) study shows that residents who perceived that they live in a disorderly neighbourhoods tend to express higher levels of fear of crime, but their perception often do not match with the actual crime rates occurring in their area. Hale (1996) also pointed out that even though there are some studies which use objective methods in measuring the level of incivility in the environment, most show that objective measures are less strongly related to fear

than subjective perceived incivilities by people.

The disorder model has received considerable empirical support. Significant and positive relationships have been found by several studies on the association between incivilities and fear of crime. Although some research has found either one or another aspect of incivilities is significant, many do support disorder in a neighbourhood as a cause of fear of crime. For example, Rohe and Burby (1988) found that social incivilities are strongly linked to fear. LaGrange, Ferraro and Supancic (1992) suggested that social incivilities seem to be more strongly correlated with fear of crime than physical incivility.

As perceive disorder is a strong indicator impacting the level of fear of crime, this study will also take account of the idea of physical and social incivilities, so as to explore whether and how does perceived disorder in the respondents' neighbourhood affect their levels of fear of crime.

2.5.4 The Social Integration Model

The social integration model suggests that fear of crime and social integration

are negative associated. For example, Lewis and Salem (1986) investigated that people who live in a plentifully socially-tied and integrated neighbourhoods, have lower level of fear of crime (Gibson et al., 2002). Austin, Woolever, and Baba (1994) found that social integration, as measured by participation in formal organizations, increased feelings of safety (Crank et al, 2003). However, empirical studies on social integration model shows mixed results. For example, Austin et al. (1994) controlled some valuables including participation in formal groups and sociodemographic variables, and found that social integration was not significant as a predictor of perceptions of safety among respondents (Gibson et al., 2002). Riger, LeBailly, and Gordon (1981) found that 'social integration was not related to fear of crime among women, but that neighbourhood bonds contributed to reducing level of fear' (Gibson et al., 2002, p.542).

The inconsistent results relating to the social integration model are perhaps caused by poor conceptualization of the concepts. There is no common consensus among the values in the social integration model, so different researchers may use different types of values in order to measure the impact of social integration model on the level of fear of crime. Bursik and Grasmick (1993) indicated that the variety of operationalizations of the social integration model makes it difficult to compare

different prior studies. They pointed out ‘measures of social integration have ranged from involvement in neighbourhood activities to the likelihood of neighbours sharing information to perceptions of similarities among neighbours to the number of friends and relatives living in the neighbourhood’ (Gibson et al., 2002, p.542). For example, Baba and Austin (1989) measure social integration by length of residence and the amount of friends in the neighbourhood. Hunter and Baumer (1982) measure it by the ability of residents to identify their neighbour from strangers and when they felt part of their neighbourhood. Similarly to Hunter and Baumer (1982), Taylor, Gottfredson and Brower (1984) also measured social integration by residents’ ability to distinguish between strangers in their block, but they also measured it by the length of residence, and feelings of responsibility for where they live.

Gibson et al. (2002, p.543) hold a slightly different view of the social integration concept. They incorporated the idea of social capital and social control into the model, pointing out that ‘the core idea of social capital as it applies to neighbourhoods is that trustful relations among neighbours translate into the willingness of neighbours to attend to neighbourhood matters and act as agents of informal social control.’ Sampson et al. (1997) has termed this relationship and control as ‘collective efficacy’, in which people are willing to combine together and

intervene as agents of informal social control in their neighbourhood as well as community (Crank et al, 2003; Gibson et al., 2002). Gibson et al (2002) further illustrated that the extent to which individuals feel integrated into their own neighbourhood may impact on their perceptions of collective efficacy (Gibson et al., 2002). Therefore, Gibson et al.'s idea of social integration depends on the perceived informal social control provided by neighbourhood, and their own perception of integration in the neighbourhood. According to Crank et al (2003), fear of crime will be reduced once a person perceive that their neighbours can be trusted to engage in social control for the community's benefit.

Due to the poor conceptualization and the contradictory findings among studies using the social integration model, the relations between fear of crime and social integration are still largely ambiguous. Therefore, further investigation of the neighbourhood condition in relation to levels of fear of crime may be beneficial in clarifying the model. This study, as a result, will try to explore if people tend to link their fear of crime to their neighbourhood conditions and their perceived level of integration in their neighbourhood.

2.6 Fear of Crime: Consequences

Fear of crime among older persons is a significant issue that society and social policy should be concerned with, not only the 'fear' itself, but also the impacts that it brings to older persons. The National Workshop on Crime and the Elderly in South Australia organized during 1989 identified that fear was an important problem due to its impact on older persons (James, 1992). Hale (1996) reviewed the past fear of crime literatures and summarized the impacts of fear of crime into six points. In fact, these impacts can be categorized broadly into individual impacts and societal impacts.

Fear of crime may create certain impacts on an individual. As summarized by Hale (1996), people may change their habits due to their worry of being a victim of crime. For example, they may restrict their daily activities (Butler, 1975; Yin, 1982; Joseph 1997), avoid activities and places which they perceive as dangerous, and even avoid go out (Hale, 1996). More seriously, some people may even become 'prisoners in their own homes' due to their high level of fear of crime as noted earlier (Conklin, 1975). Moreover, people who have high levels of fear may feel the need to invest large sums (both financial and psychological) in fortifying their living environment

and taking defensive actions (Skogan and Maxfield, 1981; Dolan and Peasgood, 2007). For example, they may invest a lot to buy security devices such as locks, door and window grilles so as to reduce their vulnerability. However, as Hale (1996) indicated, these moneys and efforts can be spent more positively on other activities which may improve their quality of life. Finally, fear of crime can create negative psychological and emotional impacts among the fearful individuals, which can include creating feelings of isolation and vulnerability among them and may produce a significant loss in personal well-being (Hale, 1996). For instance, Beaulieu, Leclerc and Dube's (2003) study suggested that significant signs of psychological distress and negative impacts appeared in older persons with chronic fear of crime.

Fear of crime may also create a considerable social impact. Hale (1996) suggests that fear of crime fractures the sense of community and neighbourhood. When the cohesiveness of neighbourhoods is weak, it may undermine the capacity of their residents to act collectively to solve their problems (Skogan and Maxfield, 1981). For older people, strong community cohesion is often important and assumed for the implementation of policies such as care in the community and for strong informal support networks. Moreover, anything (such as fear of crime) that damages such a sense of community, could be especially deleterious for older persons. Besides,

fear of crime may affect the harmony between different classes in any society. For example, Hale (1996) mentioned that 'Fear may increase social divisions between rich and poor, between those who can afford private security measures and those who cannot. This deterioration in community life may lead in turn to a decline in society's ability to deal with crime' (Hale, 1996, p.80). Further, 'it leads to more prosperous citizens protecting themselves and their property, or moving from the neighbourhood, the incidence of crime may be displaced onto those already suffering from other social and economic disadvantages' (Hale, 1996, p.80). Finally, fear of crime may lead to increases in the crime rate. When people spend more time at home and restrict their activities due to their fear, neighbourhood ties and relations may be further weakened, informal social control in the community may decline, and surveillance in public areas may also decline so as to permit increases in crime (Hale, 1996).

Chapter 3: Methods

This chapter discusses the research methodology, including pilot studies, research procedures, research sites, and method of analysis.

3.1 Pilot Studies

Following the extensive review of the academic and policy literature, pilot studies were conducted in two different types of living environments, Cheung Chau Island (長洲) and Sun Chui Estate, Shatin (沙田新翠村), on January 10, 2007 and January 15, 2007, respectively. Cheung Chau Island and Shatin were specifically selected for the different physical environments they offer, discussed in detail below. The majority of people in Cheung Chau are live in private residential flats or houses (Census and Statistics Department, 2007) and those respondents in Cheung Chau Island were people who live in low-rise buildings, while majority of people in Sun Chui Estate, Shatin live in public rental flats (Census and Statistics Department, 2007) and those respondents are people who live in high-rise, well-shaped buildings. As this is an exploratory study, a non-probability sampling method has been used. Older persons aged 65 or older were invited to participate by the neighbourhood centre in

their district. In total, four focus groups containing 24 older people were interviewed in both locations.

Pilot studies in these two locations were conducted which aim of finding out if the living environment does contribute to older persons' levels of fear of crime. As these pilot studies were exploratory in nature, no formal sets of questions but certain focuses on crime and fear of crime were prepared for the discussion. Respondents were requested to share their views on their living environment, their concerns if any of crime as a problem in their community; direct or indirect experiences of crime, levels of fear of crime, and 'fearful' places, etc.

These pilot studies provided the researcher an initial picture of the impacts of the living environment on older persons' levels of fear of crime. This showed that the living environment does impact on the levels of fear of crime among respondents. Some fear of crime determinants in the physical and social environment were discussed. For example, social support was stressed by the Cheung Chau respondents, and security facilities were stressed by Shatin respondents. More importantly, the impact of individual factors and behavioural factors on the fear of crime were discussed by the respondents during the pilot study. Therefore, their opinions greatly

helped the researcher to design subsequent interviews and focus group questions and the interview guide for the qualitative research. Their views on social support and security issues were incorporated into the focus group questions and interview guide for the qualitative research. Extra focus on individual factors and behavioural factors were added in the subsequent interviews and focus groups.

3.2 Research Procedures

The major part of the research was conducted between November 2007 and March 2008, and included two individual interviews and eight focus group interviews at different research sites. This study explored the levels of fear of crime among older persons, the environmental impacts on their levels of fear, criteria used by older persons to evaluate their living environment, and their adjustment to any fear.

Sampling

In this study, people aged 65 or older were the target group. The Census and Statistics Department in Hong Kong defined older persons as 65 years of age or

order so, accordingly, 65 years old is the definition for many social policies in Hong Kong. These include the Senior Citizen Card (HKSAR Gov, 2002) and normal Old Age Allowance (Social Welfare Dept., 2005), as well as retirement from a number (but not all) organizations.

As this study was largely exploratory in nature, a non-probability sampling method was used. The samples were selected from neighbourhood centres. Villages were excluded since no neighbourhood centres exist in villages so respondents in the villages were reached via the outreaching community service program organized by Senior Citizen Home Safety Association and Lingnan University (APIAS).

Respondents were drawn through neighbourhood centres largely because they could help to recruit older persons from specific types of living environments with a certain number of years of living in that location. By doing so, the samples can have higher representation because respondents' living environments, as well as the number of years lived in that environment, can be controlled. These respondents may also feel more confidence in the researcher since the details of the focus group interview as well as the researcher's information has been explained by the community centre staff during recruitment. Therefore, respondents may express their

views and opinions without worrying about the misuse of their information. One possible limitation, of course, is that such older persons whilst living in the community already had a rather wider network than non-centre members, who might be more isolated and more vulnerable.

This research tried to include respondents who had lived in their particular living environment for as long as possible, a characteristic which could make them more familiar with their living environment and thus more representative of the long-term residents in that particular environment. With the help of the neighbourhood centres, a total of 8 focus groups with 46 older persons have been interviewed (Fig. 3.2). In the villages, two individual interviews were conducted (Fig. 3.1).

All participants of the focus group interviews and individual interviews in this study participated on a voluntary basis and they had been informed participation would be anonymous and also they were under no obligation to join in. The language used during the focus groups and individual interviews was Cantonese. Each focus group lasted between an hour to an hours and a half, and the duration of each individual interview was approximately one hour. The focus group interviews were

conducted in the neighbourhood centres and the individual interviews were conducted in the respondents' homes.

Fig. 3.1 Profile of respondents in individual interviews

Group	Siu Sau Tsuen Individual Interview (SSTI)	Wong Uk Individual Interview (WUI)
Age	72	75
Sex	M	F
Years in location	40	48
Direct victimisation experience	Yes	No

Fig. 3.2 Profile of respondents in focus group interviews

Group	Cheung Chau Focus Group 1 (CCGs1)	Cheung Chau Focus Group 2 (CCGs2)	Sham Shui Po Focus Group 1 (SSPGs1)	Sham Shui Po Focus Group 2 (SSPGs2)	Fortune Estate Focus Group 1 (FEGs1)	Fortune Estate Focus Group 2 (FEGs2)	Tin Shui Wai Focus Group 1 (TSWGs1)	Tin Shui Wai Focus Group 2 (TSWGs2)
No. of respondents	5	5	6	6	6	6	6	6
Age (mean)	83.2	78	75.8	72.3	74.3	72.6	75.8	74.6
Sex	M: 1 F: 4	M: 1 F: 4	M: 2 F: 4	F: 6	M: 1 F: 5	M: 1 F: 5	M: 2 F: 4	M: 1 F: 5
Years in location (mean)	55	58	42	40	6	7	14	14
Direct victimisation experience	Yes: 2 No: 3	Yes: 1 No: 4	Yes: 6	Yes: 5 No: 1	Yes: 3 No: 3	Yes: 2 No: 4	No: 6	No: 6

Individual Interviews

An in-depth interview is a data-gathering technique that is used 'to collect detailed, richly textured, person-centred information from one or more individuals' (Punch, 1998, p.176). It has also been seen as a very good way to access 'people's perceptions, meanings, definitions of situations and constructions of reality' (Punch, 1998, p.176). Individual interviews have been adopted to investigate the viewpoints of the respondents from villages. As fear of crime and victimisation experience is very personal, respondents may not be willing to express their experience with the presence of other people (in focus group). Therefore, individual interviews should allow respondents to express their experiences and opinions in a more private and perhaps comfortable setting. By using individual interviews, respondents' views on the stimuli of fear of crime could be revealed. It could also help the researcher to understand how respondents interact with their environment so as to create any possible sense of fear of crime.

Moreover, one of the limitations of the current study, the sample size from villages is too small to conduct a focus group. Therefore, individual interviews were used to collect relevant data. Questions and foci in the individual interviews are the

same as in the focus group interview which enabled the researcher to make a comparison with those focus group interviews. Nevertheless, unlike focus group interviews, there is no group dynamic but only interaction between the interviewer and the interviewee through the individual interview.

Focus Group Interviews

Focus group (FGs) interviews (also called Focus Group Discussions) defined by Phillips (1998, p.32) as “planned meetings of groups of people, who possess certain characteristics that provide data of a qualitative nature usually through a series of focused discussions” are used to interview multiple respondents within a group, and allow researcher to ‘figure out what the key issues, ideas, and concerns are from multiple respondents at once’ (Hesse-Biber and Leavy, 2006, p.196). Unlike an individual interview, respondents in a focus group interact with one another and form a group dynamic, which makes a unique conversation within each group. Through the interaction of a focus group, ‘people’s everyday forms of communication such as anecdotes, jokes or loose word association may tell us as much, if not more, about what people know’ (Hesse-Biber and Leavy, 2006, p.199).

As indicated by Babbie (2007) and Phillips (1998), there are certain advantages and disadvantages in using focus groups. Focus groups can help capture real life data in a social environment. They are low in cost, flexible, with high face validity and with speedy results. However, criticisms of focus groups indicate that focus groups can be difficult to assemble, and afford the researcher less control than individual interviews. Moreover, moderators of the groups should be well trained and with special skills. Finally, the data generated from focus group are difficult to analyze. One additional possible limitation to the focus groups in this study, people may not willing to share their victimisation experiences fully in the presence of others.

Semi-structured focus group interviews were used to collect data from the research sites (with the exception of those living in rural villages). Six to eight people participated in each group. The number of people was limited since some group members may find it difficult to speak when the group is too large. However, the group effect and discussion may suffer if there are too few respondents in a group (Phillips, 1998). FGs were used in this study to create a less formal atmosphere in which older persons will feel less stress and anxiety. Since the interview will cover topics about respondents' victimisation experiences and fears, using the focus group interview situation may cause participants to 'feel more comfortable than in a

one-on-one interview because the 'spotlight' is not constantly on them' (Hesse-Biber and Leavy, 2006, p.198), so they are more willing to express their viewpoints and experiences. Moreover, respondents may be more willing to share their feelings or victimisation experiences when they have heard other respondents' similar stories. Thus, the focus group interview can allow the researcher to gain a deeper understanding of participants' views because FGs allows them to express their feelings and opinions through discussion with others and allows the interviewer to ask follow-up questions.

Interview Guide

The interview guide was developed by researcher who was also the interviewer. Interview focused and open-ended questions were prepared in the guide, so to help the interviewer to maintain focus in the focus group discussions and conduct individual interviews in a semi-structured basis. The interview guide was used in both individual interviews and focus group interviews and included questions with the following foci:

1. The physical and social characteristics of a fearful place, as mentioned by

the respondents.

2. The physical and social characteristic of a fearless place, as mentioned by the respondents.
3. Individual factors related to fear of crime.
4. Respondents' reactions or adjusting methods towards a fearful place.

The first focus of the interview guide concentrates on the environmental characteristics that may trigger fear of crime among the respondents. Questions that concentrate on this focus include those such as the following: Can you tell me about some places that rouse your fear of crime? What characteristics do these places have? Respondents were asked to point out specific places in which they may fear walking alone, for example. Their fear should be related to crime, such as worrying about being victimised, worrying about potential offenders, or feeling uncomfortable because they are worried about crime. Respondents were also required to indicate the environmental features that generate the fear of crime.

The second focus of the interview guide focuses on the environmental characteristics that make respondents feel safe, without worrying about crime. Questions that concentrate on this focus includes: Can you tell me about some places

that make you feel safe or fearless of crime? What characteristics do these places have? Similar to the first focus, respondents were asked to point out some places in which they feel safe or do not worry about crime. Respondents were also required to indicate the environmental features of a safe place.

The third part of the interview guide focuses on the individual factors that affect older persons' levels of fear of crime. The individual factors are the subjective evaluation of characteristics shared by respondents themselves which related to their levels of fear of crime. Questions such as 'What makes you fear crime?' were asked in order to determine respondents' viewpoints on individual factors that cause any fear of crime. Respondents were requested to point out the individual factors that may either increase or reduce their levels of fear of crime.

The last focus of the interview guide seeks to determine respondents' reactions, behavioural or psychological, towards fearful places and fear of crime. Questions such as 'What do you do when passing through those fearful places?' were asked. Respondents were required to indicate what they had done when they perceived a place as 'unsafe' and how if at all a place creates fear in them.

3.3 Research Sites

Four research sites were selected for the research based on the distinctiveness of each of their physical and social living environments, including the types of housing and its location. The crime rate in different research sites (Fig 3.3) has not been considered because of its limitation. The reported crime and crime rate are divided into 18 districts, in which, one district may include several locations. For example, Yuen Long district includes Yuen Long, Sheung Shui and Tin Shui Wai. Criminal data for specific location are absent, so the data cannot effectively reflect the actual crime rate in any selected location. Moreover, the data are not divided into village settings and new developed areas even though the Tuen Mun Districts includes both types of environment. It is believed that reported crime in villages and reported crime in a new town areas could be very different, so, in the absence of detailed figures, it is unfair to take crime rate into consideration when the research site form only a part of a district, and which has only a very small population. The range of environments was specified in the research design. Maps and photographic illustrations for each location are shown in Appendixes II-VII, pp. 129-145.

Fig 3.3 Reported crime in four selected districts in HK

District	2006		2007	
	Reported Crime	Crime Rate (Crimes per 100 000 Population)	Reported Crime	Crime Rate (Crimes per 100 000 Population)
Sham Shui Po District	5 703	1 372.0	5 183	1 263.1
Yuen Long Dirtrict (Including Tin Shui Wai)	5 989	1 123.3	6 525	1 222.7
Tuen Mun District	4 652	895.1	4 175	846.4
Marine (Including Cheung Chau)	221	641.8	255	701.1

Source: Hong Kong Police Force 2008

An island site

The first research site was Cheung Chau Island (長洲) (Appendix II), located in the southwest part of Hong Kong. It is the most crowded outlying island in Hong Kong and contains approximately 40,000 residents (Cheung Chau Rural Committee, 2008). In terms of accessibility, the ferry or Kai Do (small boat) are the only means of transportation by which are can reach this island from the elsewhere in Hong Kong. Therefore, the accessibility is relatively low compared with other research locations. Most of the buildings in Cheung Chau are low-rise buildings with three floors, situated in close proximity to one another. In terms of length of residence,

respondents had lived in Cheung Chau for at least 60 years, so, on the one hand, they are familiar with the physical setting of the island, and on the other, they also have a good social network. In terms of presence of strangers, Cheung Chau is a scenic spot in Hong Kong and therefore attracts numerous local and international tourists who spend day trips and holidays on the island. As a result, Cheung Chau is a mixture of residential housing and hotels, and thus has a blend of residents and travellers.

