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REPEAT VICTIMISATION (DOMESTIC BURGLARY):
A STUDY OF THE RELATIONSHIP BETWEEN HOUSING TYPE AND THEIR TIME COURSE OF REPEAT VICTIMISATION IN NOTTINGHAMSHIRE.

Executive Summary

This study describes how a gap in the research concerning the study of repeat victimisations (dwelling house burglary), identified by Graham Farrell and Ken Pease (1993), has been potentially filled.

Farrell and Pease (1993), identified that no research had been undertaken to identify which *type* of house was most susceptible to being burgled on more than one occasion during a given period of time. Also, what influence, if any, the time course of increased risk had upon each type of dwelling so defined.

This study provides the reader with overwhelming evidence that in Nottinghamshire, between January 1998 and January 1999, the phenomenon is most prevalent in dwellings valued at £40,000 or less (council tax banding `A'). It also confirms previous investigations into time course by identifying that the risk. of being revictimised was at its highest within one month of the initial victimisation.

Following an introduction regarding the crime of burglary in general, the aims and objective of the study are identified, as well as defining what constitutes a burglary for the purposes of the research

The next section comprises the most salient work carried out to date in the research/investigation of repeat victimisation. Each of the studies included in this section is precised in order to communicate to the reader what each investigation did/established towards the development of knowledge regarding the phenomenon.

In the section entitled `Background,' revictimisation is defined, and its history mapped from conception to Key Performance Indicator. An outline of the basic elements which constitute a repeat victimisation strategy are discussed, along with the theoretical background that informs such strategies, much of which is crime prevention based. This section then progresses with discussions on `when' and `where' such crime prevention measures should be undertaken. The section concludes by identifying the `who' of repeat victimisation, concentrating on the victim, and thus includes a section concerning applicable areas of victimology.

The following section entitled `methodology' illustrates the process used to identify each repeat for the time period under investigation. This was achieved by interrogating Nottinghamshire Police's database using Structured Query Language (SQL) and Graphical Query Language (GQL).

Having established which dwellings had been subjected to repeat burglaries, each of their respective council tax bandings were identified, bandings A to H, i.e. £40,000 and under to £320,001 and above.

The time interval between each repeat for each dwelling was then identified. From the data acquired, the total number of repeats, total number of repeats per council tax banding, time course of all repeats and time course for each council tax banding was identified, along with other fundamental statistical findings.

The section entitled `Results Section' placed all the datalstatistics acquired into both tabular and graphical form.

In conclusion to the study, observations and recommendations are made on the findings.

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Methodology

The methodology used to achieve the aims of the research follows a simplistic
`menu,' of actions/operations. It would, therefore, be appropriate to use the same
methodology (allowing for local discrepancies such as computer software etc.) in
other police areas to achieve the same goals to build a national picture, if so required.
The actions/operations undertaken are as follows-:

**1. Identification of all dwelling houses defined as repeat victims within a given
time period.**

In this particular study, this was established using Nottinghamshire Police's
computerised database. The information required was retrieved from the database
using both Structured Query Language (SQL) and Graphical Query Language GQL).
The information having originally been recorded on the force's crime recording
system "CRIS."

SQL - Structured Query Language — is an international standard language for
interrogating relational databases. This can be complicated and requires the operator
to be aware of the database structure, the attribute names and the join fields between
tables.   Thus, its use is confined to IT professionals who have this awareness of the
database structure.

GQL – Graphical Query Language – is a tool whereby users who do not have this level of awareness can interrogate relational databases. The administrators set up the database in question as follows: -

- Only relevant tables are displayed
- Joins between tables are specified
- Attributes are given names which will be understood by the user

From this the user can easily specify ad hoc queries and GQL will convert this specification to SQL language, with which to interrogate the database.

As with previous research into this area of criminology, the researcher has to acknowledge the very real problem that the actual number of repeats recorded by Nottinghamshire police is inaccurate in that it will be an underestimate of the number which actually exist in that policing area. It is also acknowledged that statistics emanating from data recorded by the police is not acquired or kept for research purposes. This limitation will always be there for those utilising such data whilst conducting research. A paragraph entitled `Identifying the Problem', has been devoted to the problem within the strategy (APPENDIX 2) and reflects informed consensus that `no one knows the true extent of crime in this country' (Home Office 1995).

