



Causal model of fear of crime among people in Bangkok

Wichien Prechathamwong*, Veenunkarn Rujiprak

Criminology, Justice Administration and Society, Faculty of Social Sciences and Humanities, Mahidol University, Nakhon Pathom 73170, Thailand

Article Info

Article history:

Received 24 July 2017

Revised 10 November 2017

Accepted 23 January 2018

Available online 10 February 2018

Keywords:

crime prevention,
crime victim,
fear of crime,
social disorganization,
victimization

Abstract

Quantitative research was applied to explore the fear-of-crime level among people in Bangkok by distributing questionnaires to 960 Bangkok residents living in the Inner Bangkok, urban fringe, and suburban areas. The findings suggest that females exhibited higher vulnerability and risk perception of fear of crime than males, whereas gender, perceived social disorganization, and experience of victimization indirectly affected fear of crime through perceived risk of victimization, satisfaction with the police community crime preventive measures, and people participation in the campaign. Moreover, gender and the experience of being a crime victim also indirectly affected fear of crime. The research findings provide primary data to promote preventive measures regarding community crimes and guidance on how to reduce the fear-of-crime level.

© 2018 Kasetsart University. Publishing services by Elsevier B.V.

Introduction

Fear of crime is an important problem. Individual offenses against life and property have evolved along with social and technological growth. Fear of crime then grows through complex social dynamics and creates insecure feelings among social members. The lack of safety in public places combined with social unrest further increase these negative feelings. Consequently, crimes can leave physical and emotional impacts or even result in the loss of life and property for those who are harmed, including families and friends. No matter what the circumstances under which the crime was committed, the victims' sense of control and self-worth may decline. Victims often blame every available scapegoat for their problems and may develop extreme resentment which may turn into retribution and to them intentionally committing a crime. For purposes of the current study, structural equation modeling (SEM) was

developed to show the influential factors on fear of crime among people in Bangkok.

Literature Review

Concepts and Theories on Fear of Crime

Fear of crime is emotional involvement, with many scholars such as [Gabriel and Greve \(2003\)](#) defining this emotion as a sense of danger and anxiety produced by the physical threats of crime. This relates to diversified dimensions of major concepts, namely perceived fear of crime and action against fear of crime, past feeling prior to actual fear, and individual assessment in becoming a crime victim. If a person has felt actual fear in particular circumstances during the past, that person is more likely to anticipate feeling fear in similar circumstances in the future. According to [Stovic, Fischhoff, and Lichtentien \(1987\)](#), fear of crime involves various emotional states and different attitudes or perceptions including distrust of others, anxiety of perceived risk, fear of strangers or awareness of non-uniform neighbor, or less discipline.

Fear of crime is therefore the range of emotions that is provoked in a person by the possibility of victimization

* Corresponding author.

E-mail addresses: wichien.mu11@gmail.com (W. Prechathamwong), trujipak@gmail.com (V. Rujiprak).

Peer review under responsibility of Kasetsart University.

compared to actual victim manifestation (Hale, 1996). People may feel especially vulnerable to the risk of crime because they see themselves as especially likely to be targeted, and they are unable to control whether or not such an event occurs. An individual's fear of crime may be closely related to social conditions and the nature of crime in the neighborhood (Gabriel & Greve, 2003; Jackson, 2004). Moreover, social disorganization theory emphasizes the impact of surrounding areas, particularly the different characteristics of various neighborhoods which account for the stability of the crime rate and the failure to solve community crime problems.

The School of Criminology has long been fascinated with the effect of social relationships on human development and behavior. There were numerous studies in the 19th century in European countries (Vold, Bernard, & Snipes, 2002). In the USA, study of the social environment started in the Chicago School of Human Ecology by focusing their research on neighborhoods influencing deviant behavior. The research findings revealed that quite often the neighborhoods had a direct significant effect on human behavior when social control started to show a sign of weakness. Such areas are usually poverty-stricken and high crime areas, with low family quality, and an advanced state of decay of shelter (Bursik & Grasmick, 1993; Shaw & McKay, 1969) which were equated with disorganized areas and subsequently placing tremendous social pressure on neighborhood residents.