Villages

The second type of research site includes two villages in Tuen Mun (屯門), which are Siu Sau Tsuen (小秀村) (Appendix III) and Wong Uk (黃屋) (Appendix IV). The population in Siu Sau Tsuen and Wong Uk is low comparing with other research locations (Wong Uk has the least which may include around 50 people). The accessibility is fair to these two villages as they can be reached by several public transportation modes plus an extra fifteen minutes' walk. These villages have grown organically and are non-planned living environments, in which most of the houses are constructed with wood and rock, although some of them have been rebuilt with ferroconcrete. Dwellings are one to three floors at most, and built close to one another. The majority of households have at least one dog that serves as both a pet

and a security measure. In terms of length of residence, respondents in these two locations had lived there at least 40 years, so they are familiar with the place they live and they have a good knowledge of their neighbours. However, the presence of strangers in those villages is rare. Unlike Cheung Chau, both of these villages have few outsiders that visit, so only residents tend to enter the village.

Older-in-town area and redeveloped area

The third research site is Sham Shui Po (深水埗) (Appendix VI). This is an in-town area that contains both older slum-type dwellings and redeveloped areas. The accessibility of Sham Shui Po is high as it can be reached by several means of transportation (including bus and MTR). Sham Shui Po lacked town planning in the early years so the district now takes on a somewhat chaotic but bustling appearance. Many buildings date back to the 1950s and 1960s or earlier and many are now deteriorating, which causes various hazards in building management and fire prevention (District Council Homepage, 2007). Sham Shui Po is a classic example of an older in-town area of Hong Kong, with old and poorly planned buildings. Most of the buildings are from six to eight floors, with mixed uses of commercial (ground floor) and residential in a building. The sample has mainly been drawn from the Nam

Cheong Street area, so it reflects the level of fear of crime among older persons who live in this district. The length of residence for the respondents in Sham Shui Po was 40 to 42 years, which meant that they were familiar with the environments in which they live. As indicated above, most buildings contain commercial activities on the ground floor, and with numbers of strangers were present in this research area compared with the other research locations. However, Fortune Estate (幸福村) (Appendix V), which is a redeveloped area in Sham Shui Po, has also been selected. Adding this redevelopment in Sham Shui Po to the study sample allows for further understanding of how new infrastructure and housing affects the level of fear of crime. Fortune Estate enjoys high accessibility, like Sham Shui Po (Nam Cheong Street area). However, buildings in Fortune Estate are high rise building of 30 floors. These building are equipped with extra security facilities including gates, CCTV and security guards. As respondents were relocated to Fortune Estate from elsewhere, they have lived there for around 6 to 7 years, which means that they might have a weaker understanding of their living environment comparing with other respondents. The present of strangers is fair in this location as it is a housing estate which does not have any extra activities like Cheung Chau and Sham Shui Po that may attract visiting strangers. However, as it contains many households in one estate, respondents found it hard to know and recognize whether the people in the estate

were residents or not.

A new town area

The fourth research site is Tin Shui Wai (天水圍) (Appendix VII). It is a third generation new town in Hong Kong which is located in the northwestern part of New Territories. It is a planned living environment and complete with many infrastructure works as well as a full range of community facilities. Accessibility is high as it can be reached by several types of transportation. Similar to Fortune Estate, all housing comprises high rise buildings of at least 35 floors, and contains a series of security facilities including security guards, entrance gates, and CCTV. Respondents have lived in Tin Shui Wai for around 14 years, which means that they have a fair familiarity with their living environment. Similar to Fortune Estate, the presence of strangers in this location is fair as it is a housing estate which does not have any extra activities that may attract strangers. However, Tin Shui Wai is known as a location which contains many big housing estates, and for respondents it is extremely hard to recognize people as residents or non-residents, just as in Fortune Estate. This area represents and reflects the new types of living environments in Hong Kong although it has been the subject of considerable discussion on social disadvantage and equality

issues in the recent years.

3.4 Data Analysis and Data Processing

A grounded theory approach (Punch, 1998) was adopted in this study. According to Babbie (2007, p.284), 'grounded theory is the attempt to derive theories from an analysis of the patterns, themes, and common categories discovered in observational data'. It 'attempts to combine a naturalist approach with a positivist concern for a systematic set of procedures in doing qualitative research' (Babbie, 2007, p.284). Grounded theory requires systematic coding of the data as it helps to achieve validity and reliability in data analysis (Babbie, 2007). The grounded theory approach can help the researcher to explore if it is common stimuli which arouse fear of crime among the respondents. The pattern of adjustment can also be found by using a grounded theory approach in this study. All individual interviews and focus group interviews in the current study were transcribed. The content of the transcripts has been coded and analysed. First, open coding, which aim to 'open up the theoretical possibilities in the data' (Punch, 1998, p.211), has been used to analysis the descriptive data conceptually Line by line coding was used in order to identify the conceptual categories and the theoretical possibilities that the data carry (Punch,

1998). Fig 3.3 shows the example of opening coding of the study.

Fig. 3.4 Example of open coding of concepts

Conversation:	Open Coding:
I: Why do you feel fear?	
R: I am fear of the two families behind me. They are members of triad society. They are bullies. I have to turn off my television at eight every day, if there is any noise, they will shout at me. Also, I cannot find any reason that they always make noise on my ceiling, it makes me could not sleep. They just did this a few days ago (pointing to the ceiling), they made noise again; it lasted for a long time that made me could not sleep. They wanted to disturb me, but I just did not comprehend them, just tried to sleep again..... (SSTI)	Family / Neighbours Triad members / Gang members Bully / Gang members Every day Noise Shout / Action / Result Noise Impact / Could not sleep Few days ago / Frequency Noise Impact / Could not sleep Aim / Disturb / Bully Reaction / Solution

Memo writing was used during coding and after the coding when ideas come up to analyst's mind. The memos cover numerous aspects. They can be 'substantive, theoretical, methodological or even personal' (Punch, 1998, p.206). Using substantive and theoretical memos helps the researcher to move from the empirical to the conceptual level. It also helps the researcher in moving from analysis to developing propositions (Punch, 1998).

Fig. 3.5 Example of memo writing

'Social support seems highly related to fear of crime. Both CCGs, WUI, FEGs, TSWGs indicated the important of social support. For example, when FEGs1 is approached by a stranger, they feel less fear when they know they can easily seek help from the security guard or from their neighbours. All respondents emphasised the importance of this support when they faced a threat rather than their normal situation. Therefore, support or help may play a role in relation to fear of crime.'

By repeating the process of open-coding and memo writing, different categories of factors related to fear of crime have been found and are discussed in the following chapter.

After the two focus group interviews in Cheung Chau and individual interviews in villages Siu Sau Tsuen and Wong Uk in Tuen Mun data were transcribed and coded. During coding and memo writing, first-order codes, such as social support by neighbours, location, gang members, etc. were formed. It was noticed that social support was highly stressed by the respondents, so data related to social support was grouped into a category.

The second stage of the data collection process started in Fortune Estate in Sham Shui Po. As its living environment is distinctive from the previous locations,

new data were collected and coded. It was revealed that levels of fear are related to respondents' sense of protection. All respondents in FEGs indicated that security facilities reduced their level of fear of crime. They pointed out that these facilities reduce their chance of victimisation, and protect them from the environmental defects, such as strangers. Therefore, data related to protection were grouped and form a new category.

By reviewing the existing academic and policy literature and the coded transcripts, it was found that the concept of vulnerability (personal) can be applied to environmental level. The vulnerability perspective suggested that some individual characteristics, no matter whether physical or social aspects, will make people more vulnerable to crime (Skogan and Maxfield, 1981). In fact, some environmental characteristics (physical and social) may make people more expose to crime too, such as poor design of housing, gang neighbours, etc. Although some defects of the environment can be categorized within the incivility model, the model stresses the feeling of disorder in relation to fear of crime. Data showed that some of the defects in the environment such as pipes easily accessible on the outside of a building may not create feelings of disorder, but do make people more exposed to crime. Therefore, data related to environmental defects are grouped into a group called vulnerability

but not incivility.

The fourth and fifth stages of the data collection process occurred in Sham Shui Po and Tin Shui Wai. Coding revealed that respondents in Sham Shui Po stressed vulnerability and defensibility, whereas respondents in Tin Shui Wai stressed defensibility and supportability. All of the data related to environmental factors on fear of crime from all focus groups and individual interviews can be placed into the three categories, vulnerability, defensibility, and supportability. No such category could be classified for individual factors and cognitive-behavioural adjustment. Therefore, the results of the current study included the environmental factors (represented in terms of vulnerability, defensibility and supportability), individual factors, cognitive- behavioural adjustment, and fear of crime.

Chapter 4: Results

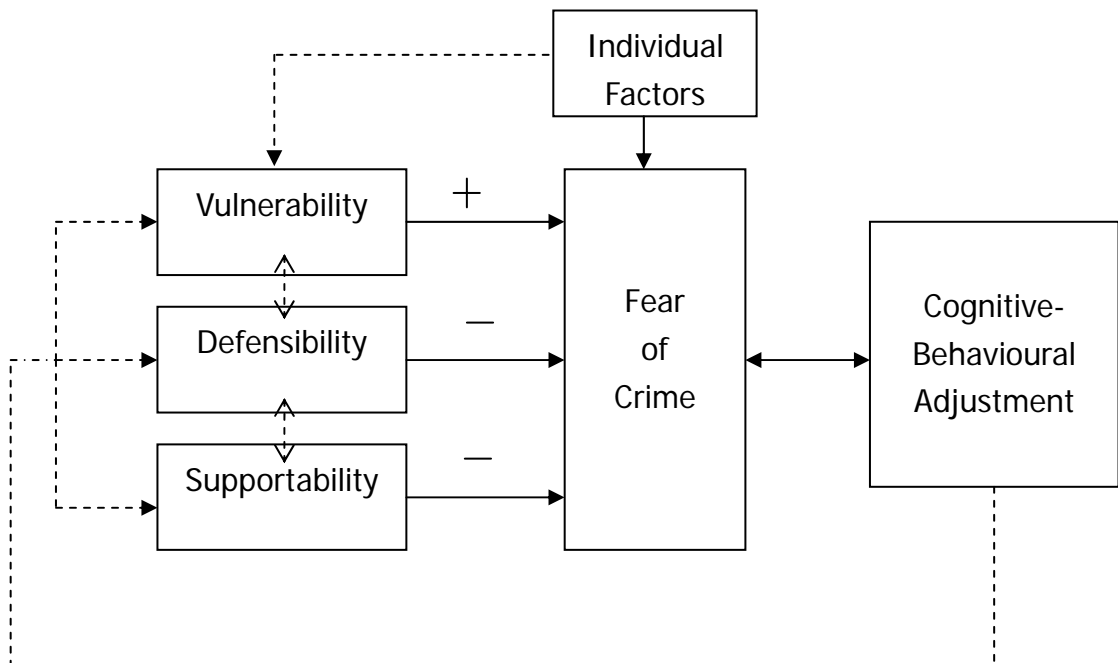
4.1 Fear of crime: cognitive and emotional aspects

Previous studies have tried to divide fear of crime into cognitive, affective as well as behavioural aspects. As discussed in Chapter 2, some researchers have tried to distinguish cognitive elements from fear of crime, and indicated that fear of crime should be more or less be defined as emotional in nature (see for example, Ferraro, 1995 and Robison, 1998). However, results of this current study support Rountree's (1998) view, that fear of crime among older respondents combines both cognitive and emotional elements. When asked to clarify if their fear is because of perceived risk, older persons found that an emotion of fear occurred, sometimes not because of perceived risk. This is especially common when the fear had been aroused by the external environment. Older persons pointed out that they may feel fear when passing through some places with few people, or when they see some drug abuser in a place. They are afraid not because of the worry of becoming a victim, but they fear without a justifiable reason.

4.2 Person-Environment Model of Fear of Crime for older persons

By analysing the data from both individual and focus group interviews, a person-environment model of fear of crime for older persons was developed (Fig. 4.1). The model below illustrates the person-environment relationship and its effects on fear of crime for older persons. (A list of abbreviations is given on p. iv). The proposed model is simplified for readers to organize details which will be elaborated in succession. More rich data and illustration can be found beginning with part 4.2 (environmental factors)

Fig. 4.1 Person-Environment model of fear of crime for older persons



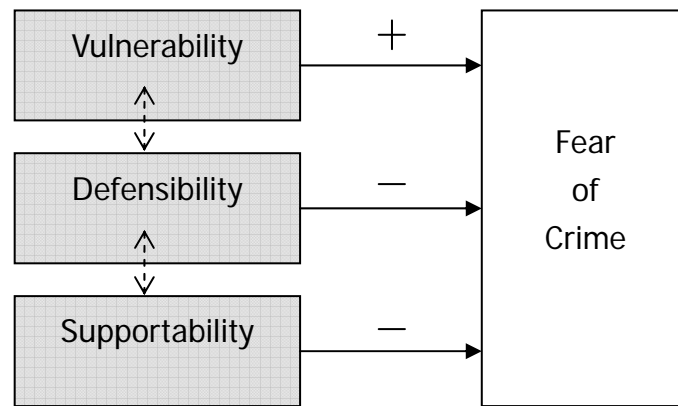
The model includes four main components: environmental factors, individual factors, fear of crime and cognitive-behavioural adjustment, each of which are explained below. Environmental factors consist of three aspects denoted by the terms vulnerability, defensibility and supportability. Individual factors are the characteristics that older persons share or are perceived to share that either increase or decrease their risk of victimisation and thus their levels of fear of crime. Cognitive-behavioural adjustment is reflected by changing behaviour in reaction to judgments of fear of crime.

The arrowed lines between the boxes in the model show the relationships between them. Solid lines mean all of the factors in the box are related to each other, whereas dashed lines indicate that only part of the factors are related to those in the other box. For example, the solid line between defensibility and fear of crime means that all of the factors that make up defensibility will lead to a fear of crime. On the other hand, the dashed line between individual factors and vulnerability means that only some individual factors have an impact on vulnerability. As shown in Figure 4.1, individual factors, environmental factors, and cognitive-behavioural adjustment have a direct effect on fear of crime. Moreover, this model involves a feedback loop, where cognitive-behavioural adjustment interacts with fear of crime as well as

...serving a role in the feedback loop so that it affects the appraisal of environmental factors. The following paragraphs divide the model into three parts to provide a more detailed explanation.

4.2.1 Environmental factors in the fear of crime

Fig. 4.2 Relationship between environmental factors and fear of crime



The environmental factors are made up of three parts, vulnerability, defensibility, and supportability (Fig. 4.2.). In this model, vulnerability is defined as the defects in the living environment that make older persons more vulnerable or exposed to crime. Vulnerability has both physical and social aspects. The defects of the physical environment refer to the weaknesses of the physical setting, facilities or environment that may provide an offender the opportunity to commit a crime, whereas defects of the social environment refer to a community atmosphere that creates a sense of

insecurity for older persons. It was found that vulnerability is positively associated with the level of fear of crime, which means the higher the vulnerability in the environment, the higher the level of fear of crime.

When asked what kind of environment would arouse the fear of crime, most respondents first indicated the physical and social defects in their living environment because they thought those defects would cause them to have a higher chance of victimisation. For example, the FEGs1 group indicated that the pipe outside their house could serve as a tool for the criminal to commit crime. FEGs2 pointed out that the large amount of households in a given building may provide an easier chance for an offender to bypass the security facility and commit a crime, since he could follow one of the many residents entering the building. SSPGs1 mentioned that the drug abusers on the street create fear in them because they think that those people have a higher potential to become offenders when they lack money. Therefore, these defects in the physical environment are categorised as the vulnerability of the environment in the environmental factor portion of fear.

Defensibility refers to the level of protection provided by the physical and social environment that helps older persons reduce their perceived vulnerability. Similar to

vulnerability, defensibility also has physical and social aspects. The physical aspect of defensibility refers to the physical devices used to protect the resident, such as security devices. The social aspect of defensibility emphasises the availability of authority figures who can effectively prevent crime, such as security guards or police. It was found that defensibility is negatively associated with the level of fear of crime.

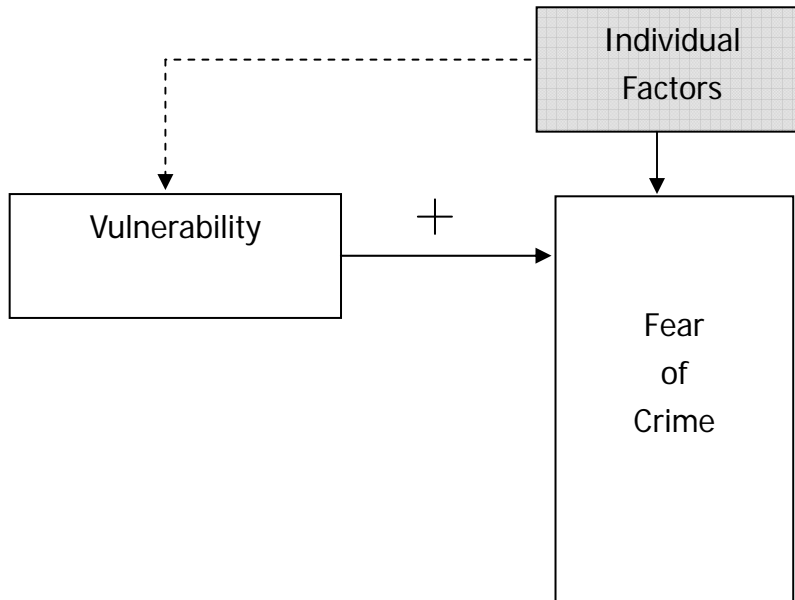
Respondents were also concerned with the protection provided by their living environment. As environmental defects make older persons suffer from a higher risk of victimisation, they may also be concerned with the level of protection that their environment can provide for them so they can avoid being victimised. For example, respondents who live in high-rise buildings, like the FEG and TSWG groups, mentioned security devices such as locks, window grilles, a main gate and a closed circuit television (CCTV) in their buildings. They indicated that these security mechanisms help to prevent crime. Respondents who live in villages and old towns share this notion. They reflected a low level of fear if the security facility is effective. Moreover, the presence of an authority figure like police or a security guard lowers their level of fear of crime since they believe that offenders do not dare to commit crime when there is an authority figure in sight. Therefore, these elements that help people from being victimised are incorporated into the environmental aspect of

defensibility.

Finally, respondents were also concerned with the availability of help when they are facing a threat. WUI, FEG, TSWG and CCG groups all indicated the importance of social support when they are facing a threat. Supportability is the availability of this social support that older persons have access to when they are at risk. Unlike defensibility, supportability only has the social aspect. Interestingly, it does not necessarily require an authority figure to be the source of support. Although police and security guards are powerful sources to support older persons when they are facing a threat, a neighbour, friend, or even a stranger on the street can also play an important role in supporting older people. Focus groups pointed out that they have lower levels of fear when they perceive that help is available when they need it. Some respondents shared this view by saying, 'My neighbours will help me when I shout' (TSWGs2). Others said, 'When I call the security guard and tell him that there is a stranger in our corridor, the security guard will come immediately and expel the stranger' (FEGs1). Another respondent explained, 'All of the islanders will help me when they know that I am in need' (CCGs1). Therefore, it was found that supportability is negatively associated with the level of fear of crime.

4.2.2 Individual factors in the fear of crime

Fig. 4.3 Relationship between individual factors, fear of crime and vulnerability

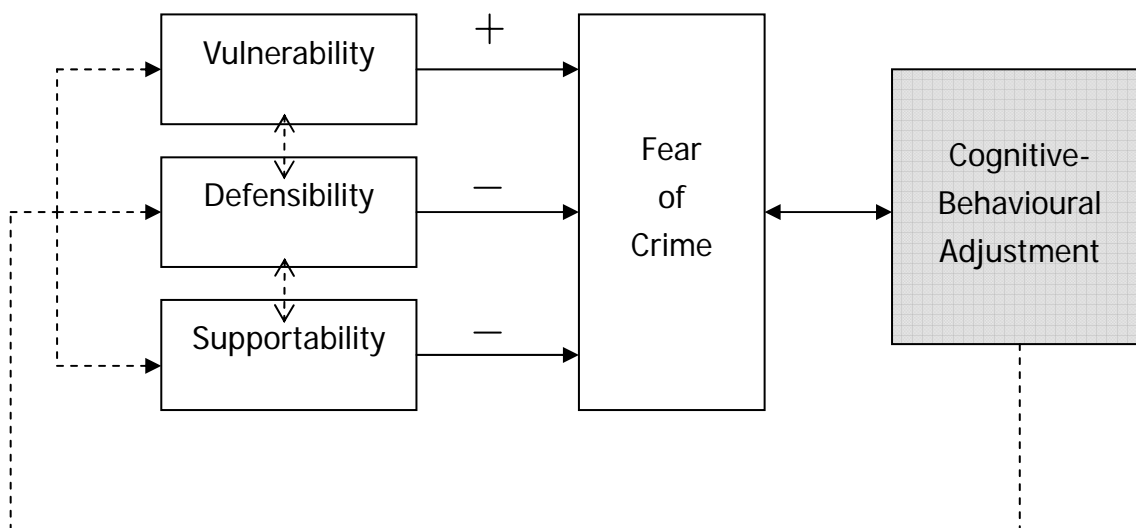


Individual factors are the characteristics that older persons share that may increase or decrease their chance (or perceived chance) of being victimised. Individual factors include the physical, psychological and behavioural characteristics of older persons. As shown in Figure 4.3, individual factors directly affect the level of fear of crime in older people. The relationship between individual factors and fear of crime can be either positive or negative. Some individual characteristics may increase the level of fear, such as poor physical health and frailty, while there are other characteristics that seem to reduce the level of fear of crime, like lifestyle and personal wealth.