The GQL report produced by the system contained the following information for each Local Area Command (LAC) regarding individual repeat victimisation-:

- **Beat code -** this identifying both the division and beat the dwelling is situated upon

- **Address –** identifying the dwelling along with its associated postcode

- **Crime number**

- **Committed from/committed to –** the time period between the last time the dwelling was known to be secure (committed from) and the time at which the burglary was discovered (committed to)

- **Description –** this section conveying such information as, The Act and section appropriate to the crime e.g. Section 9 Theft Act 1968, nature of the property stolen, type of dwelling (flat, semi-detached etc.) and the nature of any damage.

- **Force class/state –** this relates to the forces classification of the crime e.g. Burglary dwelling and the `state,' relates to whether or not the offence is detected.

- **Modus Operandi (MO) –** this relates to the way in which the offender committed the crime e.g. forced/bodily pressure front ground floor door

- **Aggrieved –** identifies the victim, the victims sex and may include a telephone number where applicable.

Therefore the database was requested to produce all repeat victims by address between January 1998 and January 1999 (APPENDIX 1(A), (B) & (C))

2. Identification of the council tax banding for each of the dwellings identified in (I) above.

The identification of the council tax banding for each dwelling was completed using the manual records available, for public scrutiny, from the local Valuation Office (Inland Revenue Department). For the purposes of this research, this is located on Chalfont Drive, Wollaton, Notts. Due to data protection problems the researcher was unable to use their computerised system upon which to undertake this task, thus some considerable time was spent completing this job manually.

Every dwelling in England has been placed in one of eight bands for Council Tax purposes (Table 1). Each banding is based on an evaluation of the individual property. The evaluation is based upon the following question: -

*"How **much** would the dwelling have sold for on 1ˢᵗ April 1991? "*

However, in order to place all valuations on a common footing, a number of standard assumptions are made. These assumptions have no direct impact on this research, and, as such, do not require development.

It is assumed, therefore, that these bandings more or less reflect the socio-economic profile of the occupants of the properties. The bandings and their associated values are given as follows-:

Table 1 Council tax banding and associated dwelling value

BAND	VALUATION
A	Up to £40,000
B	£40,001 to £52,000
C	£52,001 to £68,000
D	£68,001 to £88,000
E	£88,001 to £120,000
F	£120,001 to £160,000
G	£160,001 to £320,000
H	£320,001 and above

(Source: Valuation Office [Inland Revenue] 1999)

With regard to the total number of dwelling houses in Nottinghamshire and respective bandings, the following table (Table 2) was constructed from data acquired *from the Valuation Office, Chalfont Drive, Wollaton, Nottingham, as at 12[1'] January 1999.*

Table 2 Council tax banding and associated number of dwellings

BAND	NUMBER OF DWELLINGS
A	213,695
B	83,973
C	65,304
D	39,002
E	20,304
F	9,477
G	5,681
H	537
TOTAL	437,973

(Source: Valuation office [Inland Revenue] 1999)

3. __The interrogation of the GQL printout.__

From the GQL printouts (APPENDIX 1(A),(B) & (C)) the following information was established-:

■ The total numbers of repeat burglaries. This included the second burglary suffered within the time period being analysed (January 1998/January 1999) at any one property and subsequent burglaries within that same period. For example, house ` A' suffered three burglaries during the course of the year. Only the second and third burglaries form part of this calculation. When interrogating the GQL information, care was taken to distinguish between single-unit dwellings and multiple-unit dwellings. For the purposes of this research multiple-unit dwellings were defined as being one dwelling with regard to the calculation of repeats. For example a building containing a number of flats would be regarded as one building and, as such, the number of repeats would be numerically increased, compared to defining each flat as a single-unit dwelling. The rational behind this being that the repeats are inflicted upon the building as a whole, rather than on the individual flats within. The researcher acknowledges the argument that repeat victimisation reflects both the individual victim as well as the property. The actual number of multiple-unit dwellings was so low that, with regard to this research, it had very little effect.

