

The Impact of Fear Levels According to Residential Environment on Protective Behaviors

- Focusing on the Moderating Effect of Self-Defense Product Possession

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Abstract

It can be said that people have different degrees of perception of fear depending on their residential environment, and when they feel fear, they take protective actions. Therefore, this study investigated the degree of fear caused by the surrounding environment, local relations, local residents' criminal response, and local police activities among the residential environment, and investigated whether or not the possession of self-defense products moderates the effect of protection behavior caused by fear. This study was conducted using the questions of the second data, the '2020 Survey on National Life Safety'. A total of 13,836 survey participants were evenly distributed in both gender and age. The research results are as follows. People felt more fear as the surrounding environment was bad, and through this, it was found that the surrounding environment needed to be improved. And the better the relationship with the local residents, the greater the fear. This is presumed to be because among the types of crime, people around them often become the perpetrator, and the better they know themselves, the more planned the crime can be approached. The less local residents responded to crime, the greater their fear, so it was found that local residents had to trust each other and try to escape the fear of crime. Local police activities were not related to fear in the residential environment, but police were not often seen in real life, so they assumed that they did not affect the relationship with fear. Regarding fear and protective behavior, the greater the fear, the greater the protective behavior. And the moderating effect was confirmed when examining whether the relationship between fear and protective behavior was moderated by the possession of self-defense products. The more they possessed self-defense products, the more they were able to cope with protective behavior. Using these results, residents should be able to feel safe by distributing self-defense products to residents in places where the surrounding environment is generally perceived to be disorderly or in areas where they are considered to be less reliable in responding to crimes between residents

Key words: Residential environment, Surrounding Environment, Local Relationship, Local Resident Crime Response, Local Police Activities, Fear, Protective Behavior, Self-defense Supplies

I. Introduction

With the stabbing at Shin Lim Station and similar copycat crimes taking place in July 2023, people experienced fear that they might be harmed by someone they didn't know for no reason (Ko, Chosun Ilbo). As people became afraid, the purchase of self-defense products by men as well as women who were easily targeted by crimes increased.

These events were more feared to occur within the radius of their lives, not in a special space. Some studies have shown that people feel more afraid when the local environment is socially and physically disordered (Kwak, 2010), and some previous studies have shown that people in socially dismantled areas feel more afraid of crime (Lee, 2000) and that the less they have a sense of community bond, the higher the fear of crime (Choi, 2021). On the contrary, local residents' responses, such as when residents saw the victim and reported or applied to the police (Kim, 2016), led to a decrease in fear, and the more active the police were, the lower the anxiety of crime (Jang, 2021).

The result of fear leads to protective behavior, and there is a previous study that fear of crime is the most powerful factor in protective behavior, and self-defense behavior comes out as a result of fear of crime (Kim, 2010). People have also led to the purchase of self-defense products to reduce their fear of crime even a little.

II. Theoretical Discussions

1. Fear

Among the preceding studies related to fear, crime fear defined by Song(2016) is divided into specific fear and general fear, and specific fear is the fear of becoming a specific victim, and general fear refers to a vague fear of crime or safety. This paper intends to define fear based on this definition.

By referring to Fisher & his colleagues(1995), and Ferraro's Risk Analysis Model, we want to find out the fear of the residential environment by considering four variables related to the residential environment: surrounding environment, relationship with local residents, crime-related responses of local residents, and local police activities.

According to a study by Hwang(2015), in general, it is easy to feel scared when the surrounding environment of one's residence is dark or unorganized, and those who witness disorder in one's residence consider the residence to be unsafe from crime, and this feeling eventually stimulates the fear of crime to the individual. In addition, there is a study result that when the ties between members of the region are weakened and the trust relationship is lost, the fear of crime increases(Yoon, 2016). Not only the relationship with the local people, but also the residents' response to the crime when the crime occurred were affected. According to a study by Jeong(2023), general fear was reduced when residents expected to report when a criminal act occurred. In addition, residents in areas with active community police activities felt intimacy and satisfaction toward the police, thereby helping to alleviate their fear of crime (Lee, 2000).