Apart from directly affecting the level of fear of crime, individual factors may also have certain impacts on the vulnerability environmental factor. Due to some characteristics that older persons share, their idea of a vulnerable place may differ from that of another age group. For example, older persons may view a crowded place as a threatening and vulnerable situation because they tend to be frailer than other age groups.

4.2.3 Cognitive-behavioural adjustment

Fig. 4.4 Relationship between cognitive-behavioural adjustment, fear of crime and environmental factors



Cognitive-behavioural adjustment can be viewed as a coping strategy, which involves gaining or acquiring knowledge on crime prevention or incidences and

subsequent crime fighting behaviours or strategies. The coping strategy can be psychological (changing of view or mindset) or behavioural (changing of action). The relationship between cognitive-behavioural adjustment and fear of crime is mutual. In other words, an older person's level of fear of crime may change his or her behaviour; or, an adjustment in behaviour (or mindset) may affect a person's level of fear of crime (Fig. 4.4).

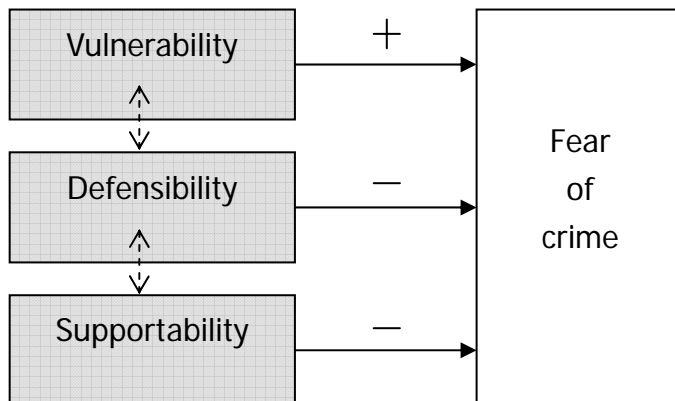
In addition to directly affecting fear of crime, some of the components in cognitive-behavioural adjustment may also have an impact on environmental factors, namely vulnerability, defensibility, and supportability. For example, adding extra security devices may increase the defensibility of the environment. Likewise, actively building up neighbourhood relationships may increase the supportability in the environment. Therefore, cognitive-behavioural adjustment (actions one takes) may have an impact on the environmental factors as well as the level of fear of crime.

4.3 Environmental Factors

Data collected from the focus group interviews and individual interviews show

that environmental factors affect the level of fear of crime among older persons. The environmental factors are divided into three categories: vulnerability of the environment, defensibility of the environment, and supportability of the environment. Vulnerability of the environment includes all the defects of the living environment that make older persons more susceptible to crime. Defensibility refers to the level of protection that is provided by the physical and social environment. The supportability of the environment is the availability of social support that older persons have access to when they are at risk.

Fig. 4.5 Relationships between environmental factors and fear of crime



The relationships between the environmental factors and fear of crime are shown in Figure 4.5. As determined through individual and group interviews, it was found that vulnerability and fear of crime are positively associated, while

defensibility and supportability are negatively associated with fear of crime.

4.3.1 Vulnerability

Vulnerability in the physical environment

The term vulnerability as used here is not the same idea as the vulnerability model proposed by Jaycox (1978), in which he stresses the demographic characteristics in relation to fear of crime, pointing out that gender (female) and age (older persons) contribute to high levels of fear of crime. The concept of vulnerability in this study refers to the defects in the living environment that make older people more susceptible to crime. These environmental defects include both physical and social aspects. Through the self-evaluation process, respondents tried to pinpoint the weaknesses of the environment to determine their risk, that is, their vulnerability in a given situation or setting. A positive association has been found between vulnerability and fear of crime.

Defects in the physical environment are the weaknesses in a particular physical setting, facilities or environment, which may provide an opportunity for an offender

to commit a crime. These shortcomings are mainly caused by poor physical environmental design. During the focus group and individual interviews, respondents pointed out a number of environmental defects that increase their vulnerability and arouse their fear of crime. With regards to physical design, concerns expressed included pipes outside buildings, number of households and location.

Pipes

In most of the high-rise buildings in Hong Kong there are drainpipes built outside that pass through each floor (see photographs, p. 139). According to older persons participants, those pipes could serve as a tool for an offender to commit a crime. An offender could climb the pipes to enter a household or use them as an escape from the crime scene. Thus, older persons whose households have pipe outside felt more vulnerable to victimisation and thus had higher levels of fear.

FEGs1 explained:

'My home was broken into by an offender once. He climbed the drainpipe and entered my home from the bathroom window. I live on the 32nd floor. (How? It is the 32nd floor.) He could do so even if it were the 100th floor—just climb out from the corridor window, and there will be a pipe outside which can be stepped on, and then he can climb inside my home. He messed up my

home. I called the police and filed a report but they could not catch the offender...I have heard that there are many cases like mine in Wong Tai Sin, as we live in the same type of building. I added some window grilles at last as the previous one is fragile' (FEGs1).

Although these older persons respondents have never tried to step out on the joint of the pipe, they believe that it is possible for it to hold a person, enough so as to help the offender commit a crime. In the focus group interview, FEGs1 also mentioned that there was a similar case that happened on 08-11-2007. A man climbed into his girlfriend's 24th-floor flat, killed her and escaped from the drainpipes (Lo, 2007). As a result, older people whose households have a pipe outside feel more vulnerable and thus have a higher level of fear. Accordingly, FEGs1 viewed the pipe as a kind of physical vulnerability, which may lead to a greater propensity toward crime compared to others without the pipe. This shows that older persons acquire the belief, by the media and friends, that households with drainpipes outside are more dangerous than households that do not have it. Therefore, pipe becomes one of the physical environmental defects for older persons.

Number of households

The number of households in a building also has an impact on the living environment and the sense of vulnerability among older persons in that environment. It was found that the more households in a building, the more vulnerable older persons perceived the building to be. This is simply because the number of households in a building is directly related to the familiarity between residents in that building. If there are fewer households and residents, it will be more likely that the residents will master their environment and get to know one another. As such, strangers and unauthorized people will be easily noticed once they enter. However, if there are many households in a building, the residents may not know each other; less familiarity may provide a better opportunity for an offender to commit a crime.

'It is useless having a gate at the main entrance because offenders can follow us and enter the building. We don't know if the person who follows us is a resident of this building. I enter and he enters too. I don't know which floor he lives on, so we are often not being alerted if he follows us and enters the building. Once the offender enters the building, he can commit a crime at a suitable opportunity' (FEGs2 and TSWG1).

The neighbourhood integration model suggests that 'neighbourhood integration is a causal building block to understanding people's assessment of their life space

and to understanding a variety of social pathologies, including fear and crime' (Fisher, 1995, p.184). By understand more of the neighbourhood, older persons can more easily define who are strangers and who are not, which can help them to reduce the level of fear. However, as the number of household increases, residents may find it harder to understand their living environment. It may also reduce their 'integration' into the place in which they live.

A large number of households is one of the problems with many high rise buildings in Hong Kong. For example, in Fortune Estate, Shum Shui Po, there are about 700 households in a building (Hong Kong Housing Authority, 2008). It is impossible for a resident - even the security guard - to know all of the other residents and recognize strangers. Although there are security facilities like an entrance gate and password system at the main entrance of each high-rise building, the large number of households, to a considerable extent, weakens the effectiveness of those security devices and creates a higher vulnerability for older persons.

Location

Location of the housing also plays a role in the respondents' level of fear of

crime. SSTI, who lives in a house built of rock and covered by iron sheets, is surrounded by four other houses. More importantly, there is only one stairway, which is located in front of the respondent's house and is connected to the main road (see photographs, p. 133 & 134). Therefore, people from the other four households should pass by near the respondent's house in order to get on the main road. The stairway is visible from all five households, which allows all neighbours to know who has gone out from each household. SSTI perceived that all of his neighbours are a threat to him, and thus he is extremely fearful living in a house surrounded by others. He claimed:

'They will keep a watchful eye on me and see if I am away home. They will enter and steal my things once I go out. Therefore, I will avoid doing so' (SSTI).

Because SSTI thinks that his neighbours will enter his home and steal his property once he is away, and the physical location of the stairwell is visible to his neighbours, SSTI chooses not to go out, in order to protect his own property. Clearly, one of the physical environmental defects for SSTI is the highly exposed stairway, which is the only entry and exit point to his house. This reveals his presence at home and creates risk for him. On the other hand, SSTI is scared when he perceives that

someone is passing around his house. Due to the location of his house, he has heard many sounds around him. Those sounds were one of the sources that make him frightened, because he connects the sounds as a threat. Therefore, the sound of someone passing by becomes the stimulant that arouses his fear.

WUI has a different situation, as she lives in the distant part of the village. Her house is located at the end of the village and has a mountain at the back (see photographs, p. 135). This helps the respondent to have a low level of fear of crime because she is less likely to find strangers who walk near her home. More importantly, she thinks that people will not be willing to walk a long distance in order to commit a crime. She said:

'We live in the most distant part of this village; no one in this village lives more inner than us.... There were some people who lost their way and passed by in front of our house, but it is quite rare. Even if someone wants to commit crime in our village, he won't walk such a long distance and commit crime here' (WUI).

This example shows that the location of a respondent's house may reduce the level of fear of crime because he or she believes that no one is willing to commit a crime in such a distant part of the village. Due to the physical location of the

respondent's house, very few people, especially strangers, pass it by. More importantly, the respondent believes that no one would travel such a long distance to commit a crime. This perception makes her feel less vulnerable in this environment. It also reduces the level of her fear of crime.

Respondents in Cheung Chau enjoy similar advantages. As Cheung Chau is an island surrounded by sea, ferries (or boats) are the only mode of public transport to and from it. This reduces respondents' fear of crime in two ways. First, they think that 'outsiders' who commit crime in Cheung Chau are rare. This group pointed out:

'No one is willing to take such a long trip and commit crime in Cheung Chau' (CCGs1).

Second, they believe that criminals cannot escape if they have committed a crime in Cheung Chau. They said:

'Cheung Chau is an island. If a crime takes place, it will be difficult for the offender to escape because police can easily arrest him at the pier' (CCGs1).

A remote and isolated island like Cheung Chau creates a sense of security for the older residents. Due to its geography and location, respondents feel that they are less likely to be victims of crime. As shown above, the two beliefs that older respondents in Cheung Chau share, 'difficulty to escape' and 'high opportunity cost for the criminals,' allow respondents to enjoy a low level of fear of crime in Cheung Chau.

Nevertheless, location can also be viewed as a defect of the environment if it is poor. SSTI's case shows that an older person who lives in close proximity to others may have an increased fear of crime, especially when older person distrusts his or her neighbours. In such instances, every little sound or movement that occurs around the house may arouse fear.

Vulnerability in the social environment

Crime History

The local history of crime in the community plays a role in the perceived vulnerability of older persons. When there is previous victimisation history in a

living community, the perceived vulnerability increases. Once criminal cases appear in their living environment, older persons may experience an increased level of fear because it means that the criminal selected their community to victimise. Consequently, people who live in this community may have a higher risk of being victims of crime. In fact, most of the respondents in the focus group and individual interviews referred to the history of crime in the community to determine their vulnerability. For example:

'I don't fear. I think Wong Uk is very safe as there is no criminal events that happened here. Yes, Shiu Sau Tsuen is complicated compared with Wong Uk, and there are some criminal cases that happened there, I have heard before' (WUI).

'The 12th floor is quite good and safe because I have never heard of any crime committed on this floor' (FEGs2).

Thus, history of crime in a community serves as an indicator for older persons to determine whether a place is safe or not. If there are no previous criminal events, older persons tend to think a place is safe and therefore show less fear.

Although the history of crime in a place does apparently affect people's perception of that place, it should be noticed that there are different dimensions that

affect people's perceived vulnerability as well as the level of fear of crime within crime history in the community. These include seriousness of crime, types of offender, and the similarity of the crime scene compared to one's own living environment.

Seriousness of crime. Beneath the umbrella of crime history in a community, the seriousness of these previous crimes affects people's perceptions of vulnerability. It was found that the more serious the crime committed in older person's living community, the more likely he or she was to have an increased level of fear. FEGs1 indicated that they had a high level of fear of crime in the previous year because serial robberies had happened in their community. FEGs1 shared:

'In the year 06-07, there was a series of criminal cases related to robbery and break-ins in our community. It was very terrible because it happened again every two to three days. And there was one serial break-in case in which the perpetrator broke into all of the four households in the same wing. We felt unsafe and fearful in this period. It was a fearful year in our community' (FEGs1).

Since the majority of older persons respondents accept that crime is all around them, be it petty or serious, they show very little concern for those less serious

crimes. This is because they think that they can prevent minor crimes by being more careful and less greedy. However, when there is a serious criminal case that happens in their community, older persons may become more aware and more fearful. For example, the serial break-in cases in the same wing make older persons believe that it is not simply a matter of being careful or on the defence; it is a matter of the offender's abilities or some other factors that they cannot control. The following conversation occurred in FEGs1, indicating how older people view a serious case:

R2: The offender is so great. How can he break into those households as all of them are locked?

R1: I think he used skeleton key.

R4: Hey, it is not surprising. Some people have used a hairpin to open a lock in the past.

R5: Yes, it should be a skeleton key. Other people must surely notice if he broke the lock by violence.

R2: Yes, how come no one noticed it when he broke into those households at the same time?

R4: He must be a skilful offender. Otherwise, it is easy to notice.

This conversation between older persons respondents about the serial break-in cases centred on the abilities of the offender. Unlike stealing or confidence game, where they focus on the carelessness or greed of the victim and feel the victimisation can be prevented by the victims themselves, when they discussed serious criminal

events like this serial break-in case, respondents turned their focus to the offender's abilities or other external factors which they cannot control. In the previous example, they focused on the use of a skeleton key and the skills of the offender. Respondents seemed to think they would not be able to avoid an attack if they faced a skilful offender. Because it is perceived to be a matter of luck, which they cannot control, they experience higher levels of fear towards serious crime.

Although the results reveal that seriousness of crime affects older persons' perceived vulnerability and thus fear of crime, respondents only mentioned this to be true with crime against property. No cases involving crime against a person were discussed by older persons in the interview, therefore there is further room for investigation regarding seriousness of crime against a person in relation to fear of crime.

Type of offender. An 'offender' was perceived to be an outsider who commits crime in the living community of older persons or an insider who commits crime in his own community; both increase older persons' vulnerability as well as fear of crime. To a certain extent, this is a similar concept to the villain in the community, which will be described in the following paragraph. People fear living with potential

offenders who commit crime in their own communities since this increases the perceived risk of being victimised by a crime. FEGs1 illustrated this by saying:

'The most terrible thing was, after checking the recording of the CCTV, there were no strangers who went in or out before and after the serial break-ins were committed. This implies that the offender may be someone who lives in this building. So it is frightening to live here after this crime was committed. On one hand, the police could not find and arrest the offender. The offender may live in this building, which means that we may become one of his targets if he is going to commit crime again. Therefore, we were so scared last year' (FEGs1).

Surely it is frightening to live close to an offender because it may increase the chance of being victimised. However, there was an interesting finding that some older persons do not fear living in the same neighbourhood as an offender if he or she will not commit crime within his or her own community. SSPGs2 pointed out:

'Those drug abusers [of the past] are very 'You Yi Qi' (have a sense of honour and justice) and they would not commit crime in the place where they lived. Just like the old saying that 'they don't piss where they eat.' They only committed crimes in Mong Kok or other places if they were living in Sham Shui Po. They would not commit crime here. Therefore, we do not fear them, even though some of them are my neighbours. And we do not close our door and gate when we sleep at night.... Sometimes, those drug abusers may put some drugs under your cupboard, which is located outside your home, and get them back later. But they would not do something that harms you or your property,

so we didn't fear living so close to them. However, the situation has changed. Nowadays, they become 'Mo Yi Qi' (without a sense of honour and justice) and commit crime in the community in which they live. Thus, it is dangerous nowadays to be the neighbour of those people' (SSPGs2).

From the above viewpoint, it becomes clear that some older persons would not mind living in close proximity to offenders if the offenders did not commit crime in their own neighbourhood. This is because they often are not a threat to older persons in terms of endangering their life and property. Maybe from their point of view, an offender who does not commit crime (in their area) is not an offender at all. Nevertheless, older persons do experience fear if they are unsure if the offender will commit crime in his own community. As SSPGs2 pointed out, many respondents felt those offenders to be 'Mo Yi Qi' because they commit crime in their own space. This ultimately scares older persons who live near the offender, as it seems to raise the chances of being victimized by a neighbour.

Similarity of scenes of crime compared to one's own living environment.

The third dimension of crime history in the community, affecting the perception of vulnerability, is the similarity of the crime scene with older person's own living environment. This means that older persons will express a higher level of concern

and fear if they find that the environment of a crime scene is similar to their own living environment. FEGs1 voiced their concern on the weakness of 'diamond' type housing after they heard news about criminal cases within this type of housing. Although the crime had not happened in their living community, they worried since the circumstances were similar between their own living environment and the victimized one. One respondent shared the feeling that:

'It is a great risk for me as I live in the 'diamond' type household [the inner shape of the household like a diamond], where the offender can easily enter my home from the kitchen. There are plenty of criminal cases in Wong Tai Sin. All of them are in diamond type households and all of the offenders entered the house through the kitchen' (FEGs1).

If several criminal cases have occurred among particular types of living environments, these will serve as indicators for older persons that these types of living environments are vulnerable. They may share a weakness in their similar physical design. Thus, if older persons live in an environment that is similar to those that have been victimised, they may be likely to feel a higher level of vulnerability in that type of environment.

Income level

Low income level in the community is another social environmental defect that older persons perceived as vulnerable. In short, older persons believe that they are at higher risk if they are living in a low income area. FEGs2 confessed:

'We would not be living here (public housing) if we had money. Every person who lives here has a low income. The government sets the rules for applying for public housing. Applicants' income should not be higher than the upper limit, otherwise they are not eligible to apply for public housing. Therefore, when you are eligible to apply, it means that you are poor. Wealthy people would not commit crime but poor people do. They commit crime when they need money. Therefore, it is a problem being in a place with a low income group' (FEGs2).

Hale, Pack and Salked's (1994) study also suggested that socio-economic status of the community is related to residents' levels of fear of crime. However, the explanation here is slightly different from their study. Hale, Pack and Salked (1994) suggested that insufficient financial resources and professional contacts of low socio-economic status communities make their residents unable to cope with the community problems effectively, so as to evoke fear of crime. Respondents in this study stressed the criminal problems which may occur due to the low

socio-economic status of the community. The rationale of FEGs2 is that low income people have a greater potential of becoming offenders than those in higher income groups. Therefore, people who live in a low income area will be more vulnerable than those living in a high income area.

Local population

Another environmental defect that was discussed by respondents is the number of people in a given area. There are two extreme conditions that older persons will perceive as vulnerable in an area. The first condition is an overly-crowded area; the second is an excessively desolate, unpopulated area. Older persons fear that crime will be easily committed in a crowded place, especially crimes such as pick-pocketing. In fact, several respondents in the focus group had been victims of pick-pocketing and some of them knew someone who had been victimised in a crowded place. SSPGs1 mentioned:

'Pick-pocketing and robbery is very common in the wet market. They steal money and mobile phones. Most of the cases happened in Pei Ho Street (北河街) Market (see photographs, p. 143). My husband has been victimised two times...victimised twice within two months...I wonder why he went to Yu Kei (a shop) to buy food as so many people are there. It is hard to

notice the pick-pocketer since you have so much physical contact with other people in a crowded place. I'm afraid of crowded places very much, so I will not walk into the crowd' (SSPGs1).

