Georgia State University ScholarWorks @ Georgia State University

Criminal Justice Theses

Department of Criminal Justice

Winter 12-1-2012

Protecting the Castle: Applying Protection Motivation Theory to Explain the Use of Home Guardianship

Audrey C. Clubb Georgia State University

Follow this and additional works at: https://scholarworks.gsu.edu/cj theses

Recommended Citation

Clubb, Audrey C., "Protecting the Castle: Applying Protection Motivation Theory to Explain the Use of Home Guardianship." Thesis, Georgia State University, 2012.

 $https://scholarworks.gsu.edu/cj_theses/4$

This Thesis is brought to you for free and open access by the Department of Criminal Justice at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Criminal Justice Theses by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

PERMISSION TO BORROW

In presenting this dissertation as a partial fulfillment of the requirements for an advanced degree from Georgia State University, I agree that the Library of the University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote from, to copy from, or to publish this dissertation may be granted by the author or, in his or her absence, the professor under whose direction it was written or, in his or her absence, by the Dean of the Andrew Young School of Policy Studies. Such quoting, copying, or publishing must be solely for scholarly purposes and must not involve potential financial gain. It is understood that any copying from or publication of this dissertation which involves potential gain will not be allowed without written permission of the author.

Signature of Author

ander C. Clubb

PROTECTING THE CASTLE: APPLYING PROTECTION MOTIVATION THEORY TO EXPLAIN THE USE OF HOME GUARDIANSHIP

BY

AUDREY C. CLUBB

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Science in the Andrew Young School of Policy Studies of Georgia State University

Copyright by Audrey Christine Clubb 2012

ACCEPTANCE

This dissertation was prepared under the direction of the candidate's Dissertation Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in Economics in the Andrew Young School of Policy Studies of Georgia State University.

Dissertation Chair: Barbara D. Warner

Committee: Brent E. Teasdale

Joshua C. Hinkle

Electronic Version Approved:

Mary Beth Walker, Dean Andrew Young School of Policy Studies Georgia State University December 2012

DEDICATION

I would like to express my sincere and immense appreciation for my family, friends, and the faculty at Georgia State University for their guidance and support over the years. First, I cannot thank my mother, father, and husband enough for their support and encouragement through my academic career. Second, I would like to thank the faculty at GSU for encouraging me and providing the tools and guidance needed to excel. Finally, I would like to dedicate this thesis to Ms. Demurrel Jenkins, my grandmom, who I cannot surprise but hope to amaze.

ACKNOWLEDGMENTS

Thank you to all of those involved in the development of this thesis. I would like to thank Dr. Barbara Warner for her guidance, support, and countless hours of reviews. Dr. Warner's work has been an inspiration for my own, and she has pushed me to explore new concepts and use new techniques to make the best possible product for this thesis. I would also like to express my appreciation to Dr. Brent Teasdale and Dr. Josh Hinkle for their guidance and suggestions during this process. Finally, I would like to thank Dr. Terrance Miethe for providing access to the data used for this analysis. This thesis has been made possible with the support and resources provided by these individuals, and I am truly grateful to them all.

TABLE OF CONTENTS

ACKN(OWLE	DGEMENTS	vi
LIST O	F TAE	BLES	viii
LIST O	F FIG	URES	ix
SUMM	ARY .		X
СНАРТ	ΓER 1:	INTRODUCTION	1
СНАРТ	ΓER 2:	LITERATURE REVIEW	5
	2.1	Protection Motivation Theory (PMT)	6
	2.1.1	Evolution of the Protection Motivation Theory Model	7
	2.1.2	Findings from the Protection Motivation Theory Research	9
	2.1.3	Applying Protection Motivation Theory to Explain Home Guardianship	10
	2.1.4	Protective/Guardianship Measures	11
	2.1.5	Sources of Information	13
	2.1.6	Cognitive Mediating Processes	23
	2.2	Summary	28
СНАРТ	ΓER 3:	METHODOLOGY	29
	3.1	Purpose of the Study	29
	3.2	Data Collection Methods	29
	3.2.1	Sample	29
	3.2.2	Research Design and Data Collection	30
	3.2.3	The Survey Instrument	30
	3.2	Study Variables	30
	3.2.1	Primary Dependent Variable – Coping Mode	31

	3.2.2	Primary Independent Variables – Sources of Information	32
	3.2.3	Mediating Variables – Cognitive Mediating Processes	40
	3.2.4	Control Variables	45
	3.3	Statistical Analysis	46
	3.3.1	Statistical Software	47
	3.4	Study Hypotheses	47
	3.5	Methodological Summary and Conclusions	50
СНАР	TER 4:	RESULTS	51
	4.1	Descriptive Statistics	51
	4.1.1	Coping Response – Home Guardianship Measures	52
	4.1.2	Sources of Information	53
	4.1.3	Cognitive Mediating Processes	54
	4.1.4	Control Variables	55
	4.2	Bivariate Analyses	56
	4.3	Mediating Analyses for Guardianship PMT Model	56
	4.3.1	Effects of Sources of Information on the Use of Home	
		Guardianship Measures	56
	4.3.2	Effects of Sources of Information on Cognitive Mediating Processes	58
	4.3.3	Analysis of the Cognitive Mediating Effects of Appraisal Processes	
		on the Relationship Between Sources of Information and the Use of	
		Home Guardianship	64
	4.4	Summary	68
CHAP	TER 5:	CONCLUSIONS	69

5.1 Discussion of Findings	70
5.2 Limitations	75
5.3 Recommendations for Future Research	77
5.4 Conclusions	78
APPENDIX A: SURVEY INSTRUMENT	81
APPENDIX B: CORRELATION MATRIX	101
REFERENCES	102
VITA	106

LIST OF TABLES

Table 1	Findings from O'Shea (2000)	12
Table 2	Percent of Personal Guardianship Measures Used	44
Table 3	Descriptive Statistics	51
Table 4	Relationship Between Sources and Information on the Use of Home Guardianship	57
Table 5	Relationship Between Sources of Information and Perceived Home Vulnerability	59
Table 6	Relationship Between Sources of Information and Use of Personal Guardianship Measures	60
Table 7	Relationship Between Sources of Information and Worry About Home Victimization (Break In)	62
Table 8	Relationship Between Sources of Information and Cognitive Mediating Variables	64
Table 9	Relationship Between Sources of Information and Use of Home Guardianship with Cognitive Mediating Processes	65
Table 10	Summary of Significant Findings	67

LIST OF FIGURES

Figure 1	Rogers's 1983 PMT Model	8
Figure 2	Modified PMT Model	27

SUMMARY

Home guardianship measures provide individuals with a means to enhance and ensure the safety of themselves, their family, and their property inside their homes. However, research regarding the factors considered in the decision to employ home guardianship measures as well as the means by which individuals assess this information regarding potential threats and protective responses is limited and varied in its implementation. This study attempts to provide a theoretical framework for understanding the use of home guardianship measures with the application of a modified version of Ronald Rogers' (1983) Protection Motivation Theory (PMT) model. This model assesses factors that directly contribute to the motivation to engage in protective measures as well as cognitive processes through which an individual assesses these factors. This study finds support both for the direct relationships between sources of information about potential threats or protective responses and the use of home guardianship measures, as well as support for mediating effects of these relationships. In conclusion, this study provides suggestions for future research to further examine the application of PMT to understand the use of guardianship measures.

Chapter 1

Introduction

An individual's home is their castle – a safe haven from the dangers of the outside world – but even the mightiest fortress is not impenetrable. While the threshold offers some protection from the threat of criminal victimization one might experience on the street, the protection of one's self, one's family, and one's property within the home remains a concern. The extent to which concerns for home victimization affects an individual and his or her decision to fortify his or her home can be affected by a variety of individual and social factors as well as the means by which one interprets and rationalizes such potential threats. At best, defensive measures for the home deter potential offenders and provide a sense of safety to the home's residents. At worst, such defensive measures cost individuals and families monetarily, psychologically, and emotionally, and can have a detrimental effect on the community itself.

Home guardianship refers to a wide variety of measures an individual can implement to protect the home itself and the persons and property therein from harm. This can include physical changes to the structure to impede potential offenders, or behavioral modifications by the residents to identify and deter potential threats. Home guardianship measures vary greatly and can include a wide variety of methods such as installing door locks or window bars, installing security lighting, keeping lights on when away, asking neighbors to check in on one's home while out of town, keeping a weapon or guard dog in the home, or joining a neighborhood watch. Such measures vary in their cost and effectiveness in deterring or addressing home victimization, but nonetheless provide the residents with a means of protecting themselves and their property.

While home guardianship measures can be particularly valuable in providing safety for individuals and their property, it is important to acknowledge that home guardianship can also

have unintended adverse effects on individuals. First, home guardianship measures can be expensive for individuals and families. A 2005 study by Dubourg and Hamed revealed that approximately 1.1 billion British Pounds for physical defensive expenditures and approximately 884 million British Pounds in insurance-related expenditures were by individuals and households in England in 2003. This translates to roughly 2.1 billion and 1.7 billion United States dollars, respectively. Other studies have attempted to quantify additional economic impacts of guardianship measures including devaluation of homes and property, increased transport costs for fear of taking public transportation, lost time/productivity to engaging in security measures such as arming alarm systems and taking "safer" routes, health and mental health impacts, and increased insurance costs (Fisher, 1991; Dolan & Peasgood, 2006; Moore & Shepherd, 2006). Though impossible to adequately quantify, home guardianship measures also have the potential to adversely affect communities through limiting of social interaction and time spent outside of the home, limiting economic prosperity of local businesses, and providing a negative image of neighborhood safety through the overt presence of security features. As such, while home guardianship measures have obvious potential benefits, these measures must also be implemented with consideration of their potential adverse consequences.

The decision to employ home guardianship measures and the type of guardianship techniques used can depend on a variety of factors including persuasion by others and the surrounding environment as well as an individual's own personality characteristics and reasoning processes. In this study, I apply a modified version of Ronald Rogers' 1983 Protection Motivation Theory (PMT) to better understand individual motivations for employing home guardianship measures and the processes for assessing these motivations. The original PMT model addresses the direct relationship between sources of information about potential threats

and potential protective responses on the decision to employ measures intended to reduce or eliminate vulnerability to the threat. In addition, the PMT model also incorporates the potential mediating effects of an individual's reasoning and evaluation processes on this relationship. The decision to employ this model is based on two key issues. First, while home guardianship has important implications for individuals and communities, little research has attempted to explain the wide range of potential influences on its use in a theoretical framework. Second, while PMT was designed to understand motivations for health-related behaviors (i.e. quitting smoking), it is well suited to adaptation to explain guardianship of the home.

The purpose of this study is to identify key factors related to the use of home guardianship measures and to place these factors into a more concise and consistent model in order to understand the complex motivations behind the use of home guardianship. In Chapter 2, I begin with a detailed discussion of the tenets of PMT and findings related to the effectiveness of the model in explaining protective, or guardianship, measures. Because of the limited research in the field of home guardianship and application of PMT in a crime victimization related context, I next discuss more general findings related to individual and social characteristics related to fear of victimization in general. Finally, I develop a modification of Rogers' (1983) PMT model to explain home guardianship measures. Because of the complexity of the model and its adaptation to fit the context of home guardianship, I reserve the discussion of the study hypotheses for the end of Chapter 3 following discussion of the study variables.

In Chapter 3, I proceed with a detailed explanation of the methods used to examine the application of the modified PMT model to explain the use of home guardianship measures. First, I discuss the data set used for this study and the data collection processes used and potential threats to internal and external validity. Second, I discuss the modified PMT model and the

statistical analysis used to examine its effectiveness in explaining the use of home guardianship. The methodology for this study is based on guidance from Baron and Kenney (1986) regarding analysis of mediation using OLS and logistic regression. Third, I discuss the operationalization of each of the variables used in this study. Finally, I provide the hypotheses for this study.

The final sections of this study, Chapters 4 and 5, include findings from the data analysis and discussion of the results. In Chapter 4, I provide the results from the analysis. Support, or lack thereof, for the hypotheses in this study are also included. Chapter 5 includes a summary of key findings from the analysis and addresses potential limitations of the findings. In addition, this chapter provides suggestions for future research and policies aimed at improving our understanding of home guardianship, its uses, and its implications.

Chapter 2

Literature Review

In his book Governing through Crime: How the War on Crime Transformed American Democracy and Created a Culture of Fear, Jonathon Simon (2007) opines:

The home is often, at least in American mythology, viewed as a bulwark against a wide variety of individual and collective threats, but ... fear of victimization attacks subjects precisely in their homeowner status, and individuals can do very little to protect themselves without cutting their ties to the community and relocating. (p. 155)

While Simon takes an extremist view of the conditions of crime in the United States, his statement highlights the importance of the home and the role it plays in both the lives of individuals and the prosperity of the community. The home is generally considered a safe haven from the threats of the outside world, but even the home itself is often in need of fortification to ensure the protection of the persons and property within. Despite the important role the home plays both in protecting residents and their property as well as providing peace of mind for the home's inhabitants, few studies have been conducted to evaluate the factors and processes involved in the decision to employ home guardianship measures. Through this study, I aim to address some of these deficiencies through the application of Protection Motivation Theory (PMT), a theory of defensive behavior previously unapplied in the realm of criminal victimization and guardianship related research.

Guardianship research, particularly home guardianship research, remains somewhat limited and is plagued by a lack of theoretical guidance. Because few theories have attempted to explain how and why individuals chose to protect themselves and their property, most guardianship research is based upon an atheoretical approach. Researchers typically include a

number of individual and macro-level independent variables of interest in a multivariate analysis to determine which variables have a significant effect on guardianship behavior or its assumed parallel of fear of victimization of the home. Fear is often considered a proxy for guardianship with the implication that guardianship measures are a direct result of fear of victimization. Such studies are exploratory in nature and provide valuable information about the effects of such characteristics on guardianship. However, this atheoretical approach results in inconsistencies in the variables used across studies making conclusions difficult. This study is intended to begin to address some of these inconsistencies by applying PMT to examine factors and cognitive processes involved in the use of home guardianship.

In this study, I examine the application of PMT as a means to explain why individuals choose to employ home guardianship measures as a means to protect themselves and their property from potential criminal victimization. In this chapter, I first discuss the components of the PMT model and the evolution of the model from its conception. Second, I examine findings from previous applications of PMT to explain protective behaviors. Third, I discuss the application of the principles of PMT to guardianship behavior along with related guardianship research findings. Fourth, I discuss some additional factors that must be considered in order to apply PMT in the context of home guardianship including a modification to the current PMT model.

Protection Motivation Theory (PMT)

PMT is a theoretical model intended to explain the factors and processes involved in individuals' decisions whether or not to engage in behaviors intended to protect them from potential threats. The theory was originally proposed by Ronald Rogers in 1975 and later revised and built upon by Rogers in 1983. PMT incorporates both individual and social factors as well as

complex cognitive processes involved in the decision to engage in protective behavior. According to Rogers (1975), "[t]he proposed formulation asserts that the attitudinal change is not mediated by or a result of an emotional state of fear, but rather is a function of the amount of protection motivation aroused by the cognitive appraisal process" (p. 100). In contrast to the general assumption that the use of protective or guardianship measures is a direct result of fear of a threat, PMT incorporates a more complex psychological or rational choice model of decision making in the use of guardianship. To date, PMT has been applied almost exclusively in health-related research. However, the application of PMT can potentially enhance our understanding of the use of home guardianship by providing a theoretical model, which incorporates not only fear of home victimization but also other individual and environmental cues which provide motivation for home guardianship.

Evolution of the Protection Motivation Theory model. Ronald Rogers published the first iteration of the PMT and the associated model in 1975. This model consists of three primary components: a fear appeal, a cognitive mediating process, and an attitude change. The fear appeal consists of three types of information regarding potential threats: 1) the magnitude of the threats potential effects, 2) the probability that such a threat will affect the individual, and 3) the efficacy of a recommended response in protecting an individual from a potential threat. Next, in the cognitive mediating process, an individual considers the information presented by the fear appeal and decides the extent to which these factors will affect them. This assessment determines an individual's motivation to engage in a recommended response to a potential threat, which ultimately initiates the final part of the PMT model: intent to adopt a recommended protective response. When the perceived severity, perceived potential for exposure to the threat, and/or the perceived effectiveness of a recommended protective response are high enough, an individual

would be expected to have the motivation to engage in a protective response to the potential threat. While the 1975 iteration of the PMT provides a model to understand the complex factors and processes involved in using protective behaviors, Ronald Rogers' 1983 iteration of the PMT model builds upon the earlier theory to address a broader range of considerations.

In 1983, Rogers revised his original theory to clarify and elaborate the processes involved in the decision to use guardianship measures, thus creating the modern PMT model, which is the focus of this study. A summary of the key elements of the 1983 model is illustrated in Figure 1.

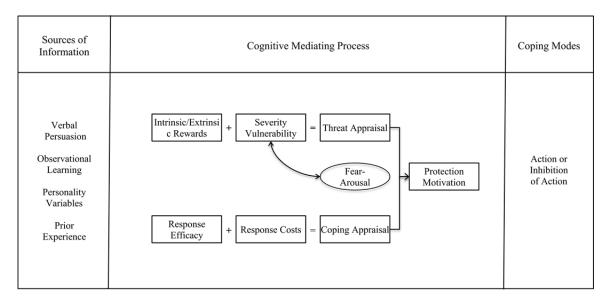


Figure 1 -Rogers's 1983 PMT model

This more complex process begins with the provision of information from the environment and interpersonal interaction regarding potential threats and options for protective behavior, commensurate with the fear appeals component of the earlier model. Next, the individual assesses this information through two processes: threat appraisal and coping appraisal. In the threat appraisal process, the individual must balance the rewards of not engaging in a protective behavior with the severity and vulnerability of a potential threat. Fear arousal has a reciprocal effect with severity and vulnerability each serving to perpetually increase the other. The coping appraisal involves a balance of perceived efficacy of the protective response with the

costs of such a response. The results of these threat and coping appraisals lead to protection motivation. As discussed later in this chapter, it may be possible to apply this model to understand what motivates individuals to engage in guardianship behavior.

Findings from Protection Motivation Theory research. PMT has been applied almost exclusively in health-related research, and has received substantial empirical support. In particular, findings from two meta-analyses of tests of protection motivation theory reveal moderate to substantial support for the processes involved in the decision to engage in protective behavior. In a review of 65 studies addressing the effects of one or more elements of protection motivation theory on the intent or actual use of protective behaviors, Floyd, Prentice-Dunn, and Rogers (2000) found moderate effect sizes for most of the elements. In their analysis, response efficacy (i.e. belief that a suggested protective response will work in preventing a particular threat) and intrinsic/extrinsic rewards (i.e. positive results from not engaging in a suggested protective response) had moderate effect sizes. In addition, response cost (i.e. the monetary expense of a given protective response) had an extremely high effect size. This would suggest that motivation to engage in home guardianship measures is likely to be highly dependent upon the belief that home guardianship measures will be effective in preventing victimization, will not adversely impact one's lifestyle, and will be relatively inexpensive. Other elements of PMT were close to moderate in effect size though threat vulnerability appeared to be comparatively low. This would indicate that other elements of the PMT model may have some effect on the motivation or use of home guardianship measures in response to potential victimization, though the perceived vulnerability to home victimization would have little effect. As such, the findings from this meta-analysis generally support the PMT model for understanding protective or guardianship measures, though some elements may be more influential than others.

