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# Territorial functioning, victimisation and fear of crime: A comparative study of high and low crime rate estates

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# **Abstract**

There is substantial empirical support that links territorial functioning with low crime and fear of crime in the residential setting. However, for the concept to be useful in preventing crime and fear of crime, it is important for it to operate in different crime contexts, especially in high crime areas, where the problem poses a major concern. This study focuses on territorial functioning in outdoor residential settings close to the home such as front and back gardens, porches, pedestrian pathways and immediate streets. Territorial functioning was measured on two dimensions: territorial attitudes and marking behaviour. Based on a survey of 217 respondents, this paper examines territorial functioning in neighbourhoods with different crime levels, focusing mainly on outcomes of crime: victimisation and fear of crime. In accordance with the "victimisation perspective", the current study found a significant negative relationship between territorial functioning and victimisation, at the individual and neighbourhood levels, extending the link between high territorial functioning and less crime experience to different crime contexts. The negative relationship between territorial functioning and fear of crime was also observed in the study. Residents who were more territorial were less fearful of going out after dark and felt safer in the streets. However, the link between territorial functioning and less fear of household crime was only confined to elderly residents.

Keywords: territorial functioning, fear of crime, victimisation, crime, council estates, Sheffield, residential setting, territorial attitudes, marking behaviour.

#### 1 Introduction

The concept of territorial functioning refers to how people manage the space they own and how they occupy or use them at varying times. According to Taylor [1], territorial functioning can be expressed through attitudes, behaviours and markers. Attitudes are related to people's perception of their relationship to a particular delimited location, such as one's feelings of annovance towards people who throw litter into the garden. Behaviours are expressed through non-verbal and verbal efforts including surveillance, gardening and beautification work. Markers on the other hand are observable consequences of behaviours that can be achieved through signs of upkeep such as trimmed lawns. Territorial functioning is important especially in spaces that immediately surround the home (e.g. streets, front and back gardens, and pathways) because the home does not exist in isolation [2]. It is connected with its immediate setting both physically and psychologically. The outdoor spaces surrounding the home act as a bridge connecting the individual or household to the immediate society. The quality of life in the home is influenced by the events, people and conditions in these spaces.

The link between territorial functioning and the deterrence of crime and fear of crime is based on the assumption that offenders perceive care and maintenance of outdoor residential spaces by the occupants as likely to be defended. This link has been identified in many studies [3 & 4]. This type of research focuses mainly on the offender in understanding crime and the risk of victimisation. This includes determining the social, physical and economic factors that influence people to offend. However, many researchers have now moved from examining the consequences of crime as an activity of the offender to the experience of the victim, known as the victimisation perspective [5 & 6]. This view perceives that the victims' behaviour, the characteristics of the physical and social environments influence the risk of victimisation. Changing these factors can often lead to a reduction in crime. One of the foci of this perspective is to study how people's lifestyles affect their risks of being a victim [7].

Exploring the relationship between territorial functioning and victimisation has many benefits. It could lead to new insights into the cause and nature of the problem that could then provide a better understanding of the relationship between people and places. This study sets out three main objectives. The first aim is to establish the demographic variables that are related to victimisation of household crimes. The second aim is to examine the relationship between territorial functioning and victimisation of household crimes while the third objective is to examine the relationship between territorial functioning and fear of crime.

## 2 Method

#### 2.1 Site selection

The study focuses on council estates in Sheffield, England, which are predominantly occupied by people on a low income. This type of tenure represents a high proportion (30%) of the overall tenure type in Britain [8]. The Census SAS (OPCS, 1991) was used to obtain information on demographic characteristics of potential estates while crime rates were based on the 1995 Police Offence and Offender Data. Three estates were chosen for the study. The first estate represented a low crime estate (Estate Low) while the second (Estate High-SE) and third (Estate High-NW) estates represented high crime estates. The three "garden-city" cottage-type estates were built in the inter-war period. All three estates are located in a predominantly housing area with basic shopping facilities provided within the estates. The estates were comparable in terms of size, density and rent rates as well as key demographic characteristics (i.e., ethnicity, gender balance, marital status, tenure type, social class and car ownership).