A respondent in FEGs1 agreed:

'I have heard that some of my friends have been pick-pocketed. There are plenty of cases in the market, especially in front of the vegetable food store because it is very crowded. I have heard two to three cases about robbery which happens in that area' (FEGs1).

Crowded places attracted older persons' attention in this respect as they feel these places provide an offender the opportunity to commit crime. When older persons enter a crowded place, it is difficult to know whether their property is safe or not. This is because physical contact is very common in a crowded place, and older persons need to be concerned with their own safety amid the hustle and bustle of a market. On the other hand, they also need to worry about their property. It can be quite difficult for older persons to take care of both.

Besides crowded places, older persons also avoid places that have very few people or none at all. They think that it is dangerous to enter places with few or no

people because they will become a target chosen by a potential offender. More importantly, there will be no help available if they were to be victimized in a desolate area. For example:

'I will avoid passing by some quiet places in the park. I will only go to those areas with people. You have nothing to do in a place with no people. And it is dangerous to be there because no-one will notice if you need help' (FEGs1).

'Aren't you the only target for the offender if you are going to a place with no one? I will not do this' (SSPGs1).

As physical ability tends to decrease with increasing age, older persons are less likely to go to isolated places. Most of the respondents claimed that it would be terrible if there were no-one to help them when they are in need, whether they need help from a crime, a fall, or for any other reason. When talking about help from others, some of the respondents in both SSPGs and FEGs mentioned cases of their neighbours' deaths, which went unnoticed. They think that this is the worst example of being unable to get help. They all agreed that older persons have relatively poor physical ability, and some of them may have chronic disease, so it is very important for them to be able to access external help when they need it. Accordingly, the respondents pointed out that a deserted or isolated place is another environmental

defect that increases their sense of vulnerability.

Known villains living in the community

The presence of villains in the community refers to persons or groups of people who are perceived as troublemakers or potential offenders. They are potential law breakers who cause harm to the innocent, as well as society as a whole. Villains include gang members, juvenile delinquents, thieves, drug abusers, and so on. Jackson's (2004) study on social and cultural significance found that people perceived higher risk and fear when they find the symbolic of crime and things that can be associated with crime. These include 'perceptions of young people 'hanging around', rubbish and graffiti, and the presence of individuals and groups who are 'different', with different values and who behave in unpredictable ways' (2004, p.963). As villains are recognized as a threat to the community, older persons—due to their physical ability—are more likely to fear them than other age groups.

'There are so many drug abusers who gather under the bridge at Nam Cheong...I fear when I pass through that place. Actually, they will not rob you, but they will ask you for a little amount of money. They may say they need to take the bus somewhere but they don't have money, so they ask you. Or they may say they want to buy bread but they lack money, and ask you for money'

(SSPGs1).

When approached by drug abusers, older persons tend to give them a little bit of money to avoid trouble. The drug abusers, as described by older persons, are around 30 to 50 years old. Older persons do not fear them like they fear other gang members or juvenile delinquents. This is because the drug abusers are highly affected by drugs and usually have weakened physical ability, like older persons. Therefore, drug abusers do not create as much of a threat to older persons as a gang or gang members.

Although villains in the community can cause vulnerability in older persons, they can try to avoid places where those troublemakers are known to be, which may reduce their fear of crime. However, it becomes more problematic if those villains are the neighbours of older persons. SSTI, a person with a high level of fear of crime, believes his neighbour is a gang member, and a person who is dangerous. When asked what makes him fearful, he explained:

'The two households behind me! They are both bad people! They are gang members who always bully and oppress me. I have to turn off the television at 8 p.m. If not, they will give me a rap on the ceiling. They do so just because I turn the volume a little bit up on my television. Moreover, they always make noise

on my rooftop. I don't know what they are doing, but the noise they create makes me suffer from insomnia. They did it again a few days ago (pointing to the rooftop). The duration is long, which makes me unable to sleep. I don't know what they are doing, but the noise maintains for a very long time. They want to harm me, but I ignore them and fall asleep. The woman who lives beside my house too...she steals my food' (SSTI).

This example shows that SSTI is extremely fearful due to the negative perception of his neighbours as gang members and offenders. One of the characteristics of the gang member is that once you have a conflict with them, they will do many things to bother or harm you. In SSTI's case, he found that once he had a conflict with his 'gang' neighbour, he received endless harassment. More importantly, he cannot avoid the harassment since it occurs in his house, the place where he lives. Although he has applied for public housing, he is also afraid that those 'gang' neighbours will find someone to bother him even if he has relocated to another place. Clearly, the gang member creates considerable stress and fear for older person in this case, and older person is largely vulnerable in this situation.

4.3.2 Defensibility

Another environmental factor that is related to fear of crime in older person is defensibility. Defensibility is the level of protection that is provided by the physical and social environment, which helps reduce older persons' fear of crime. Unlike vulnerability, defensibility is mainly focused on prevention. As such, older people seek protective devices and protective authorities to reduce their perceived vulnerability in different environments. Defensibility can also be divided into two categories, physical and social, in which the physical dimension stresses physical security devices such as closed circuit television, window grilles, and locks, while the social dimension includes the availability of authority figures that can effectively prevent crime, such as police and security guards.

Defensibility in the physical environment

Security devices

Security devices are different types of objects which are used to protect peoples' property and prevent unauthorized persons entering certain area such as lock and

window grille. They can also help to provide surveillance such as closed circuit television. Security facilities are one of the factors that affect older persons' level of fear of crime. There is mainly one focus which concerns older persons about security facilities, which is effectiveness. With reliable and effective security facilities, the level of fear of crime reduces. Rohe and Burby's (1988) study indicated the significance of adequacy of security measures, including lighting and safe locks, in relation to the levels of fear. They found that respondents who reported having sufficient security were significantly less fearful than others.

In the example of WUI, she has a lock on the door, and keeps a dog as a security guard. When asked if it is effective to keep a dog as a guard, respondent 2 confirms and says:

'The dog helps us a lot for the security purpose. It is good. When it sees something is coming or heard something, it barks. We know someone is coming when it barks. Sometimes, when the dog barks actively and this will arouse our attention and alarms us to go out and see what happen outside. So, it is good' (WUI).

In fact, people who live in villages always tend to keep a dog for security reasons. As dogs have sensitive smell and hearing, they can serve as an alarm for

their owner, which can arouse people attention when something happen. To some extent, dogs also serve as a body guard that protect their owner and property, because most of them will attack a stranger who enters their territory. Therefore, due to their protective and sensitive characteristics, they serve as a reliable security facilities for their owners and help to relieve people's level of fear of crime.

Respondents who live in the new type housing in Tin Shui Wai and Fortune Estate, reported different security facilities used to make them safe. For example, they have a main gate at the main entrance with password system of the building. They also have closed circuit television (CCTV) in the elevator. There are also gate, window grille and lock for each household (see photographs, p. 140 & 146).

'There are gates and security guards at the main entrance, so for a non-resident it is hard to come in' (TSWG_s2).

'The CCTV in the elevator is very useful. We were fearful in the past when there was no CCTV in the elevator, because no-one knew what was happening in the elevator. But now, the offender dares not to commit crime in the elevator as a security guard may know what is happening, and the CCTV will have record of it' (SSPG 2).

This shows that, to a certain extent, security facilities help older persons to

reduce their perceived vulnerability as well as levels of fear of crime. As SSPGs² mentioned above, taking an elevator with stranger was scary in the past because, on the one hand, help is not available in the elevator when crime takes place whilst, on the other hand, they cannot escape when they are facing a threat. After the installation of CCTV in the elevator, security guards and residents may know the situation in each of them, and the CCTV will record every movement in it. Therefore, potential offenders may not commit crimes in the elevator, which makes it safer for the residents. Similar results were found by Bazargan (1994). He studied black elderly people and suggested that people who lived in semi-high-rise building with protective measures, such as guards and/or check-in attendants, may reduce the levels of fear of crime at home.

Defensibility in the social environment

As mentioned before, defensibility in the social dimension emphasises the availability of an authority figure, who can effectively prevent crime, such as security guards and police. Although neighbours, to a certain extent, can help older persons to defend their property, they do not have the symbol of authority which can prevent crime effectively.

Security Guards

Security guards play an important role related to the social dimension of defensibility for older persons and can be especially important for older persons who live in high-rise buildings. On one hand, the security guard serves as the first barrier preventing unauthorized people from entering the building. They also provide surveillance and protection for the residents. Therefore, older persons will perceive as higher protection in the building as well as less fear of crime of living in the building. The following ideas were communicated during the focus groups:

'There are security guards in the estate, and they will focus on safety issues...Security guards will patrol the building, and thus they can find out unauthorized people, so it is safer...Less crime will be committed in these new types of housing because the security guards will remember their residents. Once a stranger enters the building, he has to register his HK identity card. But there is no security guard in the old-type housing, so they will be poorer than us' (FEGs2)

'My brother lives in old-type housing without a security guard. Therefore, one day a man followed him and robbed him when my brother walked on the stairs at around 5th to 6th floor' (SSPGs1).

It is surprising that when asked if there were any sorts of security facilities they would like to have, all of them answered security guards. They placed considerable emphasis on the idea of a security guard as they think that it is a highly important factor for their defensibility. As mentioned, unauthorized people hardly enter those buildings which have a security guard, as non-resident have to register before entering. Therefore, they are perceived to be a first line of defence for older persons, who live in high-rise buildings. On the other hand, they think that offenders will be afraid of the security guards just like 'a rat that saw a cat'. Therefore, with the patrol in the building, older persons think that security guard provides them with a high level of defensibility.

Police

The formal police are seen as the most effective source of protection as perceived by older persons. Most respondents think that police can effectively prevent crime and they also believe that the crime rate in some crime hot spots will drop once more police patrols are started in that particular area. When asked if they think the police are useful to protect them, the respondents mentioned that:

'The standard of the police force in Hong Kong is world class'
(SSPGs2).

'They are, of course, useful. Imagine that if you are the offender, who plans to commit crime. You will hesitate and fear once you see the police' (SSPGs1).

Renaure (2007) too found that the presence of police officers is a significant inhibitor of fear of crime. Salmi, Gronroos, and Keskinen (2004) also suggested that citizens who saw the police more on foot can reduce their level of fear of crimes against property. SSPGs1 may point out the reason of this phenomenon. Police officers are the symbol of justice and they are the authority figures to tackle criminal activities. Therefore, as indicated by SSPGs1, offenders may not commit crime in a place where police officers are present.

Although police are the most effective way to prevent crime, there is a main problem, which is perceived by older persons, toward the Hong Kong police force. They think that the number of police is not enough in Hong Kong. The shortage of police force makes most of the places in their community left unprotected.

'Police only patrol in areas with criminal history but ignore those without crime history. Once the place has victimisation case, there will be police patrol in the coming few days.'

However, the number on patrol will decrease day by day, and there, at last, turn out to have no police patrol again' (SSPGs1).

In fact, Hong Kong actually has one of the highest police-to-population ratio in the world, which is 386 officers for every 100,000 people (Hong Kong SAR Government, 2007). However, due to the perceived shortage of members in the Hong Kong police force, older persons do not rely on them too much as the basis of protection in the community. Although older persons believe that the police force is world class, and can prevent crime effectively, they seemed to ignore the police force throughout the interview process until they were specifically questioned about their points of view of the HK police. To a larger extent, older persons think that security guards are more important for them in the social dimension of defensibility as they are always present and ready to help.

4.3.3 Supportability

Finally, older persons may also consider the availability of support that they can get when they are at risk (facing a threat or have become the victim of crime). Unlike defensibility, supportability does not necessarily require an authority figure. Although police and security guard are powerful sources to support older persons

when they face a threat, neighbours, friends, or even strangers on the street can also play an important role in supporting older persons.

Security Guards

Security guards are an important source of support for older persons, especially for those who live in high rise buildings. Respondents reported that they will call the security guard if they face any problem, because they think that the security is reliable and supportive.

'I remember that a man pressed our bell, and promoted something to us. We ignored him but he didn't leave. Therefore, we called the security guard. The guard came here very quickly, and he asked the guy to leave. The guard was really helpful. So we will call the guard if we have any problem' (FEGs1).

As a security guard is considered as an authority figure in the building, he can help the residents not only to defend, but also as a support to residents when they are in need. Security guards are an effective source of support in addition to the neighbours. They can arrive in a short time and provide help for older persons who need it. Moreover, with their authority symbol, they can support older persons more

effectively as they can expel any non-resident and thus protect older persons.

Therefore, it is more likely that people who live in a building with a good security guard will have a lower level of fear of crime.

Neighbours

When asked WUI if she feels fear in living in her household, she replied that ‘Absolutely not. Why should I fear?’ One of the main reasons that she stressed is that she has lived in the village for around 40 years and she knows everyone in the village.

‘I have lived here for around 40 to 50 years and I know everyone in this village well. They are all good guys... We will help each others when someone is in need. For example, my neighbour Mrs. W will come and help us to weed and spray pesticide. She would also feed my dog if I leave my home for a couple of days... People in this village always help each other...They are very good!’ (WUI)

Respondents in Cheung Chau also shared a similar notion and they pointed out that:

‘Our islanders are very supportive. You can easily get help when something goes wrong. For example, they will help you to stop the offender if you are robbed on street. (Have you faced it

before?) No. But I think that they will do so. As Cheung Chau islanders, we will provide help even if we don't know each other' (CCGs2).

In this case, it shows that living in a supportive community would help older people to reduce their level of fear of crime. Older persons realized that when they are in trouble, they can seek help easily, so they are less likely to be in fear. To a large extent, it is consistent with Yin's (1980) findings in which, he pointed out that social support networks and neighbourhood networks are hypothesized as negatively related with the fear of crime (Yin, 1980). The importance of the social support network can help older persons 'view themselves as capable of recuperation with help from their support network' (Yin, 1980, p.198). Thus, the more extensive the social support network, the lower the level of fear of crime among older persons.

Non-government organizations

Some services provided by non-government organizations (NGOs) also serve as a source supporting older persons. An example is the Personal Emergency Link (PE Link) Service provided by Senior Citizen Home Safety Association which connects the PE Link users (older persons) to a 24-hour PE Link Centre by a communication

system. Users can communicate with the operator by pressing a portable remote control. The operators can, therefore, identify the needs of the PE link user and provide them with any necessary support services (Senior Citizen Home Safety Association, 2007). Some respondents mentioned that they will seek help from this system when they are facing a threat.

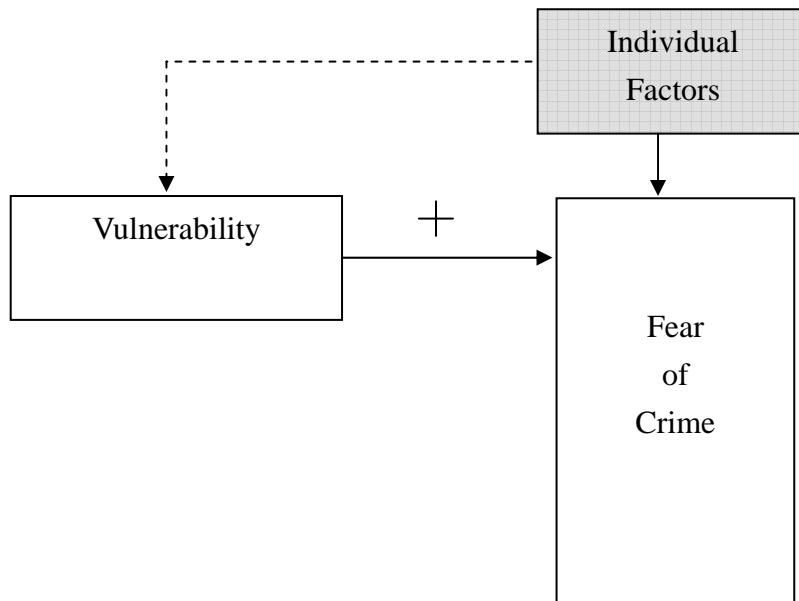
'We have the PE Link Service. We just use the PE Link Service when we need help. (How?) Just press the button and there will be someone to talk to you, and they can help you' (TSWGs1).

Respondents think that PE Link Services is supportive because of its simplicity. It is easy to use by just a simple press on the controller, through which the user can contact the centre and get support. However, the major constraint on this service is distance. The remote control cannot operate well when it ranges 10 meters or further from the main adapter. Therefore, older persons can only enjoy this service at home. Although its limitation is obvious, older persons still treat it as an important source of support when they are in need.

4.4 Individual Factors

Individual factors are also found to be related to fear of crime among older persons (Fig. 4.6). Finding suggests that fear of crime is related to older persons' perception of vulnerability, defined by Perloff (1983, p.43) as 'a belief that one is susceptible to future negative outcomes and unprotected from danger or misfortune'. The term 'vulnerability' for individual factors refers to the vulnerability model which suggested that demographic characteristics relate to fear of crime. The result revealed that physical vulnerability (e.g., physical health and frailty, and distractions from the market place), social vulnerability (e.g. educational level), as well as cognitive-behavioural vulnerability (e.g., personal disclosure, health and family caring attitude and lacking of communication with family or support networks) are positively related to their level of fear of crime. However, two others factors, namely personal wealth and lifestyle help older persons to reduce the sense of vulnerability and, therefore, it shows a negative association with the level of fear of crime among older persons.

Figure 4.6 Relationship between individual factors, fear of crime and vulnerability



4.4.1 Physical Vulnerability

Three categories of vulnerability have been identified within individual factors by interviews and focus group interviews. They include physical vulnerability, social vulnerability, and cognitive-behavioural vulnerability. Physical vulnerability includes physical health and frailty among older persons, as well as distractions from the market place. These two are categorized as physical vulnerability as both can cause vulnerable feeling among older persons due to their decline in physical ability. The first is the decline in health and physical strength, which make them unable to avoid being attacked or hurt as well making it harder to recover from victimisation. The

second is also related to their decline in physical ability. Older persons often have weaker strength compared with younger age groups and they may easily get injured when they fall. They should pay extra attention to avoiding getting hurt in a crowded place like a market. As a result, older persons may easily be victimised because they have to take care not only their property, but also of themselves.

Physical health and frailty

Tulloch (2000) indicated that fear among older persons can be part of their overall experience of physical deterioration. Results of this present study also found that physical deterioration is an important individual factor for older persons. The disadvantages resulting from physical health and frailty were readily recognized by participants in the focus groups and individual interviews. They pointed out that they are vulnerable and are easy targets for offenders. This can induce a feeling of helplessness for older persons who can neither flee or fight in the victimising situation. On the one hand, they do not have the strength to fight back against the offender and, on the other hand, they lack the physical capability to run away when they must. Therefore, the limitations of their health status and capability create a disadvantageous position for older persons when they are facing crime.

'We are old. We lack the strength to resist when we are faced with any criminal event. They (offenders) can easily subdue us, because a simple push can cause serious injuries to us' (SSPGs2).

'Older persons should be the easiest target for the criminals. We cannot resist because of our weaknesses' (CCGs1).

'You know, when we face them (offenders), we can do nothing. We can neither run faster than them, nor have the strength to resist them. Therefore, the only way we can have is to do what the offender told us to do. What can we do besides giving them money' (SSPGs1)?

The physical frailty that most older respondents experienced create a sense of vulnerability among them. The vulnerability is the lack of ability to resist or run when they are facing a threat. The only way out is to obey the offender so as to avoid a greater loss, which implies physical harm during resistance. Many older persons realize their physical frailty may lead them to a longer time and larger cost of recovery, and a simple fall may even cause a serious injury for them due to their physical weakness. Therefore, they think that this characteristic shared by many older persons may make them become good targets for offenders. A vulnerability model (Jaycox, 1978) has been developed in the light of this concept, which points out that physical vulnerability is positively associated with fear of crime among age

and sex. Older persons, due to their poor physical ability, can be highly vulnerable.

Therefore, it is not surprising that they share a high level of fear of crime according to the vulnerability model.