A second meta-analysis conducted by Milne, Sheeran, and Orbell (2000) examined 27 studies of protective behaviors including one or more measures of elements of PMT. Most elements of PMT in these studies had low to moderate effect sizes, but almost all were significant in their influence on intent and use of protective behaviors. Coping appraisal elements appeared to be more effective in promoting protective behavior than threat appraisal related variables. As such, the perceived efficacy of home guardianship measures in preventing home victimization and the cost of such home guardianship measures would be expected to have the most influence on the actual use or motivation to use home guardianship measures. In addition, PMT related elements were more influential in predicting intention to use protective behavior or current use of protective behavior, while the authors indicate that these elements were not as effective in predicting future use of protective behavior. While both meta-analyses include protective behaviors related to health-related concerns (i.e. wearing sunscreen, getting a flu shot, driving safely), the effects of the PMT related elements show consistent effectiveness and significance in encouraging these protective measures.

Applying Protection Motivation Theory to Explain Home Guardianship. With such strong support in health research and the theoretical structure for understanding protective behavior, this study examines PMT as a means to examine why individuals choose to engage in home guardianship measures. However, while home guardianship is a protective behavior in response to the potential threat of criminal victimization, it has some distinct characteristics that may differentiate it from health related protective measures seen in prior PMT research. The following subsections identify how the concepts of PMT may be applied to explain home guardianship as well as applicable findings from criminological research that may help to predict the influence of PMT associated variables on the use of home guardianship.

It is important to note that few studies have directly addressed factors affecting the use of home guardianship measures. It is generally assumed in criminal justice and victimology-related research that the use of guardianship measures is a direct result of fear or concern about potential victimization, somewhat in contrast to the tenets of PMT. As such, this literature review relies primarily on studies associated with the relationship between elements identified in the PMT model and fear of victimization, rather than the motivation to use or actual use of home guardianship measures. It is also important to note that even among the research on fear of victimization, studies examining fear of victimization of the home specifically are somewhat limited. However, this topic has received some attention in situational crime prevention research (i.e. works by Jason Ditton, Stephen Lab, and others). However, many studies have addressed factors affecting fear of personal victimization (i.e. assaults against an individual in a public area) or crime in general (i.e. a sense of worry for one's safety due to criminal behavior in an unspecified area) and have implied that this fear or concern can be used as a proxy for the use of guardianship measures. As such, many of the studies in this literature review refer to worry about personal crimes or crimes in general. Despite the lack of home guardianship specific research, findings from such studies should yield valuable information about potential relationships between the factors identified in the PMT model and the use of home guardianship measures. The conceptualization of elements of the PMT model to explain the use of home guardianship measures and findings from prior research related to the fear of victimization are discussed in the following. Reference Figure 1 for a full picture of the PMT model.

Protective/Guardianship measures. According to a 1997 estimate, nearly \$18 billion dollars were spent on physical modifications in response to the threat of crime in the United States (Anderson, 1999). While not all of this amount was spent by individual citizens, this

impressive dollar amount highlights the extent to which the protection of structures and property play a significant role in our lives and our economy. In addition, Anderson (1999) points to several forms of guardianship measures that are potentially applicable to the home including alarm systems, locks, safes, small arms, security cameras, security lighting, fences and gates, non-lethal weapons, and guard dogs. However, protective/guardianship measures of the home can include a number of physical modifications and specific behaviors in addition to those identified by Anderson (1999) intended to protect the home from potential criminal threats.

Timothy O'Shea (2000) presented one of very few studies to examine a wide range of potential home guardianship measures along with an assessment of the use of these measures. His study was limited to a sample of residents from Mobile, Alabama, but provides some insight into the many forms of home guardianship available. The following table shows the forms of home guardianship included in O'Shea's (2000) study along with the percent of the sample using the given form of home guardianship.

Table 1 – Findings from O'Shea (2000)

Type of Guardianship	Percent of Sample Using This Form of Guardianship
Lock exterior doors when away	93
Lock windows when away	93
Have someone pick up mail while away	84
Have steel or solid core wood doors	84
Use deadbolt locks on exterior doors	79
Change locks when moved in	72
Keep exterior doors lit at night	68
Have stopping mechanisms on windows	54
Have someone close curtains at night while away	35
Have automatic light timers	23
Have a burglar alarm	23

Among the most frequent of home guardianship measures were locking doors and windows when away from the home, having someone pick up the mail when away, and having

solid steel or wood doors (O'Shea, 2000). Among the least frequently used forms of home guardianship were having automatic light timers, having a burglar alarm, and having someone close one's curtains at night when away. As evident from O'Shea's study, there are a variety of home guardianship options available and they vary widely in their use. This supports the notion evident in the PMT model that there may be complex processes involved in the use of protective measures, particularly home guardianship measures.

Sources of information. Rogers (1983) identifies four sources of information that provide the individual with cues regarding potential threats and potential protective responses. The four sources of information include: verbal persuasion, observational learning, personality variables, and prior experience. In the context of home guardianship, these sources of information would be related to both levels of crime and offending of property. These are likely to stem from individual characteristics, social interactions, and environmental conditions and would impart details of potential criminal threats as well as means to protect one's self and one's property from these threats. Each of these sources of information as well as their applicability to home guardianship is discussed in the following.

Verbal persuasion. Verbal persuasion denotes information conveyed to an individual about potential threats or protective responses to that threat. In the context of home guardianship, there are several sources of verbal persuasion including friends, family, neighbors, police departments, and neighborhood organizations. However, these can be categorized into two key sources: social interaction with friends, family, or neighbors and interaction with local police. These sources provide direct communication of the presence or absence of potential threats of home victimization as well as potential means by which to alleviate such threats.

Social interaction with family, friends, and neighbors can provide an individual with information about potential crime-related threats and guardianship responses through relaying of news stories, expression of concern about an individual's safety, and suggestions for preventing victimization. While these interactions may substantially increase concern about potential victimization and the desire to use guardianship responses, they may also help to assuage such concerns through the provision of social support. It is perhaps because of this multifaceted influence of social interaction that related studies have shown conflicting findings regarding the influence of these variables on fear of victimization.

Three recent studies of metro areas in North America have identified contradictory findings regarding the influence of social interaction on fear of victimization. In a study of residents in 21 cities in Washington State, Franklin, Franklin, and Fearn (2008) found that a strong sense of community and belonging among individuals was associated with decreased fear of both personal crimes and crime in general. This would suggest that, where there is substantial interaction among neighbors or friends and family in a neighborhood, individuals would be less concerned about potential criminal victimization and thus less motivated to engage in guardianship measures. Kruger, Hutchison, Monroe, Reischl, & Morrel-Samuels (2007) reported similar findings for both the sense of community and the presence of social capital (measured as perceived trust and willingness to help among neighbors) among a sample of residents from Flint, Michigan. However, they found that the presence of social support (measured as frequency of interaction and supportive relationship with family) did not have a significant effect on fear of victimization in general. While these findings support the notion that fear of victimization may be related to social interaction, they also indicate that the influence of social interaction may be dependent on who the interaction is with and the proximity of the friend or family member to the

neighborhood. Finally, in a large-scale study of residents in Vancouver, British Columbia, Sacco (1993) found evidence to contradict the findings of the previously mentioned studies. His study revealed that strong social support from both family and friends was associated was an increase in fear of victimization in general. It is not readily apparent why Sacco's (1993) findings should so drastically contradict those of the other two studies, but it may be related to the lack of a location specific variable in the social support measure. As seen in the findings from the Kruger, et al. (2007) study, there was a difference in the significance of the findings for social interaction among neighbors and social interaction among family not specifically in the neighborhood. Nonetheless, these findings highlight the importance of social interaction in an individual's fear of criminal victimization and, likely, subsequent guardianship measures.

A second key source of information regarding potential criminal threats and protective responses in the context of home guardianship involves interaction with the local police department. With the resurgence of community-oriented policing in recent decades, strategies to bring police in closer contact with the community has been touted as a means to help alleviate fear of crime among residents. In particular, a 2005 study by Adams, Rohe, and Arcury found that residents that were aware of community policing programs in their area were less fearful of crime and were more likely to engage in guardianship measures among residents in six North Carolina cities. This finding highlights two important considerations for home guardianship. First, availability of and participation in local police activities for citizens is associated with an increase in the use of guardianship measures in general, including home guardianship measures. Second, this finding also highlights that the relationship between fear and guardianship is not always direct as one might assume. Interaction with police should result in increased use of home

guardianship measures and should also yield particularly interesting information about the factors affecting the use of home guardianship.

A third source of verbal persuasion, news media, also has the potential to influence an individual by presenting information about recent crimes in a given area. Reports about burglaries or other home victimizations in one's area can instill a sense of fear or worry, leading an individual to consider guardianship measures in response to such a threat. The relationship between the news media and fear of victimization has received substantial attention in recent years. Several studies have identified strong positive relationship between viewing news media and fear of crime (Kohm, Waid-Lindberg, Weinrath, Shelley, & Dobbs, 2012; Callanan, 2012; Chiricos, Eschholz, & Gertz, 1997; Romer, Jamieson, & Aday, 2003; Weitzer & Kubrin, 2004). However, this relationship between media and fear of crime was often limited to only those relying on local news instead of national news, watching news on television instead of in print, and watching news frequently rather than infrequently. Nonetheless, there appears to be a strong link between news media and fear of crime. As such, one may expect that those learning about crimes in their area from the news may be more motivated to engage in home guardianship measures in response.

Observational learning. According to Rogers (1983) observational learning involves witnessing what happens to other people exposed to a given threat, known in criminal justice research as indirect victimization. However, in the context of home guardianship, this information regarding potential criminal threats and guardianship responses can also stem from witnessing disorder in the community, a clue to other more serious forms of crime. Findings related to the relationship between these sources of observational learning and fear of criminal victimization are discussed in the following.

Hinkle and Weisburd (2008) present one of few studies to examine the effects of indirect victimization on fear of crime in general. They asked respondents if they knew anyone who had been a victim of a crime in their neighborhood. However, their findings indicated that this indirect victimization did not have a significant influence on the fear of crime in general. Because this variable is limited to crime within one's neighborhood, it is perhaps a better measure for the effects on home guardianship than asking about knowing a victim of crime in general. While the findings showed no significant influence of indirect victimization on fear of victimization, more research is warranted to determine if indirect victimization influences the use of home guardianship itself.

The second form of observational learning relevant to home guardianship, perception of neighborhood disorder, consists of an individual's interpretation of physical and social characteristics of an area that indicate a lack of upkeep and interest in the well-being of the community. Physical disorder includes visual cues such as litter, dilapidated structures, graffiti indicative of a lack of protection and care for personal and public property. Social disorder includes visual cues related to a lack of social control, such as loitering teens and public drunkenness. Both forms of disorder can represent a lack of social control mechanisms and a lack of care for the well being of the community among its residents. High levels of neighborhood disorder can lead to increased fear of potential victimization and a sense that one must protect themselves. Neighborhood disorder can be particularly influential in fear of home victimization because the resident cannot avoid the disorder in their surroundings. Study findings generally support the notion that there is a significant positive relationship between the presence of neighborhood disorder and fear of victimization, though there appears to be some difference if the disorder is measured as perception by the respondent or objectively recorded by the

researcher (Hinkle & Weisburd, 2008; Franklin & Franklin, 2008; Franklin, Franklin, & Fearn, 2008; Scarborough, Like-Haislip, Novak, Lucas, & Alarid, 2010; Wyant, 2008). While these studies all addressed fear of personal victimization or fear of victimization in general, the findings indicate that neighborhood disorder, both physical and social, may have important consequences for fear of home victimization and subsequent home guardianship.

Observational learning from one's environment imparts important clues to potential crime related threats in an area, but is subject to interpretation by the individual. Indirect victimization appears to have mixed effects on an individual's level of fear of criminal victimization. As such, it is difficult to predict the effect indirect victimization would have on home guardianship. Neighborhood disorder, on the other hand, appears to strongly affect fear of victimization, increasing the perceived threat to the individual. As such, neighborhood disorder would be expected to be associated with an increase in the use of home guardianship in response to higher levels of fear of victimization.

Personality variables. Rogers (1983) provides few clues regarding what is meant by "personality variables" in his PMT model. Tests of the PMT model in health related fields have thus used a variety of related variables from individual characteristics (i.e. race, sex, and age) to psychological characteristics (i.e. introversion, trust). In the context of guardianship, several studies have examined the effects individual characteristics on fear of criminal victimization, though little information is available on the relationship between more complex psychological traits and fear of victimization. This section discusses findings regarding the relationships between several individual characteristics that likely fit the intention of this component of the PMT model – age, race/ethnicity, sex, education, and marital status – and fear of victimization, a likely precursor to the use of guardianship.

Age. Age can play an important role in likelihood of guardianship, and subsequent use of guardianship measures, for many reasons from lifestyles that expose an individual to potential victimization, life experiences, and physical and social resources upon which to rely for support. Several studies have found that younger individuals are generally more afraid of personal victimization than are older individuals (Franklin, Franklin, & Fearn, 2008; Sacco, 1993). Rountree and Land (1996) found the same to be true specifically for fear of burglary victimization among a sample from Seattle, WA. Franklin and Franklin (2008) similarly found that younger individuals were more fearful of personal victimization than older individuals, but only among the females in their sample. Ferraro and Lagrange (1992) similarly found that younger individuals were reported higher levels of fear, though this was likely related to the specification of crime type used in their questions. While there may be some caveats, there appears to be strong support that younger individuals are generally more fearful of potential criminal victimization than older individuals. However, other studies have found that older individual, particularly the elderly, report higher levels of fear of crime than their younger counterparts (Covington & Taylor, 2005; Hale, 1996). Because of such conflicting findings between age and fear of crime, it is difficult to predict what effect age may have on the use of guardianship, particularly home guardianship, measures.

Race/Ethnicity. Findings related to the effects of race and ethnicity on fear of victimization have been mixed. Several studies have found that African Americans are more fearful of personal crimes (i.e. assault while in a public area) than Whites, though there was no significant difference between White and other non-White population groups among samples from cities throughout the United States (Roman & Chalfin, 2008; Hinkle & Weisburd, 2008; Scarborough, et al., 2010). However, Rountree and Land (1996) found the opposite among their

sample from Seattle, WA. In their study, White individuals were significantly more fearful of both general and burglary-specific victimization. It is not readily apparent why these studies should have conflicting findings. As such, it is difficult to determine if and how race/ethnicity may affect fear of home victimization and subsequent use of home guardianship measures.

Sex. Sex is one of the most consistent influences on fear of victimization, though one study indicates that this may not hold true for fear of home victimization. Numerous studies have found that females are more afraid of personal victimization or crime in general than are males (Roman & Chalfin, 2008; Hinkle & Weisburd, 2008; Brunton-Smith & Sturgis, 2001; Kruger, et al., 2007; and Franklin & Franklin, 2008). However, while Rountree & Land (1996) found that females are significantly more likely to fear crime in general, the same was not true for burglary specific fear. Their findings showed that among their general population sample in Seattle, WA, men were significantly more likely to fear household burglary than women. This would indicate that while females may be more fearful and thus more motivated to use guardianship measures in public, men are more likely to use home guardianship measures than women. While this is only one study that supports the notion that men are more fearful of victimization than women, the burglary specific nature of that study indicates that men may be more susceptible to fear of victimization in the home. However, the conflicting findings make it difficult to predict the potential influence of sex on the use of home guardianship measures.

Education. Few studies have examined the relationship between education and fear of victimization, though the potential influence of this variable could have important implications for understanding how individuals rationalize observational clues and fear. Franklin, Franklin, and Fearn (2008) found that individuals with higher levels of education were significantly more likely than those with lower levels of education to fear crimes against the person. Scarborough,

et al. (2010), in contrast, found that higher levels of education were significantly associated with a decrease in fear of personal victimization. This contradiction in findings may be related to two differences in the design of the studies. First, Franklin, Franklin, and Fearn's (2008) was conducted across multiple cities in Washington State while the Scarborough, et al. (2010) was limited to residents in a highly industrialized city of Flint, MI. Second, Franklin, Franklin, and Fearn's (2008) study looked at an ordinal set of education levels from less than high school to graduate degree while Scarborough, et al. (2010) looked at a dichotomous variable of education indicating completion of a bachelors degree or not. It is difficult to determine which if any of these differences in the study design affected the difference in findings, but it points to the need for additional research on this relationship between education and fear of victimization. In addition, these findings focus specifically on fear of personal victimization, not fear of home victimization. As such, it is difficult to determine the possible relationship between education and fear of home victimization, and thus to predict the relationship between education and the use of home guardianship measures.

Marital Status or Cohabitation. Marital status or cohabitation poses a unique challenge to understanding the use of home guardianship. Being married or cohabitating with another individual provides a source of support for an individual, but can also introduce a source of concern. The individual may feel safer with another individual in the home, but may also worry about his or her well-being. It may also make a substantial difference whether the other individual is a loved on or only a roommate. In general, several studies have found that married or cohabitating individuals are less fearful of criminal victimization than those who were not currently living with someone (Brunton-Smith & Sturgis, 2011; Rountree & Land, 1996). In particular, this may point to an increased motivation to use home guardianship measures.

Another aspect of marital status or cohabitation includes the presence of children in the home. As children represent a particularly precious and vulnerable source of concern, it is likely that parents or other caregivers would consider the use of home guardianship measures to ensure their protection. Warr (1992) found that, of their sample from Dallas, TX, that reported fearing for the well being of others, 41% reported fearing for their children while an additional 18% reported worry for both their spouse and children. Other studies have found similarly high levels of fear for the safety of children in reference to potential criminal victimization among respondents (Mesch, 2000; Snedker, 2006). As such, individuals with children might be expected to have higher levels of fear or concern regarding potential victimization of their children, thus a greater motivation to engage in home guardianship measures to ensure their safety.