#### 2.2 Survey Procedure

The study was quantitative in nature and involved asking respondents (main wage earner or the spouse) to answer a questionnaire that was orally administered. It contained two main parts. The first part covered demographic information, territorial attitudes, fear and crime problems and victimisation experience. The second part was conducted after the interview and involved a personal observation of residents' front garden in order to evaluate behaviour markers. A sampling frame was developed from a list of all properties in the three estates obtained from the Sheffield City Council. A systematic sampling method was used to select the respondents. The survey involved 217 respondents from the three estates. Estate High (SE) was represented by 51 respondents, Estate High (NW) had 64 respondents while 102 respondents were from Estate Low. The overall response rate was 67%.

# 2.3 Territorial functioning measures

Two methods were used to measure territorial functioning based on techniques employed in previous studies [4 & 9]. The first method involved the use of 11 attitude statement items while the second method was based on observations of residents' marking behaviour. The categories included markers, physical and symbolic barriers, gardening works and exterior house maintenance. The scores from the territorial attitude statements and marking behaviour items were being subjected to validity (corrected item-to-scale correlation) and reliability (Cronbach's alpha) tests. The final territorial attitude scale consists of nine items with an alpha value of 0.81, and the corrected item-to-scale correlations ranged from 0.32 to 0.66. On the other hand, the marking behaviour scale produced an

alpha value of 0.76 and the corrected item-to-scale correlations ranged from 0.42 to 0.90. The two different scores were then subjected to factor analysis in order to determine that the two scores can be combined. Using principle component analysis, two factors were extracted based on the scree test method proposed by Catell [10]. All items load significantly on factor one ( $\tilde{n}$ >0.3) suggesting that this dominant factor was territorial functioning. Therefore, the two measures were combined to form a scale measuring territorial functioning. Since the scale has many values ranging from 0 to 100, a collapsed version of the scale was constructed by trichotomising the scale. The third of the sample with the lowest score is called low, the middle third is called medium while the third of the sample with the highest score is called high [11].

#### 2.4 Victimisation measures

Questions regarding victimisation experience were structured based on the 1996 British Crime Survey [12], which involved asking respondents whether they have been victims of personal, household and motor vehicle crimes in the past twelve months. Personal crime refers to common assault, theft from person, wounding, robbery, sex offences and other personal thefts. Household crime covers burglary in a dwelling, vandalism, bicycle theft, theft in a dwelling and other household thefts. On the other hand, motor vehicle crime includes thefts of and from motor vehicle.

#### 2.5 Fear of crime measures

Fear of crime was measured in two ways based on the 1996 British Crime Survey [12]. The first measure of fear of crime involved asking the respondents how worried they were regarding being victims of five types of crime (burglary, car theft, assault, harassment and rape). These questions were based on a four-point Likert scale format ranging from "very worried" to "not at all worried". The second measure of fear of crime asked the respondents how safe they felt walking alone in "the area" and on their "own street" after dark. Similar to the first measure, the questions were based on a four-point Likert scale format that ranged from "very safe" to "very unsafe".

# 3 Survey Results

### 3.1 Victimisation experience and demographic characteristics

An analysis was conducted in order to examine the relationship between victimisation of household crime and demographic characteristics. The Spearman's rank order correlation  $(r_s)$  technique was used when the demographic variables were at the ordinal level, while the Mann-Whitney test was performed for dichotomous variables. The results of the analysis are presented in Table 1. Two demographic variables are significantly related to household victimisation. The first variable is age and the findings reveal that household victimisation

decreases with age. The second variable related to household victimisation is length of residence. An increase in length of residence results in a decrease in household victimisation. The partial correlation also reveals that the relationship between length of residence and household victimisation is significant after controlling for age (p<.05).

Table 1: Demographic characteristics by victimisation.

	Household victimisation	
Age <sup>a</sup>	p<.05	
Gender <sup>a</sup>	p>.05 (NS)	
Ethnic origin <sup>a</sup>	p>.05 (NS)	
Marital status <sup>a</sup>	p>.05 (NS)	
Occupation status <sup>b</sup>	p>.05 (NS)	
Social class b	p>.05 (NS)	
Household income	p>.05 (NS)	
No in household	p>.05 (NS)	
Length of residence <sup>a</sup>	p<.05	
Type of dwelling	p>.05 (NS)	
Type of ownership	p>.05 (NS)	

Significant in bold, (NS) is not significant,

# 3.2 Victimisation experience and territorial functioning

The correlation between household victimisation and territorial functioning is computed using Pearson's Correlation Coefficient (r). At the individual level, the relationship between both variables is significant (r = -.189, p < .01). An increase in household victimisation is associated with a decrease in levels of territorial functioning. In addition, the partial correlation analysis reveals that the relationship between household victimisation and territorial functioning is significant after controlling for age (r = -.161, p < .05) and length of residence (r = -.163, p < .05), the two variables related to household victimisation. At the neighbourhood level, the study also reveals that the relationship is significant for all the three estates (Estate High [NW], r = -.268, p < .05; Estate Low, r = -.239, p < .05; Estate High [SE], r = -.146, p < .05).