Houser and Fratello (2013) found correlations between changes in social determinants and the criminal patterns of minors over the past decade. The findings revealed that the impact on youth behavior from changes in the neighborhood surroundings as well as supporting the principle of social disorganization theory on offensive youth behavior being directly related to the surroundings, particularly in their own neighborhood. Many researchers have tested correlations between changes in the neighborhood and youth misbehavior, which yielded positive results. Furthermore, social disorganization is associated with the disorganized behavior, anti-social activity, indifference, and disrespect, that could be directly related to fear of crime. The current research aimed to investigate more of social and physical disorganization than focusing on fear of crime. Social disorganization is then the display of physical surrounding such as graffiti, garbage, abandoned cars, and social problems related to drug dealing, domestic violence, and public drunkenness; thus, these factors indicate social disorganization that could lead to fear of crime (Brunton-Smith & Sturgis, 2011). Moreover, earlier researchers supported a statistically significant correlation between disorganization and fear of crime (Borooah & Carcach, 1997; Carcach, Frampton, Thomas, & Cranich, 1995; Kanan & Pruitt, 2002; Wyant, 2008). Individuals feeling safe have a positive correlation with perceived clean and peaceful shelter (Ziersch, Putland, Palmer, MacDougall, & Baum, 2007).

Experienced Victimization

The majority of research findings in this field suggest that a non-victim may develop different feeling from being

the actual crime victim, leading to fear of crime. The findings also revealed that an individual exposed to crime could predict a perceived risk a fear of crime (Meyers & Chung, 1998). Some studies found fear of crime depended on the type of victim (Rountree, 1998). Cates, Dian, and Schnepf (2003) found that crime victimization can impact an individual's feelings toward a severe threat from a criminal act.

Media

The influence of the media on society has grown exponentially with the advance of technology; in particular, television plays important role on a person's beliefs and views of the world (Gerbner & Gross, 1976). Generally speaking, the media is ready to offer distorted views on crimes and criminals (Dowler, 2003). Some researchers investigate levels of fear of crime among television audiences. One study suggested that those who watch television reported a significantly higher perceived higher crime rate (Heath & Petraitis, 1987). More researchers found that the number of hours spent watching television was not connected with fear of crime (Dowler, 2003; Eschholz, Chiricos, & Gertz, 2003), though certain research works showed that not only the numbers of hours watching television, but also reading a newspaper could contribute to fear of crime. More findings also suggested those reading a newspaper as the source of information would develop less fear of crime than television audiences (Lane & Meeker, 2003). Other studies found that newspaper readers on special subjects such as heavy crime news are more likely to harbor intense fear (Liska & Baccaglini, 1990). Moreover, some findings suggested no connections between newspapers readers and fear of crime (Chiricos, Eschholz, & Gertz, 1997). Importantly, demographic factors must be taken into account because impacts from the media are relevant to fear of crime, particularly, through gender, age, nationality, economic and social status, education, and having been a past victim (Chiricos et al., 1997; Eschholz et al., 2003; Lane & Meeker, 2003).

Social Control

The literature review findings also indicate a correlation between police performance and fear of crime, but with an inverse relation. In other words, when the public realized that the police are capable of performing their duties efficiently, their fear of crime would subside. In contrast, the public may feel threatened, insecure, and concerned for their safety if the police are performing poorly (Nofziger & Williams, 2005). Therefore, the function of the police is mainly concerned with reducing the public's fear of crime by applying the principles of community policing.

For this study, social control is considered in an official sense as a variable, namely the attitude towards police crime prevention, and in an unofficial sense as social control participation in crime prevention. The integration of concepts and relevant theories identified the variables and conceptual framework as shown in Figure 1.

In this study, three hypotheses were formulated to clarify the research intention:

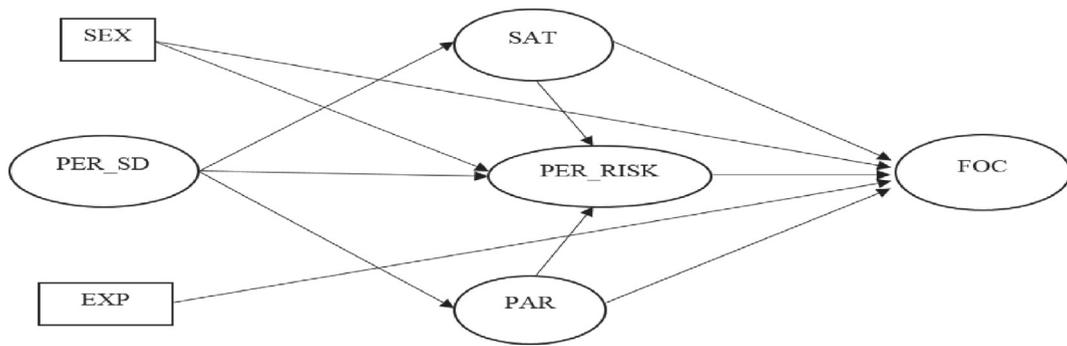


Figure 1 Research conceptual framework

1. Gender is correlated directly and indirectly with fear of crime through the risk of being a crime victim.
2. Perceived social disorganization is correlated indirectly with fear of crime through the risk of being a crime victim, people's participation in community crime prevention, and police performance regarding community crime prevention.
3. Experience of previous crime for a victim is correlated directly with fear of crime.

Methodology

The quantitative data were collected in Bangkok from August 2015 to December 2015 to study the fear-of-crime level and to develop structural equation modeling to find correlations between gender (SEX), experience as a crime victim (EXP), perceived social disorganization (PER_SD), perceived being a crime victim (PER_RISK), locals' participation in community crime prevention (PAR), and satisfaction with police crime prevention (SAT) measures with fear of crimes (FOC) among people in Bangkok. The population in this study comprised people aged 18 years or older and living in Bangkok in Inner Bangkok, urban fringe and suburban areas who were selected using multi-stage sampling from district, subdistrict, and communities, respectively, whereas simple random sampling was applied in the selection of samples. The sample size was determined using calculations derived from the completed program of [Soper \(2017\)](#) adapted from the work of [Cohen \(1988\)](#) and [Westland \(2010\)](#). In this study, 15 observed variables and five latent variables were chosen and statistical significance at the .05 level was with the developed SEM. The final population required 933 samples. Nonetheless, to match the statistical analysis and variables proportion, additional questionnaires were distributed, making a grand total of 960 questionnaires and all completed questionnaires were returned.

Results and Discussion

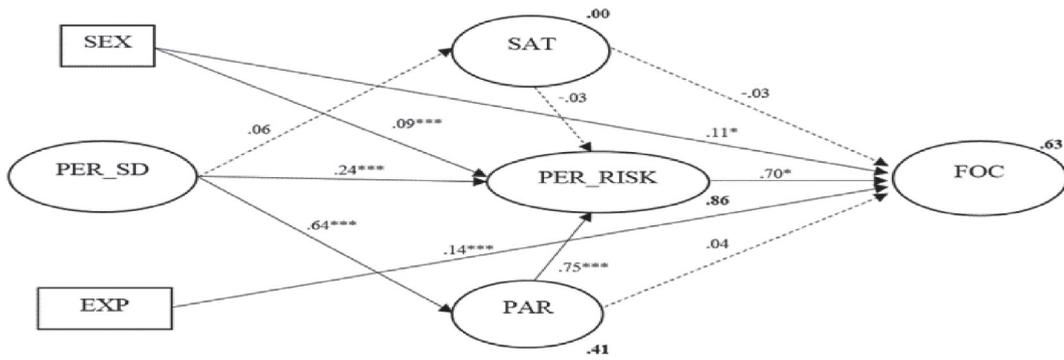
The majority of samples (52.3%) were males of whom 49.7 percent were aged 18–23 years, and the samples average age was 29.45 years. The findings revealed that 60.19 percent had completed a bachelor's degree, followed by high school and certificate graduates, primary school

level, associated degree, higher certificate or equivalence, respectively, in which the proportion resembled the samples with higher education than a bachelor's degree. In total, 65.9 percent were unmarried followed by 29.39 percent married, whereas 2.99 percent were divorced and 1.99 percent were separated. In total, 40.79 percent lived in a single home and the mean income was THB 18,606.05 (USD 581.45). Fear of crime remained at a moderate level, with a mean of 2.49 and standard deviation of 1.06.