Prior experience. Finally, prior experience refers to an individual's previous interaction with a given threat or a related protective response. While experiencing criminal victimization either directly or indirectly would seem to have an immediate and profound influence on fear of victimization and subsequent guardianship, research findings are mixed. Rountree and Land (1996) found that prior burglary victimization was associated with increased fear of burglary victimization. Brunton-Smith and Sturgis (2011) had similar findings, which indicated that both prior personal and property victimization were associated with an increase in fear of victimization in general. However, Hinkle and Weisburd (2008) and Hartnagel (1979) found no significant relationship between prior victimization and fear of victimization. It is possible that this difference in findings is related to the fact that the Rountree and Land (1996) and the Brunton-Smith and Sturgis (2011) studies considered personal and property victimization as two separate variables while the Hinkle and Weisburd (2008) and the Hartnagel (1979) studies combined personal and property victimization into a single variable. Despite the lack of support

for the relationship shown in the last two studies, there still appears to be strong evidence that prior victimization has a significant and positive impact on fear of victimization. As such, one would expect that prior experience with victimization of one's home might have a significant positive effect on the use of home guardianship measures.

Cognitive mediating processes. The cognitive mediating process proposed by Rogers (1983) consists of two appraisal processes an individual uses to interpret sources of information in order to make a decision about whether or not to engage in a protective behavior. The first appraisal process is the threat appraisal in which an individual considers the rewards or savings of not engaging in a protective behavior along with the severity and vulnerability to a potential threat. The second appraisal process is the coping appraisal process in which an individual considers the effectiveness of a recommended protective behavior and the costs of engaging in that behavior. The following sections discuss these processes in more detail along with their application to home guardianship.

Threat appraisal process. The threat appraisal process allows an individual to consider his or her vulnerability to a given threat, the potential severity of the potential threat, and what can be gained by not engaging in a protective response (Rogers, 1983). In other words, the threat appraisal examines the extent to which a potential threat can actually affect an individual. When the potential severity and vulnerability exceed the intrinsic and extrinsic rewards of not engaging in the behavior, an individual will be more motivated to engage in protective behaviors. In the context of home guardianship, the threat appraisal process allows the individual to assess if the threat of home victimization is significant enough to warrant concern and subsequent home guardianship measures based on sources of information.

The intrinsic and extrinsic rewards are somewhat unique in home guardianship research because they are minimal and likely to affect everyone in a similar way. For example, the installation of locks on one's doors is unlikely to affect property value, potentially even increasing property value, and adds only seconds to an individual's routine. As such, there is little to be gained from an individual not engaging in home guardianship behaviors. While no studies have examined perceptions of the effects of home guardianship behaviors on an individual's daily routine, it is safe to assume that there would be few reasons that one would not choose to protect their home and property. The intrinsic and extrinsic rewards of the threat appraisal process are likely to have little effect on the use of home guardianship measures.

Severity of the threat is also unique in home guardianship research because of the relativity of value to different individuals. Few if any studies have attempted to assess the potential influence of property value on fear of home victimization or subsequent home guardianship measures. However, one can generally assume that when a potential break in would result in harm to loved ones or loss of valuables in the home, an individual be more motivated or inclined towards engaging in home guardianship measures. As such, the potential loss of or harm to items of value is likely to mediate the relationship between sources of information and the use of home guardianship measures.

The component of the threat appraisal process that is most likely to affect assessment of a potential threat and subsequent home guardianship is vulnerability. Vulnerability, in the context of home guardianship refers to the perception of the extent to which it would be easy for someone to break into one's house. This could incorporate a number of factors such a presence of ground floor windows, time spent away from the home, or hidden means of access into the home. Because this is likely to vary substantially from one home to another, perceived

vulnerability would be expected to vary as well. However, this concept too has received little attention in guardianship research. As such, while high perceived vulnerability is likely to lead to an increased use of home guardianship measures, there is limited prior research to rely on for this assumption.

Coping appraisal process. The coping appraisal process allows individuals to consider the costs and effectiveness of engaging in protective behaviors in response to a potential threat (Rogers, 1983). Essentially, the coping appraisal is a cost-benefit analysis of guardianship. There are two key considerations in the coping appraisal process: the efficacy of a recommended response and the cost of implementing the recommended response. In the context of home guardianship, these considerations correspond to the effectiveness of home guardianship measures in deterring or preventing a breaking and the cost to install or participate in a particular home guardianship response.

The first element of the coping appraisal, response efficacy, is likely the most important for home guardianship. An individual must assess whether or not he or she believes that a recommended guardianship measures, such as installing window bars, will be effective in deterring a break in by a potential offender. An individual that believes that a given means of guardianship is ineffective will be less likely to employ it. To date, the only research examining perceived efficacy of a given protective behavior on the subsequent use of that behavior in the context of potential criminal victimization is related to the use of guns for self-defense. However, as mentioned previously, the use of a gun for protection is often a polarizing and unique issue very different from installing locks on a door. As such, there is little empirical guidance to predict the effects of perceived efficacy on the relationship between sources of information and

the use of home guardianship, but one can logically assume that decreased belief in the effectiveness of the response will correspond to a decrease in its use.

The second element of the coping appraisal, response costs, refers primarily to the monetary costs of employing a protective response. In the context of home guardianship, response costs would include the costs incurred to the individual for purchasing or having installed items such as door locks or burglar alarm systems. While household income and cost of materials would be an important consideration for many forms of protective behavior outside of the realm of potential criminal victimization, such a wide range of home guardianship options are available that are either free (i.e. having a neighbor watch one's home while away) to relatively inexpensive (i.e. deadbolt locks). One can engage in home guardianship whether rich, impoverished, or anywhere in between. Guardianship research to date has not addressed the cost of home guardianship measures as a means to predict its use. However, one can logically assume that higher costs for guardianship measures, particularly if cost prohibitive, would be associated with less use of home guardianship measures.

Fear Arousal. It is important to note that in the 1983 revision of PMT theory, fear of victimization does not play the same significant role as it does in other studies of crime-related guardianship. Rogers (1983) argues that the emotional response of fear has a reciprocal relationship with the severity and vulnerability components of the threat appraisal process. However, fear has traditionally been considered a precursor to guardianship in criminal justice research, perhaps playing a more significant role than it would in health-related research. As such, this study modifies Rogers' 1983 PMT model slightly to include fear, an emotional response indicative of worry about victimization, as a third mediator of the relationship between

sources of information and the use of home guardianship. This slightly modified PMT model is illustrated in Figure 2.

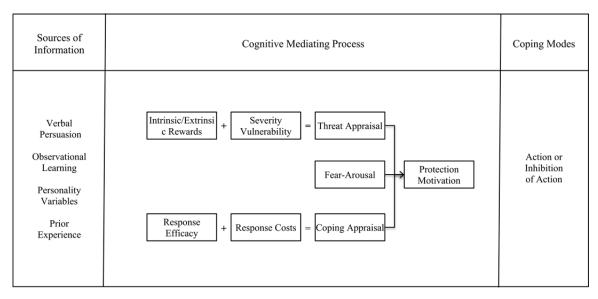


Figure 2 - Modified PMT Model

Two key studies address the effect of fear of victimization on the use of guardianship measures. Giblin (2008) conducted an analysis of a large-scale telephone survey of residents of twelve major cities across the United States collected by the Bureau of Justice Statistics. This study involved numerous variables including residents' perceptions of police and disorder, lifestyle characteristics, demographics, and prior victimization. The results of the study show a strong positive relationship between fear of crime and several forms of guardianship including carrying a warning device and avoiding places that are perceived as dangerous. Another study of a national sample derived from the National Crime Victimization Survey: Victim Risk Supplement revealed similar results with fear of crime having a positive direct effect on guardianship behaviors of individuals and their homes (Lab, 1990). Both studies support the notion that fear serves as a precursor to self-guardianship behaviors, but also include a number of individual- and neighborhood- level effects on guardianship behavior. As such, higher levels of

fear would be expected to account for some of the relationship between sources of information and the use of home guardianship measures.

Summary

Protection Motivation Theory has the potential to help explain the complex processes involved in the decision to use home guardianship measures in response to potential home victimization. This study examines the application of PMT to learn more about this little researched field of home guardianship and the factors influencing its use. Using the guidance of findings identified in this chapter, I will discuss the application of the PMT model to explain home guardianship in this study. The model, variables, and methods used in this study are detailed in Chapter 3 along with the hypotheses for the findings.

Chapter 3

Methodology

Purpose of the Study

The importance of the home as a bastion of safety from external threats cannot be overstated. So it is surprising that so little research focuses on why some individuals chose to fortify their homes against potential criminal threats while others do not. In this study, I attempt to explain levels of home guardianship by examining a model based on Rogers' 1983 Protection Motivation Theory (PMT). The analytical procedure and variables used in this study are discussed in this chapter.

Data Collection Methods

The data used for this study are based on a previously collected data set entitled "Testing Theories of Criminality and Victimization in Seattle, 1960-1990" by Terrance Miethe. Contrary to the title, questionnaire data is only included from surveys conducted in 1990. The data collection consisted of telephone interviews conducted across 100 census tracts in Seattle, WA. The following sections discuss the methodology used to conduct the original data collection.

Sample. The sample for this study was generated using cluster sampling of 100 census tracts in Seattle, WA (Miethe, 1991). Twenty-one additional census tracts within the Seattle area were omitted from the 1990 sample because of shifting borders in these census tracts not meeting the parameters of Meithe's (1991) original study. Within each of the 100 census tracts identified for this study, three pairs of city blocks were selected (Miethe, 1991). Each pair consisted of one block that had at least one reported burglary to the Seattle Police Department in 1989, known as a "victim" street, and a randomly selected adjacent block that may or may not have had a prior burglary victimization, known as a "control" street (Miethe, 1991). This selection methodology was intended to ensure that an adequate number of blocks were selected with prior criminal

victimization, which could be aggregated to the census tract level for neighborhood research (Miethe, 1991).

Research design and data collection. To obtain the survey data, Miethe (1991) conducted phone interviews with eighteen households per block using replacement sampling with a list derived from a telephone directory. Prior to conducting the telephone survey, potential respondents were sent a letter in the mail indicating that they would be contacted by the Seattle Police Department via telephone and the purpose of the study (Miethe, 1998). However, when large numbers of these eighteen home groups failed to respond when called or reported incorrect addresses, an unspecified additional number of homes were included (Miethe, 1991). A total of 9,250 homes were contacted with a final sample of 5,302 (57%) homes included in the data set (Miethe, 1991). Approximately 2,900 were excluded on the basis of "no answer" or "disconnects" (Miethe, 1991).

The survey instrument. The data used in this study were collected using a closed-ended survey administered by telephone. Respondents were asked a series of approximately 200 questions in a single interview. Question topics included basic individual and household characteristics, perceptions of neighborhood disorder, prior experience with personal and home victimization, and personal and home guardianship behaviors. Due to the extensive number of questions involved, only the construction of the questions included in this study will be included in this chapter. However, a full copy of the original survey instrument is included in Appendix A.

Study Variables

A number of variables are included in this study consistent with the various components of the modified PMT model. This modified PMT model, illustrated in Figure 2, is based on

Rogers' original PMT model with some adaptations intended to address unique aspects of home victimization and home guardianship. In the following discussion, I identify and operationalize the concepts used in this study.

Primary dependent variable – coping mode. The primary dependent variable in Rogers PMT model is the means by which an individual can cope with a specific threat, also known as the protective response. In the context of this study, the coping mode for concern about potential home victimization is *home guardianship*. As discussed previously, home guardianship consists of physical modifications to the home or behaviors in which individuals engage in to protect themselves and their property inside the home or ancillary buildings. The primary dependent variable in this study is a measure of the level of home guardianship. Respondents were asked a number of yes/no questions regarding home guardianship measures they currently use. The questions included the following along with the coded response options:

- Do you currently have a burglar alarm or some other electronic device to protect your home from criminals? ("No" = 0, "Yes" = 1)
- Do you currently have extra locks installed on doors or windows? ("No" = 0, "Yes" = 1)
- Do you currently leave lights on when you're not at home? ("No" = 0, "Yes" = 1)
- Do you currently have neighbors watch your home when you're out of town? ("No" = 0, "Yes" = 1)

An exploratory factor analysis of these variables using varimax rotation was performed and confirmed that all variables loaded on the same factor. Responses to each of these questions were summed resulting in a single home guardianship variable with a possible range of zero to four and a valid N of 5154 (97.21%). Consideration was given to the possibility that engaging in one home guardianship measures may negate the perceived need for engaging in another. However, home guardianship measures can provide different means of protection from including

deterrence, detection, delay, and response. As such, using multiple forms of home guardianship does not necessarily result in redundancy, but rather enhancement of guardianship effects¹.

The actual range for this variable was also zero to four. Respondents reported an average of 2.44 guardianship measures used to protect their homes with a median of 3.00. The most frequently used forms of home guardianship were leaving lights on when away (86.9%) and having neighbors watch one's home while away (77.3%). The least used forms of home guardianship were having extra locks on doors or windows (59.3%) and having a burglar alarms or similar device (21.3%). These findings indicate a relatively high level of use of home guardianship measures.

Primary independent variables – sources of information. Sources of information, in the PMT model, form the basis for an individual to determine the extent of a potential threat and potential value of protective responses to that threat. As detailed in Chapter 2, Rogers' (1983) identifies four particular sources of information involved in this process: verbal persuasion, observational learning, personality variables, and prior experience. In this study, several variables have been identified that correspond to each of the sources of information identified by Rogers. These variables serve as the exogenous independent variables affecting the coping response, home guardianship, either directly or indirectly through the cognitive mediating processes. Each variable is discussed below.

Verbal persuasion – Neighborhood social interaction and police interaction. Verbal persuasion consists of interactions with others in which information related to potential threats and protective responses may be relayed to an individual. As discussed in Chapter 2, this verbal

32

¹ An analysis to address this concern by weighting each form of guardianship from what appeared to be least to most extensive did not reveal a substantial difference in findings. As such, the original measurement was retained.

persuasion can either enhance anxiety about potential threats and the need for protective responses or alleviate such fears and discourage protective responses. Two key sources of verbal persuasion are relevant to this study: neighborhood social interaction and police interaction.

In this study, neighborhood social interaction is defined by the frequency of neighboring activities with others in one's neighborhood. Social interaction with neighbors is likely to lead to increased communication about potential threats in the community. In this study, neighborhood social interaction is calculated by summing responses to questions regarding several possible means of socializing with one's neighbors. Respondents were asked a number of yes/no questions regarding activities they have engaged in with neighbors at their current home. The questions included the following along with the coded response options:

- Do you have any good friends or relatives who are neighbors on your block? ("No" = 0, "Yes" = 1)
- Have you borrowed tools or small food items (e.g. milk, sugar) from your neighbors? ("No" = 0, "Yes" = 1)
- Had dinner or lunch with a neighbor? ("No" = 0, "Yes" = 1)
- Helped a neighbor with a problem? ("No" = 0, "Yes" = 1)

An exploratory factor analysis was performed using varimax rotation and confirmed that all of the variables loaded on the same factor. Chronbach's alpha for these variables was .666. This indicates a relatively low, but acceptable, level of internal consistency among the variables. As such, a new variable for social interaction was created by summing the responses to the four questions.

The new social interaction variable had both a possible and actual range of zero to four and a valid N of 5265 (99.30%). Respondents reported an average of 2.33 neighboring activities, though the mode for this variable was 4.00. This indicates that respondents in this study have

moderate to high levels of social interaction within their neighborhoods. Prior research would indicate that this relatively high level of social interaction should correspond to lower levels of fear of victimization, thus less motivation to engage in home guardianship measures.

A second key form of verbal persuasion² related to potential threats of home victimization and home guardianship responses includes direct interaction with local police. Since police provide a reputable source of information for residents about potential threats and protective responses, suggestions from this source are likely to have a substantial impact on guardianship responses. However, direct access to such sources of information is often limited. To measure this form of verbal persuasion, respondents were asked if they "[h]ave participated in a block activity sponsored by the Seattle Police Department." Responses included and were coded as "No" = 0, "Yes" = 1, "Don't know or refused" = missing. Approximately 24% of respondents reported engaging in such activities. These individuals should be most likely to engage in home guardianship activities in response to possible suggestions from the police department. Both neighborhood social interaction and interaction with local police are expected to impact the use of home guardianship measures.

Finally, prior research has found an important link between watching local news and increased fear of crime. However, the data set used for this study did not contain an appropriate measure of if individual's obtained information from news media sources or other specific details such as the frequency or type of media used. As such, this source of verbal persuasion could not be included in the study.

² The social interaction variable and the interaction with the local police department variable were initially treated as conceptually different. However, to confirm that this was the case, a factor analysis was performed with all measures of social interaction and interaction with police. The factor analysis confirmed that these were in fact different, loading on separate factors.

Observational learning – Perceived neighborhood disorder. Observational learning in prior PMT research primarily includes witnessing others experiencing victimization from a given threat or engaging in protective responses to address that threat. However, such information is not readily visible to most individuals in the context of potential home victimization and subsequent home guardianship. For instance, an individual would not be likely to notice the presence of a burglar alarm system in a neighbor's home, nor would he or she notice several clandestine forms of break ins. However, one potential source of information that an individual may consider in the assessment of potential threats is neighborhood disorder. Neighborhood disorder consists of observable aspects of one's neighborhood that indicate a lack of concern for the wellbeing of the community or a sense that "no one cares." For example, a group of loitering teens may be a visual clue to some that parents in the area are not providing oversight of the neighborhood's youth. Such proximal visual cues provide information regarding potential threats in the community that may lead an individual to seek guardianship measures to protect their homes and property.

In this study, perceived neighborhood disorder is measured as a sum of several forms of physical and social disorder that one may notice in his or her neighborhood. Residents were asked "Do you have any of these problems within 3 blocks of your current home?" The following identifies the items included with this question as well as the possible response codes:

- Groups of teenagers hanging around the street ("No" = 0, "Yes" = 1)
- Litter/garbage/trash on the streets ("No" = 0, "Yes" = 1)
- Abandoned houses and run-down buildings ("No" = 0, "Yes" = 1)
- Vandalism like broken windows, writing on walls ("No" = 0, "Yes" = 1)

An exploratory factor analysis was performed using varimax rotation and confirmed that all of the variables loaded on the same factor. Chronbach's alpha for these variables was .606. This indicates a relatively low, but acceptable, level of internal consistency among the variables. As such, a new variable for observational learning was created by summing the responses to the four questions. This new variable had a possible and actual range from zero to four and a valid N of 5179 (97.7%).

Respondents reported an average of 1.05 forms of disorder being a problem within three blocks of their homes. The median for this variable was 1 and the mode was 0, indicating a relatively low level of reported neighborhood disorder for most respondents. Nearly half (43.9%) of respondents reported no forms of disorder near their homes. The most frequently reported form of disorder was the presence of litter or trash (35.5%) and the lowest was the presence of abandoned or rundown buildings (18.2%). An average of 27.4% of respondents reported loitering teenagers and 24.0% reported vandalism within three blocks. While there was a relatively low level of disorder reported among this sample, those reporting the most types of disorder would be expected to have the greatest desire and motivation to engage in home guardianship measures.