## 3.3 Fear of crime and territorial functioning

The statistical analysis leads to the conclusion that there is no significant relationship (p>.05) between territorial functioning and worry about household and personal crimes, both at the individual and neighbourhood levels. A further analysis was conducted in order to examine whether age influences the relationship between territorial functioning and worry about crime. The results suggest that there is a significant relationship between territorial functioning and worry about household crimes for elderly respondents, those aged 65 and over

<sup>&</sup>lt;sup>a</sup>respondent. <sup>b</sup>wage earner.

(Table 2). Elderly respondents who expressed high territorial functioning were less fearful of household crimes. This relationship does not hold for other age groups. These findings are in agreement with the study conducted by Pollack and Patterson [13], which found that territoriality was associated with reduced fear among the elderly.

Table 2: Relationship between worry about crime and territorial functioning across age groups.

	Territorial functioning and household crime	
Under 25	p>.05 (NS)	
25 - 34 years	p>.05 (NS)	
35 - 44 years	p>.05 (NS)	
45 -54 years	p>.05 (NS)	
55 - 64 years	p>.05 (NS)	
65 and over	p<.05	

The respondents were asked how safe they felt walking alone in "the area" after dark. The results of the analysis reveal that there is no significant relationship between territorial functioning and perception of safety when walking alone in the area after dark (n=159, p>.05).

In addition, the respondents were also asked how safe they felt walking alone in their "own streets" after dark (Table 3). The results reveal a significant relationship between territorial functioning and perception of safety when walking alone in their own streets after dark ( $r_s = -.253$ , p<.005). Respondents who engaged in higher territorial functioning felt safer walking alone on their "own streets" after dark. No separate analysis was conducted for each estate because of the limited number of cases for meaningful subgroup analysis.

Table 3: Perception of safety when walking alone on the streets and territorial functioning.

	Territorial	Territorial	Territorial
	functioning	functioning	functioning
	(Low)	(Medium)	(High)
very safe	19%	29%	44%
fairly safe	73%	59%	45%
a bit unsafe	7%	10%	7%
very unsafe	2%	2%	3%
Total	50	59	50

Analysis based on "total weighting", n=159.

Columns do not necessarily add to 100% because of rounding.

There are many possible reasons why people do not go out after dark. It could be due to fear of crime, not liking the dark, not liking to go out at all or various other reasons. In the study conducted by Shapland and Vagg [14], it was found that 89% of respondents living in the urban area mentioned fear of crime as the main reason why they were afraid to walk alone at night. However, in the rural area, other reasons such as fear of the dark appeared prominently together with fear of crime. This study examined why people do not go out after dark according to levels of territorial functioning and whether fear of crime was an important factor influencing their decisions. The results are presented in Table 4.

Table 4: Reasons for not going out after dark and territorial functioning

	Territorial	Territorial	Territorial
	functioning	functioning	functioning
	(Low)	(Medium)	(High)
Too old or sickly	20%	10%	18%
Family responsibilities	34%	11%	6%
Fear of crime	23%	14%	9%
Don't want to go out	8%	57%	55%
Others	16%	8%	13%
Total	(18) 100%	(12) 100%	(21) 100%

Analysis based on "total weighting", n=51

Columns do not necessarily add to 100% because of rounding.

More than half of the respondents in the high and medium territorial functioning groups reported that they simply did not want to go out at night. However, this reason was hardly mentioned by the low territorial respondents who were mainly younger in age. For the low territorial functioning group, fear of crime was the second reason (23%) after family responsibilities (34%). In comparison, fear of crime was only mentioned by 14% of the medium territorial group and by 9% of the high territorial functioning group. The fact that many low territorial respondents (34%) as opposed to high territorial respondents (6%) mentioned family responsibilities as the reason for not going out at night was attributed to the fact that they had to take care of their children, reflecting the high proportion of young adults in the low territorial group.