The SEM testing displayed the influence of social disorganization on perceived risk of being a crime victim, people participation in community crime prevention, and people's satisfaction with police performance regarding community crime prevention, which in turn affected fear of crime. Moreover, gender and perceived risk of victimization also affected fear of crime. From the SEM testing, the findings indicted no goodness of fit with the empirical evidence ($\chi^2 = 454.668$, $df = 78$, $p = .00$, $GFI = .943$, $CFI = .942$, $RMSEA = .062$, $\chi^2/df = 5.829$), as shown in [Figure 2](#).

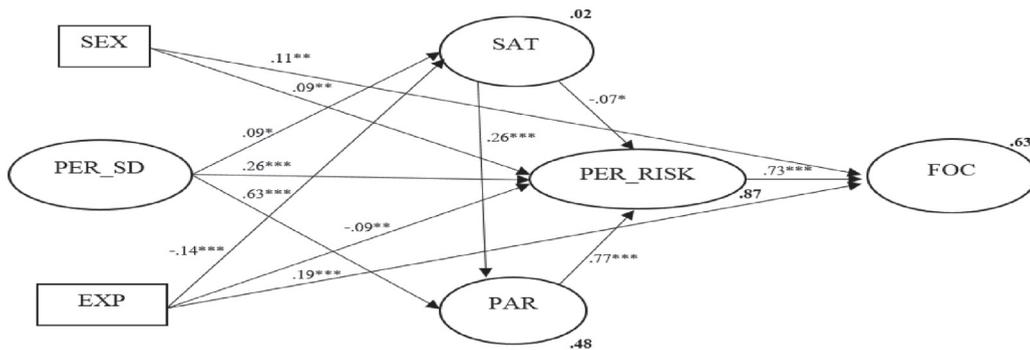
In order to meet the feasibility theory, SEM must be modified using indices. The findings suggested that experiencing victimization correlated with perceived risk of victimization, and satisfaction towards police crime prevention correlated with people's participation in crime prevention as well. On the contrary, people's satisfaction towards police performance was not correlated with fear of crime. Therefore, the researcher decided to add a correlation path from experiencing victimization to perceived risk of victimization and satisfaction with police community crime prevention to people's participation in community crime prevention, as well as removing the correlation path from satisfaction with police community crime prevention to fear of crime, as there was no statistical significance, as shown in [Figure 3](#).

The findings from these SEM modifications suggested the alternative SEM had goodness of fit with the empirical evidence, even though the p-value did not meet the .05 criterion. Nonetheless, other indices revealed goodness of fit, having correlation with $\chi^2 = 360.42$ and $RMSEA = .06$, $GFI = .95$ and $CFI = .96$ as expected. To sum up, the SEM had goodness of fit regarding fear of crime among Bangkok residents. The findings on a causal relationship model and perception of victimization, people's participation in community crime prevention, satisfaction with police



$(\chi^2 = 454.668, df = 78, p = .00, GFI = .943, CFI = .942, RMSEA = .062, \chi^2/df = 5.829)$

Figure 2 Pre-testing structural equation model goodness of fit



$(\chi^2 = 360.420, df = 77, p = .00, GFI = .953, CFI = .957, RMSEA = .062, \chi^2/df = 4.681)$

Figure 3 Post-testing structural equation model goodness of fit

community crime prevention, and proposed fear of crime explained the fluctuation in perceived risk on victimization (87%), fear of crime (63%), people's participation in community crime prevention (48%), and people's satisfaction with police community crime prevention (2%). (See Table 1).

Considering the causal factors affecting fear of crime, the findings suggested that perceived risk of victimization had the direct influence of 7.3 percent, followed by people's participation in community crime prevention with an indirect impact of 0.56 percent. Social disorganization had a

direct influence of .55, followed by gender with a direct influence of .11 and an indirect influence of .07, and experience of victimization with a direct influence of .19 and a negative indirect influence of $-.08$, and lastly satisfaction with police performance in crime prevention with an indirect influence of .09. The proportion of the reliability of perceived risk of victimization, people's participation in community crime prevention, and perceived social disorganization, and experienced of victimization could explain 63 percent of fear of crime in the sample, that is a high level of risk on victimization, people's participation in

Table 1

Standard scores of analysis results on the direct, indirect, and overall influence of casual variables affecting results and correlation coefficients