Personality variables – Individual characteristics. Rogers (1983) is particularly vague in his description of what is meant by "personality variables" in the PMT model. As such, existing research has employed a variety of potential measures from individual descriptors (e.g. race, age) to psychological characteristics (e.g. introversion, risk-taking behavior). Questions regarding psychological characteristics were not included in the original Meithe (1991) survey, and are thus not available for inclusion in this study. As such, this study utilizes the more basic individual descriptors of age, race/ethnicity, sex, education, and marital status to examine how

these variables may act as sources of information for the use of home guardianship. While these variables do not provide "information" about potential threats to the home and potential response strategies, certain inherent aspects of these characteristics may have a significant influence on the use of home guardianship measures. Operationalization and measurement of these variables in discussed in the following.

Age. For this study, age was measured using the respondent's age in years. In the data set from this the data for this study was taken (Miethe, 1991), respondents were asked in what year they were born. In order to determine the age of the respondent, the year of birth was subtracted from 1990, the year in which the study was conducted. The may result in a variation of one year of age given the date of birth and the date on which the original study was conducted. However, the difference of one year should be minimal given the range of ages in the study. The valid N for this variable was 5296 (99.9%) and the variable had a range of 17 to 97. The mean age of respondents was 48.58 with a median of 44 years of age. Given mixed findings regarding the relationship between age and fear of victimization in prior research, it is difficult to determine how age might affect the use of home guardianship.

Race/Ethnicity. In the original study by Miethe (1991), respondents were asked if they identified as white (coded as 1), black (coded as 2), or other (coded as 3). Because an initial examination of the data revealed a relatively homogenous sample, this data was recoded into two categories: white (coded as 0) and non-white (coded as 1). The category "non-white" combines responses from respondents identifying as either "black" or "other". The resulting variable had a valid N of 5236 (98.8%). The majority of respondents were white (83.9%). Because previous findings are quite mixed regarding the influence, or lack thereof, of race/ethnicity on fear of

victimization, it is difficult to predict the influence of this variable on the use of home guardianship measures.

Sex. Respondents were asked if they identified as male (coded as 1) or female (coded as 0). There was no missing data for this variable. The sample was split almost in half between males and females, with 49.8% reporting being female. Given mixed findings regarding the relationship between sex and fear of victimization, particularly the difference between fear of personal and home victimization, it is difficult to predict how sex may affect the use of home guardianship measures.

Education. The respondent's level of education may reflect their level of knowledge regarding potential threats and protective responses. Education, for the purposes of this study, was measured as having completed college (coded as 1) or having not complete college (coded as 0). The valid N for this variable was 5274 (99.5%). The majority of respondents reported having completed college (70.7%). This indicates a relatively high level of college-educated individuals in the sample. Given the limited and varying findings regarding education level and fear of victimization and guardianship use, it is difficult to predict the influence of this variable on the findings in this study.

Marital status/cohabitation. The fifth and final variable used to represent the "personality variables" component of the PMT model for this study was the respondents' marital status. While the original Miethe (1991) study asked respondents to identify as being in one of many types of relationship statuses (e.g. single never married, divorced, widowed), these response categories were recoded for the purposes of this study. The resulting variable included two categories: "married or cohabitating" (coded as 1) and "not married or cohabitating" (coded as 0). The resulting variable had a valid N of 5248 (99.0%) with over half (55.0%) of respondents

reporting being married or cohabitating. Previous findings regarding marital status and fear of victimization generally indicate that those who are married are less fearful of victimization, thus should be less likely to engage in home guardianship measures.

While prior research has shown that those with children report typically report increased levels of fear, the data from the original Miethe (1990) study did not include an adequate means to measure the presence of children in the home. It was not clear from questions regarding the whether or not the respondent had children, if those children were current in the respondent's home full time nor the exact ages of the children. For this reason, it was determined that this variable should not be included in this study.

Prior experience – Prior home victimization. The final source of information identified in the PMT model is prior experience. According to Rogers' (1983), prior experience refers to an individual direct or indirect experience with a potential threat or protective response. In the context of home guardianship, prior experience corresponds to prior home victimization experienced by an individual and/or those around him or her. Unfortunately, the study from which this data was drawn (Miethe, 1991), only addressed prior home victimization experienced by the respondent in such a way that it is applicable to this study. As such, it is not possible to examine this source of information as either victimization experienced by others close to the individual or as prior experience with home guardianship measures. However, as experience with home victimization by an individual is likely to have a substantial effect on that individual's interpretation of potential threats and protective responses, such a variable should well capture the intent of prior experience in the PMT model.

For this study, prior experience was measured by asking respondents (in two separate questions) if they had experienced a break in or attempted break in at their current home.

Respondents could answer yes (coded as 1) or no (coded as 0) for each question. This information was combined into a single variable such that if the respondent had experienced an attempted or actual break in at their current home, their response was recoded into a single response of yes (coded as 1) or no (coded as 0). This new variable had a valid N of 5296 (99.9%). Approximately one-third (34.4%) of respondents had experienced an attempted or actual break-in at their current home. This seems to be a relatively high level of victimization, but may be skewed due to the sampling technique used in the original Miethe (1991) study. This may be somewhat controlled for by including the status of each case as a "victim" or "control" street as discussed later in this chapter. Nonetheless, those experiencing a prior attempted or actual victimization at their home would be expected to have a higher motivation and thus actual use of home guardianship measures.

Mediating variables – Cognitive mediating processes. According to Rogers' (1983) PMT model, the effects of sources of information regarding potential threats and protective responses on the motivation to use, or actual use of, protective measures is mediated by a rationalization process. The individual weighs the information in light of these cognitive processes considering factors such as the costs of engaging in protective behaviors, the severity of the threat, and their belief in the efficacy of protective responses. Rogers (1983) identified two cognitive mediating processes: threat appraisal and coping appraisal. In this study, I use a modified model of PMT that also includes a fear of victimization as a cognitive mediating process. Each of these processes is discussed in the following.

Threat Appraisal Process – Threat Vulnerability. The threat appraisal process consists of four elements: intrinsic rewards, extrinsic rewards, severity, and vulnerability. Intrinsic and extrinsic rewards refer to the potential benefits of the individual *not* engaging in a protective or

guardianship measure in response to a threat. As such, when the rewards of avoiding protective behavior are high, there is less incentive for the individual the engage in such measures. In the context of home guardianship, these intrinsic and extrinsic rewards would likely correspond to spending more time outside of the house with friends and or engaged in recreational activities. Unfortunately, data from the Miethe (1990) study used for this analysis did not include an appropriate measure with which to measure intrinsic and extrinsic rewards.

The next element of the threat appraisal process of the PMT model is an assessment of the severity of the threat. In the context of home guardianship, this would likely correspond to the value an individual places on the property within their home and/or the presence of children or other family members that the individual cares for within the home. Unfortunately, the data set from which the data for this study was derived did not include a suitable measure of perceived threat severity. As such, this element of the threat appraisal process could not be included in this study. This may result in a de-emphasis of an important component of the threat appraisal process. The implications of this are discussed in more detail in Chapter 5.

The final element of the threat appraisal process is the individual's assessment of their vulnerability to the potential threat. In the context of this study, this refers to the belief that the home is or is not likely to be broken into. Respondents were asked if they thought it would be easy (coded as 1), somewhat difficult (coded as 2), or very difficult (coded as 3) for a burglar to break into their house/apartment. For the purposes of capturing vulnerability in this study, these responses were recoded as "vulnerable" (combining "easy" and "somewhat difficult" responses and recoding as 1) and "not vulnerable" (equivalent to "very difficult" and recoded as 0). It was

determined that this was the appropriate means to categorize this variable because both "easy" and "somewhat difficult" indicate some level of doubt in the security of the home³.

This new variable has a valid N of 5091 (96%) with 85% of the respondents reporting that their home was at least somewhat vulnerable to a break in. This indicates a relatively high level of concern regarding vulnerability to home victimization. Higher levels of perceived vulnerability would be likely to explain an increase in the use of home guardianship measures in response to potential threats of home victimization and suggestions for home guardianship responses.

Coping Appraisal Process – Guardianship Efficacy. The second mediating process in the PMT model is the coping appraisal process in which the individual assesses the costs, benefits, and efficacy of suggested protective responses to a potential threat (Rogers, 1983). In the context of home guardianship, this corresponds to an individual's belief that a given means of home guardianship will or will not be effective and efficient in preventing a break in. The coping appraisal process consists of two key considerations: efficacy and cost. Each of these is discussed in the following.

The first component of the coping appraisal process is the assessment of efficacy of the protective response. This corresponds to the individual's belief that a given home guardianship measure will or will not prevent a potential offender from breaking into the home. While the data available for this study did not specifically offer a measure of confidence in *home* guardianship, a proxy variable was chosen to represent the individual's confidence in other forms of personal guardianship, or measures used while in public to prevent criminal victimization. An individual

42

³ An additional analysis was run using recoding "easy" to "vulnerable" and "somewhat difficult" and "very difficult" to "not vulnerable". The results did not differ substantially and significant findings remained significant in both analyses.

who is willing to engage in measures to protect themselves in public would also be expected to be willing to engage in measures to protect themselves in their home.

Belief in guardianship efficacy was measured by asking respondents if they engage in a series of personal guardianship measures in a place they feel is dangerous: checking one's wallet/purse regularly (yes=1, no=2), looking around for suspicious looking people (yes=1, no=2), avoiding eye contact with strangers (yes=1, no=2), walking at a faster pace than usual (yes=1, no=2), and trying to stay at a safe distance from strangers (yes=1, no=2). Initially, a count variable of the "yes" responses was created with a range of 0 to 5. However, this resulted in a relatively high level (approximately 10%) of missing data resulting from listwise deletion of cases missing responses to one or more types of personal guardianship. As such, it was determined that the percentage of guardianship engaged in would be best suited for this variable.

This new variable was calculated by dividing the count of "yes" responses for the five forms of personal guardianship by a count of the valid (non-missing) responses given by the respondents to these questions. Cases in which a respondent failed to answer three or more of the five questions were omitted, resulting in a 1.5% missing portion of the sample. The results indicate a varied use of personal guardianship measures as shown in Table 2.

Table 2 - Percent of Personal Guardianship Measures Used

		Г	D 4	Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	0	508	9.6	9.7	9.7
	20	580	10.9	11.1	20.8
	25	79	1.5	1.5	22.3
	33	18	.3	.3	22.7
	40	795	15.0	15.2	37.9
	50	89	1.7	1.7	39.6
	60	993	18.7	19.0	58.6
	66	15	.3	.3	58.9
	75	104	2.0	2.0	60.9
	80	1062	20.0	20.3	81.2
	100	982	18.5	18.8	100.0
	Total	5225	98.5	100.0	
Missing	System	77	1.5		
Total	-	5302	100.0		

The table shows a distribution that is slightly skewed towards a higher percentage of personal guardianship measures engaged in. It is likely that because these individuals trust in personal guardianship measures to keep them safe in public, they will similarly turn to home guardianship measures to keep them safe in their homes. As such, high percentages of personal guardianship usage should mediate the relationship between sources of information and the use of home guardianship measures accounting for higher levels of home guardianship.

Fear assessment – **Fear of a break in.** In the 1983 version of the PMT model, a "fear arousal" component was included, not as a separate appraisal process, but as a reciprocal influence on the vulnerability and severity assessment. However, given the substantial focus on the relationship between fear and guardianship in criminal victimization related research, I chose to include fear of a break in as a potential mediator in this study.

Fear of home victimization (i.e. a break in) was measured by asking residents how often they think or worry about someone breaking into their home⁴. Respondents could answer with the following: every day (coded as 1), about once a week (2), once per month (3), or less than once a month (4). These responses were recoded into two response categories: "frequently" coded as 1 and combining "everyday" and "about once a week" responses, and "not often" coded as 0 and combining "once per month" and "less than once per month" responses. The resulting variable had a valid N of 5221 (1.5%). Approximately one-third of the respondents (38.4%) reported frequently (about once per week or more) worrying about a break in. Frequently worrying about home victimization would be expected to account for higher levels of home guardianship use in response to sources of information.

Control variables. Understanding the unique nature of home guardianship requires some additional considerations beyond those identified in the PMT model. In particular, it was important to control for two additional variables in this study: status of the respondent as being on a "victim" or "control" street and status of the home as "owned" or "rented".

The data collection process used in the original Miethe (1991) study from this the data for this study is derived, used a unique sampling methodology to emphasize burglary victimization as discussed previously. Because this could have some influence on the analysis related to home victimization and perceived vulnerability, the status of the case as being on a "victim" (coded as 0) or "control" (coded as 1) street was controlled for in this study. As expected from the sampling methodology, respondents were split among victim and control streets. 49.5% reported

_

⁴ It is important to note that worry about a break in may be different from the emotional fear of crime. The use of the term "fear" in this study is meant to parallel terminology used in Rogers' PMT model.

being from victim streets while 50.5% reported being from control streets. Implications of this sampling methodology on the findings are detailed in Chapter 5.

Another consideration specific to home guardianship research is the status of the respondent as a home owner or renter. Because many rental homes limit the amount of modifications that an individual can implement, residents may be limited in the number or types of home guardianship measures they can engage in. While several forms of home guardianship included in this study do not require physical modifications that would potentially be in conflict with apartment bylaws, rental (coded as 0) or ownership (coded as 1) status is controlled for in this study. Thirty-five percent of respondents reported being home renters while sixty-five percent reported being home owners. Less than 0.5% of cases had missing data for this variable.

Statistical Analysis

The analysis used for this study involves multiple stages. Stage 1 consists of conducting univariate analyses for all variables in the analysis to establish descriptive information and statistics for each variable. Stage 2 involves bivariate analyses of all study variables to check for potential sources of multicollinearity. Stages 3 through 5 are based on Baron and Kenny's (1986) guidance on examining mediation among test variables. Stage 3 includes an OLS regression of the variables representing sources of information as the independent variables with the home guardianship variable as the dependent variable to examine the effects of sources of information on the use of guardianship measures. Stage 4 includes OLS and logistic regressions, as appropriate, of the variables representing the sources of information as the independent variables with the variables representing the cognitive mediating process as the dependent variables to determine if these sources of information have a significant influence on the elements of the cognitive mediating process. The sources of information must have a significant influence on the

cognitive mediating process variables in order for the cognitive mediating variables to be potential mediators of the impact of sources of information on the use of home guardianship measures. Stage 5 involves an OLS regression with the variables representing sources of information and the cognitive mediating process as the independent variables with the home guardianship variable as the dependent variable. Changes in the effects of sources of information on home guardianship with the addition of the cognitive mediating variables to the analysis are indicative of a mediating effect of the cognitive mediating variables. This multistep analysis is applied for this study to examine the potentially complex role of both sources of information and cognitive mediating processes on the use of home guardianship measures.

Statistical software.

Analyses for this study were conducted using two statistical software programs. Preliminary analyses were conducted using Statistical Program for Social Sciences Version 18. Regression analyses were conducted using Stata Version 12 to allow for control of variation associated with the clustered sampling process used in the original data collection process. Robust standard errors were calculated for all regression analyses to control for the neighborhood clustering.

Study Hypotheses

In this study, I intend to test the applicability of PMT to help explain the factors and processes involved in the level of home guardianship. I propose the following hypothesis for this study:

Hypothesis 1: The following sources of information will be significantly associated with the use of home guardianship measures as identified in the following:

H1a: Social interaction with neighbors will be significantly associated with the use of home guardianship measures such that those with more social interactions with neighbors should engage in fewer home guardianship measures.

H1b: Participation in block activities with the location police department will be significantly associated with the use of home guardianship measures such that those who participate in block activities with the local police department will engage in more home guardianship measures than those that do not.

H1c: Perceived neighborhood disorder will be significantly and positively associated with the use of home guardianship measures such that those with higher levels of perceived neighborhood disorder will engage in more home guardianship activities than those with lower levels of perceived disorder.

H1d: Respondent age will be significantly associated with the use of home guardianship measures though the direction of the relationship cannot be predicted based on prior research.

H1e: Race/Ethnicity will be significantly associated with the use of home guardianship measures though the direction of this relationship cannot be predicted based on previous research.

H1f: Sex will be significantly associated with the use of home guardianship measures though the direction of this relationship cannot be predicted from previous research.

H1g: Education will be significantly associated with the use of home guardianship measures though the direction of this relationship cannot be predicted from previous research.

H1h: Marital status will be significantly and negatively associated with the use of home guardianship measures such that those who are married or cohabitating will engage in fewer home guardianship measures than those who are single or living alone

H1i: Prior victimization will be significantly associated with the use of home guardianship such that those who have experienced a prior break in will engage in more home guardianship measures than those that have not previously been a victim of a break in.

Hypothesis 2: The following cognitive mediating variables with have a significant mediating effect on the relationship between each source of information and the use of guardianship measures.

H2a: Threat vulnerability will mediate the relationship between each of the sources of information and the use of guardianship. Sources of information are likely to increase perceived vulnerability to a break in which will increase home guardianship.

H2b: Perceived response efficacy will mediate the relationship between each of the sources of information and the use of guardianship. Sources of information are likely to increase likelihood that an individual will engage in personal guardianship measures which will increase home guardianship.

H3c: Fear arousal will mediate the relationship between each of the sources of information and the use of home guardianship. Sources of information are likely to increase worry about a break in at the home which will increase home guardianship.

Methodological Summary and Conclusion

In summary, this study provides insight into the decision-making processes involved in utilizing home guardianship measures using a multivariate, multistage analysis. While there are some potential issues with the generalizability of the sample and the data collection methods discussed above, these can be somewhat controlled for in the statistical analysis. The results of this analysis are discussed in Chapter 4. Implications of the data collection and analysis process as well as implications and discussion of the findings are detailed in Chapter 5.

Chapter 4

Results

Guardianship of the home provides a sense of security and safety for its residents, but the decision to use home guardianship depends on a number of factors and is likely more complex than a simple response to fear of potential victimization. While several studies have examined the effects of various individual and neighborhood characteristics on the use of personal guardianship or guardianship in general, few have examined these variables specifically in the context of home guardianship. Rogers (1983) also proposes in his PMT model that protective behaviors are the result of a more complex cognitive process rather than the direct effect of any given variable. As such, additional research is needed to explore the potentially complex relationships involved in the use of home guardianship measures.

In this study, I examine the effects of sources of information about potential criminal threats and means to protect the home on the use of home guardianship measures. In addition, I also examine the effects of an individual's cognitive processes in mediating this relationship between sources of information and the use of home guardianship measures. Using Baron and Kenny's (1986) methodology for examining mediating effects, this study is comprised of several analyses to identify several factors contributing to the use of home guardianship. The results reveal several sources of information significantly associated with the use of home guardianship as well a minor, but present, mediating effect of each element of the cognitive mediating process on this relationship.

Descriptive Statistics

Table 3 provides the relevant descriptive statistics for each variable included in this study. Additional details and discussions are provided in the subsequent sections.