Distractions in the market place

Older persons think that they are more vulnerable in the market, mainly as a result of their physical ability and also their carelessness. Most respondents in different focus groups pointed out that the most dangerous place is the market. On one hand, markets include plenty of people, which make them a good place for pick pocketing. On the other hand, older persons can hardly focus on several things at the same time in the market, which means that they have to take good care of their property and their body at the same time as doing the grocery shopping. Therefore, most of the victimisation cases that were shared by older persons in the focus groups happened in the market.

'Ah, it is very common for older persons not to take good care of their property in the market. You have to choose the goods you need, and you have to open your bag and get the required money. Therefore, it is not unusual for older persons that they forget to zip up their bags when they are continuing their purchases. How can we remember that when we are focusing on

something else?’ (FEGs2)

A crowded place like market creates plenty of overwhelming distractions for older persons to process. As they have may have declined in their physical ability and health, older persons have to pay extra attention when they are in a crowded place. Physical contact in a crowded place is common but it may easily hurt an older person due to their physical condition. It may also result in a serious outcome if they fall. Therefore, protecting oneself is the primary thing that older persons have to take care of. They avoid subjecting themselves to falls and hurt when in a crowded place. Furthermore, older persons need to attend to their possessions such as goods purchased from the market. During the process of picking their purchases at each market vendor, older persons put relatively fewer concerns and awareness on their own valuables. This opens an opportunity for potential offenders to commit crime.

4.4.2 Social Vulnerability

Social vulnerability has been classified based on the variables which related to people’s social status including educational level and income. This study found that low educational level among older persons creates sense of vulnerability for them.

However, limited personal wealth also leads them to believe that they are less likely to be the target of offenders so as to relieve their sense of vulnerability as well as levels of fear of crime.

Educational level

Educational level creates another disadvantage for older persons. Due to the poor social condition and the absence of compulsory education in the past, older persons in Hong Kong today are less likely to be educated than the younger generation. Their knowledge mainly comes from their life and work experience. Therefore, it is not surprising that many do not know how to read and write Chinese characters fluently. This may reduce their confidence and makes them vulnerable to all kinds of confidence games. For example, criminals use fake identity card to act as social workers or staff of the Social Welfare Department. Due to their lower educational levels, older persons can find it hard to identify peoples' real identity so as to avoid being cheated.

'We don't know if the identity card, which people show, is real or not, because we can't read the text on it. But if it is a volunteer, who comes from the community centre... they will give us a call before visiting us' (TSWGs1).

Being unable to read or write can make life difficult for older persons. As TSWGs1 indicated above, he found it difficult to confirm the identity of those who approached him, even though the person has shown his or her identity document to him. Older persons lacking the ability in using important information to determine the trustfulness of strangers are exposed to confidence tricks or fraud. Criminals can make use of this disadvantage and convince older persons to sign documents, which are unfavourable to them, so as to achieve their goal. Therefore, low educational level can mean vulnerability for older persons.

Personal Wealth

Although older persons think that they are highly vulnerable to crime due to their physical limitations, they also point out that criminals are less likely to target them because of the little property they have. Some of the respondents pointed out their view on the issue of their property.

'But we are not afraid as we are old. (Why?) Because we lack money. It should be you and the youngsters who are afraid more than us' (SSPGs1).

'Why should we be afraid as we don't have much property at home? I am only afraid of the offender that they will terrify me' (FEGs1).

'We don't have any valuable stuff and we will only bring a few hundred dollars when we go out. They (offenders) can therefore only get this small amount of money if the criminals commit crime against us' (SSPGs2).

Previous studies have pointed out that the high level of fear of crime among older persons is due to their limited financial resources. For example, Kanan and Matthew (2002) suggested that having higher income is associated with lower levels of fear of crime as well as lower perceived personal risk as people with higher income have greater ability to protect themselves and insulate themselves from crime. Moreover, poor older persons may suffer from relatively higher loss when they are victimised compared with other age groups as they lack means to recover their loss. Nevertheless, in terms of target attractiveness, limited financial resources and property can help older persons reduce their levels of fear, as they believe their chances of victimisation are concomitantly low.

4.4.3 Cognitive-Behavioural Vulnerability

The cognitive-behavioural vulnerability concept has been classified from the individual interviews and focus group interviews based on the idea that older persons perceived their thinking and behaviour as the result of their vulnerability. These factors may either increase their sense of vulnerability (such as personal disclosure, health and family caring attitude, lacking of communication with family or support networks) or decrease their sense of vulnerability (such as lifestyle).

Personal Disclosure

Older persons in this research pointed out that they are more likely to disclose their personal information to strangers since they have no-one to talk to in their lives. During the focus group interviews, some older persons mentioned that chatting to friends and strangers is one of their most frequent activities. Sometimes, they pay less attention to whom they chat with even though they may be strangers. Older persons enjoy sharing their experience with others and they are willing to chat with them unless the person looks obviously bad.

'Older persons like to talk especially to other talkative people. They are not aware of the need to protect their personal information or family background during the conversation' (FEGs1).

The disclosure of their family background and personal information creates a great chance for potential offenders to gather necessary information Which can then be used by the criminals to develop a confidence game. Some participants pointed out that their conversations are mainly focused on their daily living, personal health and their family. Consequently, it is easy for the criminal to collect information just by talking to older persons. It, therefore, potentially places such older persons at a higher risk of exposure to confidence games/tricks and other criminal activities.

Health and family caring attitude

With the awareness of any decline in physical ability and health, older persons put more effort and concern into maintaining their health. Consequently, this can make them highly exposed to confidence games and street scams related to health issues.

'I did dye my hair few years ago, but I don't do it now. I remember that there were two guys who brought some bone and

passed by me, and said those bones came from a place outside HK, and are very valuable. Hair will grow perfectly healthy and black once you cook and eat those bones. I am the one who have heard their conversation, and I could not control myself and asked them about the bones. And I was cheated' (SSPGs1).

These kinds of confidence games are especially used by criminals to cheat older persons who have chronic disease, because such people may be willing to try almost any methods that can relieve their pain and illness. One group of respondents even pointed out that they are willing to try some things, even though they know that they may be untrue.

'If you are tortured by some disease and feel very painful, you are willing to try any methods proposed by someone who says they are useful even though you know it may be fake. But they, at least, give a chance for you to relieve your pain' (SSPGs1).

In addition to health issues, many older persons also highly treasure their family members. Therefore, if they hear that their family members are in trouble or in need of help, they are more likely to provide help. This gives criminals an opportunity to cheat and request money from older persons by claiming that their family members need their assistance, or claiming that they kidnapped one of their family members. One group of respondents pointed out their feelings when they heard their family

member was in trouble:

'When you pick up the phone and someone suddenly tells you that your son is in their hands ...it is so terrifying that you cannot think clearly who you are talking to, and whether the case is true. The only thing that comes to mind is the safety of my family member. Therefore, it is terrifying when you receive such a call' (TSWGs1).

During the focus group interview, older persons often mentioned their concerns about health and their care for their family members. It is readily understood why older persons may easily become victim of confidence games or tricks which stress health and the safety of family members, because these two areas can be treated as the main weakness shared by most older persons.

Lacking of communication with family or support networks

Perhaps surprisingly, older persons seldom appeared to share their worries with their family members. However, there are some cases which show that crimes can be prevented if older persons are willing to talk to their family members during their victimisation process. For example, FEGs1 shared a case related to the lack of communication during a victimisation process:

'My mother tried it. There was a man who held a diamond watch and told my mom that it was valuable. But he claimed that he didn't know where could he sell it, so he asked my mom to buy it at a lower price and sell it herself later. The man then followed my mom and waited for her money. Luckily, when she returned home and got the money, my brother realized that there could be a problem so he followed her. The man ran away when he saw my brother. My mum finally realized that she had nearly been cheated by the man' (FEGs1).

When asked why older persons seldom share their feelings and problems with their family members, many mentioned two main reasons, including the fear of bothering their family members, and the inconvenience of doing so in certain circumstances. The former reason reflects the belief that shared by some older persons, in which they are afraid of being a burden of their family members. Therefore, they seldom mention their needs to them. The latter reason is more interesting. FEGs1 pointed out that it is a kind of family politics, in that you may have bias in treating your family members and you do not want some of your family members to know everything you have done. However, once you told one of them, it is very likely that all of them will ultimately come to know.

'It is very complicated. You know you could have preferences for some of your children or family members in a big family. You may want to share your feelings or problems with one of them

but not all of them. However, it is most likely that all of them will know if you just told one. Consequently, if someone comes and approaches me on the street and tells me that he can solve my problems without involving my family members, I am willing to do so' (FEGs1).

The worry of bothering their family members and the preference of their family members, to a certain extent, makes older persons relatively more vulnerable to crime as they are less likely to seek help internally within the family. They can therefore make themselves more exposed to crime as they are more likely to seek help from the outside world. More importantly, older persons may lack communication with their family members who could provide them with necessary information or suggestions which could help them avoid becoming victims of crime. Mr. Chan, the Chairman of the Association for the Rights of the Elderly, indicated that some older persons are more likely to be victimised as they lack communication with their family members as well as neighbours. They are especially vulnerable when strangers approach them with a caring attitude. More importantly, Mr. Chan indicated that some older persons hold conservative views of their relatives, more so than towards strangers. Some may even think that it is safe to share their information to the stranger, just as some people do on the internet (Ming Pao, 2008). To a large extent, Mr. Chan's view is consistent with the findings of this research study and

reflects the idea that lack of communication with family or support networks may put older persons at higher risk as well as increase their level of fear of crime.

Lifestyles

The habit and lifestyles of older persons can make them less likely to be exposed to crime. For example, many participants mentioned that they have a regular pattern in their daily lives. They may wake up at around 4:00 to 5:00 a.m. if they want to exercise at the park. Then they may spend the afternoon with their friends or in the community centre. After that, they may return home to cook and have dinner at around 6:00 p.m. Finally, they watch TV and sleep at around 8:00 or 9:00 p.m. As most older persons sleep early, they have very few social activities at night. More importantly, they think that most of the criminal activities happen at night. Therefore, they think that they are safer than those people who go out at night.

'We have nothing to do at night. Why should we go out if we don't have any business? It is time to stay at home, to watch TV and prepare to sleep' (TSWGs1).

'Because older persons tend to sleep early, and are less likely to go out at night, we would not be victims of crime. Those people, who work and play at night, are more exposing to danger

compared with us' (SSPGs1).

One of the traditional methods to evaluate the level of fear of crime among the respondents, used in the General Social Survey and the National Crime Victimization Survey, is by asking the respondent how fearful of crime they are during the daytime or night-time (Miller and Wright, 2005). However, when the respondents in these focus groups were asked this, most pointed out that they rarely go out at night. This lifestyle, on one hand, means they find it difficult to answer this question. On the other hand, they also believe that they are less exposed to criminal activities. Therefore, this aspect of lifestyle can help older persons to reduce the level of fear of crime.

4.4.4 Individual factors in relation to environmental vulnerability

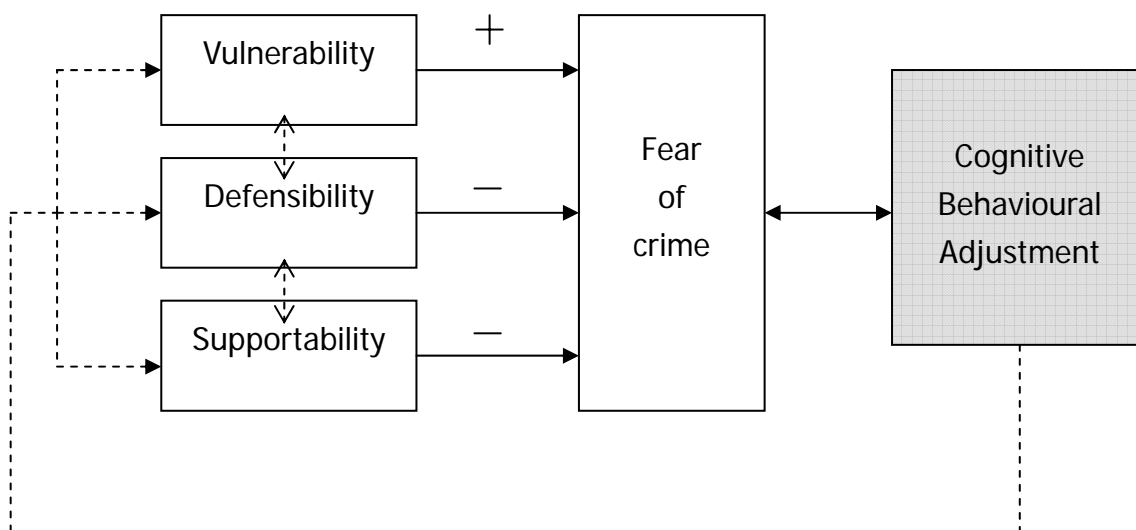
As Fig 4.3.1 indicates, individual factors may create certain impacts on environmental vulnerability although they may not be as strong as the impact on fear of crime. The individual factors that older persons shared might also affect their perceptions of the environment. Therefore, they may perceive some environmental characteristic, such as defects, which may differ from other age groups

As indicated in the discussion of social environmental defects, crowded places are seen as an environmental defect by many older persons. Older persons may suffer from certain decline in abilities including both sensory ability, mental ability and physical ability when they grow old (Hooyman & Kiyak, 2008). When they get into crowded places, they have to, on one hand, take care of their own safety, because physical contact is very common and older persons have to be careful to avoid being hurt. On the other hand, they also have to be concerned about their property. Therefore, it is challenging for older persons to take good care both. But this changes when youngsters go to the crowded place, as they can mainly concentrate on their property as they do not need to worry so much about avoiding physical harm.

4.4: Moderators of fear of crime

It should be noted that, although environmental and individual factors can affect the level of fear of crime among older persons, the results indicate that moderators, which focus on the cognitive and behavioural adjustment, may also have an impact on levels of fear of crime (Fig. 4.4.1). For example, respondents who live in Sham Shui Po all perceived crime (such as confidence games, pick pocketing and drug taking) as a common problem in their community. Most of the respondents in these two focus groups had experience of victimisation. Therefore, criminal activities are widely prevalent in their surrounding and they are at high risk of being victimized. Although they live in a high risk area, some adaptive beliefs and behaviours, which they share, seemed to help them to reduce their level of fear of crime.

Fig. 4.7 Relationships between cognitive-behavioural adjustment, fear of crime and environmental factors



Information about criminal activity

Respondents who live in Sham Shui Po have sufficient knowledge of crime. They know very well the dangerous places in their community and they also know well the methods which criminals use to commit crime. Therefore, they appear to have sufficient understanding of crime which helps them to reduce their chance of being victimized and also acts to reduce their level of fear of crime.

‘Most people will think about theft, robbery, rape, etc. when talking about crime. But actually they know very little about the detailst. Some of the details you’d never heard it before...Let me tell you the processes of pick pocketing. There are often three people. One of them stands in front of you and blocks your way. The other one who stands behind you will then steal from your

pocket and pass it to the third one. And finally the one who gets the items from your pocket will leave the crime scene. When you realize that your property has been stolen, you will only suspect the second one and you find nothing on him' (SSPGs1).

'When talking about crime in Sham Shui Po, we must note the drug abusers (heroin taker mainly). Sham Shui Po contains many drug abusers, they are all around us. As it is an old district, and it is an important drug selling place before the development, it is not surprising that many drug abusers are concentrated here. More importantly, after the development, most of the drug abusers were allocated to different estates in Sham Shui Po, so illegal drug abuse is a serious problem in our living community...More than that, 'Dropped Money (one kind of confidence game/trick)' occurs at the exit of Pei Ho Street MTR station...Pick pocketing in Pei Ho Street Market etc.' (SSPGs1).

The respondents in SSPGs both show a rich knowledge of crime in their community, whether of the location, types of crime as well as the methods that criminals use. During the focus group interview, older persons frequently mentioned that young people know very little about crime, because it is not taught by textbooks. They said that people will only get to know more when they enter society and experience life. Therefore, their confidence of knowing the criminal activities in their living community helps these residents to reduce their level of fear. However, certain avoidance behaviour also resulted, which helps them reduce the chance of being victimized.

Avoidance behaviour

Avoidance behaviour is very common among older persons. They may avoid some places that they think is unsafe or places which create high levels of fear of crime for them.

'There are many drug abusers who gather under the Nam Cheong Bridge, so I will avoid going there' (SSPGs1).

'We will avoid going to the 'Tung Tai' as there are many outsiders (visitors). Although most of them come to Cheung Chau for sightseeing and play, we avoid that place because we don't know those outsiders well' (CCGs1).

By avoiding 'fearful places', older persons can reduce their levels of fear of crime because they think that they can avoid the threat. In other words, this can reduce their perceived risk. However, avoidance behaviour may also increase the level of fear of crime among some older persons.

'In the past, I used to go to the park to do some exercises, but I will not go out now because they will enter my house and steal my property once I have left my home' (SSTI).

SSTI thus changes his habits and avoids going out, because he thinks that people will break into his house and steal his property once he has left his home. His avoidance behaviour is slightly different from that seen in the SSPG and CCG, because SSPG and CCG avoid the places which may increase their level of fear of crime, but SSTI does not. The place which SSTI worried about is his home. He perceives that he will be victimized once he goes out. In consequence, he almost becomes a 'prisoner of his own home'. In fact, the fact that he spends more time in his home may reinforce his belief that he will be victimized when he is out. This belief may create a lot of stress and fear of crime for him because he may remind himself that crime is going to happen every time when he might leave his house. Finally, it becomes a vicious cycle of fear of crime for SSTI which increases both of his fear of crime as well as avoidance behaviour.

The Nature of Criminal Activity

Understanding the nature of the common criminal activity which happens in the community may also help to reduce the levels of fear of crime. For example, respondents in Sham Shui Po perceive that crime against the person is rarely happens in their living community. Most of the criminal activities in their community are

crimes against property, which means that people are rarely hurt seriously even though they have been victimized.

'When unluckily facing someone who wants to rob you, you can just simply give them money. The criminal is also as afraid as you. Last time, the criminal just took my hand bag, he was afraid too. He was worried that someone would discover his criminal act, so he just told me to give him my hand chain but forgot the one on my neck' (SSPGs1).

To large extent, respondents in Sham Shui Po think that criminals mainly focus on property rather than hurting people. More importantly, older persons tend to carry only small sums of money or property when they go out. Therefore, their costs of victimisation are limited to the value of the property that they carry. This shows that their knowledge of consequence of being victimized contributes to reduce their level of fear of crime.

'Matter of luck'

During the focus group interviews, some older persons indicated that becoming the victim or not is very dependent on luck. It is the matter of luck which determines whether a person will become a target of a criminal. To a certain extent, people who

share this view think that crime is hard to avoid by personal efforts alone. They may try their best to avoid being victims of crime, but whether or not they become a target is not controlled by them but the criminal. Therefore, the respondents think that luck is a crucial element in victimisation. The formation of this belief may be due to the uncertainties related to crime, which include the uncertainty of time, venue, and offender.

First, uncertainty of time means crime does not take place at a fixed time. Although people may think that crime is more likely to take place at night, actually it does not. Indeed, different types of crime can have different temporal occurrence. Some respondents realize that crimes take place at all times and they are nearly impossible to predict.

'You can do nothing when you are faced with it (crime). It happens not only at night but it can happen in the morning too. I have faced it before. Around twenty years ago, I was robbed when I was going upstairs at the second floor. It was just eleven o'clock in the morning' (SSPGs1).

Secondly, crime may happen in different venues. Although there may be hot spots of crime, crime can take place at any venue, whether indoors or outdoors, rich

or poor.

'Fear is meaningless. You have to go out even if you are afraid. You cannot lock yourself up in your home. More importantly, there is no guarantee that your home is safe. It can be unsafe if the criminal has chosen it as a target...Moreover, we live here and it is nonsense to move out because of fear. There are criminal cases that happened in wealthy districts. There is still robbery. Therefore, the only thing we can do is to be aware but not to fear' (SSPGs2).

Lastly, the uncertainty of criminal activity also contributes to their belief that victimisation is dependent on luck. Similarly, the uncertainty of criminality means there is a variety of types and groups of offender. Everyone can be a criminal. It is difficult to identify whether a passer-by who walks near you is a criminal or not.

'Not only youngsters can be criminals, older women also cheat. Older women also cheat older women. I experienced it once, but she didn't cheat me successfully...She followed me for a very long distance and claimed that I took one hundred dollar from her...She finally left when I said I was going to call the police' (SSPGs1).