Variable	PER_RISK (R ² = 87)			SAT			PAR			FOC (R ² = 63)		
	TE	IE	DE	TE	IE	DE	TE	IE	DE	TE	IE	DE
SEX	.09	—	.09**	—	—	—	—	—	—	.18	.07*	.11**
PER_SD	.76	.50**	.26***	.09	—	.09*	.65	.02	.63***	.55	.55**	—
EXP	-.11	-.02*	-.09**	-.14	—	-.14***	-.37	-.37**	—	.11	-.08**	.19***
PER_RISK	—	—	—	—	—	—	—	—	—	.73	—	.73***
SAT	.13	.20**	-.07*	—	—	—	.26	—	.26***	.09	.09*	—
PAR	.77	—	.77***	—	—	—	—	—	—	.56	.56**	—

$\chi^2 = 360.42; df = 77; p = .00; GFI = .95; CFI = .96; RMSEA = .06; \chi^2/df = 4.68$

* $p < .05$, ** $p < .01$ and *** $p < .001$

community crime prevention, female samples, and satisfaction with police performance in community crime prevention, together raised fear of crime level as high as 63 percent. Perceived risk of victimization received the most influence from people's participation in community crime prevention, having a direct influence of .77, followed by perceived social disorganization with direct influence of .26 and an indirect influence of .50. Satisfaction with police performance regarding community crime prevention had a direct influence of $-.07$ and an indirect influence of .20 and lastly, gender had a direct influence of .09. The proportion of community crime prevention, perceived social discrimination, satisfaction with police performances regarding community crime prevention, and experience of victimization, including gender could explain a high level of perceived risk of victimization at 87 percent. Perceived social disorganization was also listed at a high level; therefore, a high level of experience of victimization and the female gender coupled together boosted perceived risk on victimization to as high as 87 percent.

Satisfaction with police community crime prevention had most the most influence on experience of victimization with a negative direct influence of $-.14$, followed by perceived social disorganization with a direct influence of .09. The proportion of reliability of experience of victimization and perceived social disorganization could explain 2 percent of sample satisfaction with police performances regarding community crime prevention. This suggests indirectly that a significant level of experience of victimization and perceived social disorganization yielded 2 percent satisfaction with police performance regarding community crime prevention. People participation in community crime prevention was influenced the most by perceived social disorganization, having a total weight of .65 divided into .63 on the direct weight and .02 indirect weight, followed by experience of being a crime victim with a specific indirect negative weight $-.37$ and satisfaction with police performance regarding community crime prevention with a direct weight .26 in which the proportion of reliability in perceived social disorganization and satisfaction with police performance regarding community crime prevention among samples was 48 percent, revealing a high level of perceived social disorganization.

Gender and fear of crime produced an indirect imposing influence on the samples' fear of crime, including an indirect influence on fear of crime through perception of being a crime victim. The finding is coincided with the research of Pinkerton James (1992) who found elderly women and experience of victimization highly affected the level of fear of crime. This correlation between gender and fear of crime is also in line with the work of Sahawattana, Kruekam, Limmanon, and Sakulsukcharuen (2013). According to Gilchrist, Bannister, Ditton, and Farrall (1998), Hale (1996), Killias (1990), Rader, May, and Goodrum (2007), and Scott (2003), gender is often used to explain fear of crime in the study. Gender has an indirect impact on being a crime victim through the perceived risk of being a crime victim which could be explained by females perceiving news on being a crime victim through the media, be it newspaper, television, radio, or the Internet. This concept coincided

with the research of Heath and Petraitis (1987) who found serious television viewers reporting significantly more on perceived crime risk. Chiricos, Padgett, and Gertz (2000) and O'Connell (1999) studied factors affecting fear of crime locally under social disorganization with their findings indicating that the local news could stir up fear of crime at a high level as well.

Perceived social disorganization had a direct influence on perceived risk of victimization and the samples' satisfaction with police performance regarding community crime prevention, including the indirect impact on the samples' fear of crime through risk of victimization, satisfaction with police performance regarding community crime prevention, and people's participation in community crime prevention. Sahawattana et al. (2013) revealed a statistically significant correlation between the residential area and fear of crime which agreed with Rachanukul (2009) who reported strongly significant correlations between perceived social disorganization in the neighborhood or educational institution with fear of crime at the .05 level. The findings relating to experience of victimization influenced perceived risk of victimization, satisfaction with police performance regarding community crime prevention, and the samples' fear of crime, including the indirect influence on fear of crime through perceived risk on victimization, satisfaction with police performance regarding community crime prevention, and people's participation in community crime prevention. The research of Cates et al. (2003) found experienced of victimization may lead to a severe threat of crime.