Table 3 – Descriptive Statistics

Variables	Matrica	Descriptive Statistics		
	Metrics	Mean	Std. Dev.	Range
Protective Behavior				
(Dependent)				
Coping Response - Home	no. types of home guardianship	2.44	1.01	0-4
Guardianship	engaged in			
Sources of Information				
(Primary Independent) Verbal Persuasion – Social	no. types of interaction with			
Interaction with Neighbors	neighbors	2.33	1.37	0-4
Verbal Persuasion – Participation in	0 = no			
Block Activities with Local PD	1 = yes	.24	.43	0-1
Observational Learning – Perceived	no. types of disorder witnessed		1.18	0-4
Neighborhood Disorder	within 3 blocks of home	1.05		
Personality Variables – Age	respondent age in years	48.58	17.95	17-97
Personality Variables –	0 = white	1.5	20	0.1
Race/Ethnicity	1 = non-white	.15	.39	0-1
Personality Variables – Sex	0 = female	.50	.5	0-1
reisonality variables – Sex	1 = male	.30	.3	0-1
Personality Variables – Education	0 = not complete college	.71	.46	0-1
	1 = complete college	., 1	.10	0 1
Personality Variables – Marital	0 = not married/cohabitating	.55	.50	0-1
Status	1 = married/cohabitating			
Prior Experience – Prior Break in or	0 = no	.34	.48	0-1
Attempted Break in	1 = yes			
Cognitive Mediating Variables (Mediators)				
Threat Appraisal – Vulnerability of	0 = not vulnerable			
Home	1 = vulnerable .85		.361	0-1
	percentage of personal			
Coping Appraisal – Guardianship	guardianship measures engaged	57.79	31.51	0-100
Efficacy	in			
Fear Arousal – Worry About Break	0 = not often	.39	.49	0-1
In	1 = frequently	.39	.49	U-1
Control Variables				
Victim or Control Street	0 = victim	.51	.5	0-1
Victim of Control Street	1 = control	.51	.5	0 1
Home Ownership	0 = rent	.65	.48	0-1
T	1 = own			

Coping response - Home guardianship measures. Respondents reported employing an average of 2.44 home guardianship measures with a mode of 3 guardianship measures. Having extra locks on one's doors and leaving lights on when away from the home were the most frequently reported forms of home guardianship with 86.9% of the sample reporting use of each. Having a neighbor watch one's home when away was also reported relatively frequently at

77.3%. Having extra locks on doors or windows was reported by 59.6% of respondents. Finally, having burglar alarms (21.3%) was the least frequently used form of home guardianship. These findings indicate that residents in this sample are indeed relying on supplementary home guardianship measures, but some forms of home guardianship measures are certainly favored over others.

Sources of information. Several sources of information were considered in this study in accordance with Rogers's (1983) PMT model. These sources of information were divided into four types: verbal persuasion, observational learning, personality variables, and prior experience. Descriptive statistics for each of the variables in each of these categories are included in Table 3 and are discussed in the following subsections.

Verbal persuasion. Respondents reported an average of 2.33 applicable activities indicating moderate social interaction among neighbors. It is interesting to note that the mode for this variable was 4, highlighting the strength of social ties among many of the respondents in this study. The second form of verbal persuasion used in the study is participation in block activities with the local police department. Twenty-four percent of respondents reported participation in these block activities with the local police department. These percentages are indicative of relatively high potential for verbal persuasion in the community.

Observational learning. Respondents reported an average of 1.05 forms of disorder within three blocks of their homes. The median for this variable was 1 and the mode was 0, indicating a relatively low level of reported neighborhood disorder for most respondents. Nearly half (43.9%) of respondents reported no forms of disorder hear their homes. The most frequently reported form of disorder was the presence of litter or trash (35.5%) and the lowest was the

presence of abandoned or rundown buildings (18.2%). An average of 27.4% of respondents reported loitering teenagers and 24.0% reported vandalism within three blocks.

Personality variables. A number of variables were used in this study to represent the personality traits component of the PMT model. These included respondent's age, race/ethnicity, sex, college completion (education), and status as married or cohabitating. The average age of respondents in this study is 48.58 years with a range from 17 to 97. The sample was perfectly split between males and females at 50% each. Eighty-five percent of the sample was white and 55% were either married or cohabitating. Finally, a relatively high number of respondents, 71%, had completed a college degree. While these variables are not necessarily representative of any particular personality trait, each has the potential for common effects on the use of home guardianship measures.

Prior experience. Thirty-four percent of respondents reported having previously experienced a break in or attempted break in at their current home. While this number may appear relatively high, it is important to note that the selection process for gathering data was centered on neighborhoods that had previously had at least one break in. As such, the status of one's block as a "victim" or "control" street was controlled for in the analyses for this study. Additional details of the selection process are discussed in Chapter 3 and in a subsequent section of this chapter.

Cognitive mediating processes. Three variables were included in this study representing each of three cognitive mediating variables in the modified PMT model as detailed in Chapter 3. These variables, per the modified PMT model, are expected to mediate the effects of sources of information regarding potential criminal threats against the home and the subsequent guardianship responses. First, the vulnerability component threat appraisal elements of the PMT

model was operationalized by asking respondents how difficult it would be for someone to break into their home. Eighty-five percent reported that their home was vulnerable to a break in (it would be somewhat difficult to easy to break in). The coping appraisal component was measured by asking respondents how many personal guardianship measures (checking wallet/purse, looking for suspicions people, avoiding eye contact with strangers, walking at a faster than normal pace, and staying at a safe distance from stranger) they use in areas they believe are dangerous. This measure was intended to gauge the perceived efficacy of using guardianship measures in response to the threat of crime. Because of issues related to missing data (detailed in Chapter 3), percentage of guardianship measures engaged in per responses given by an individual was calculated. On average, respondents engaged in 57.79% of the personal guardianship measures to which they responded to. Finally, fear arousal was added to Rogers's (1983) PMT model as its own appraisal process in the modified PMT model. Fear arousal was measured as the frequency at which individuals worry about a break in at their home. Thirtyeight percent reported frequently worrying about a home break (at least once per month or more). These findings indicate a relatively high level of concern about the safety of the home as well as a sense that guardianship may be a useful response to criminal threats.

Control variables. Two control variables were included in this study to address data collection issues: home ownership and street status. Because home owners are likely to have more liberty to modify their home with guardianship measures than home renters, the respondent's status as a home owner or renterpro was included as a control measure. Sixty-five percent of respondents reported that they owned their current home. Because of the collection process used to gather data, respondents were selected based on their proximity to streets that had experienced a burglary in the past, as discussed in Chapter 3. Because this may have skewed

the sample towards a more vulnerable population, the status of the street as a "victim" street (previously experienced a break in) or "control" street (adjacent but not necessarily with a previous break in) was included. Fifty-five percent of the respondents were located on a control street.

Bivariate Analyses

A correlation matrix is provided in Appendix B. No potential issues with multicollinearity were identified for the variables used in this study.

Mediating Analyses for Guardianship PMT Model

The mediating analyses follow the format for examining mediating effects as proposed by Baron and Kenny (1986) to identify factors contributing to the use of home guardianship measures and the applicability of the PMT model in understanding the cognitive processes involved in the use of home guardianship. The first step in this analysis included examining the effects of several sources of information related to potential criminal threats and guardianship responses on the use of home guardianship. The second step included examining the effects of these sources of information on each of the three components of the cognitive mediating process. Finally, the third step involved examining the potential mediating effects of the cognitive mediating process variables on the relationship between the sources of information and the use of home guardianship measures. In addition, several variables were controlled for at each stage of these analyses. The results of these analyses are discussed in the following sections.

Effects of sources of information on the use of home guardianship measures. In the first step of this analysis, I examined the relationship between sources of information related to potential threats or forms of guardianship and the use of home guardianship measures. This analysis was conducted using OLS regression. The results reveal that several sources of

information are significantly related to the use of home guardianship measures. Being a prior victim of a break in at one's current home, having strong social ties with others in the neighborhood, participating in block activities with the local police department, and being married or cohabitating with another individual were all significantly and positively associated with an increase in the use of home guardianship measures. Home ownership, used as a control variable in this study, was also significantly and positively associated with an increase in the use of home guardianship. Table 4 details these findings.

Table 4 –Relationship Between Sources of Information and the Use of Home Guardianship

Variables	Unstd. Coef.	Robust Std. Err.				
Sources of Information						
Verbal Persuasion – Social Interaction with Neighbors	.1399*	.0101				
Verbal Persuasion – Participation in Block Activities with Local PD (1 = yes)	.1843*	.0307				
Observational Learning – Perceived Neighborhood Disorder	.0004	.0185				
Personality Variables – Age	0007	.0010				
Personality Variables – Race/Ethnicity (1 = non-White)	0386	.0371				
Personality Variables – Sex (1 = male)	0571*	.0285				
Personality Variables – Education (1 = completed college)	.0204	.0289				
Personality Variables – Marital Status (1 = married/cohabitating)	.2216*	.0272				
Prior Experience – Prior Break in or Attempted Break in (1 = yes)	.2251*	.0266				
Control Variables						
Victim or Control Street (1 = control)	0177	0177				
Home Ownership (1 = own)	.5662*	.0410				
Constant						
Constant	1.4972*	.076				

Notes:

 $R^2 = .2226$

* = p < .05

Several sources of information were found to be significantly related to the use of home guardianship. Social interaction with neighbors and participation in block activities with the local police department, measures of verbal persuasion, were significantly and positively associated in an increase in the number of home guardianship measured used. Prior experience, in this case prior experience with a break in or attempted break in, was also significantly and positively related to the increased use of home guardianship measures. Those who had previously experienced a break in or attempted break in at their current home engage in approximately .22 more types of home guardianship than those that had not experienced such prior victimization. Two of the personality variables showed significant relationships with the use of home guardianship measures. Females and those who were married or cohabitating were significantly more likely to engage in home guardianship measures than their counterparts. Finally, perceived neighborhood disorder, a measure of observational learning, was not found to be significantly associated with the use of home guardianship measures. The R square for this regression was .2226, indicating that roughly 22% of the variance in the use of home guardianship measures was explained by the sources of information included in this study.

Effects of sources of information on cognitive mediating processes. The second step in this analysis involved examining the effects of the sources of information on each component of the cognitive mediating process. This is done as part of Baron and Kenny's (1989) process for identifying mediating effects. In order for the cognitive mediating effects in this study to have a mediating effect on the relationship between sources of information and home guardianship, they must have a significant relationship with one or more of the sources of information. Due to the dichotomous nature of two of the cognitive mediating variables, the relationships between the sources of information and the threat appraisal variable (perceived vulnerability of the home to a

break in) and the fear arousal variable (worry about a break in) were examined using logistic regression. The relationship between the sources of information and the coping appraisal variable (use of personal guardianship measures) was calculated using OLS regression. Tables 4.3 through 4.6 show the results of this part of the analysis.

Sources of information and threat appraisal (perceived home vulnerability). Table 5 shows the relationships between sources of information and worry about home victimization (break in).

Table 5 - Relationship Between Sources of Information and Perceived Home Vulnerability

Variables	Unstd. Coef.	% Change Odds ⁵	Robust Std. Err.
Sources of Information			
Verbal Persuasion – Social Interaction with Neighbors	.0215	2.2	.0257
Verbal Persuasion – Participation in Block Activities with Local PD (1 = yes)	0778	-7.5	.0983
Observational Learning – Perceived Neighborhood Disorder	-0008	-0.1	.0407
Personality Variables – Age	0113*	-1.1	.0027
Personality Variables – Race/Ethnicity (1 = non-White)	3774*	-31.4	.0711
Personality Variables – Sex (1 = male)	.1460	15.7	.1001
Personality Variables – Education (1 = completed college)	.3772*	45.8	.1154
Personality Variables – Marital Status (1 = married/cohabitating)	0471	-4.6	.0809
Prior Experience – Prior Break in or Attempted Break in (1 = yes)	.2114*	23.5	.1077
Control Variables			
Victim or Control Street (1 = control)	.0023	0.2	.0835
Home Ownership (1 = own)	.1391	14.9	.1274

Notes:

^{* =} p < .05

⁵ Calculated using the following formula: $\%\Delta = (e^b-1)*100$

Only a few of the sources of information appeared to have a significant relationship with perceived home vulnerability. Younger individuals, Whites, those who had completed college, and those who had experienced a prior break in or attempted break in at their current home were significantly more likely to report believing their home was vulnerable to a break in (somewhat difficult to easy to break in). Social interaction with neighbors, participation in block activities with the local police department, perceived neighborhood disorder, sex, and marital status did not appear to be significantly associated with perceived vulnerability of the home.

Sources of information and coping appraisal (personal guardianship). Table 6 shows the relationships between sources of information and the use of personal guardianship measures.

Table 6 –Relationship Between Sources of Information and Use of Personal Guardianship Measures

Variables	Unstd. Coef.	Robust Std. Err.
	Olista. Coel.	Kooust Stu. E11.
Sources of Information		
Verbal Persuasion – Social Interaction with Neighbors	.7611*	.3473
Verbal Persuasion – Participation in Block Activities	1.9679	1.0863
with Local PD $(1 = yes)$	1.5075	1.0003
Observational Learning – Perceived Neighborhood	1.1576*	.3765
Disorder	1.13/0	.3703
Personality Variables – Age	1315*	.0307
Personality Variables – Race/Ethnicity (1 = non-	-2.3899	1.2338
White)	-2.3699	1.2336
Personality Variables – Sex (1 = male)	-16.2106*	.8550
Personality Variables – Education (1 = completed	2.0439*	1.0279
college)	2.0439	1.0279
Personality Variables – Marital Status (1 =	1.4145	.8919
married/cohabitating)	1.4143	.0919
Prior Experience – Prior Break in or Attempted Break	2272	0760
in (1 = yes)	2273	.9769
Control Variables		
Victim or Control Street (1 = control)	4988	.9236
Home Ownership (1 = own)	-2.0311	1.0811

Notes:

^{* =} p < .05

The use of personal guardianship measures was used in this study as a proxy for belief in the efficacy of guardianship in response to a threat of crime-related victimization. Females, those with college degrees, and younger individuals were significantly and positively associated with the increased use of personal guardianship measures. As such, these individuals should have a stronger belief in the efficacy of guardianship measures than their counterparts. Those reporting more forms of physical and social disorder in their neighborhood also used significantly more personal guardianship measures than those reporting lower levels of neighborhood disorder. Finally, more types of social interaction with neighbors were associated with increased numbers of personal guardianship measures than those with less social interaction with their neighbors. Participation in block activities with the local police department, race/ethnicity, marital (or cohabitation) status, and prior experience with a break in were not found to be significantly related to the use of personal guardianship measures.

Sources of information and fear arousal appraisal (worry about home victimization).

Table 7 shows the relationships between sources of information and worry about home victimization (break in).

Table 7 – Relationship Between Sources of Information and Worry About Home Victimization (Break In)

(Break III)			
Variables	Unstd.	% Change	Robust Std.
variables	Coef.	Odds	Err.
Sources of Information			
Verbal Persuasion – Social Interaction with Neighbors	.0266	2.7	.0228
Verbal Persuasion – Participation in Block Activities	.1631*	17.7	.0933
with Local PD $(1 = yes)$.1031	17.7	.0933
Observational Learning – Perceived Neighborhood	.2022*	22.4	.0338
Disorder	.2022	22.4	.0336
Personality Variables – Age	0142*	-1.4	.0020
Personality Variables – Race/Ethnicity (1 = non-	2030*	-18.4	.0672
White)	2030	-10.4	.0072
Personality Variables – Sex $(1 = male)$.1595*	17.3	.0694
Personality Variables – Education (1 = completed	.0000	0.0	.0668
college)	.0000	0.0	.0008
Personality Variables – Marital Status (1 =	.2022*	22.4	.0814
married/cohabitating)	.2022	22.4	.0014
Prior Experience – Prior Break in or Attempted Break	.4471*	56.4	.0945
in (1 = yes)	.44/1	30.4	.0743
Control Variables			
Victim or Control Street (1 = control)	0369	-3.6	.0578
Home Ownership $(1 = own)$.1604*	17.4	.0898
NT 4			

Notes:

Several of the sources of information used in this analysis had significant relationships with worry about a break in at one's home. Prior experience had a particularly strong relationship with worry about home victimization with a 56.4% increase in odds of frequently (at least once per month) worrying about a break in as compared with those that did not frequently worry about a break in (less than once per month). Being married/cohabitating, male, White, and participating the block activities with the local police department were also significantly and positively associated with worry about a break in. Age was negatively associated with worry about a break in such that younger respondents were more likely to report believing that there was some level of vulnerability of their home to a break in than were older individuals. Finally, perceived

^{* =} p < .05

disorder was significantly and positively related to perceived home victimization such that those reporting higher levels of physical and social disorder within three blocks of their homes were more likely to frequently worry about a break in at their home. Social interaction with neighbors and education level did not appear to be significantly related to worry about home victimization.

Summary of effects of sources of information on cognitive mediating process variables.

Table 8 summarizes the significant relationships found between the sources of information and the cognitive mediating variables. It is important to note from this table that each appraisal process is significantly associated with at least one of the sources of information. In particular, age has a significant negative relationship with all three appraisal processes. Sex, on the other hand, positively affects one relationship while negatively affecting another. Because each of the appraisal process is affected by at least one source of information, there is a potential for each appraisal process to mediate the relationship between sources of information and guardianship.

Table 8 -Relationship Between Sources of Information and Cognitive Mediating Variables

Variables	Threat	Coping	Fear
Variables	Appraisal	Appraisal	Arousal
Sources of Information			
Verbal Persuasion – Social Interaction with	NS	+	NS
Neighbors	NS	Т	11/2
Verbal Persuasion – Participation in Block	NS	NS	+
Activities with Local PD $(1 = yes)$	NS	110	1
Observational Learning – Perceived Neighborhood	NS	+	+
Disorder	NS	'	'
Personality Variables – Age	-	-	-
Personality Variables – Race/Ethnicity (1 = non-		NS	
White)	_	110	-
Personality Variables – Sex (1 = male)	NS	-	+
Personality Variables – Education (1 = completed	+	+	NS
college)	1	•	110
Personality Variables – Marital Status (1 =	NS	NS	+
married/cohabitating)	No	116	'
Prior Experience – Prior Break in or Attempted	+	NS	+
Break in $(1 = yes)$	1	110	'
Control Variables			
Victim or Control Street (1 = control)	NS	NS	NS
Home Ownership (1 = own)	NS	NS	+

Analysis of the cognitive mediating effects of appraisal processes on the relationship between sources of information and the use of home guardianship. The final component in the analysis of mediating effects was performed using an OLS regression of the home guardianship variable, each of the sources of information, and each of the appraisal processes. The purpose of this process is to identify changes in the coefficients for the relationship between sources of information and the use of home guardianship in the presents of the cognitive mediating processes. Table 9 presents the results of this analysis.