# 4 Discussion

This study reveals that age and length of residence are significantly related to household victimisation. The results of the analysis indicate that elderly residents and those who have lived on the property for a longer period of time are less likely to be victimised than non-elderly and short-term occupiers. The findings that houses occupied by older persons have lower household victimisation rates are consistent with other studies, both at the individual [15 & 16] and aggregate levels [17, 18 & 19]. Although it is unclear whether these findings reflect independent causal processes at both levels of analysis, the negative association

between household victimisation and age is perceived as reflecting the individual level process, which is, the individual guardianship of households occupied by older residents. In addition, this study has found that victimisation risk is lower for households who have lived on the property for a longer period of time than those who have lived on the property for a shorter period. These findings are consistent with other studies [20].

Although much emphasis has been put on the significance of territorial functioning in reducing crime, studies focusing on territorial functioning from the "victimisation perspective" are rather scarce. A notable study was conducted by Brown and Altman [21], which examined territorial display in burgled and non-burgled houses. It was found that non-burgled houses, as opposed to burgled houses, had more surveillance opportunities, personalisation and maintenance efforts. This study reveals a significant relationship between household victimisation and territorial functioning at the individual and neighbourhood levels. Residents who engage in high territorial functioning are more likely to experience low victimisation than those who engage in low territorial functioning. This relationship is significant after controlling for age and length of residence, the two variables related to household victimisation.

Previous research has come to the conclusion that fear of crime is inversely related to territorial functioning [4, 9, 13 & 22]. This study reveals some mixed results. Initially, the study found no significant relationship between territorial functioning and fear of household and personal crime. However, when the analysis was conducted for each age category, a significant relationship was found between territorial functioning and fear of household crime for those aged 65 and over. High territorial respondents, aged 65 and over, were less fearful of household crime than their counterparts in the lower territorial groups. No significant relationship was observed for other age groups (i.e. those under the age of 65).

These findings are similar to those reported by Pollack and Patterson [13]. In their work, fear of crime was measured by fear of assault and fear of theft. Their study found an association between territoriality and both, fear of assault and fear of property loss in an elderly sample (i.e. those aged 65 and above), but no such relationship was found among the non-elderly. Pollack and Patterson [13] offered an explanation for the observed relationship between territorial behaviour and fear of crime among the elderly. They suggested that the environment created by the territorial behaviour among the elderly resulted in increased feelings of safety that follows Newman's [23] conceptualisation of "perceived zones of territorial influence" in his Defensible Space Theory. The fact that territorial display does not influence fear levels among the non-elderly sample led them to reject an earlier alternative hypothesis of "active mastery" [9].

The relationship between territorial functioning and fear of crime was also measured in relation to perception of safety when walking alone in "the area" and on their "own street" after dark. There are two notable characteristics that distinguishes the area and the respondents' own street. First, the area covers a boundary that is much bigger in size compared to the streets. Second, in terms of distance, the area covers locations that are further away from the home compared

to the streets. The results suggest that there is no significant relationship between territorial functioning and perception of safety when walking alone in "the area" after dark.

On the contrary, there is a significant relationship between territorial functioning and perception of safety when walking on "the street" after dark. The respondents who were more territorial perceived it safer to walk alone on the streets after dark than those who were less territorial. In agreement with other studies [24, 25 & 26], the current study suggests that territorial functioning operates in reducing fear only when the residents are close to their homes but not when they are further out. On the basis of these findings, the results support Taylor's [1] contention that territorial functioning is highly place-specific to small-scale delimited areas.

# **5** Conclusion

Crime has always been a focus of public interest. One of the main reasons for this concern being the negative effects victimisation can have on the victims. Crime should not be viewed merely as an activity of the offender as the characteristics of the victims also influence crime. The victimisation perspective in studying crime should be further explored. In order to reduce crime, criminologists should focus more attention on the phenomenon of multiple victimisations because a high proportion of crimes are in fact against the same people. The display and maintenance of territorial features is an environmental approach to crime prevention that can be employed by the residents themselves.