Variables such as gender, had a direct influence on perceived social disorganization and fear of crime for the samples, including indirect influence on fear of crime of the sample group through perceived social disorganization. Perceived social disorganization had a direct influence on perceived social disorganization and satisfaction with police performance regarding community crime prevention of the sample group, including an indirect influence on fear of crime of the sample group through perceived social disorganization, satisfaction with police performance regarding community crime prevention, and participation of people in community crime prevention. The experience of being a crime victim had a direct influence on perceived risk of being a crime victim, satisfaction with police performance regarding community crime prevention, and fear of crime of the samples, including an indirect influence on fear of crime of the samples through perceived social disorganization, satisfaction with police performance regarding community crime prevention, and people participation in community crime prevention.

Policy-related Recommendations

1. Improving police performance to ensure public safety of life and property would in turn help people to gain more trust in and satisfaction with police performance.
2. The police action plan should direct a strategic plan to gain the trust and confidence of crime victims as well as focusing on law enforcement, particularly regarding

those who frequently break the laws. This would make the concept of crime prevention more effective.

3. The Royal Thai Police, Bangkok Metropolitan Area Office and concerned organizations should establish effective communication to enlist community assistance regarding reducing fear of crime.
4. Techniques should be developed to involve local people in identifying areas that make them feel unsafe as well as inventing measures to reduce their fear.

Implementation

The relevant findings can be used to direct further community crime prevention and in turn reduce fear of crime as well as seeking public collaboration in such matters. Based on the principles of community-oriented policing and problem solving, this police operation must focus on building a partnership with the community by getting involved with the locals in solving crime problems. The police should conduct meetings with local residents and other stakeholders in the area to collect crime issues and data. Social disorganization is another influential factor affecting fear of crime through numerous variables, so environmental improvement should be considered based on the broken window theory coupled with actual patrolling in the community and crime control environmental design to keep problems under control.

Conflict of interest

There is no conflict of interest.