Table 9 – Relationship Between Sources of Information and Use of Home Guardianship with Cognitive Mediating Processes

Without Mediating With Madiating Processes				
			Processes With Mediating Processes	
	Unstd.			Robust Std.
Variables	Coef.	Err.	Unstd. Coef.	Err.
Sources of Information				
Verbal Persuasion – Social Interaction with	1200*	0101	1272*	0105
Neighbors	.1399*	.0101	.1372*	.0105
Verbal Persuasion – Participation in Block	1042*	.0307	1042*	0215
Activities with Local PD $(1 = yes)$.1843*	.0307	.1843*	.0315
Observational Learning – Perceived	.0004	.0185	0079	.0184
Neighborhood Disorder	.0004	.0165	0079	.0104
Personality Variables – Age	0007	.0010	0007	.0010
Personality Variables – Race/Ethnicity (1 =	0386	.0371	0407	.0389
non-White)		.0371	0-07	.0307
Personality Variables – Sex $(1 = male)$	0571*	.0285	0326	.0299
Personality Variables – Education (1 =	.0204	.0289	.0324	.0285
completed college)	.0201	.0207	.0321	.0203
Personality Variables – Marital Status (1 =	.2216*	.0272	.1949*	.0282
married/cohabitating)	.==10	.0272	.13.13	.0202
Prior Experience – Prior Break in or	.2251*	.0266	.2134*	.0274
Attempted Break in (1 = yes)				
Cognitive Mediating Processes				
Threat Appraisal - Perceived Home			4.500 dt	0.412
Vulnerability (1 = vulnerable, easy to			1580*	.0413
somewhat hard to break in)				
Coping Appraisal – Personal Guardianship			.0018*	.0005
Measures Foor Approisal Worms shout a Break In (1)				
Fear Appraisal – Worry about a Break In (1 = frequent, about once per week or more)			.1902*	.0281
Control Variables				
Victim or Control Street (1 = control)	0177	0177	0179	.0288
Home Ownership (1 = own)	.5662*	.0410	0179 .5697*	.0288
1 \ /	.3002	.0410	.5097	.041/
Constant Constant	1.4972*	.076	1.5283*	.0926
	1.49/4	.070	1.3283	.0920
$\frac{\text{Notes:}}{R^2} = .2384$				
* = p < .05				
p00				

Table 9 shows the relationship between sources of information and the use of home guardianship measures in the presence of the cognitive mediating processes. Each of the threat

appraisal variables was significantly associated with the use of home guardianship measures. Those who believed their home was vulnerable to an attack (easy to somewhat difficult to break into) used fewer home guardianship measures than those who believed their home was very difficult to break into. Those who frequently worried about a break in at their home (about once per week or more) used more guardianship measures than those that did not frequently worry about a break in. Finally, those engaging in higher numbers of personal guardianship measures, a proxy for belief in the efficacy of guardianship, also reported increased use of home guardianship measures.

Several sources of information were significantly related to the use of home guardianship in this full model. Those who participated in block activities with the local police department, females, those who were married or cohabitating, and those who had previously experienced a break in at their current home used more home guardianship measures than their counterparts. Those reporting more forms of social interactions with neighbors also reported increased use of home guardianship measures. The significance and direction of the relationships between sources of information remained consistent among the models with and without the presence of the cognitive mediating variables (Reference Tables 4.2 and 4.7). The only exception was respondent sex, which was no longer significant with the addition of the cognitive mediating variables to the model.

The relationship between four of the sources of information and the use of home guardianship appear to be mediated by the cognitive mediating processes. The significant findings reflecting mediation are summarized in Table 10.

Table 10 – Summary of Significant Findings

Variables	Percent Mediated	Mediator
Sources of Information		
Verbal Persuasion – Social Interaction with Neighbors	2%	Coping
Verbal Persuasion – Participation in Block Activities with Local PD (1 = yes)	0%	Fear
Personality Variables – Sex (1 = male)	Mediated	Coping Fear
Personality Variables – Marital Status (1 = married/cohabitating)	12%	Fear
Prior Experience – Prior Break in or Attempted Break in (1 = yes)	5%	Threat Fear

The strength of the relationship between social interaction with neighbors and the use of home guardianship measures was decreased by .0027 (2%) with the addition of the cognitive mediating processes, which can be attributed to the significant relationship between social interaction with neighbors and the use of personal guardianship (coping appraisal process). The fear appraisal process significantly mediated the relationship between marital status and the use of home guardianship measures resulting in a decrease of .0267 (12%) in the magnitude of the relationship. This indicates that the difference between males and females in the when worry about victimization is considered. The cognitive mediating process similarly mediated the relationship between prior experience and the use home guardianship measures by .0117 (5%) in the related to both the fear and threat appraisal processes. Finally, the relationship between sex and the use of home guardianship measures was completely mediated by the addition of the cognitive mediating process. This indicates that the effect of sex on the use of home guardianship was completely mediated by the cognitive mediating processes.

Summary

In this study, I have identified several significant relationships between sources of information and the use of home guardianship measures as well as mediating effects of cognitive mediating processes on the relationship between these sources of information and the use of home guardianship measures. Though the mediating effects were minimal, these findings support the concepts proposed by PMT in its application to understanding guardianship responses to potential criminal victimization of the home. A discussion of the findings, potential implications, and suggestions for future research and provided in Chapter 5.

Chapter 5

Discussion and Conclusions

In the midst of challenges and dangers in the outside world, the home can provide a source of protection and solace. But when potential threats are near one's front door it may be necessary to fortify one's home to ensure the protection of the individual, his or her family, and his or her property. The motivations by which an individual chooses to protect his or her home may be dependent on a number of factors, thus varying among different individuals. Understanding this variation in the decision to employ home guardianship, however, has received little attention in existing research. Extant research uses a wide array of variables to predict the use of a variety of forms of guardianship measures and generally assumes that fear of victimization is the primary motivating factor in the use of guardianship measures. However, the limited nature of home guardianship specific research and the diversity of variables used in such analyses have provided a vague and mixed picture of the motivations and reasoning an individual uses in the decision whether or not to employ home guardianship measures in response to potential criminal threats against the home.

In this study, I attempt to address some of these issues by applying Protection Motivation Theory (PMT) as a potential means to explain the use of home guardianship measures. The currently recognized PMT was developed by Ronald Rogers' (1983) to identify the sources of information one uses to obtain details about specific threats and protective responses to those threats as well as to explain the thought processes one uses in assessing that information in the decision to employ a given protective response. To date, PMT has been applied almost exclusively in health care related research to understand motivations for such behaviors as wearing sunscreen and stopping smoking. Despite the successful application of PMT in the

health care field, and its parallels to issues in criminology and victimology, it has not yet been used to explain protective or guardianship responses to potential criminal threats.

Building upon Rogers' (1983) PMT model, I examine the effects of sources of information about potential criminal threats and guardianship responses for the home as well as cognitive mediating processes through which individuals assess this information in their decision whether or not to engage in home guardianship measures. The application of PMT allows for consideration of a number of factors with the potential to affect the use of home guardianship. In addition, PMT allows for examination of potentially complex decision making processes used in determining whether or not to engage in home guardianship measures in response to a potential break in. I used Baron and Kenny's (1989) methodology for identifying mediating effects to examine the application of the PMT model to explain the use of home guardianship. The results of this study revealed several sources of information that had significant relationships with the use of home guardianship measures as well as several significant mediating effects on these relationships. Though many of the mediating effects were weak, these findings lend support for the application of PMT to explain the use of home guardianship measures.

Discussion of Findings

Findings from this study generally support the application of the modified PMT model, illustrated in Figure 2, as a means to explain, to some extent, the use of home guardianship measures. With regard to the relationships between sources of information and the use of home guardianship measures, several significant relationships were identified and several components of Hypothesis 1 were confirmed. The use of home guardianship measures was significantly associated with increased use of home guardianship measures among those that participated in block activities with the local police department (H1b) and those that previously experienced a

break in at their current home (H1i). Sex was also significantly associated with the use of more forms of guardianship, consistent with research hypothesis H1f, with females reporting more forms of home guardianship than males. Social interaction with neighbors (H1a) and being married/cohabitating (H1h) were significantly associated with the use of home guardianship measures, though in the opposite direction than was hypothesized, both associated with an increase in the use of home guardianship measures. Finally, perceived neighborhood disorder (H1c), age (H1d), race/ethnicity (H1e), and education (H1g) were not significantly related to the use of home guardianship measures, in contrast to their respective hypotheses.

These findings provide interesting insight into the potential influences on the use of home guardianship measures. First, sources of verbal persuasion (interaction with neighbors and local police) appear to play an important role in the use of home guardianship, thus providing support for programs aimed at building communities that are capable of deterring crime. This could be a sign of successful policies aimed at community building and community policing. Given the significance of marital status and cohabitation, this may also indicate that the decision to employ guardianship is largely socially influenced. As such, communication with others appears to be key in encouraging the use of home guardianship measures.

Second, it is interesting to note that that sex appears to be the only individual characteristic with a significant relationship with the use of home guardianship. Other individual characteristics – age, race/ethnicity, and education – were not significantly associated with the use of home guardianship measures. Again, this may point to the possibility that guardianship is largely based on social interactions rather than individual factors. Prior experience with a break in or attempted break in at one's current home, another individual factor, was significantly associated with the use of home guardianship measures as expected.

Finally, the findings related to perceived disorder pose interesting questions for understanding the use of home guardianship measures. Perceived disorder was not significantly associated with the use of home guardianship measures. As such, it appears that the appearance of the surrounding environment alone is not enough of a cue to engage in home guardianship measures. Or, perhaps this is a result of the growth of the gated community, a situation in which guardianship is in integral part of the community as a preemptive rather than a reactive measure to potential criminal threats. Given that environmental cues related to disorder in the community would be expected to influence one's perception of potential threats, the lack of significant findings for the influence of perceived disorder on the use of home guardianship is particularly interesting.

The second major component of the modified PMT model, the cognitive mediating process, was to some extent supported in this study thus indicating that the decision to engage in home guardianship measures is dependent on a complex assessment of sources of information, not only an emotional fear response. The relationships between several sources of information - social interaction with neighbors, participation in block activities with the local police department, sex, marital status, and prior experience with a break in or attempted break in – and the use of home guardianship were mediated by the cognitive mediating process, though the mediating effects were minimal. Nonetheless, these findings lend support for the components of Hypothesis 2.

The threat appraisal process, measured as perceived vulnerability to a break in, was responsible for mediating the relationship between the use of home guardianship and prior experience. This is in line with expectations as a break in at one's current home is likely a jarring example of vulnerability for the individual. As such, the use of guardianship measures may not

simply be an automatic response to victimization, but rather a response to a sense of vulnerability acting as a direct result of that victimization. This highlights the emotional toll victimization can have on the individual.

The coping appraisal process, measured as use of personal guardianship measures, was responsible for mediating the relationship between two sources of information - social interaction with neighbors and sex – and the use of home guardianship measures. It is not immediately clear why personal guardianship measures would mediate the relationship between social interaction with neighbors and the use of home guardianship. However, it is likely that social interaction with others encourages both the use of personal guardianship measures and home guardianship measures. However, as this personal guardianship measure was an indirect means to measure belief in the efficacy of guardianship measures, a better variable is needed. The mediating effect of personal guardianship on the relationship between sex and home guardianship may be more straightforward. This may indicate that women place more emphasis on the efficacy of guardianship measures in general than do men. Nonetheless, there is still reason to question potential issues with the validity of this measurement.

Finally, the fear appraisal process mediated the relationship between four sources of information - participation in block activities with the local police department, marital status/cohabitation, prior experience with a break in or attempted break in, and sex - and the use of home guardianship measures. The mediating effect of worry about a break in on the relationship between participation in block activities with the local police department and the use of home guardianship measures is somewhat concerning. These results seem to indicate that participation in block activities with the local police increases the frequency of worry among individuals resulting in more use of guardianship. This can have a positive effect if there truly is

a significant threat of a break in, but may also point to an adverse effect on sense of safety in community efforts by police. While this findings could also be attributed to issues of reverse causality resulting from the use of cross sectional data, it warrants further evaluation in future research.

It is not surprising that the relationships between two of these variables - marital status/cohabitation and prior experience with a break in or attempted break in at one's current home - were mediated by worry about a break in. A cohabitating spouse, friend, family member, or significant can be a person of great value to an individual resulting in concern about their safety. Thus, this worry about the safety of the other individual may cause some to seek home guardianship measures to protect that individual. Prior experience with a break in or attempted break in at one's current home can be an emotionally painful experience resulting in a prolonged sense of worry about future attacks. As such, it is not surprising that worry about a break in mediates the relationship between prior home victimization and the use of home guardianship measures.

In summary, this study has provided several important insights into home guardianship including providing support for the application of the PMT model to better understand the complex factors leading to the use of home guardianship measures. First, the direct and mediating effects proposed by the PMT model (and modified PMT model) were supported, at least to some extent, in these findings. This highlights not only the applicability of the PMT model as a means to understand the use of guardianship measures, but also that the decision to employ guardianship measures may be more complex than a simple response to fear. Second, the mediating effects of the fear appraisal processes included in the modified PMT model used in this study indicate that, though the relationship may be more complex, fear still plays an

important role in the use of guardianship measures. While these findings provide insight into the use of home guardianship measures, the results must also be considered in light of limitations to the study itself and the need for additional research.

Limitations

There were several challenges and limitations of this study that must be considered in the interpretation of these findings. In particular, three limitations likely affected findings in this study: sampling methods, variable selection, and temporal ordering. The sample population used by Miethe (1991), as described in Chapter 3, was obtained by centering participant selection on blocks that had experienced a prior burglary victimization. While the sampling methodology ensured a large population of individuals likely to have direct experience with or knowledge of local burglary events, the selection process may also have introduced some threats to external validity. First, 21 census tracts were excluded because of changed borders, resulting in the potential for a portion of the population being removed from the sample population. Second, the selection criteria that focused on including blocks specifically selected for experiencing residential burglary may cause overrepresentation of higher crime areas than would be seen in a true random sample. Finally, Seattle itself has a somewhat unique makeup of population that may differ from other cities in the United States. For example, the city of Seattle has a substantially higher percentage of Asian or Pacific Islanders and residents with some college, bachelor degrees, and graduate or professional degrees than the national average (U.S. Census Bureau, n.d.). As such, the comparison of the findings to other locations must be considered in light of the generalizability of the sample. By controlling for certain sample demographics (i.e. sex, education, ethnicity) and status of each case as being from and "victim" or "control" street, some of these factors may have been accounted for.

The reliance on phone interviews leaves the potential for non-coverage error related to those homes without phone service. In addition, this response rate of only approximately 57% indicates that there may be a high level of non-response error in the data. Finally, Miethe (1990) does not detail the times when the surveys were conducted, so there may be potential issues with non-coverage error with those working or away from the home at certain times. These are serious considerations for the generalizability of the findings in this study. However, as this study is intended to identify potential trends in a relatively unexplored perspective of the relationship between individual or social characteristics and home guardianship, this study should still provide important information on how this relationship operates.

With regard to variable selection, the use of an existing data set required some creative application of variables to meet those specified by the PMT model and required omission of other key components of the PMT model. Several sources of information were not available for this study such as media coverage of local criminal threats, indirect victimization of others in their homes, and personality characteristics. Similarly, additional measures of the coping and threat appraisal processes were not available such as presence of valuables in the home, presence of young children, and more direct information regarding the belief in the efficacy of home guardianship measures. Nonetheless, the variables included in this study still provide valuable information about home guardianship and the application of PMT to understand home guardianship. Despite issues with both the sampling methodology and the selection of variables, this study has provided important insight into the use of home guardianship and can serve as a stepping stone for future research.

Finally, it was not possible in this study to establish temporal ordering to demonstrate that sources of information led to mediating effects which in turn led to the use of guardianship

measures. For example, one cannot determine if home guardianship measures were in place prior to experience with a break in or attempted break in. As such, some of the relationship identified in this study may be the result of reverse order causality. This is an important limitation for this study, and one which that should be addressed in future research with longitudinal data.

Recommendations for Future Research

This study treads new ground for research on guardianship measures by applying PMT to understand the use of guardianship measures. Future research can build upon the findings from this study by addressing limitations in the variable selection and sampling methodology discussed in the previous section and employing longitudinal data collection. Future research should account for each of the variables included in the PMT model, particularly the full cognitive mediating processes. Future research should also examine the use of PMT to explain home guardianship in other locations including other cities and across urban, suburban, and rural communities. Addressing these limitations is necessary to further verify the applicability and validity of PMT in the context of home guardianship.

Future research should also consider the application of PMT to explain other forms of guardianship. The modified PMT model used in this study could also be used to explain specific forms of home guardianship such as installation of burglar alarm systems, the use of weapons as a means of home defense, and the choice to relocate in response to concern about potential home victimization. This model could also be applied to explain other forms of guardianship such as avoidance of certain public areas and the use of personal guardianship measures (i.e. carrying a weapon or mace) in a public area. With the support found in this study for the application of PMT to explain home guardianship, there is promise for the application of PMT in understanding guardianship in response to potential criminal victimization. In sum, this study provides a new

means to examine guardianship measures through the application of PMT, a model that can be built upon to examine guardianship in a number of contexts.

Finally, it is also important to examine the PMT model as a means to explain the use of guardianship measures through longitudinal research. Survey research can only help to establish possible relationships between sources of information and the use of guardianship measures including potential mediating processes. However, to truly test the PMT model it is important to establish temporal ordering. As such, a long-term longitudinal study is suggested to establish, at least to some extent, whether sources of information and mediating variables actually precede the decision to employ guardianship measures.

Conclusion

This study has demonstrated that PMT may provide a valuable means through which to understand home guardianship. A number of factors appear to be significantly related to the use of home guardianship measures. In addition, individuals appear to use a complex reasoning process in their assessment of sources of information about potential criminal threats and protective responses in the decision to use of home guardianship measures. In particular, it appears that individuals consider their vulnerability to the threat of home victimization, the efficacy of employing guardianship measures to address those threats, and their own worry about the threat of home victimization. As such, it is evident that individuals consider more than just fear in their decision to employ home guardianship measures.

These findings have several potential implications for guardianship research and related policy. First, the results highlight a strong relationship between social interactions and the use of home guardianship measures. As such, policies aimed at encouraging citizens to engage in guardianship measures should look to encouraging social interaction with neighbors and

participation in block activities with the local police playing a key role. However, it is important that such interactions do not impart an unnecessary level of worry. Nonetheless, social interaction with neighbors and police appears to be a valuable means to encouraging the use of home guardianship measures.