#### References

- [1] Taylor, R.B., Human Territorial Functioning: An Empirical, Evolutionary Perspective on Individual and Small Group Territorial Cognitions, Behaviours and Consequences. Cambridge: Cambridge University Press, 1988
- [2] Taylor, R.B. & Brower, S.N., Home and near-home territories, in *Human Behavior and Environment*. pp. 183-212, 1985.
- [3] Craik, K.H. & Appleyard, D., Streets of San Francisco: Brunswik's lens model applied to urban inference and assessment. *Journal of Social Issues*, **36(3)**, pp. 72-85, 1980.
- [4] Taylor, R.B., Gottfredson, S.D. & Brower, S. Block crime and fear: Defensible space, local social ties and territorial functioning. *Journal of Research in Crime and Delinquency*, **21(4)**, pp. 303-331. 1984.
- [5] Lewis, D.A., ed. Reactions to Crime, Sage: Beverly Hills, CA, 1981.
- [6] Pease, K., *Repeat Victimisation: Taking Stock*, Home Office Police Research Group, 1998.
- [7] Hindelang, M.J., Gottfredson, M.R & Garofalo, J., *Victims of Personal Crime: An Empirical Foundation for a Theory of Personal Victimisation*. Cambridge, Mass: Ballinger, 1978.

- [8] Sheffield Housing Department., Facts and Figures: Annual Statistical Report 1995/96, Sheffield: Housing Department. 1996.
- [9] Patterson, A.H., Territorial behavior and fear of crime in the elderly. Environmental Psychology and Nonverbal Behavior, 2(3), pp. 131-145, 1978.
- [10] Cattell, R.B., The meaning and strategic use of factor analysis, in *Handbook of Multivariate Experimental Psychology*, ed. R.B. Cattell, Rand McNally: Chicago, 1966.
- [11] de Vaus, D.A., Surveys in Social Research. London: Unwin Hyman, 1986.
- [12] Mirrlees-Black, C., Mayhew, P & Percy, A., *The 1996 British Crime Survey*, Home Office: London, 1996.
- [13] Pollack, L.M. & Patterson, A.H., Territoriality and Fear of Crime in Elderly and Nonelderly Homeowners. *The Journal of Social Psychology*, **111**, pp. 119-129, 1980.
- [14] Shapland, J. & Vagg, J., Policing by the Public. London: Routledge, 1988.
- [15] Cohen, L., James, R.K & Kenneth, C., Social inequality and predatory victimisation: An exposition and test of a formal theory. *American Sociological Review*, **46**, pp. 505-524, 1981.
- [16] Tseloni, A. & Pease, K., Repeat victimisation and Policing: Who Gets Burgled, Where and How Often?, in *Problem-Oriented Policing and Crime Prevention*, ed. P.O. Wilstrom, W. Skogan, and L. Sherman. Wadsworth: New York, 1998.
- [17] Sparks, R.F., Genn, H.G. & Dodd, D.J., *Surveying Victims*, New York: John Wiley, 1977.
- [18] Roncek, D.W., Dangerous Places: Crime and Residential Environment. *Social Forces*, **60(1)**, pp. 74-96, 1981.
- [19] Gottfredson, M.R., *Victim of Crime: The Dimension of Risk*, Home Office Research and Planning Unit: London, 1984.
- [20] Smith, D.A. & Jarjoura, G.R., Household characteristics, neighborhood composition and victimization risk. *Social Forces*, **68(2)**, pp. 621-640, 1989.
- [21] Brown, B.B. & Altman, I., Territoriality, defensible space and residential burglary: An environmental analysis. *Journal of Environmental Psychology*, **3**, pp. 206-220, 1983.
- [22] Normoyle, J. & Lavrakas, P.J., Fear of crime in elderly women: Perception of control, predictability, and territoriality. *Personality and Social Psychology*, 10(2), pp. 191-202, 1984.
- [23] Newman, O., Defensible Space, London: Architectural Press. 1973.
- [24] Gillis, A.R., & Hagan, J., Bystander Apathy and the Territorial Imperative. *Sociological Enquiry*, **53**, pp. 449-460, 1983.
- [25] Greenberg, S., Rohe, W & Williams, J., Safe and Secure Neighbourhood, , ed. W. Rohe, Research Triangle Park: NC, 1981.
- [26] Mc Pherson, M., Silloway, G & Frey, D.L., Crime, Fear and Control in Neighbourhood Commercial Center, Minneapolis: Minnesota Crime Prevention Center, 1983.