2. Protective Behavior

According to the 'Protection Motivation Theory', protection motivation is created to alleviate a threat depending on how much an individual perceives it (Lee, 2009). This protection motivation leads to protection behavior. According to a study by Kim(2004), protection behavior was defined as an action to increase resistance to criminal damage under conditions or situations with a high risk of damage. Kim(2016) said that the more fear of crime, the greater the self-protection behavior.

And people bought self-defense products when their fear grew. These self-defense products can be divided into weapons such as three-tiered sticks, spray guns, and electric shockers that can protect themselves by directly attacking criminals and non-weapons such as self-defense alarms and whistles that can seek help around them by using sound and other means (Kim, 2016). I think that the use of self-defense products can solve my fear and that this can protect me, so I think we can

see the effect of self-defense products between fear and protective behavior.

III. Research Method

The data used in this study were conducted with the results of the "2020 Survey on National Life Safety as of 2020" developed by the Korea Institute for Criminal and Legal Policy with the Gallup Korea.

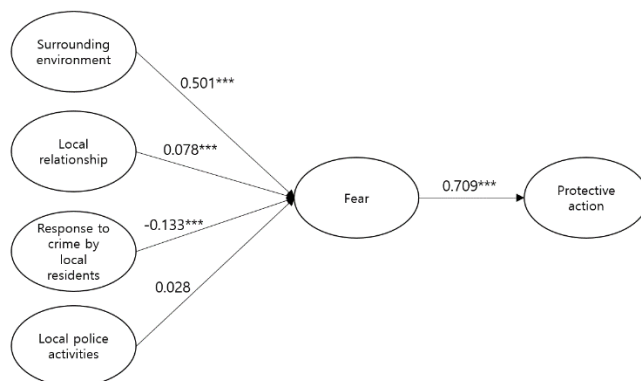
Reliability analysis, exploratory factor analysis, and confirmatory factor analysis were performed to verify the reliability of the scale, and multi-group structural equation model analysis was performed to verify the research model. Above, a multi-group structural equation model analysis was conducted. SPSS 26.0 and AMOS 22.0 programs were used for the analysis program.

IV. Result

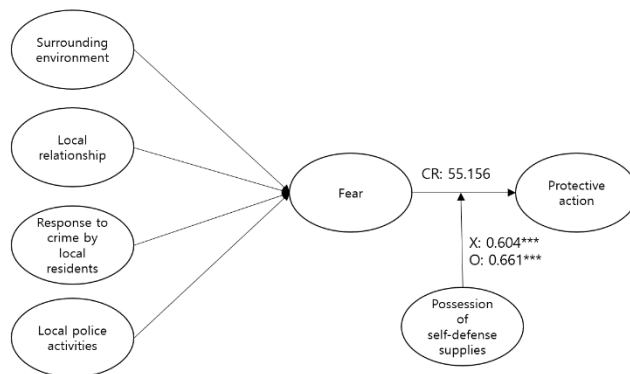
First, in the relationship between fear and the residential environment, the bad surrounding environment and good local relationships made fear increase, and the fear decreased as local residents actively responded to crime. However, local police activities did not affect fear.

Second, the relationship between fear and protective behavior and the moderating effect of the possession of self-defense products were examined. Fear and protective behavior are positive relationships, and the greater the fear, the higher the protective behavior. In this regard, the possession of self-defense products has a moderating effect, so people with self-defense products actively took protective actions when they were afraid.

1. Structural model with the standardized path estimate



2. Structural Model Comparing The Standardized Path Estimate and Composite Reliability in the Not in possession and Possession Groups.



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

V. Conclusions

In this study, the degree of fear according to the residential environment was identified, and whether or not the possession of self-defense products controls the effect of protective behavior caused by fear.

In the residential environment, items on the surrounding environment, local relations, crime-related responses of local residents, and local police activities were examined. Research results showed that the surrounding environment, local relationships, and crime-related responses of local residents affected fear, and local police activities did not. And regarding fear and protective behavior, the greater the fear, the greater the protective behavior. This was the same result as previous studies, and the moderating effect was confirmed when examining whether the relationship between fear and protective behavior was controlled by the possession of self-defense products.

Through this paper, we investigated the areas that provide crime fear externally by presenting the residential environment by focusing on external factors rather than internal factors, looking at the relationship between residential environment and fear to protective behavior, and seeking practical measures by using the possession of self-defense products that people can use in the event of a crime as a control effect.

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