This shows that crime is not likely to be predicted and avoid by personal efforts alone, in the respondents' view. It is not a matter of how careful you are, it depends on how *'unlucky'* you are. They think that one of the reasons for being a victim of

crime is the bad luck you have, which means that the offender chooses you as his or her target. Therefore, due to the uncertainty of crime, they think that fear is useless. The only way is to accept the uncertainty. Once you become a victim of crime, the only thing that you can blame is your bad luck.

'Result of greed'

Respondents in all focus groups shared a belief that victims of crime would usually be people who are greedy. They think that they can greatly reduce their risk if they can reduce their avarice.

'We must not be greedy. Those who are victims mainly become so because of their avarice...Those who are not greedy will be less likely to be the victims of cheating. To be frank, crime against older persons in Tin Shui Wai is not serious' (TSWG1).

'In short, don't be greedy. Cupidity leads to crime' (SSPG1).

'Sometimes people phoned me and told me that I won a lucky draw. They have a gift for me. But I will reject them, saying that I don't need anything, and hang up. We can avoid being victims if we are not greedy' (FEG1).

There is a Chinese old saying that 'the word greed is equal to poor'. Most of the

respondents share the same view, and they think that they can largely decrease their chance of victimisation if they can control their avarice. This reveals two phenomena. First, that confidence games are the most popular crime against older persons in the respondents' view. Secondly, they fall into the fundamental attribution error, which is 'the tendency for observers, when analyzing another's behaviour, to underestimate the impact of the situation and to overestimate the impact of personal disposition' (Myers, 2005, p.541). Older persons who fall in to the attribute error may think that it is personal disposition, which creates the victim. Therefore, people believe that if they can avoid the characteristics that victims have, they will be less likely to be victims of crime. In this case, older persons think that it is greed that makes people become the victims of crime. Respondents believe that if they can control their avarice, they can successfully avoid being victims of crime. Therefore, most respondents indicated that they would not be greedy so as to prevent being victims of crime. For example, some pointed out similarly to the above that

'Someone phoned me and told me that I won a prize. I told him that I don't need anything, and told him to give it to another one. And then I hang up' (TSWGs2).

'There are always people approaching me at my front door. They say we have something for you to try for free, or something else. I will not open my door. I will not do so even though they

offer to give me anything' (TSWGs1).

Although it may be hasty to conclude that greed causes victimisation, to a certain extent, this view helps older persons to reduce their level of fear as they perceive that they can avoid victimisation by their actions.

Participation in community activities

Respondents in TSWGs1 think that the victims of crime in their community are people who do not take part in any activities provided by the community centre. They think that the community centre helps people in two ways. First, it provides a place for older persons to spend their time in. More importantly, those who spent their time in the community centre are people who are more trustworthy than in other places.

'The most important thing is that it provides a place for us to gather and talk. There is a variety of people in the park, but only people who feel bored and with similar ages will go to the community centre' (TSWGs1).

Most of the community centres in Hong Kong use a membership system. Anyone who wants to enjoy the facilities and activities in the centre requires

registration. Consequently, those who participate in the centre must have fulfilled certain requirements and share similar aims or backgrounds, which makes them more 'trustworthy' than people in other places. As a result, if there is a community centre which serves as a gathering place for older persons to spend their time, older persons will then have less time to linger in parks or other places, so that they are less likely to expose to criminals.

Exchange of information about crime is the second function of the community centre. There are talks on crime prevention organized by the police or the centre regularly so as to provide information to older persons and help them to reduce their chances of victimisation. On the other hand, older persons can share criminal news and experiences with others so that they can have a clear picture and updated information of their community, which can also help other older persons to be aware of criminal activities.

'Information talks can increase our awareness of crime. It increases our chance to be educated...No matter if you are 20 years old or 100 years old, you will become a silly persons if you isolate yourself and are unwilling to learn' (TSWGs1).

Crime prevention talks are useful for older persons especially in avoiding

confidence games/tricks. When older persons receive updated information about crime activities and statistics in their community, this helps to increase their awareness and helps them to act properly if facing a threat.

Respondents in Tin Shui Wai concluded that only those who do not participate in the community centre will be the victims of crime and, moreover, they believed that people who remain active in the community will not be victimized. Therefore, this belief helps them enjoy low perceived risk so as to reduce their level of fear of crime.

Psychedelic drugs or substances

Respondents believe that the reason why many victims follow the criminal's orders is because the offenders have given them psychedelic drugs. When these psychedelics take effect, victims can no longer think independently but to follow the orders given by the criminal. This helps to explain why many victims in the confidence games lost their judgement and gave the criminals large amounts of money.

'They use psychedelics. They put psychedelics in something. If not, how could the victim give them so much money?' (FEGs1)

'I have a colleague who faced it before. When he becomes dazed, the criminal asked him for money. He then gave everything he had to the criminal' (SSPGs1).

When questioned how can the offenders do so, and how can they know that the offenders are using psychedelic substances, they reported that

'They put the psychedelic into a cigarette and exhale the smoke onto the victim's face...I have been to Shen Zhen, and saw an old woman, who breathed in the smoke, became dazed. Finally, she followed the man who had exhaled the smoke to her face' (FEGs1).

'It existed before World War II. My father saw it at the lane' (FEGs1).

'The victim told us that is what happened ...' (SSPGs1).

Respondents in Fortune Estate in Sham Shui Po attributed the success of confidence games to the use of psychedelic substances. This on one hand helps respondents to explain why victims would act 'irrationally'. It also helps older persons to formulate their strategy in dealing with confidence games on the other hand. As older persons believe that criminal will exhale drugged smoke onto them,

they pointed out that they will pay extra attention to those who pat them on the back and they may try to avoid talking to strangers on the street. Consequently, older persons reduce their level of fear because they know how to tackle the problem and become less likely to be victims of crime.

Extra security facilities

During the individual interviews and focus group interviews, it was found that respondents tend to install extra security facilities when they think that the level of defensibility provided by the environment is not enough. For example, when FEGs and TSWG were asked if there is enough protection provided by the existing security facilities provided by their buildings, respondents disagreed and pointed out that it is common to add more security facilities in their households. FEGs1 reported that:

'The security facilities provided by the building are not reliable. The window grilles in the bathroom and kitchen is too weak. The screws are too narrow to reinforce the window grille which makes it vulnerable to external damage...All of the gates in this building use the same series of lock. A television program showed that people can use their own key to open other locks...We use the same gate as the TV program shows. Therefore, we don't know if it is true for us too. We should add

extra locks to prevent this situation' (FEGs1).

This shows that people may reinforce or add additional security facility once they think that the existing ones cannot fully protect them. More importantly, older persons perceive that their security devices are not safe enough by collecting information from their own experience, neighbours or the media. FEGs1 reported that:

'It is a great risk for me as I live in the 'diamond' type household (the inner shape of the household like a diamond), where the offender can easily enter my home from the kitchen. There are plenty of criminal cases in Wong Tai Sin. All of them are in 'diamond' type households and all of the offenders enter the houses by kitchen. Therefore, I added a window grille to the kitchen window. It can help to prevent crime' (FEGs1).

By adding additional security devices, older persons may feel less fear as they believe that they can avoid any threat. FEGs1 case shows that they will add extra locks to doors as they perceive that their gate may be easily open by others. They may also change their window grille when they find the existing one provided by the building is too weak. Their actions, on the one hand, create an impact on the level of defensibility of the environment. On the other hand, these help them to reduce their levels of fear of crime as they think that the level of defensibility in the environment

has been reinforced.

However, it should be noted that frustration and fear of crime may increase if the security facilities which people rely on fail to prevent crime. The situation may become worse especially for those who already think that their system is perfect. For example, SSTI has been a victim of crime. After his victimisation, he reinforced his security system by adding an expensive lock on his door. However, he found that it failed and he was victimized twice. He reported that:

'So what? I can do nothing. He (the thief) can break in even though I have four locks on the door. It cost me six hundred dollars for the middle one. It's expensive. Yet he still can break in. What can I do?' (SSTI)

This shows that a sense of helplessness may be evoked if the security system on which people rely fails against crime. In this case, the respondent found that his security system was not enough to protect him, so he reinforced them by adding an expensive one. In this, the expensiveness of the security system implied high quality for the respondent. The more it cost, the higher protective ability it has. Therefore, if the expensive system has failed to protect its owner, feeling of helplessness occurs and fear of crime may also increase.

On the other hand, although physical security devices or settings can be used to reduce vulnerability among older persons, in some specific situations, on the contrary, they can create a defect of their own living environment which may lead to criminal event and increase the chance of victimisation. FEGs1 shared their view and pointed out that

'People who add more locks on their door or gate, especially when they are visible to others, are telling others that they have plenty of valuable stuffs in their home. It is stupid because it gives a hint to those offenders that you are rich...Moreover, households that have all locks locked also imply that the owners are not home. Therefore, it will increase the chance to be broken in' (FEGs1).

The rationale of FEGs1 is that only people who are rich or have valuable property will pay more attention on their security devices. However, those who are poor, have very little to lose, so that extra security devices are unnecessary. Moreover, they think that the status of the security devices will serve as hints for potential offenders. When people lock all the locks, this serves as an indicator that the owner has gone. Therefore, it will tempt offenders to break into the house. FEGs1 think that this view can be applied to all people including offenders. Therefore, they concluded that number of visible security devices is related to the possibility of victimisation.

By adding extra security facilities, respondents' level of fear of crime can be reduced as they have increased the level of defensibility in their living environment. However, as pointed out by FEGs1, the number and situation of the security facility may serve as a clue for the offender, so it may become a kind of added vulnerability in the environment. Therefore, it shows that people's behaviour may create certain impacts no matter the vulnerability and defensibility in the environmental factor.

Knowledge of the neighbourhood

Neighbours are one important type of supportability. During the individual interviews and focus group interviews, respondents indicated that they have less fear of crime if they are living in a supportive neighbourhood. Therefore, people may try to build up neighbourhood relations when they think that the supportability in their living environment is not sufficient. Or they may actively build up neighbourhood relations when they are new or there are newcomers to their living environment.

'A supportive neighbourhood is important...There are four to five households in each wing, everyone will greet when they meet. And we will shout when we need to, such as if a stranger approached me, and I will shout to Miss Ko (one of my

neighbours), and she will reply. Therefore, you can get help when you know each other well. If you ignore your neighbours, there will be no one to help you when you are in need. Therefore, it is one of the strategies we use to protect ourselves by actively greeting and getting close with the neighbours (TSWGs1).'

'When there are new neighbours moving into our floor, we will actively find them and know more about them. You know, first, their backgrounds so that we may know what kind of people they are. Moreover, we can help each other when we need to' (TSWGs2).

'It is very important to get known to your neighbours especially when you are living alone, so you can easily get help when you need it. But some older persons who live alone don't like to meet others. They ignore us even we greet them...Well, but we can then do nothing. If they still ignore us after trying a few more times, we then ignore them and continue to get known to the others' (FEGs2).

As Renaurer (2007, p.60) indicated, 'Residents who sense cohesion, trust, and value sharing among their neighbours report less fear of crime', older persons in this study also realize the importance of neighbourhood supportability for them, thus they will contact and greet their neighbours actively so as to create a supportive living environment. By building up such an environment, they think that they can easily obtain assistance from this supportive relationship, so it can help to reduce their level of fear of crime. Therefore, their actions may affect the level of supportability in their living environment, as well as helping in reducing their level of fear of crime.

Chapter 5: Conclusions, Limitations, and Recommendations

This study has investigated environmental factors as well as people's subjective evaluation of factors related to their levels of fear of crime. Data was derived from individual interviews and focus group interviews. Two individual interviews were conducted in a village. Eight focus groups with 46 older people as discussants, were conducted in four different locations: Cheung Chau, the Old district of Sham Shui Po, the New district of Sham Shui Po, and Tin Shui Wai. There were four research questions (See Chapter 1).

1. In what ways do physical living environments affect levels of fear of crime among older persons?
2. In what ways do social living environments affect levels of fear of crime among older persons?
3. In what ways do individual factors affect the levels of fear of crime among older persons?
4. How do cognitive-behavioural adjustments among older persons relate to their levels of fear of crime?

5.1 Summary of findings

The results of the first research question indicate that some types of physical environmental vulnerability may increase older persons' level of fear of crime. For example, pipes outside the respondent's building, the number of households in a building, and location of their household may be seen as risk aspects of their living environment which may increase their chance of being victims of crime. However, the results also suggest that security facilities provided in the living environment may help respondents to reduce their levels of fear of crime.

The findings on the second research question indicate that some types of social environmental vulnerability may increase older persons' level of fear of crime. For example, the crime history in the community, income level, local population, as well as known villains living in the community may all contribute to the increase of older persons' level of fear of crime. Nevertheless, it is suggested that levels of fear of crime can be reduced by the presence of defensibility and supportability provided by the social environment. For example, the presence of an authority figure like a security guard or a policeman in older persons' living environment helps them to reduce their levels of fear of crime. It was also found that the support provided by

neighbours and some non-government organizations can also decrease levels of fear of crime among the respondents.

In addition to environmental factors, some individual factors are also found to be related to older persons' level of fear of crime. For example, physical health and frailty, lack of attention, educational level, personal disclosure, health and family caring attitude, and family communication are found to be positively associated with the level of fear of crime. However, life style and personal wealth contribute to the decrease of the level of fear of crime among older persons.

Cognitive-behavioural adjustment among older persons can also exert certain influences on their level of fear of crime. And it also creates impact on environmental factors. For example, the beliefs shared by the respondents, like having sufficient criminal information, crime targeting only property but not person, dependence on luck, community centre participation, psychedelic drug use, and victims greed leading to their deserved fate, lower their level of fear. Besides, respondents' behaviour likes adding extra security facilities, building relationship with neighbourhood actively and avoidance of behaviour creates different impact on their level of fear of crime and the environment.

Finally, based on the findings, a person-environment model of fear of crime for older persons has been developed. The model incorporates physical and social environmental factors into three categories: vulnerability, defensibility, and supportability. Besides, individual factors and cognitive-behavioural adjustment are also related to fear of crime. Positive association of vulnerability has been found with fear of crime, whereas negative relations comprising defensibility and supportability are also co-existing. This model is a feedback loop where cognitive-behavioural adjustment interacts with fear of crime as well as serving as a role in the feedback loop so that it affects the appraisal of environmental factors (See Chapter 4).

These conclusions lead to the contributions of this research in various areas, namely conceptual contributions, practical and policy recommendation. The limitation and future directions are also discussed.

5.2 Conceptual Contributions

This study has contributed to the conceptual understanding of level of fear of crime in a number of ways. First, this study investigated four different types of living

environment in Hong Kong including an island, old-town, new-town and village area. All of these locations have distinguished environmental characteristics. Therefore, the present study allows us to know the range of physical features in the dwelling environment that have potential impact on its residence.

Moreover, this research provides a new dimension in explaining people's vulnerability by incorporating cognitive-behavioural factors related to their vulnerability. The vulnerability perspective (Jaycox, 1978) emphasizes social demographic factors in relation to the level of fear of crime. For example, it suggests that older persons and women have higher level of fear of crime. And their fear is mainly based on their perceived physical and social vulnerability. For older persons, this would be a decline in physical ability and the weakening of social support networks. Findings of this study suggest that cognitive-behavioural components among older persons such as self-disclosure, and lacking of communication with family or support networks, in which the former one indicates that older persons enjoy sharing their information with others, and the later one is a hesitation in talking of their difficulties to their family members, are also highly related to their perception of vulnerability. Therefore, this study can enrich the previous

vulnerability perspective (Jaycox, 1978) by exploring further in the cognitive-behavioural factors which affect older persons' vulnerability.

Finally, this study also points out the adjustment methods of older persons in related to their level of fear of crime, which has been neglected by previous studies. For example, the victimisation model indicated that direct or indirect victimisation may increase people's level of fear of crime, although this model has ignored some adjustment strategies used by victims in order to reduce their level of fear of crime. Agnew (1985) explored the mediators of victimisation experience and fear of crime, and suggested that victims may use several techniques to cope with their experiences of victimisation, including 'the denial of injury, either physical or emotional; denial of vulnerability; acceptance of responsibility; belief in a just world; appeal to higher motives' (Hale, 1996, p.105), but his study tends to lay stress on the cognitive change among victims. However, this study has indicated that older persons use cognitive-behavioural adjustment in order to reduce their level of fear of crime for real and imaginary victimisation.

5.3 Practical and Policy Recommendations

From such a study, a number of suggestions can be made in terms of environmental design and management, and importantly, in terms of public and personal support for older persons.

This study found that environmental factors, individual factors and cognitive-behavioural adjustment are related to the level of fear of crime among older persons. Therefore, selected policy recommendations will be provided considering these three dimensions. These recommendations draw on the findings and the review of policies and practices in other countries.

This research found that environmental factors relating to fear of crime includes three dimensions: vulnerability, defensibility and supportability. However, not all of them operate in the same way. The relations of vulnerability to fear of crime are generally positive, whereas the other two dimensions are usually negatively associated. Therefore, simply speaking, one way of reducing fear of crime among older persons by modifying environmental factors is possibly to reduce the

vulnerability in their living environment and increase its defensibility and supportability.

5.3.1 Policies that concentrate on environmental factors

Crime Prevention Through Environmental Design (CPTED)

Crime Prevention Through Environmental Design (CPTED) suggested two decades ago by C. R. Jeffery's (1971) is a good way to reduce crime and fear of crime by modifying the physical environment as well as increasing inhabitant's involvement. As fear of crime can be treated as a person-environment interaction (Ward, LaGory, and Sherman, 1986), in which people interact with the environment and develop different perceptions with it. CPTED is a comprehensive and beneficial idea of how crime can be efficiently prevented through urban and environment design. As Felson (2002, p.120) mentions, good designs lead to less crime, but 'more oppressive designs make for more crime'. Thus, it is believed that through better environmental planning, crime and also the fear of crime can be effectively avoided. For example, improving the lighting in dark walkways, paths and streets, and increasing the visibility of some hidden or 'high risk' places, can provide natural

surveillance by the residents so as to reduce the crime rate and also the fear. Nair, et al. (1993) examined the effectiveness for reducing fear of crime by improving the environment and they found that fear of crime can be decreased. The current study found that environmental vulnerability may lead to fear of crime. Therefore, using the concept of CPTED to reduce or eliminate the vulnerabilities of physical environment may reduce crime as well as fear of crime among older persons. For example, drainpipes out-side high-rise buildings may locate somewhere hardly reached by passers-by. Or the design of the joints in the drainpipes can be changed to a shape that is hard to step on. Potential offender therefore will find it difficult to make use of such drainpipes to commit crime on one hand. On the other hand, it helps to reduce levels of fear of crime for those who have a drainpipe built outside their buildings.

Neighbourhood Watch schemes

The concept of Neighbourhood Watch started in a village in Cheshire, UK in 1982 (Bracknell Forest Council, 2008). It is a community base program which develops a close relationship between different households in a neighbourhood and local police in order to help people protecting themselves and their properties as well

as reducing fear of crime by building up community spirit (National Neighbourhood Watch Association, 2004). Under Neighbourhood Watch scheme, local citizens are involved in crime prevention. They come together and talk the current situation of their neighbourhood; they will create some plans and methods for crime prevention and also how to deal with crime activity, which include neighbourhood surveillance and crime reporting activities (National Neighbourhood Watch Association, 2004).

By discussion and sharing of information, residents in a neighbourhood watch areas can have some control over their own living environment and learn about the current situation in their community. More important, such approaches can help the residents to build up social support networks within their communities which can make them feel safer, and also potentially reduce fear. Neighbourhood watch schemes and variations on these have been introduced in countries around the world including the United States, the United Kingdom, Canada, Australia and others. Positive results have been found in reducing certain types of crime. For example, in the London (Ontario, Canada), only 17% of break-and-enter events occurred in areas with neighbourhood watch program, the other 83% occurred in areas where residents had not joined such program (Neighbourhood Watch London, 2008). Although there are studies which have found that Neighbourhood Watch program was fail in high

crime areas (Laycock and Tilley, 1995) and can only deal significantly with burglary (Laycock and Tilley, 1995; Mukherjee and Wilson, 1987), research has also found that they help to reduce *fear* of crime and *anxiety* among the residents, even though the actual crime rate may remain much the same in their neighbourhoods (Mukherjee and Wilson, 1987).