Calculation of data required for the production of a time course characteristic for all the property bandings as well as for each individual council tax banding. This section of the calculations required identification of the time interval between the first burglary and the first repeat, also, the second burglary and the second repeat, the third burglary and the third repeat and so on. As indicated above, this time interval was calculated for all the bandings subjected to the phenomenon, as

well as for each of the individual bandings. These in effect tracing, over time (month by month), the change in the risk of being burgled more than once. The methodology used in this section mirrors that utilised by Polvi et at (1990, 1991) in their study of residential burglary in Saskatoon, Canada, in that it compares, over varying time intervals, multiple burglaries occurring in all possible pairs of months between January 1998 and January 1999. The repeated comparisons including the following time intervals- zero (comparing a month with itself), one month (adjacent months such as January – February, March – April), two months (e.g., January – March, February – April), three months (e.g., January – April, February – May), and so on up to an eleven month separation. These calculations utilised the Poisson Distribution, and indicate whether risk increases or decreases over time.

The presentation of time course data has been analysed as being *fraught with* danger,'(Anderson, Chenery and Pease, 1995, p. 47). The most fundamental problem being that the time period analysed in this research, as previously explained, is too short, being below that specified in Farrell and Pease (1993). The problem is clearly identified and explained, by Anderson, Chenery and Pease (1995), in the following paragraph: -

"In an eleven-month period (January – November), there are only five months (January – May) when a repeat victimisation six months later **would be included in the data set. There are ten months in which a repeat one-month later would be included. Without correction, the time course curve is arithmetically bound to go down. "**

(Anderson, Chenery and Pease, 1995, p. 47)

A correction or weighting is therefore required. This, according to Anderson,

Chenery and Pease (1995), is achieved by multiplying the observed number of

repeats by eleven and dividing by the gap length (there being an eleven-month gap

length between January 1998 and January 1999). For example, if `X' events with

a `Y' gap length were observed, the adjusted figure would have been subjected to

the following formulae:

Weighted time course = (X * 11)1(11— Y).

Where `X' = number of repeats, and

Where `Y' = the time interval between repeats or gap length.

Table 5 dwelling ■■ e burglary time ■rs■ and associated council tax banding
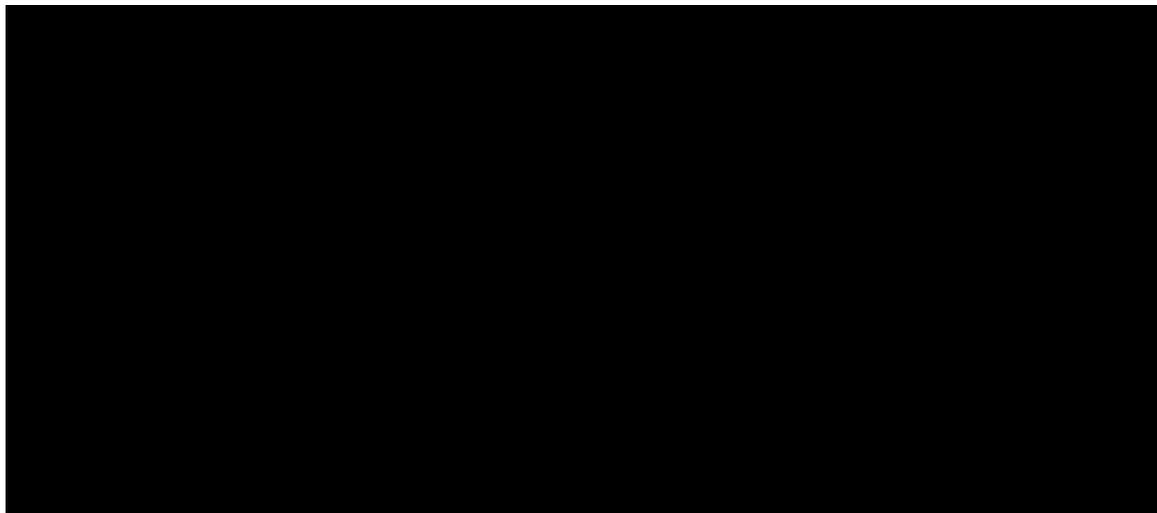
Table 6 Dwelling house ■er^{g}S ry time course and associated council tax banding including weighting factor