References

- Boroah, V. K., & Carcach, C. A. (1997). Crime and fear: Evidence from Australia. *The British Journal of Criminology*, 37(4), 635–657.
- Brunton-Smith, I., & Sturgis, P. (2011). Do neighbourhoods generate fear of crime? An empirical test using the British Crime Survey. *Criminology*, 49(2), 331–369.
- Bursik, R. J., & Grasmick, H. G. (1993). *Neighborhoods and crime: The dimensions of effective community control*. New York, NY: Lexington.
- Carcach, C., Frampton, P., Thomas, K., & Cranich, M. (1995). Explaining fear of crime in Queensland. *Journal of Quantitative Criminology*, 11, 271–287.
- Cates, J. A., Dian, D. A., & Schnepf, G. W. (2003). Use of protection motivation theory to assess fear of crime in rural areas. *Psychology, Crime, & Law*, 9, 225–236.
- Chiricos, T., Eschholz, S., & Gertz, M. (1997). Crime, news, and fear of crime: Toward an identification of audience effects. *Social Problems*, 44(3), 342–357.
- Chiricos, T., Padgett, K., & Gertz, M. (2000). Fear, TV news, and the reality of crime. *Criminology*, 38(2), 755–785.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Dowler, K. (2003). Media consumption and public attitudes toward crime and justice: The relationship between fear of crime, punitive attitudes, and perceived police effectiveness. *Journal of Criminal Justice and Popular Culture*, 10(2), 109–126.
- Eschholz, S., Chiricos, T., & Gertz, M. (2003). Television and fear of crime: Program types, audience traits, and the mediating effect of perceived neighborhood racial composition. *Social Problems*, 50(3), 395–415.
- Gabriel, U., & Greve, W. (2003). The psychology of fear of crime: Conceptual and methodological perspectives. *British Journal of Criminology*, 43(3), 600–614.
- Gerbner, G., & Gross, L. (1976). Living with television: The violence profile. *Journal of Communication*, 26(2), 172–199.
- Gilchrist, E., Bannister, J., Ditton, J., & Farrall, S. (1998). Women and the fear of crime: Challenging the accepted stereotype. *British Journal of Criminology*, 38(2), 283–298.
- Hale, C. (1996). Fear of crime: A review of the literature. *International Review of Victimology*, 4, 79–150.
- Heath, L., & Petraitis, J. (1987). Television viewing and fear of crime: Where is the mean world? *Basic and Applied Psychology*, 8(1–2), 97–123.
- Houser, K. A., & Fratello, J. (2013). Prediction of crime (issues in measurement). *Encyclopedia of criminology and criminal justice*. Hoboken, NJ: Wiley-Blackwell.
- Jackson, J. (2004). Experience and expression: Social and cultural significance in the fear of crime. *British Journal of Criminology*, 44(6), 946–966.
- Kanan, J. W., & Pruitt, M. V. (2002). Modeling fear of crime and perceived victimization risk: The (in) significance of neighborhood integration. *Sociological Inquiry*, 72(4), 527–548.
- Killias, M. (1990). Vulnerability: Towards a better understanding of a key variable in the genesis of fear of crime. *Violence and Victims*, 5(2), 97–108.
- Lane, J., & Meeker, J. W. (2003). Ethnicity, information sources, and fear of crime. *Deviant Behavior*, 24(1), 1–26.
- Liska, A. E., & Baccaglini, W. (1990). Feeling safe by comparison: Crime in the newspapers. *Social Problems*, 37(3), 360–374.
- Meyers, S. L., & Chung, C. (1998). Criminal perceptions and violent criminal victimization. *Contemporary Economic Policy*, 16(3), 321–333.
- Nofziger, S., & Williams, L. S. (2005). Perceptions of police and safety in a small town. *Police Quarterly*, 8(2), 248–270.
- O'Connell, M. (1999). Is Irish public opinion towards crime distorted by media bias? *European Journal of Communication*, 14(2), 191–213.
- Pinkerton, J. M. (1992). The elderly as victims of crime, abuse and neglect. *Trends & issues in crime and criminal justice, no.37*. Canberra, ACT, Australia: Australian Institute of Criminology.
- Rachanukul, T. (2009). *Factors affecting fear of crime among women in Bangkok Noi District, Bangkok Metropolis* (Unpublished master's thesis). Mahidol University, Nakhon Pathom.
- Rader, N., May, D., & Goodrum, S. (2007). An empirical assessment of the threat of victimization: Considering fear of crime, perceived risk, avoidance, and defensive behaviors. *Sociological Spectrum*, 27(5), 475–505.
- Rountree, P. W. (1998). A reexamination of the crime-fear linkage. *Journal of Research in Crime and Delinquency*, 35, 341–372.
- Sahawattana, P., Kruekam, S., Limmanon, P., & Sakulsukcharuen, S. (2013). *Police station efficiency assessment campaign and people confidence on police performances, annual budget 2013* (Research Report). Bangkok, Thailand: National Institute of Development Administration.
- Scott, H. (2003). Stranger danger: Explaining women's fear of crime. *Western Criminology Review*, 4(3), 203–214.
- Shaw, C. R., & McKay, H. D. (1969). *Juvenile delinquency and urban areas*. Chicago, IL: University of Chicago Press.
- Soper, D. S. (2017). *A-priori sample size calculator for structural equation models [Software]*. Retrieved from <http://www.danielsoper.com/statcalc>.
- Stovic, P., Fischhoff, F., & Lichtentien, S. (1987). Behavioral decision theory perspective on protective behavior. In N. D. Weinstein (Ed.), *Taking care: Understanding and encouraging self-protective behavior*. Cambridge, UK: Cambridge University Press.
- Vold, G. B., Bernard, T. J., & Snipes, J. B. (2002). *Theoretical criminology* (5th ed.). New York, NY: Oxford University Press.
- Westland, J. C. (2010). Lower bounds on sample size in structural equation modeling. *Electronic Commerce Research and Applications*, 9(6), 476–487.
- Wyant, B. R. (2008). Multilevel impacts of perceived incivilities and perceptions of crime risk on fear of crime. *Journal of Research in Crime and Delinquency*, 45(1), 39–64.
- Ziersch, A., Putland, C., Palmer, C., MacDougall, C., & Baum, F. (2007). Neighborhood life, social capital and perceptions of safety in the western suburbs of Adelaide. *Australian Journal of Social Issues*, 42(4), 549–562.