As the majority of types of households in Hong Kong are in high rise buildings, meaning one block contains many families, it is important to be familiar with the neighbourhood so as to have a better understanding of the environment in which people live, may be reducing the uncertainty and fear. More important, as it is hard to be familiar with all the families who live in the same building, a programme, such as a neighbourhood watch, could help residents join together and share information. Moreover, on the one hand, a neighbourhood watch could provide a chance for residents to get to know each other and know more about their living environments and social networks. On the other hand, some groups of people who need special care or attention will be discovered by their neighbourhood, so a social support network in the building can perhaps be formed. By setting up a neighbourhood watch in each building, and then later joining them together with others, a more accurate assessment of the situation in the whole housing estate or area can be formed and

information disseminated to all residents. Very important, 'community spirit' can probably be fostered, so that the levels of fear of crime in the community should decrease even if 'awareness' of crime is raised. Neighbourhood watch schemes in HK could readily be developed through Mutual Assistance Committees (MACS) which are established for many tenants in estates, or via incorporated owners' bodies. These already have a legal basis and organizing committees so the neighbourhood watch could effectively become sub-projects of the MACS or owners' organizations.

Foot Patrol Programmes

Foot patrol programmes have been used in many countries such as the UK, Australia, Canada and USA, which put police officers in the community so as to curb the neighbourhood crime as well as increase the interaction with residents (Public Safety Strategies Group, 2007). They are an established method that aims to reduce crime and fear of crime. The programmes require police officers to operate in different way. First, they walk or cycle their beats in the neighbourhood and get to know people in the area, to build up a constant interaction and report with residents. Second, they can encourage local residents to be actively involve in crime prevention programmes, such as a neighbourhood watch, so as to prevent crime from a

community base. The officers can discuss crime and security issue with residents in order to identify and deal with any problems in the community (Public Safety Strategies Group, 2007). As police officers are in based and part of the community, crime rates can be reduced because people will not commit crimes as they know the officers are around. Moreover, the levels of fear of crime in the community can also be reduced because people believe that they can get help from the local police officers if needed.

There have been some success stories about foot patrol programme. For example, in Newark, New Jersey, a foot patrol program resulted in a reduction in levels of fear of crime among residents, even though it failed to reduce crime itself (Police Foundation, 2007). Moreover, an evaluation of a foot patrol programme in Flint, Michigan, also found that 70% of respondents felt safer in their living community after the foot patrol programme was implemented (Bennett, 1991). In fact, research on police visibility reveals that foot patrol creates a greater impact on fear of crime, compared with patrols in squad cars and related activities. Salmi, Gronroos and Keskinen's (2004) research shows that police on foot could lower the level of fear of crime against both property and the person in teenager's group. Research also shows that foot patrol also lower the levels of fear of crime against

property for other age groups. However, a high level of fear of crime against property and persons was found when police car patrols were used.

As mentioned earlier, the situation in Hong Kong is rather different from that in many international settings. High rise buildings, which contain many families, are very common in HK. Population density is high and some estates can house populations of 20,000 people or more. For example, according to the Housing Authority, Tin Shui (I) Estate in Tin Shui Wai contains around 4,600 household and 15,400 people (2008). With such a huge population in a single estate, it is hard for police officers to have a deep contact with and knowledge of every household. Nevertheless, employing security guards and arranging them to run a foot patrol programme may have a larger impact than relying on a police programme alone.

5.3.2 Policies that concentrate on individual factors

Individual factors that affect the level of crime among older persons include both physical aspects, psychological and behavioural aspects. As these are individual in nature, it is relatively difficult to change many by introducing policies as has been suggested for environmental factors. However, certain efforts can be put in place to

deal with factors such as educational levels although there are usually likely to be much longer terms and part of a broader social policy thrust than only crime prevention.

Educational level is nevertheless one of the key individual factors that seem to make older persons vulnerable to crime as well as being linked to fear of crime. Although it is hard to re-educate older persons so as to make them fully capable of reading and writing, some efforts can be put into helping older persons in identifying who is, for example, an authorized social worker or a person who may be trusted if they approach them. Standardized uniforms can be used (like the uniform used by enumerators in the HK population census), by social workers or authorized person who come from the government departments (e.g. Social Welfare Department) when they are going to visit older persons. Moreover, they can give older persons a call before their visit and, more importantly, tell older persons some personal appearance characteristic of the person who is going to visit them and also give them a contact number of the organization so that they can call back if they have any questions or doubts. When such processes are standardized by the government and NGOs, potential offenders may find it more difficult to cheat older persons in their homes. Moreover, older persons can identify a person by using identity document and

personal appearance characteristic which together give them extra protection as well as confidence in the visitor.

5.3.3 Policies that concentrate on cognitive-behavioural adjustment

Education again appears to play a very important role in reducing the fear of crime among older persons. Education will not only teach people how to avoid becoming victims, or about common crimes that occur against older persons, but it can be also for more general well-being. However, we should educate older persons about the potential cost of being a victim, and what should do if they are being victimized.

According to Doerner (1998), the costs which are borne by crime victims themselves, especially older persons, include not only direct property loss, but also medical costs, pain and suffering. Besides pain and suffering, most of the costs which the victims pay can be recovered by insurance if the person happens to have this although older persons may be less likely than other to have personal insurance, especially if they are not homeowners. Nevertheless some personal memorable things cannot be replaced by the insurance, even if to a large extent, insurance can

help the victim in recovering what they have physically lost. Thus, education on the importance of insurance is needed in our society.

More than this, it is important to let people know what they can do after being victimized. As victimisation may cause different physical and psychological impacts for the victim, supporting services including counselling services are important for them. However, when asked what supporting services for the victims are available in Hong Kong, none of the respondents in the focus group were able to answer. Although some respondents replied that they can find social worker if needed, they had no idea about any victim support services in Hong Kong. Without the knowledge of the range of support networks provided by society, elderly victims may suffer more stress and anxiety because they cannot obtain appropriate help.

5.4 Discussion

In terms of limitations of the sample size, the individual factors in this model are mostly based on respondents' perceptions of their own characteristics. Other factors such as gender, social class, income, type of crime which they faced have not been classified and tested in current study.

The person-environment model of fear of crime for older persons proposed in current study is the simplified summary of the finding in this research. As shown in the proposed model, environmental factors (vulnerability, defensibility and supportability), individual factors, and cognitive-behavioural adjustment have their impacts on levels of fear of crime. The model also showed that individual factors create several impacts on vulnerability in the environmental factors. In fact, it is believed that individual factors such as physical health and frailty, educational level, lifestyle as well as personal wealth do impact on the perception of the environmental factors of fear of crime including defensibility and supportability. For example, older persons may perceive the basic security facilities provided by their building as not being sufficient to protect them due to their decline in physical health and their frailty. However, no support was found by analysing the transcripts of individual interviews and the focus group interviews. Older persons did not show extra concern about their security facilities because of their health status (individual factors). Therefore, no relationship was shown in the model between individual factors and defensibility as well as supportability. Further research could valuably try to investigate if there is any relation between these three factors.

As this study adopted a qualitative approach to study fear of crime, there can be no statistical support about the level of fear of crime in different living environments. However, by analysing respondents' transcripts which show their thinking and behaviour in respect to fear, it was found that the respondent who showed the highest level of fear and the respondent believed to have the lowest level of fear of crime are located in village settings. The one with highest level of fear of crime is SSTI whereas the one with lowest level of fear of crime is WUI. SSTI was a victim of crime, and lives in a gang neighbourhood. He acquired four locks on his door, and restricted his activities into his house. By contrast, WUI said that she does not fear crime and she has had no victimisation experience. She acquires one lock on her door, and even no lock on the back door of her house. She will go to market everyday and she is not scared even walking alone in her neighbourhood at night.

Such huge differences were found in village settings because of some differences in the physical environment in these two villages, and also the different perception of the environment by the two respondents. The population density in Siu Sau Tsuen is higher than in Wong Uk. Moreover, residents are more diversified in Siu Sau Tsuen compared to Wong Uk. There are many 'outsiders' including new immigrants and youngsters who have moved in to Siu Sau Tsuen. However, all of the

residents who live in Wong Uk except WUI share the same surname, a characteristic of many traditional villages in HK. It means that only WUI is an 'outsider' in this village. As people in Wong Uk rarely change, WUI shares a good social network with them. She perceived that she can get help whenever she needs it. Nevertheless, SSTI thinks that his neighbours are gang member who want to break into his house and steal his property. He thinks that he cannot rely on anyone in his village, so he lives with his fear everyday in the village.

Finally, it is noteworthy to explore the factor 'matter of luck' mentioned in the cognitive-behavioural adjustment discussion. By analysing the data, it can be suggested that many respondents think that victimisation is based on 'luck' or 'fate' but is not controlled by them. The reasons were explained in chapter 4 that the nature of crime is full of uncertainty including time, space and offender. However, it is worthwhile to explore if this belief reflects the cultural norm of Hong Kong Chinese as belief in 'luck' and 'fate' are rooted in Chinese culture. There are old Chinese sayings that 'Man proposes, God disposes' (謀事在人，成事在天) and 'to resign (or abandon) oneself to one's fate' (聽天由命). Chinese people place a high degree of belief in the external forces (God or Heaven). This phenomenon may relate to the traditional agricultural background of many Chinese. There is plenty of uncertainty

in farming. External factors such as natural disasters or even heavy rain can destroy all the farmer's hard work. Therefore, older Chinese may develop a belief which relies on luck or fate. The current study cannot provide support or disprove this suggestion but future research using a cross-cultural approach might be helpful.

5.5 Limitations to the research and recommendations for further study

As any research project, this one is subjected to a number of limitations, in methods and results. First, the sample size of this study is restricted, as it only includes 48 people in total, with 8 focus groups involving 46 people, and 2 people questioned in the individual in-depth interviews. Thus, this sample size will not be sufficient to generalize the whole picture of fear of crime in related to environmental factors, individual factors and the adjustment pattern of older persons. Indeed, qualitative methods such as focus groups cannot deliver fully generalizable findings, so this is a methodological limitation.

Sampling could be a further limitation. Respondents were drawn from neighbourhood centres, which means that the experience of older persons who do not participate in the neighbourhood centres could be neglected. Older persons who are

the members of community centres may very likely be people who are already more active in the community, so they may not even be typical of the older population. Moreover, as indicated in Chapter 2, social networks and interaction are related to levels of fear of crime. Older persons with supportive social networks and active interaction with others are associated with lower levels of fear of crime, whereas social isolation can result in higher levels of fear. It is believed that older persons who participate in community centre may share better social networks than who do not. As this sample can only reflect the experience and the opinion of these 'active members' but probably not the experience of more passive ones or those not known to the neighbourhood centre staff, the actual levels of fear of crime among older persons in different living environments may be under-represented in this study.

In terms of gender, the majority of participants in this study were women, so there may also be a gender bias. Previous studies have found that women tend to have higher levels of fear of crime than men, perhaps due to their physical and social vulnerability, and willingness to express their emotions, and the threat they face (Braungart, 1980; Hale, 1996). Although no specific support was found in the literature on gender differences in environmental factors of fear of crime, individual factors as well as cognitive-behavioural adjustment in this study may be affected by

its potential gender bias.

Even though the model is based on respondents of home, the majority are women, it is believed that the model is not only applicable to women, as men in those focus groups also actively presented their point of view as well as experience. Moreover, the most fearful individual in the current study was a man, who provided much useful data helping towards the construction of the current model. However, the impact of gender in this model should be carefully tested by future research in order to ascertain any gender bias.

In terms of the sample size, that in the village was small, with only 2 people, so it may not enough to generate the general picture of fear of crime among older persons who live in village. Moreover, the socio-economic characteristics have not been controlled in this study, given its qualitative small scale approach and most of the respondents were people with low incomes and living in relatively poor areas. As a result, the perspectives and opinions of middle-class and high-income groups are not covered in the research. However, as the majority of older persons in HK are in the lower income groups, perhaps this is not as yet a serious limitation. Finally, as the sample of this study are older persons, the person-environment model are constructed

based on their perspective. Therefore, this model may need further test to see if it is applicable to other age groups.

Further future studies by means of quantitative research methods could be used to test the correlations amongst factors in the person-environment model proposed by this study. Respondents and samples could be drawn from different age groups so as to test the applicability of this person-environment model to other age groups. In addition, future research could focus on older persons of medium to high economic status who live in middle class and high income areas, as this segment of the older population will grow in size in coming years. This may help to enrich the model, as well as providing a more comprehensive picture of the situation of all older groups in Hong Kong society.

Appendix I

Interview Guide

Perception of crime

- What comes to your mind when I mention the term 'crime'?
- How often do you think about crime?
- Which age group of people do you think is suffering from the highest victimisation rate?

Perception of the living environment

- What do you think about your living environment?
- How safe do you feel being out alone in your neighbourhood after dark?
- Is there any place around here where you feel unsafe walking at night?
- Is there any place that you avoid to go because of your fear of crime?
- Do you think crime is a serious problem in your neighbourhood? Why?
- Can you tell me about some places that rouse your fear of crime? What characteristics do these places have?
- In your view, what makes a fearful environment?
- Can you tell me about some places that make you feel safe or fearless of crime? What characteristics do these places have?
- In your view, what makes a safe environment?

Self perception

- Do you think older persons are vulnerable to crime? Why?
- Do you think you are vulnerable to crime? Why?
- What makes older persons fear of crime?
- What makes you fear crime?
- Have you ever been the victim of crime? Why?

Behaviour and reaction

- What do you do when passing through those fearful places?
- Have you ever done anything to reduce your level of fear of crime? What are they?
- What should be done in order to reduce your levels of fear of crime effectively?

Appendix II

Maps and Photographs of Cheung Chau (CC)

Map of Cheung Chau (CC):



Source: Centramap.com

Part of Cheung Chau (Enlarged with bird's eye view)



Source: Centramap.com

Housing in CC (1):



Housing in CC (2):



Appendix III

Maps and Photographs of Siu Sau Tsuen (SST)

Map of Siu Sau Tsuen (SST):



Source: Centramap.com

Map of SST (bird's eye view):



Source: Centramap.com

Environment of SST:



Housing in SST:



Stair mentioned by SSTI:



Appendix IV

Maps and Photographs of Wong Uk (WU)

Map of Wong Uk (WU):



Source: Centramap.com

Map of Wong Uk (bird's eye view):



Source: Centramap.com

Living environment in WU:



Housing in WU:



Appendix V

Maps and Photographs of Fortune Estate (FE)

Map of Fortune Estate (FE):



Source: Centramap.com

Map of FE (bird's eye view):



Source: Centramap.com

Housing in FE (1):



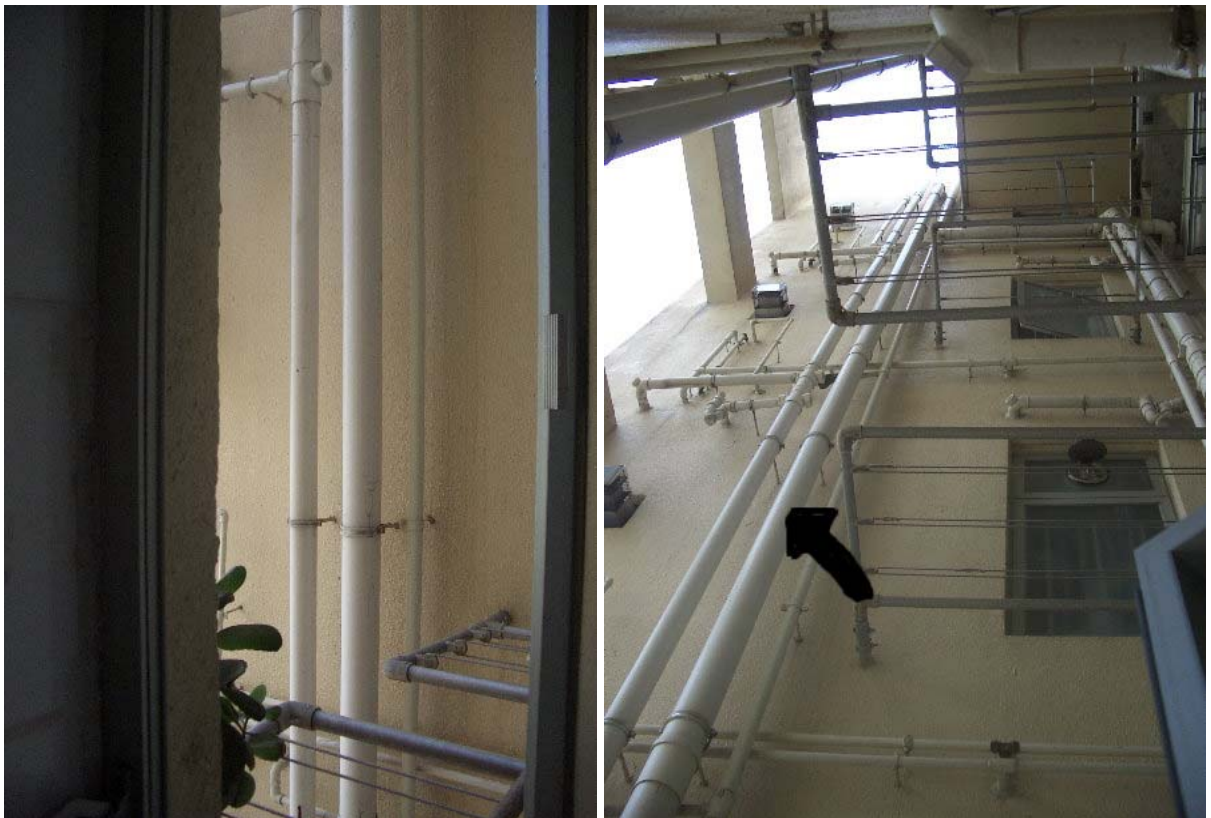
Housing in FE (2):



Pipes outside a building in FE:



Pipes outside the building (view from the toilet in FE):



Main Gate (FE):



Gate to a household (FE):



Appendix VI

Maps and Photographs of Sham Shui Po (SSP)

Map of Sham Shui Po (SSP):



Source: Centramap.com

Map of SSP (bird's eye view):



Source: Centramap.com

Housing in SSP (1):



Housing in SSP (2):



Entrances to SSP housing:



Pei Ho Street in SSP:



Appendix VII

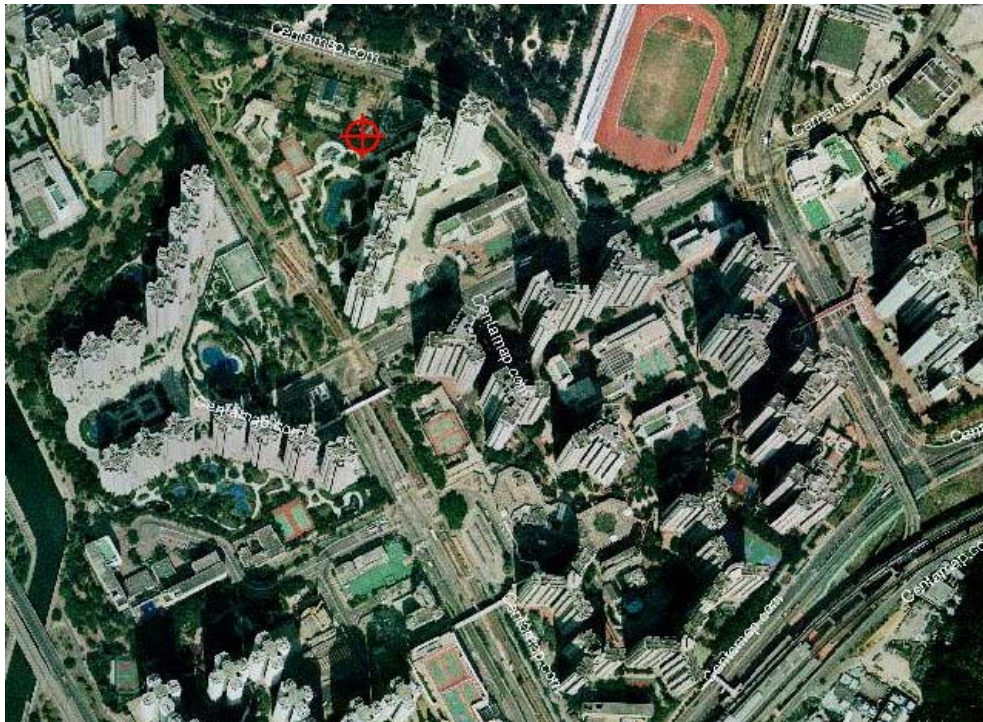
Maps and Photos of Tin Shui Wai (TSW)

Map of Tin Shui Wai (TSW):



Source: Centramap.com

Part of TSW (Enlarged with bird's eye view)



Source: Centramap.com

Housing in TSW



Community Centre in TSW



Main Gate (TSW)



Bibliography

- Agnew, R.S., 1985. Neutralising the impact of crime. *Criminal Justice and Behaviour*, 12(2), p.221-239
- Arnold, H., 1991. Fear of crime and its relationship to directly and indirectly experienced victimization: a binational comparison of models. In K. Sessar & H-J. Kerner. *Developments in crime and crime control research: german studies on victims, offenders, and the public*. New York: Springer- Verlag, 1991, p.87-125.
- Akers, R.L., La Greca, A.J., Sellers, C. & Cochran, J., 1987. Fear of crime and victimization among the elderly in different types of communities. *Criminology*, 25(3), p.487-505.
- Baba, Y. & Austin, D. M., 1989. Neighborhood environmental satisfaction, victimization, and social participation as determinants of perceived neighbourhood safety. *Environment and Behavior*, 21, p.763-780.
- Babbie, E, 2007. *The practice of social research*. Belmont, CA:Thomson/Wadsworth
- Barnett, K., Buys, L., Kitchin, J.L., Lewis, G.B., Smith, D. & BBus, M.H., 2007. Older women's fears of violence: the need for interventions that enable active ageing. *Journal of Women & Aging*, 19(3/4), p.179-192.
- Bazargan, M., 1994. The effects of health, environmental, and socio-psychological variables on fear of crime and its consequences among urban black elderly individuals. *International Journal of Aging and Human Development*, 38(2), p.99-115.
- Beaulieu, M., Leclerc, N. & Dube, M., 2003. Fear of crime among the elderly: an analysis of mental health issues. *Journal of Gerontological Social Work*, 40(4), p.121-138.
- Bennett, T., 1991. The effectiveness of a police-initiated fear-reducing strategy. *British Journal of Criminology*, 31(1), p.1-14.
- Birren, J.E., 2007. *Encyclopedia of Gerontology*. Amsterdam; London: Elsevier.