TIME	i	2	C	A	E	F	R	f/
0	217	94	01	12	13	2	13	5
1	303	-13	29	17	m	_	3	
2	154	IS	IS	2		2	4	e
$	IUI	2R	17	R	4	l	4	
4	11S	30	14	0	3	2	2	b
5	114	:O	13	7	2	2		4
4	SK	9	u	4	_			
	50	17	i^g	3	0	b	!!	0
a	13§	IS	11	l l	4	4	4	§
9	R05	9	it	6	0	0	0	§
7^q	l 32		11	I1	9	0	0	0
//	NtA	N:\	N :A	\/3	\/\	\/3	&	xZ&

Figure 1 Graphical disᵖlay of council tax banding and associated number of repeat dwelling house burglaries

Y- AXIS = NUMBER OF REPEATS
X- AXIS = COUNCIL TAX BANDING
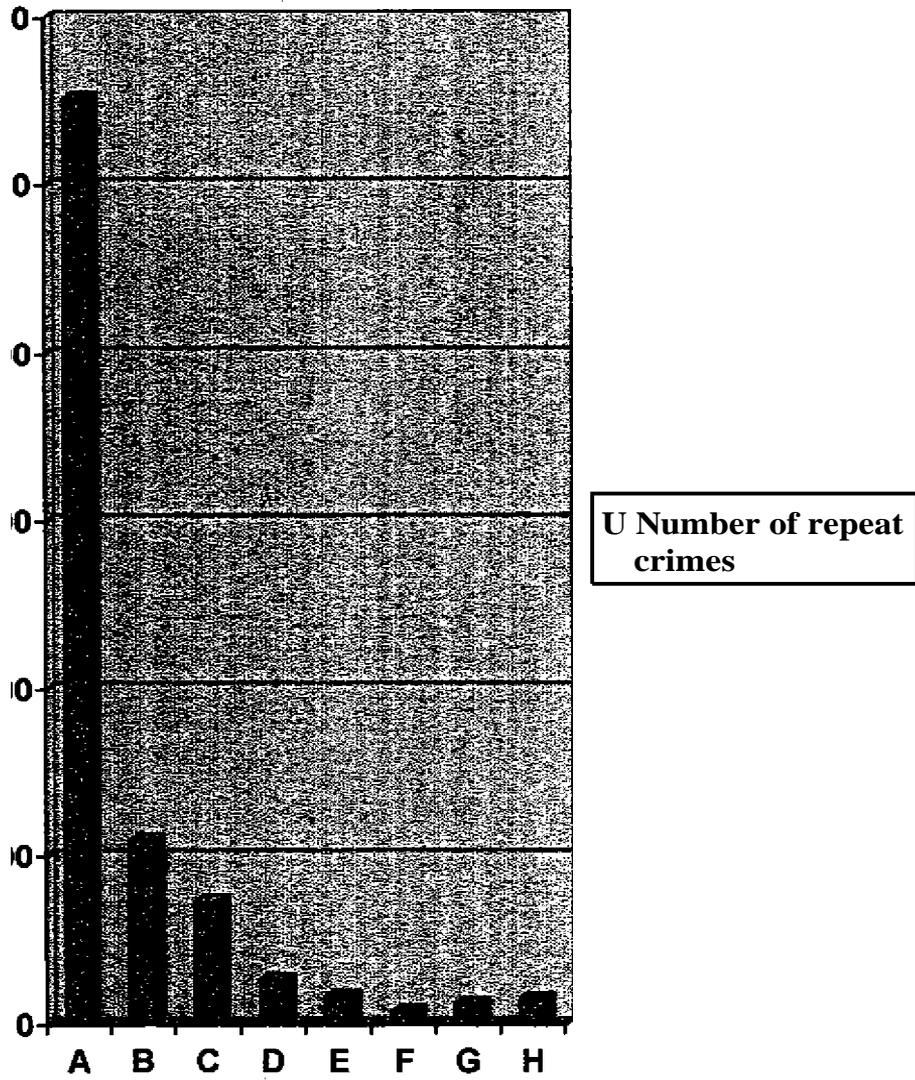
Figure 2 Repeat dwelling house burglary time course-graph for all council tax bands