Second, the mediating processes identified in this study indicate that fear, in this study worry about a break in, is not the soul factor, nor even the primary factor, in the decision to employ guardianship measures. This is an important factor for future fear of crime and guardianship related research. It is important that research and policy related to the use of guardianship measures examine this complex assessment process. Indeed, "fear" itself may incorporate many of the concepts of the cognitive mediating process, warranting further research. Such findings may help both in encouraging the effective use of guardianship measures as well as addressing concerns about crime in the community.

Finally, while this study has focused specifically on the use of home guardianship, it has important implications for research and policy related to many other forms of guardianship used in response to potential criminal victimization. PMT could be applied to understand and encourage effective forms of personal guardianship such as carrying non-lethal weapons and avoiding potentially dangerous locations. Understanding the factors that an individual considers and the processes by which they use to assess this information can help to encourage the use of effective forms of personal guardianship while assuaging concerns that may lead to unnecessary or potentially harmful guardianship measures. In particular, PMT could be applied to understand a most controversial form of guardianship, possession of firearms. As such, in addition to improving our understanding of the use of home guardianship, I hope that this study leads to

future application PMT to understand and improve the use of all forms of guardianship measures.

APPENDIX A

SURVEY INSTRUMENT

ICPSR 9741	Page 27	
Terance D. Miethe Department of SOCIOLOGY Virginia Polytechnic Institut Blacksburg. Virginia USA Phone: 703-231-8973 FAX: 703-231-3860	RESP.#:	
BITNET: Miethe at VTVM1 Q1. Hello, may I please speak to (F	Seattle City Blocks EAD NAME FROM CARD)?	
SKIP TO Q.5 < ASK Q.2 <	Yes 1	
SKIP TO Q.4 <	No one by that name lives here 2 Not available 3	
Q2. My name is Surveys for the Seattle Police Seattle. Is this (READ ADDRES	and I'm calling from Northwest Department. We are doing a study of S FROM CARD)?	
SKIP TO Q.4 ASK Q.3 <	Yes 1	
1101. 8.2	no, wrong	
Q3. (IF NO, WRONG ADDRESS, SAY:) I' the people who live at this ac		
4. May I speak to an adult member	of this household?	
IF NOT AVAILABLE, ARRANGE CALL-	BACK <	
Surveys for the Seattle Police crime in Seattle.) Several week	, and I'm calling from Northwest Department. We are doing a study of s ago we sent a brief letter describing letter telling you that we would be	
SKIP TO Q.7 <	Yes 1	
ASK Q.6 <		
	Don't know/Refused 3	,
neighborhoods experience more of very important to help prevent	Tying to understand why some people and crime than others. This information is crime in Seattle and other cities. Can with me about this topic? (SAY IF the about fifteen minutes.")	
SKIP TO Q.8 <		

Page 28 ICPSR 9741

7.	Then you may remember that we are trying to under and neighborhoods experience more crime than of is very important to help prevent crime in Seat Can you spend a few minutes talking with me about IF NEED: 'This survey will only take about fifther than the seat of the se	thers. This informaation ttle and other cities. out this topic? SAY	
	SKIP TO Q.8 < ARRANGE CALL-BACK < THANK & TERMINATE <	Yes No Don't know/Refused	1
8.	Thank you. I would like to begin by asking if is your current HOME address?	(READ ADDRESS FROM CARD))
	CONTINUE < THANK & TERMINATE < other building? (TRIPLEX = APT)		1
	House Duplex Condo Trailer/Houseboat Apartment/Room	1 2 3 4 5	
	Townhouse Other (SPECIFY:)	67	
	Don't know/Refused	8	
10.	(Codes 1-4 = HOUSE CODE, 5 APARTMENT CODE, KNOW/REFUSED = 3)	TOWNHOUSE OTHER/DON'T	
12.	RECORD RESPONDENT'S SEX. (ASK ONLY IF NECK Male Female		2
	first set of questions involve your personal exds of crime.	sperience with different	
13.	First of all, has anyone ever broken into or in home, garage, or other building on your propert ASK Q.14 <	ry? Yes	1 2
	SKIP TO Q.23 <	Don't know/Refused	3
14.	How many times has this occurred?	Don't know/Refused 9	9
15.	Has a break-in occurred at your current home?	Yes No	1

Don't know/Refused

3

ICPSR 9741 Page 29

16.	Has this happened within the last two Years?	Yes No Don't know/Refused	1 2 3
19.	Was anyone home during (this)/(the last) brea	ak-in?	
		Yes	1
		No	2
		Don't know/Refused	3
22.	Did you report (this)/(the last) burglary to t	the police?	
		Yes	1
		No	2
		Don't know/Refused	3
23.	(Other than the incident just mentioned), have jimmied, a lock forced, or any other signs of into your home?		
	ASK Q.24 <	Yes	1
	SKIP TO Q.30 <	No Don't know/Refused	2 3
	BAII 10 Q.30 \	bon c know/keruseu	_
24.	How many times has this occurred?		
		Don't know/Refused	99
25.	Has an attempted break-in occurred at your cur	rent home?	
		Yes	1
		No	2
		Don't know/Refused	3
26.	Has this happened WITHIN THE LAST TWO YEARS?	Yes	1
		No	2
		Don't know/Refused	3
29.	Was anyone home during (this)/(the last) attem	npted break-in?	
		Yes	1
		No	2
		Don't know/Refused	3
30.	Have you EVER had property like barbecue gr chairs stolen from your yard or porch?	rills, bicycle, lawn	
	ASK Q.31 <	Yes	1
	SKIP TO Q.34 <	No	2
		Don't know/Refused	3
31.	How many times has this occurred?		
J1.	non many other has ones occurred.	Don't know/Refused	99

Pag	e 30	ICPSR 9741	
32.	Has this occurred at your current home?	Yes No Don't know/Refused	1 2 3
33.	Has this happened WITHIN THE LAST TWO YEARS?	Yes No Don't know/Refused	1 2 3
34.	Have you EVER been physically attacked, beaten stranger?	up, or threatened by a	
	ASK Q.35 < SKIP TO Q.45 <	Yes No Don't know/Refused	1 2 3
35.	How many times has this occurred?		
		Don't know/Refused	99
36.	Has this happened WITHIN THE LAST TWO YEARS?	Yes No Don't know/Refused	1 2 3
39.	Were you injured from (this attack)/(the last to require medical attention?	attack) serious enough	
	to require medical accention.	Yes	1
		No Don't know/Refused	3
42.	Were you alone or with someone when (this attacocurred?	ck)/(the last attack)	
		Alone With someone	1 2
		Don't know/	3
		Refused	4
45.	Did (this attack)/(the last attack) occur with current home?	in 4 blocks of your	
		Yes No	2
		Don't know/Refused	3
48.	Have you ever had your (pocket picked)/(purse stolen from you by force (stick-up mugging) who		
	ASK Q.49 <	Yes	1
	SKIP TO 0.57 <	No Don't know/Refused	2

ICPSR 9741 Page 31 49. How many times has this occurred? Don't know/Refused 99 50. Has this happened WITHIN THE LAST TWO YEAR? Yes 1 No 2 Don't know/Refused 3 53. Were you alone or with someone when (this theft)/(the last theft) occurred? Alone 1 With someone 2 Don't know/ 3 Refused 4 Did (this act)/(the last theft) occur within 4 blocks of your current 56. home? Yes No 2 Don't know/Refused 3 57. Have you EVER had any windows broken, property destroyed, or other damage done to your home by vandals or strangers? ASK Q.58 < -----Yes 1 2 No SKIP TO Q.61 < -----Don't know/Refused 3 58. How many times has this occurred? Don't know/Refused 99 59. Has this occurred at your current home? Yes 1 NO 2 Don't know/Refused 3 60. Has this happened WITHIN THE LAST TWO YEARS? 1 No 2 Don't know/Refused 3 61. Have you EVER had your car broken-in to or stolen? ASK Q.62 < -----Yes 1 SKIP TO Q.65 < -----No 2 Don't know/Refused 3 62. How many times has this occurred? Don't know/Refused 3 63. Has this happened WITHIN THE LAST TWO YEARS? Yes 1

2

3

Don't know/Refused

Page 32	ICPSR 9741

64. Has this occurred within 4 blocks of your current home?

Yes 1 No 2 Don't know/Refused 3

- 65. Next, we would like to ask you some questions about your neighborhood and the city block where you live. Neighborhood refers to the area within 3 blocks of your current home. Your block refers to the area between the cross-streets on either side of your home.
- 66. First, how long have you lived at your current address? (SHOW MONTHS YEARS, EXAMPLE 2 1/2 years = 2Y 6M, 3 YEARS = 3Y)

Don't know/Refused 99

Are any of the following places within 3 blocks of your home?

		Yes	No	Don't know /Refused
67.	High school or Junior high	1	2	3
68.	Convenience store/Gas station	1	2	3
69.	Bar or nightclub that serves alcohol	1	2	3
70.	Fast food restaurant	1	2	3
71.	Bank or office buildin	1	2	3
72.	Park or play	1	2	3
73.	Shopping center/mall	1	2	3
74.	Hotel/motel	1	2	3
75.	Bus stop	1	2	3

76. Is there any place - within 3 blocks of your current home - where you are afraid to walk alone at night?

Yes	1
No	2
Unsure/Depends	3
Refused	4

77. Do you think your neighborhood is very safe, somewhat safe, somewhat unsafe or very unsafe from crime and criminals?

very saie	1
Somewhat safe	2
Somewhat unsafe	3
Very unsafe	3
Don't know/Refuse	4

78. Do you think you will be living in this same neighborhood 5 years from now?

Yes	1
No	2
Unsure/Don't know	3
Refused	4

ICPSR 9741 Page 33

79.	Can you	ı easil	ly tel	.1 :	if a p	pers	son :	is a	strange	er o	resident	on your	city
	block?	NOTE:	WANT	TO	KNOW	IF	THE	RESP	ONDENT	CAN	RECOGNIZE	STRANGE	RS
	AROUND	THEIR	HOME.										
										•	700		

Yes	1
No	2
Unsure/Don't know	3
Refused	4

80. "Do you have any good friends or relatives who are neighbors on your block?

Yes	1
No	2
Refused	3

81. Would you say that you know none, some, most, or all the people on your block on a first-name basis?

None of	them	1
Some of	them	2
Most of	them	3
All of	them	4

Don't know/Refused 5

Have you done any of the following activities with your current neighbors, have you . . .

		YES	NO	DON'T KNOW /REFUSED
82.	Watched your neighbor's property when they are		•	2
	out of town?	1	2	3
83.	Borrowed tools or small food items (e.g., milk,	,		
	sugar) from you neighbors?	1	2	3
84.	Had dinner or lunch with a neighbor?	1	2	3
85.	Helped a neighbor with a problem?	1	2	3
86.	Participated in an organized block activity or			
	neighborhood association?	1	2	3
87.	Participated in a block activity sponsored by			
	the Seattle Police Department?	1	2	3

91. About how many times in an average week do you see a police car drive by your (house)/(apartment)/(home)?

Don't know/Refused 99

Do you have any of these problems within 3 blocks of your home?

		YES	NO	DON'T KNOW
				/REFUSED
92.	Groups of teenagers hanging around the street	1	2	3
				3
93.	Litter/garbage/trash on the streets	1	2	3
94.	Abandoned houses and run-down buildings	1	2	3

Page 34 ICPSR 9741

	Poor street lighting at night Vandalism like broken windows, writing on walls	1	2 2	3 3	
97.	Here are several questions about your daytime outside the home DURING THE LAST SEVEN DAYS (L what you were doing the LAST SEVEN DAYS when a IF RESPONDENT SAYS LAST WEEK NOT TYPICAL WEEK, QUESTIONS IN TERMS OF A TYPICAL WEEK INSTEAD O	AST nswe HAV	WEEK). Tering the	hink abou sse questi MSWER	ıt
98.	First of all, how many EVENINGS LAST WEEK did y social or leisure activities outside your home?		go out fo	or work,	
			n't know fused		8 9
	Dow many EVENINGS LAST WEEK did you go for a sh neighborhood after dark?	ort	walk in	your	
			n't know fused		8 9
100.	How many EVENINGS LAST WEEK was you home unocc night? (IF ASKED, HOW LONG, SAY:) unoccupied f				it
			on't know efused	,	8 9
101.	How many DAYS LAST WEEK was your home UNOCCUPI	ED o	during th	ne DAYTIME	?
			on't know efused	1	8 9
102.	Overall, about how many HOURS LAST WEEK were y for work, social or leisure activities?	ou a	away from	your hom	ne
	,		B hours on't know	or more //Refused	98 99
103.	During the LAST WEEK, did you visit a bar or n alcohol?	igh	t-club th	at serves	3
		No		/Refused	1 2 3
104.	During the LAST WEEK, were you in a public pla teenagers or young adults were hanging out on			oups of	
		No		/Refused	1 2 3
105.	How many times in the LAST MONTH did you feel attack by a stranger? (30 TIMES = EVERY DAY/A			a physic	al

Don't know/Refused 99

ICPSR 9741 Page 35

106.	6. About how many times in the LAST MONTH were you at a public place like a street market, shopping mall, movie theatre, park that you had never been at before? (30 TIMES = EVERY DAY/ALWAYS)				
		Don't know/Refused	99		
107.	Do you ever take a city bus or other forms of p	public transportation?			
		Yes	1		
	_	No	2		
	SKIP TO Q.109 <	Don't know/Refused	3		
108.	How many times per month (do you take public tr	ansportation)?			
		- ,			
		Don't know/Refused	99		
109.	People protect themselves from crime in many digoing to name some types of self-protection. Pl take this precaution now or did this TWO YEA YES or NO.	ease tell me if you			
110.	Do you currently lock doors whenever you leave	home?			
		Yes	1		
		No	2		
		Don't know/Refused	3		
111.	Did you lock your doors TWO YEARS AGO?				
		Yes	1		
		No	2		
		Don't know/Refused	3		
112.	Do you currently leave lights on when you're no	et at home?			
		Yes	1		
		No	2		
		Don't know/Refused	3		
113.	Did you leave lights on TWO YEARS AGO?				
	•	Yes	1		
		No	2		
		Don't know/Refused	3		
114.	Do you currently belong to a community crime pr neighborhood/block watch program)?	evention program (like	е		
		Yes	1		
		No	2		
		Don't know/Refused	3		

Page	36	ICPSR 9741	
115.	Did you belong to this program TWO YEARS AGO?	Voc	1
		Yes No Don't know/Refused	1 2 3
116.	Do you currently have extra locks installed on o	doors or windows?	
		Yes No Don't know/Refused	1 2 3
117.	Did you have extra locks TWO YEARS AGO?	_	_
		Yes No Don't know/Refused	1 2 3
118.	Do you currently carry a weapon for protection weapon (IF ASKED: A weapon such as a gun, knife, mace,		
		Yes No Don't know/Refused	1 2 3
119.	Did you carry a weapon for protection TWO YEARS	AGO?	
		Yes No Don't know/Refused	1 2 3
120.	Do you currently have a burglar alarm or some of to protect your home from criminals?	ther electronic device)
		Yes No Don't know/Refused	1 2 3
121.	Did you have an alarm like this TWO YEARS AGO?	Yes No Don't know/Refused	1 2 3
122.	Do you currently have a dog at your home?		
		Yes No Don't know/Refused	1 2 3
123.	Did you have a dog TWO YEARS AGO?	v	
		Yes No Don't know/Refused	1 2 3

ICPS	R 9741	Page 37	
124.	Do you currently have neighbors watch your home town?	when you're out of	
		No	1 2 3
125.	Did you have neighbors watch your home TWO YEARS	AGO?	
		No	1 2 3
126.	Do you currently have a weapon in your home for	protection?	
		No	1 2 3
127.	Did you have such a weapon TWO YEARS AGO?	No	1 2 3
128.	In general, have you increased your safety precative YEARS because of crime?	autions over the LAST	
		No	2 3
129.	In general, have you changed where you go or whome over the LAST TWO YEARS because of crime?	at you do outside your	
		No	1 2 3
130.	Some people are more likely to be crime victims them as "easy targets." Here are several question habits and property which might influence your crime victim.	ons about your persona	
134.	First, does your (house)/(apartment)/(home) have	e ground floor windows	?
		No	2 3

Page	38	ICPSR 9741	
135.	Is there a tall fence or hedge (over 5 feet high ing?	a) around your dwell-	
		Yes	1
		No Don't know/Refused	2
		Don t know/Refused	3
136.	Is there a vacant lot or empty house next to you	r home?	
		Yes	1
		No	2
		Don't know/Refused	3
140.	Is your (house)/(apartment)/(home) on a street of	corner?	
		Yes	1
		No	2
1/1	Is there an alley behind your home?	Don't know/Refused	3
141.	is there an arrey benind your nome:	Yes	1
		No	2
		Don't know/Refused	3
145.	What kind of street is your (house)/(apartment)/2-way, 1-way, dead end, or some other kind of ro		L
		2-way	1
		1-wall	2
		Dead end/Cul-de-Sac Other kind of street	3
		Don't know/Refused	5
146.	Is it hard to see the front of your home from the bigg trees, shrubs, a tall bank or other physical		
		Yes	1
		No	2
		Don't know/Refused	3
150.	Do you think it would be easy, somewhat difficul for a burglar to break Into your (house)/(apartm		
		Easy	1
		Somewhat difficult	2
		Very difficult	3
		Don't know/Refused	4

ICPSR 9741 Page 39

151. When you go to a public place for shopping or leisure activities, do you usually go out alone or with another adult?

Alone	1
With another	2
Depends	3
Don't know/Refused	4

154. Do you consider yourself to be above average, below average or about average in physical size when compared to other (men)/(women)?

Above	average	in	physical	size	J	L
Below	average	in	physical	size	2	2
About	average	in	physical	size	3	3
Don't	know/Ref	use	ed		4	1

155. Do you think you could physically defend yourself or ward off an attack from another person?

Yes	1
No	2
Don't know/It depends/Unsure	3
Refused	4

Do you own any of the following expensive consumer items that are commonly stolen by burglars? Do you own . . . READ a-e

on't know /Refused
3
3
3
3
3

161. During the LAST MONTH, about how many times did you go to a crowded
 public place -- like a shopping mall, the public market, or movie
 theatre? (EVERY DAY = 30 TIMES)

Don't know/Refused 99

164. During the last month, about how many times did you carry at least \$50 cash in your (wallet)/(purse) while in a public place? (EVERY DAY = 30 TIMES)

Don't know/Refused 99

165. During the last month, about how many times did you wear jewelry (like a watch, ring or necklace) worth more than \$100 when in a public place (EVERY DAY = 30 TIMES)

Don't know/Refused 99

Page 40 ICPSR 9741

166.	How oft	en do	you	word	ry or	think	about	being	phys:	ically	a	tta	cked	by a
	strange	r? Wo	ould	you s	say y	ou wor	ry or	think	about	this			REAL	1-4.