- Bracknell Forest Council. 2008. *History of neighbourhood watch*. [Online]. Available at:
<http://www.bracknell-forest.gov.uk/living/liv-safer-communities/liv-neighbourhood-watch/liv-hist-nw.htm> [accessed 10 June 2008]
- Braungart, M.M., Braungart, R.G. & Hoyer, W.J., 1980. Age, sex and social factors in fear of crime. *Sociological Focus*, 13(1), p.55-66.
- Bursik, R. J. & Grasmick, H. G., 1993. *Neighborhoods and crime: the dimensions of effective community control*. New York: Lexington Books.
- Butler, R., 1975. *Why survive? Being old in America*. New York: Harper & Row.
- Census and Statistics Department. 2007. *Demographic trends in Hong Kong 1981-2006*. [Online]. Available at:
http://www.info.gov.hk/info/population/eng/chapter2_e.pdf [accessed 12 January 2008]
- Census and Statistics Department. 2007. *Basic Tables for Constituency Areas : New Territories*. [Online]. Available at:
http://www.byensus2006.gov.hk/FileManager/EN/Content_962/06bc_dcd.pdf [accessed 26 January 2008]
- Census and Statistics Department. 2008. *Thematic report: older persons*. [Online]. Available at:
http://www.censtatd.gov.hk/products_and_services/products/publications/statistical_report/population_and_vital_events/index_cd_B1120053_dt_latest.jsp [accessed 12 January 2008]
- Cheung Chau Rural Committee. 2008. *Introduction*. [Online]. Available at:
<http://www.cheungchaurc.com/eng/> [accessed 20 January, 2008]
- Clarke, A.H., 1984. Perceptions of crime and fear of victimization among elderly people. *Ageing and Society*, 4(3), p.327-342.
- Clarke, A.H. & Lewis, M.J., 1982. Fear of crime among the elderly: An exploratory study. *British Journal of Criminology*, 22(1), p.49-62.

- Clarke, R., Ekblom, P., Hough, M. & Mayhew, P., 1985. Elderly victims of crime and exposure to risk. *The Howard journal*, 24(1), p.1-9.
- Conklin, J.E., 1975. *The impact of crime*. New York: Macmillan Inc..
- Covey, H.C. & Menard, S., 1988. Trends in elderly criminal victimization from 1973 to 1984. *Research on aging*, 10(3), p.329-341.
- Crank, J.P., Giacomazzi, A. & Heck, C., 2003. Fear of crime in a nonurban setting. *Journal of criminal justice*, 31, p.249-263.
- Doerner, W.G., 1998. *Victimology*. Cincinnati, OH: Anderson Pub. Co.
- Dolan, P. & Peasgood, T., 2007. Estimating the economic and social costs of the fear of crime. *British Journal of Criminology*, 47, p.121-132.
- Donder, L.D., Verte, D. & Messelis, E., 2005. Fear of crime and elderly people: key factors that determine fear of crime among elderly people in West Flanders. *Ageing International*, 30(4), p.363-376.
- Dussich, J. & Eichman, C.J., 1976. The elderly victim: vulnerability to the criminal act. In J. Goldsmith & S. Goldsmith. *Crime and the elderly*. Lexington, Mass: Health
- Farrall, S., Bannister, J., Ditton, J. & Gilchrist, E., 1997. Questioning the measurement of the 'fear of crime': findings from a major methodological study. *The British Journal of Criminology*, 37(4), p.658-679.
- Fattah, E.A. & Sacco, V.F., 1989. *Crime and victimization of the elderly*. New York: Springer-Verlag.
- Felson, M., 2002. *Crime and Everyday Life*. Thousand Oaks: Sage Publications.
- Ferraro, K.F., 1995. *Fear of crime: interpreting victimization risk*. Albany, NY: State University of New York Press
- Ferraro, K.F. & LaGrange, R.L., 1992. Are older people most afraid of crime? Reconsidering age differences in fear of victimization. *Journal of Gerontology*,

47(5), p.233-244.

Fetchenhauer, D. & Buunk, B.P., 2005. How to explain gender differences in fear of crime: Towards an evolutionary approach. *Sexualities, Evolution and Gender*, 7(2), p.95-113.

Fisher, B.S., Sloan, J.J. & Wilkins, D.L., 1995. Fear of crime and perceived risk of victimization in an urban university setting. In B.S. Fisher & J.J. Sloan. *Campus crime: legal, social, and policy perspectives*. Springfield, Ill.: Charles C. Thomas, 1995, p.179-209.

Gabriel, U. & Greve, W., 2003. The psychology of fear of crime: conceptual and methodological perspectives. *The British Journal of Criminology*, 43(3), p.600-614.

Garofalo, J., 1979. Victimization and the fear of crime. *Journal of research in crime and delinquency*, 16(1), p.80-97.

Garofalo, J. & Laub, J., 1978. The fear of crime: broadening our perspective. *Victimology*, 3, p.242-253.

Gibson, C.L., Zhao, J., Lovrich, N.P. & Gaffney, M.J., 2002. Social integration, individual perceptions of collective efficacy, and fear of crime in three cities. *Justice Quarterly*, 19(3), p.537-564.

Gilchrist, E., Bannister, J., Ditton, J. & Farrall, S., 1998. Women and the fear of crime: challenging the accepted stereotype. *The British Journal of Criminology*, 38(2), p.283-298.

Greve, W., 1998. Fear of crime among the elderly: foresight not fright. *International Review of Victimology*, 5, p.277-309.

Hale, C., 1996. Fear of crime: a review of the literature. *International Review of Victimology*, 4, p.79-150.

Hale, C., Pack, P. & Salked, J., 1994. The structural determinants of fear of crime: an analysis using census and crime survey data from England and Wales. *International Review of Victimology*, 3, p.211-233.

- Hammersley, M., 1999. Deconstructing the qualitative-quantitative divide. In Bryman, A., & Burgess, R.G. *Qualitative research Volume 1*. London: SAGE Publication, 1999, p.70-83.
- Harris, L. & Associates., 1977. *The myth and reality of aging in America*. Washington: National Council on the Aging.
- Hesse-Biber, S.N. & Leavy, P., 2006. *The practice of qualitative research*. Thousand Oaks: SAGE Publications.
- Hong Kong SAR Government. 2002. *Senior Citizen Card well received by public*. [Online]. Available at: <http://www.info.gov.hk/gia/general/200209/10/0910250.htm> [accessed 11 November 2007]
- Hong Kong SAR Government. 2007. *Law enforcement and the fight against corruption*. [Online]. Available at: http://www.brandhk.gov.hk/brandhk/e_pdf/efact7.pdf [accessed 1 July 2008]
- Hooymann, N.R., & Kiyak, H.A., 2008. *Social Gerontology: a multidisciplinary perspective*. 8th ed. Boston: Allyn and Bacon.
- Housing Authority. 2008. *Information and location of public estates: Fui Tai Estate*. [Online]. Available at: http://www.housingauthority.gov.hk/en/interactivemap/estate/0,,1-347-3_4786,00.html [accessed 1 March 2008]
- Houts, S. & Kassab, C., 1997. Rotter's social learning theory and fear of crime: differences by race and ethnicity. *Social Science Quarterly*, 78(1), p.122-136.
- Hunter, A. & Baumer, T.L., 1982. Street traffic, social integration, and fear of crime. *Sociological Inquiry*, 52, p.123-131.
- Jackson, J., 2004. Experience and expression: social and cultural significance in the fear of crime. *British Journal of Criminology*, 44(6), p.946-966.
- Jackson, J., 2005. Validating new measures of the fear of crime. *International*

Journal of Social Research Methodology, 8(4), p.297-315.

James, M. & Graycar, A., 2000. *Preventing crime against older Australians*. [Online]. Available at: <http://www.aic.gov.au/publications/rpp/32/RPP32.pdf> [accessed 19 May 2008]

James, M., Graycar, A. & Mayhew, P., 2003. *A safe and secure environment for older Australians*. [Online]. Available at: <http://www.aic.gov.au/publications/rpp/51/> [accessed 10 December 2007]

James, M.P., 1992. *The elderly as victims of crime, abuse and neglect*. [Online]. Available at: <http://www.aic.gov.au/publications/tandi/ti37.pdf> [accessed 10 December 2007]

Jaycox, V.H., 1978. The elderly's fear of crime: rational or irrational? *Victimology: an International Journal*, 3(3-4), p.329-334.

Jeffery, C.R., 1971. *Crime Prevention Through Environmental Design*. Beverly Hills, CA: Sage Publications.

John Howard Society of Alberta. 1999. *Fear of crime*. [Online]. Available at: <http://www.johnhoward.ab.ca/PUB/C49.htm> [accessed 24 March 2007]

Joseph, J., 1997. Fear of crime among black elderly. *Journal of Black Studies*, 27(5), p.698-717.

Kaufman, S.R. . In-depth interviewing. In Gubrium, J.F. & Sankar, A. *Qualitative methods in aging research*. Thousand Oaks, Calif.: Sage, 1994, p.123-136.

LaGrange, R.L., Ferraro, K.F. & Supancic, M., 1992. Perceived risk and fear of crime: role of social and physical incivilities. *Journal of Research in Crime and Delinquency*, 29, p.311-334.

Laycock, G. & Tilley, N. 1995. *Policing and neighbourhood watch: strategic issues*. [Online]. Available at: http://www.popcenter.org/problems/burglary_home/PDFs/Laycock_Tilley_1995.pdf [accessed 4 March 2008]

- Lawton, M.P., Lucille, M., Silvia, Y., Steven, F., 1976. Psychological aspects of crime and fear of crime. In J. Goldsmith & S. Goldsmieth, *Crime and the Elderly: challenge and response*. Lexington, Mass.: Health, 1976.
- Lee, G.R., 1982. Residential location and fear of crime among the elderly. *Rural Sociology*, 47(4), p.655-669.
- Lindquist, J.H. & Duke, J.M., 1982. The elderly victim at risk: Explaining the fear-victimization paradox. *Criminology*, 20(1), p.115-126.
- Lupton, D. & Tulloch, J., 1999. Theorizing fear of crime: beyond the rational/irrational opposition. *British Journal of Sociology*, 50(3), p.507-523.
- Mahony, D.O. & Quinn, K., 1999. Fear of crime and locale: the impact of community related factors upon fear of crime. *International Review of Victimology*, 6, p.231-251.
- McCabe, K.A. & Gregory, S.S., 1998. Elderly victimization: An examination beyond the FBI's index crimes. *Research on Aging*, 20(3), p.363-372.
- McCoy, H.V., Wooldredge, J.D., Cullen, F.T., Dubeck, P.J. & Browning, S.L., 1996. Lifestyles of the old and not so fearful: life situation and older persons' fear of crime. *Journal of Criminal Justice*, 24(3), p.191-205.
- McCrea, R., Shyy, T.K., Western, J. & Stimson, R.J., 2003. Fear of crime in Brisbane: individual, social and neighbourhood factors in perspective. *Journal of Sociology*, 41(1), p.7-27.
- Miethe, T.D. & Lee, G.R., 1984. Fear of crime among older people: a reassessment of the predictive power of crime related factors. *Sociological Quarterly*, 25, p.397-415.
- Mukherjee, S. & Wilson, P. 1987. *Neighbourhood watch: issues and policy implications. Trends & issues in crime and criminal justice. No. 8. Australian Institute of Criminology*. [Online]. Available at: <http://www.aic.gov.au/publications/tandi/ti08.pdf> [accessed 4 March 2008]
- Myers, D.G., 2005. *Exploring Psychology*. 6th ed. New York: Worth Publishers

- Nair, G., Ditton, J. & Phillips, S., 1993. Environmental improvements and the fear of crime: The sad case of the 'Pond' area in Glasgow. *British Journal of Criminology*, 33(4), p.555-561.
- National Neighbourhood Watch Association. 2004. *Neighbourhood Watch*. [Online]. Available at: <http://www.crimereduction.gov.uk/neighbourhoodwatch/nwatch01.htm> [accessed 6 April 2006]
- Neighbourhood Watch London. 2008. *Program overview*. [Online]. Available at: <http://www.nwl.london.ca/overview.htm> [accessed 4 February 2008]
- Newman, W.L., 2000. *Social research methods: qualitative and quantitative approaches*. Boston : Allyn and Bacon
- Ohman, A., 2000. Fear and anxiety: evolutionary, cognitive, and clinical perspectives. In M. Lewis & J.M. Haviland-Jones (eds.). *Handbook of emotions*. New York: The Guilford Press, 2000, p.573-593.
- Pantazis, C., 2000. 'Fear of crime', vulnerability and poverty: evidence from the British Crime Survey. *The British Journal of Criminology*, 40(3), p.414-436.
- Parker, K.D., McMorris, B.J., Smith, E. & Murty, K.S., 2001. Fear of crime and the likelihood of victimization: a bi-ethnic comparison. *The Journal of Social Psychology*, 133(5), p.723-732.
- Perloff, L.S., 1983. Perceptions of vulnerability to victimization. *Journal of Social Issues*, 39(2), p.41-61.
- Phillips, D.R., 1998. The place and utility of focus groups in social and health research: Conceptual and practical considerations. In C. Palagiano, G. De Santis e D. Castagnoli (a cura di), *Atti del sesto seminario internazionale di geografia medica* Perugia, Ed. Rux, Roma, 4-6 dicembre 1997, p.31-38.
- Phillips, D.R., 1999. The importance of the local environment in the lives of urban elderly people. In D.R. Phillips & G.O. Yeh. *Environment and ageing: environmental policy, planning and design for elderly people in Hong Kong*

Hong Kong : Centre of Urban Planning and Environmental Management,
University of Hong Kong, 1999, p.15-35.

Police Foundation. 2007. *The Newark foot patrol experiment. Police Foundation Research Brief*. [Online]. Available at:
<http://www.policefoundation.org/docs/newark.html> [accessed 24 May 2008]

Public Safety Strategies Group. 2007. *Perspectives on foot patrols: lessons learned from foot patrol programs and an overview of foot patrol in San Francisco interim report*. [Online]. Available at:
<http://www.sfpolicereview.org/docs/SFPDFootPatInterim.pdf> [accessed 24 January 2008]

Punch, K.F., 1998. *Introduction to social research: quantitative and qualitative approaches*. London;Thousand Oaks, Calif.: SAGE Publications.

Renauer, B.C., 2007. Reducing fear of crime: citizen, police, or government responsibility? *Police Quarterly*, 10(1), p.41-62

Robinson, M.B., 1998. High aesthetics/ Low incivilities: criminal victimization and perceptions of risk in a downtown environment. *Journal of Security Administration*, 21(2), p.19-32.

Roh, S. & Oliver, W.M., 2005. Effect of community policing upon fear of crime: understanding the causal linkage. *Policing*, 28(4), p.670-683.

Rohe, W.M. & Burby, R.J., 1988. Fear of crime in public housing. *Environment and Behavior*, 20(6), p.700-720.

Rountree, P.W., 1998. A reexamination of the crime-fear linkage. *The Journal of Research in Crime and Delinquency*, 35, p.341-372.

Sacco, V.F., & Glackman, W., 1987. Vulnerability, locus of control and worry about crime. In, J. Ditton & S. Farrall. *The fear of crime*. Aldershot, Hants, England ; Burlington, Vt.: Ashgate/Dartmouth, 2000, p.415-427.

Salmi, S., Gronroos, M. & Keskinen, E., 2004. The role of police visibility in fear of crime in Finland. *Policing*, 27(4), p.573-591.

- Schafer, J.A., Huebner, B.M. & Bynum, T.S., 2006. Fear of crime and criminal victimization: Gender-based contrasts. *Journal of Criminal Justice*, 34, p.285-301.
- Silverman, E.B. & Della-Giustina, J., 2001. Urban policing and the fear of crime. *Urban Studies*, 38(5-6), p.941-957.
- Skogan, W.G., 1990. *Disorder and decline: crime and the spiral of decay in American neighbourhood*. New York: Free Press.
- Skogan, W.G. & Maxfield, M.G., 1981. *Coping with crime: individual and neighbourhood reactions*. London: Beverly Hills.
- Smith, W.R. & Torstensson, M., 1997. Gender differences in risk perception and neutralizing fear of crime: toward resolving the paradoxes. *The British Journal of Criminology*, 37(4), p.608-634.
- Social Welfare Department. 2005. *Social Security Allowance (SSA) Scheme*. [Online]. Available at: http://www.swd.gov.hk/en/index/site_pubsvc/page_socsecu/sub_ssallowance [accessed 11 November 2007]
- Stafford, M., Chandola, T., & Marmot, M., 2007. Association between fear of crime and mental health and physical functioning. *American Journal of Public Health*. 97(11), p.2076-2081.
- Sutton, R.M. & Farrall, S., 2004. Gender, socially desirable responding and the fear of crime: are women really more anxious about crime. *The British Journal of Criminology*, 45(2), p.212-224.
- Taylor, R.B., & Hale, M., 1986. Criminology: testing alternative models of fear of crime. In J. Ditton & S. Farrall. *The fear of crime*. Aldershot, Hants, England ; Burlington, Vt.: Ashgate/Dartmouth, 2000, p.355-393.
- Taylor, R.B., Gottfredson & Brower, S., 1984. Block crime and fear: defensible space, local social ties, and territorial functioning. *Journal of Research in Crime and Delinquency*, 21(2), p.303-331.

- Tulloch, M., 2000. The meaning of age differences in the fear of crime: combining quantitative and qualitative approaches. *The British Journal of Criminology*, 40(3), p.451-467.
- United Nation. 2007. *Executive summary. World population ageing 2007*. [Online]. Available at:
<http://www.un.org/esa/population/publications/WPA2007/ES-English.pdf>
[accessed 10 January 2008]
- Ward, R.A., LaGory, M. & Sherman, S.R., 1986. Fear of crime among the elderly as person-environment interaction. *The Sociological Quarterly*, 27(3), p.327-341.
- Weatherburn, D., Matka, E. & Lind, B., 1996. *Crime perception and reality: public perceptions of the risk of criminal victimization in Australia*. [Online]. Available at:
[http://www.lawlink.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/cjb28.pdf/\\$file/cjb28.pdf](http://www.lawlink.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/vwFiles/cjb28.pdf/$file/cjb28.pdf) [accessed 10 January 2007]
- Yin, P.P., 1980. Fear of crime among the elderly: some issues and suggestions. *Social Problems*, 27(4), p.492-504.
- Yin, P., 1982. Fear of crime as a problem for the elderly. *Social Problems*, 30(2), p.240-245.
- Zastrow, C. & Kirst-Ashman, K.K., 2004. *Understanding Human Behavior And The Social Environment*. Belmont, CA: Thomson
- Ming Pao (明報). (16/5/2008).長者乏家人關心 易墮歹徒陷阱.