Every day	1
About once a week	2
Once a month	3
Less than once a month	4
Don't know/Refused	5

167. How about someone breaking into your home and stealing your property? Would you say you worry or think about this . . . READ 1-4.

Every day	1
About once a week	2
Once a month	3
Less than once a month	4
Don't know/Refused	5

168. In the PAST TWO YEARS, have any of your close relatives or good friends had their homes broken into or been physically attacked?

Yes		1
No		2
Don't	know/Refused	3

169. Think about where you were living and and what you were doing TWO YEAR ago (PAUSE) At that time, about how many EVENINGS PER WEEK did you go out for work, social or leisure activities outside your home?

(IF UNSURE, SAY BEST GUESS)

Don't know 8 Refused 9

170. TWO YEARS AGO, about how many days per week was your home unoccupied during the daytime?

Don't know 8 Refused 9

Finally, a few questions to complete our statistical analysis.

171. What year were you born? (EXAMPLE = 1943) RANGE WILL BE 1880 -1974

Don't know/Refuse 1974

175. Counting yourself, how many people are currently living in your (house)/(apartment)/(home)?

Don't know/Refused 99

ICPSR 9741 Page 41

176. How many people in your household, counting yourself, are 16 years old or older? NOTE: CANNOT EXCEED TOTAL HOUSEHOLD MEMBERS.

Don't know/Refused 99

177. (DO NOT ASK, IF Q.173 EQUALS 174) How many people in your household ar under 6 years old? NOTE: CANNOT EXCEED TOTAL HOUSEHOLD MEMBERS.

Don't know/Refused 99

178. Do you consider yourself to be . . . READ 1-6

White	1
Black	2
Asian	3
American Indian/Eskimo	4
Hispanic	5
Some other ethnic/racial group	6
Don't know/Refused	7

179. What was the highest grade of formal education you completed?

DO NOT READ.

Grade school	1
Some high school	2
High school graduate or GED	3
Trade/Vocational school after high school	4
Some college	5
College graduate	6
Graduate school/Professional school	7
Don't know/Refused	8

180. Are you currently. READ 1-6.

	Married	1
	Living with someone as a couple	2
	Single	3
	Divorced	4
SKIP TO Q.184 <	- Separated	5
	Widowed	6
	Refused/No answer	7

183. (SAY SPOUSE IF MARRIED/PARTNER IF LIVING TOGETHER) Does your (spouse)/ (partner) either work outside the home or attend school on a full-time basis?

Works outside the home	1
Attends school	2
Both works and attends school	3
Doesn't work or attend school	4
Don't know/Refused	5

Page 42 ICPSR 9741

185.	What were you doing most of keeping house, going to school			
		Looking for work (Neeping house (home Retired/Disabled Armed Service Going to school (se	emaker)	1 2 3 4 5
	ASK Q.187 <	With a job but not leave, vacation Working Other activities (on, etc.)	6 7 8
		Don't know/Refused		9
	IF NOT 5, 6, OR 7, SKIP TO 1	94		
187.	How many hours do you (work)	/(go to school) in a	an average week?	
			Don't know/Refused	99
190.	How many miles is your home (O MILES = LESS THAN 1 MILE		(typical work setting	g)? 9
	IF NOT 6 OR 7 IN Q.178, SKIP	то 194		
191.	Does your job involve coming public?	into direct person	al contact with the	
	public:		Yes No Don't know/Refused	1 2 3
192.	Does your job involve handli	ng or carrying cash	or other valuables?	
			Yes No Don't know/Refused	1 2 3
193.	Do you work a straight sched swing/night shift?	ule (example 8 to 5), rotating hours or	a
		Straight shift		1
		Rotating shift Swing/night shift		2 3
		No general pattern, Don't know/Refused	/Sporadic work	4 5

ICPSR 9741	Page 43	
194. Do you own or rent your curr	Tent dwelling? Own or buying Rent Other (SPECIFY:) Don't know/Refused	1 2 3 4
	single-unit dwelling, a duplex, or a mult A SINGLE UNIT DWELLING CAN BE HOUSE,	i-
SKIP TO Q.199 <	Single unit dwelling Duplex Apartment/Multi-unit complex Don't know/Refused	1 2 3 4
197. How many separate housing unbuilding?		98 99
198. What floor of this building	do you live on? (FIRST = 1, SECOND = 2, 1 Don't know/Refused 99	ЕТ 99
199. Excluding the basement, how you live?	many floors/stories is the building where Don't know/Refused 99	e 99
200. How times have you moved or	changed residence in the last 5 years? Don't know/Refused	99
201. Do you own a car? ASK Q.202 < SKIP TO Q.203 <	_Yes No _Don't know/Refused	1 2 3
202. About how many miles is it d		99

Page 44 ICPSR 9741

203. When you go shopping for groceries, do you usually shop at a particular time of day or particular day of the week?

Yes	1
No	2
Don't know/Refused	3

204. Think about the last time you were in a public place that seemed dangerous, the last time that happened did you . . . Read 207-211 (NOTE: IF RESPONDENT SAYS THEY HAVEN'T BEEN IN A PUBLIC PLACE THAT SEEMED DANGEROUS, TELL THEM TO RESPOND IN TERMS OF WHAT THEY WOULD DO IF THEY WERE IN SUCH A DANGEROUS PLACE.)

		YES	NO	KNOW/ REFUSED
207.	Check your (wallet)/(purse) regularly?	1	2	3
208.	Look around for suspicious-looking people?	1	2	3
209.	Avoid eye-to-eye contact with strangers?	1	2	3
210.	Walk at a faster pace than you usually do?	1	2	3
211.	Try to stay at a safe distance away from strangers?	1	2	3

- 212. What do you consider to be the major crime problem facing Seattle
 today? (NOTE: IF JUST DRUGS MENTIONED, ASK FOR SPECIFIC TYPES.)
 (98 = DON'T KNOW, 99 = REFUSED)
- 215. Which of the following broad categories best represents your total fam income before taxes in 1989? Please stop me when I mention the categor that applies to you. Would you total income from all sources be... READ 1-7.

Less than \$10,000	1
\$10,000 to \$20,000	2
\$20,000 to \$30,000	3
\$30,000 to \$50,000	4
\$50,000 to \$75,000	5
\$75,000 to \$100,000	6
Over \$100,000	7

Refused/no answer

216. May I please verify your phone number.

217.

220. (IF NAME VERIFIED IN Q.1, ASK: Can I please verify the spelling of yo of your first and last name?) May I please have your first and last n VERIFY CORRECT SPELLING.

ICPSR 9741 Page 45

221. That concludes our interview. Thank you so much for your help on our project. If you would like specific information about what you can do to reduce your chances of being a victim of crime, talk to the Community Crime Prevention Division of the Seattle Police Department or your neighborhood watch block captain. Have a good day/night.

ENTER HOUSEHOLD ID CODE. (EXAMPLE: N 055 22 15 V A 1)
(TYPE N AND ENTER, OR ENTER IF BLANK, 3 DIGIT NUMBER ENTER, 2 DIGIT NUMBER
ENTER, 2 DIGIT NUMBER ENTER, LETTER ENTER, LETTER ENTER, 1 DIGIT NUMBER)

223. N-1, 0-blank

224.	3 digit code		
225.	2 digit code		
226.	2 digit code		
	letter		
228.	letter		
	1 digit code		
	What was your first impression of this re	spondent? At any time dur.	ina
	the interview was the respondent inattent interview?		
	Incolvion.	Not at all	1
		Somewhat	2
		Yes, definitely	3
		rob, doringori	
231.	Nervous, suspicious or frightened?		
	norvous, suspicious or ringinous.	Not at all	1
		Somewhat	2
		Yes, definitely	3
		ros, dorrarosi,	
222	How cooperative was this respondent?		
232.	now cooperative was this respondent:	Not at all cooperative	1
		Somewhat cooperative	2
		Very cooperative	3
		very cooperative	3
233.	How honest do you think this respondent w	as during the interview?	
		Not at all honest	1
		Somewhat honest	2
		Very honest	3
		very nonesc	3
234.	How much difficulty do you think this res questions in this interview?	pondent had understanding	the
	droporoup in cuip inceratem:	No difficulty	1
		Fair amount of difficult	
		will will be will tou.	

Great deal of difficulty 3

Page 46	ICPSR 9741
235. Was anyone else on the phone during the interview?	
Yes No	
236. HOUSEHOLD CODE IS IS THIS CORRECT	
(IF NO IN 236, REENTER CORRECT HOUSEHOLD ID CODE)	
238. N-1, blank-0 239. 3 digit code 240. 2 digit code 241. 2 digit code 242. letter 243. letter 244. 1 digit code	
245. Enter address from card	
246. Interviewer's ID#	
247. Day of week	
248. Time of day	
251. Respondent to be recorded on card	
252. Date	
254. Attempt	

255. End of interview

APPENDIX B

CORRELATION MATRIX

	-1	2	3	4	5	9	7	60	6	10	11	12	13	14	15
Home Guardianship Measures (1)	1.000	309	225	032	.103	023	054	.036	.234	174	384	600	034	.132	170.
Neighborhood Social Interaction (2)	309	1.000	.224	.022	710.	004	071	101.	.202	.073	.255	.024	.028	.055	.045
Participate in Block Activity with PD (3)	.225	.224	1.000	014	.169	017	015	.027	.155	.103	.273	510.	007	.044	.022
Neighborhood Disorder (4)	032	.022	014	1.000	212	007	.031	.055	050	.075	173	600'-	.014	.139	990.
Respondent Age (5)	.103	710.	169	212	1.000	062	190'-	277	011	.125	.353	.020	077	101	075
Respondent Sex (6)	023	004	017	007	062	1.000	.032	.032	060	024	003	.020	610.	.043	258
Respondent Race/Ethnicity (7)	054	071	015	.031	061	.032	1.000	064	047	013	063	010	052	031	028
Respondent Education Level - Completed College? (8)	.036	101.	.027	.055	277	.032	064	1.000	.054	009	029	.023	.093	.039	.050
Respondent Marital Status (9)	.234	.202	.155	050	011	060	047	.054	1.000	900'-	.303	650.	600	990.	500.
Prior Victimization (10)	174	.073	.103	570.	.125	024	013	600'-	900'-	1.000	.164	040	.028	.108	005
Rent or Own Home (11)	384	.255	.273	173	.353	003	063	029	.303	.164	1.000	.047	000	.021	038
Victim of Control Street (12)	600	.024	.015	600	.020	.020	010	.023	650.	040	.047	1.000	.001	011	009
How Vulnerable to a Break In (13)	034	.028	007	.014	077	610.	052	.093	600	.028	000	.001	1.000	.104	.039
Times Worry or Think about Break In (14)	.132	.055	.044	.139	101	.043	031	.039	990.	.108	.021	011	.104	1.000	.146
Personal guardianship measures (15)	.071	.045	.022	990.	075	258	028	.050	500.	005	038	600:-	.039	.146	1.000

REFERENCES

- Adams, Richard E., William M. Rohe, and Thomas A. Arcury. 2005. Awareness of community oriented policing and neighborhood perceptions in five small to midsize cities. *Journal of Criminal Justice*, 33(1), 43-54.
- Anderson, D. (1999). The aggregate burden of crime. *Journal of Law and Economics*, 42(2), 611-642.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182.
- Brunton-Smith, I., & Sturgis, P. (2011). Do neighborhoods generate fear of crime? An empirical test using the British Crime Survey. *Criminology*, 49(2), 331-369.
- Callanan, V. (2012) Media Consumption, Perceptions of Crime Risk and Fear of Crime: Examining Race/Ethnic Differences. *Sociological Perspectives*, 55(1), 93-115.
- Chiricos, Ted, Sarah Eschholz & Marc Gertz (1997). Crime, news and fear of crime. *Social Problems*, 44(3), 342-357.
- Covington, J., & Taylor, R. B. (1991). Fear of crime in urban residential neighborhoods. *The Sociological Quarterly*, 32(2), 231–249.
- Dolan, P., & Peasgood, T. (2007). Estimating the economic and social costs of the fear of crime.

 *British Journal of Criminology, 47(1), 121-132.
- Dubourg, R., & Hamed, J. (2005). Estimates of the economic and social costs of crime in England and Wales: Costs of crime against individuals and households, 2003/04.

 Retrieved April 9, 2011 from http://www.hm-treasury.gov.uk/d/1(1).pdf

- Ferraro, K. F. & LaGrange, R. L. (1992). Are older people most afraid of crime? Reexamining age differences in fear of victimization. *Journal of Gerontology*, 47(5), 233-244.
- Fisher, B. (1991). A neighborhood business area is hurting: Crime, fear of crime, and disorders take their toll. *Crime and Delinquency*, *37*(3), 363–373.
- Floyd, D.L., Prentice-Dunn, S., & Rogers, R.W. (2000). A meta-analysis of research on protection motivation theory. *Journal of Applied Social Psychology*, *30*, 407-429.
- Franklin, C., & Franklin, T. (2009). Predicting fear of crime: Considering differences across gender. *Feminist Criminology*, *4*(1), 83-106.
- Franklin, T., Franklin, C., & Fearn, N. (2008). A multilevel analysis of the vulnerability, disorder, and social integration models of fear of crime. *Social Justice Research*, 21(2), 204-227.
- Hale, C. (1996). Fear of crime: A review of the literature. *International Review of Victimology*, 4(2), 79-150
- Hartnagel, T. F. (1979). The perception and fear of crime: Implications for neighborhood cohesion, social activity, and community affect. *Social Forces*, 58(1), 176-193.
- Hinkle, J., & Weisburd, D. (2008). The irony of broken windows policing: A micro-place study of the relationship between disorder, focused police crackdowns and fear of crime. *Journal of Criminal Justice*, 36(6), 503-512.
- Kohm, S. A., Waid-Lindberg, C. A., Weinrath, M., Shelley, T. O., Dobbs, R. R. (2012). Canadian Journal of Criminology & Criminal Justice, 54(1), 67-100.
- Kruger, D., Hutchison, P., Monroe, M., Reischl, T., & Morrel-Samuels, S. (2007). Assault injury rates, social capital, and fear of neighborhood crime. *Journal of Community Psychology*, *35*(4), 483-498.

- Lab, S. (1990). Citizen crime prevention: Domains and participation. *Justice Quarterly*, 7(3), 467-491.
- Mesch, G. S. (2000). Women's fear of crime: The role of fear for the well-being of significant others. *Violence and Victims*, 15(3), 323-336.
- Miethe, T. D. (1990). Testing theories of criminality and victimization in Seattle, 1960-1990 [Data file]. Retrieved from http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies /9741?archive=ICPSR&q=miethe
- Miethe, T. D. (1991). Citizen-based crime control activity and victimization risks: An examination of displacement and free-rider effects. *Criminology* 29, 419–39.
- Milne, S., Sheeran, P., & Orbell, S. (2000). Prediction and intervention in health-related behaviour: A meta-analytic review of protection motivation theory. *Journal of Applied Social Psychology*, 30(1), 106-143.
- Moore, S., & Shepherd, J. (2006). The cost of fear: Shadow pricing the intangible costs of crime. *Applied Economics*, *38*(3), 293-300.
- O'Shea, T. C. (2000). The efficacy of home security measures. *American Journal of Criminal Justice*, 24(2), 155-167.
- Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change. *Journal of Psychology*, *91*(1), 93-114.
- Rogers, R.W. (1983). Cognitive and physiological processes in fear appeals and attitude change:

 A revised theory of protection motivation. In J. Cacioppo & R. Petty (Eds.), *Social Psychophysiology*. New York: Guilford Press.
- Roman, C., & Chalfin, A. (2008). Fear of walking outdoors: A multilevel ecologic analysis of crime and disorder. *American Journal of Preventive Medicine*, *34*(4), 306-312.

- Romer, D., Jamieson, K. H., & Aday, S. (2003). Television news and the cultivation of fear of crime. *Journal of Communication*. *53*(1), 88-104.
- Rountree, W., & Land K. C. (1996). Perceived risk versus fear of crime: Empirical evidence of conceptually distinct reactions in survey data. *Social Forces*, 74(4), 1353-1376.
- Sacco, V. (1993). Social support and the fear of crime. *Canadian Journal of Criminology*, 35(2), 187-196.
- Scarborough, B. S., Like-Haislip, T. Z., Novak, K. J., Lucas, W. J., & Alarid, L. F. (2010). Assessing the relationship between individual characteristics, neighborhood context, and fear of crime. *Journal of Criminal Justice*, *38*(4), 819-826.
- Simon, J. (2007). Governing through crime. Oxford: University Press.
- Snedker, K. A. (2006). Altruistic and vicarious fear of crime: Fear for others and gendered social roles. *Sociological Forum*, *21*(2), 163-195.
- Warr, M. (1992). Altruistic fear of victimization in households. *Social Science Quarterly*, 73(4), 723-736.
- Weitzer, R., Kubrin, C. E. (2004). Breaking news: How local tv and real world conditions affect fear of crime. *Justice Quarterly*, 21(3), 497-520.
- Wyant, B. R. (2008). Multilevel impacts of perceived incivilities and perceptions of crime risk on fear of crime: Isolating endogenous impacts. *Journal of Research in Crime and Delinquency*, 45(1), 39-64.

CURRICULUM VITAE

Audrey C. Clubb
Department of Criminal Justice and Criminology
Georgia State University
140 Decatur Street NW
Atlanta, GA 30303
(404) 413-1020
aclubb1@student.gsu.edu

Education

M.S. Criminal Justice and Criminology, Georgia State University, Atlanta, GA, 2012
Thesis: Defending the Castle: Applying Protection Motivation Theory to Explain the Use of Home Guardianship (Thesis Chair: Barbara Warner)
Summa Cum Laude

B.S. Criminal Justice, Kennesaw State University, Kennesaw, GA, 2006 Concentration: Forensic Behavioral Sciences Summa Cum Laude

Research and Teaching Interests

- Communities and Crime
- Fear and Crime
- Policy/Program Evaluation

Research Experience:

2012-present Graduate Research Assistant, Georgia State University

Department of Criminal Justice and Criminology

Supervisor: Joshua Hinkle

2010-2012 Graduate Research Assistant, Georgia State University

Department of Criminal Justice and Criminology

Supervisor: Barbara Warner

Published Works

Warner, B.D. & **Clubb, A.C**. (2012). Neighborhood ties, control, and crime. In F. Cullen & P. Wilcox (Eds.), *Oxford handbook of criminological theory*. Oxford: Oxford University Press. (Forthcoming December 2012).

Professional Presentations

Clubb, A.C. & Warner, B.D. (2011, November). *Perceptions of crime, crime rates and self guardianship*. Paper presented at the Annual Meeting of the American Society of Criminology, Washington, DC.

Honors and Awards

2012 Graduate Academic Achievement Award, Georgia State University

Service

2005-2006 Cobb County District Attorney Victim Witness Unit, Atlanta, GA, Volunteer