X-AXIS= TIME INTERVAL BETWEEN REPEATS (MONTHS)

Y-AXIS= NUMBER OF REPEATS
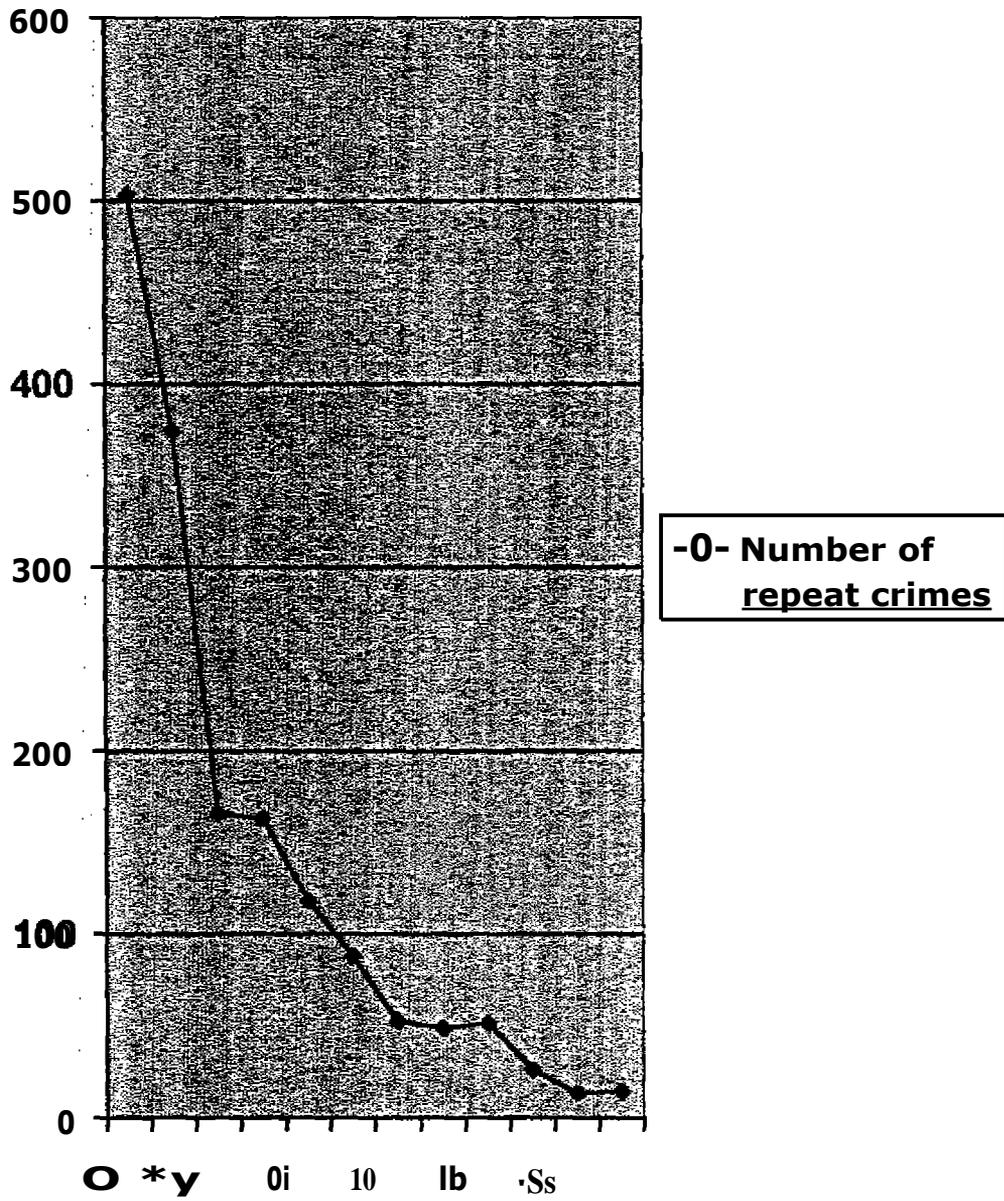
Fieure 3 Repeat dwelling house bur<u>g</u>lary time course-graph for all council tax bandings including weighting factor

X-axis = time interval between repeats (months)
Y-axis = number of repeats
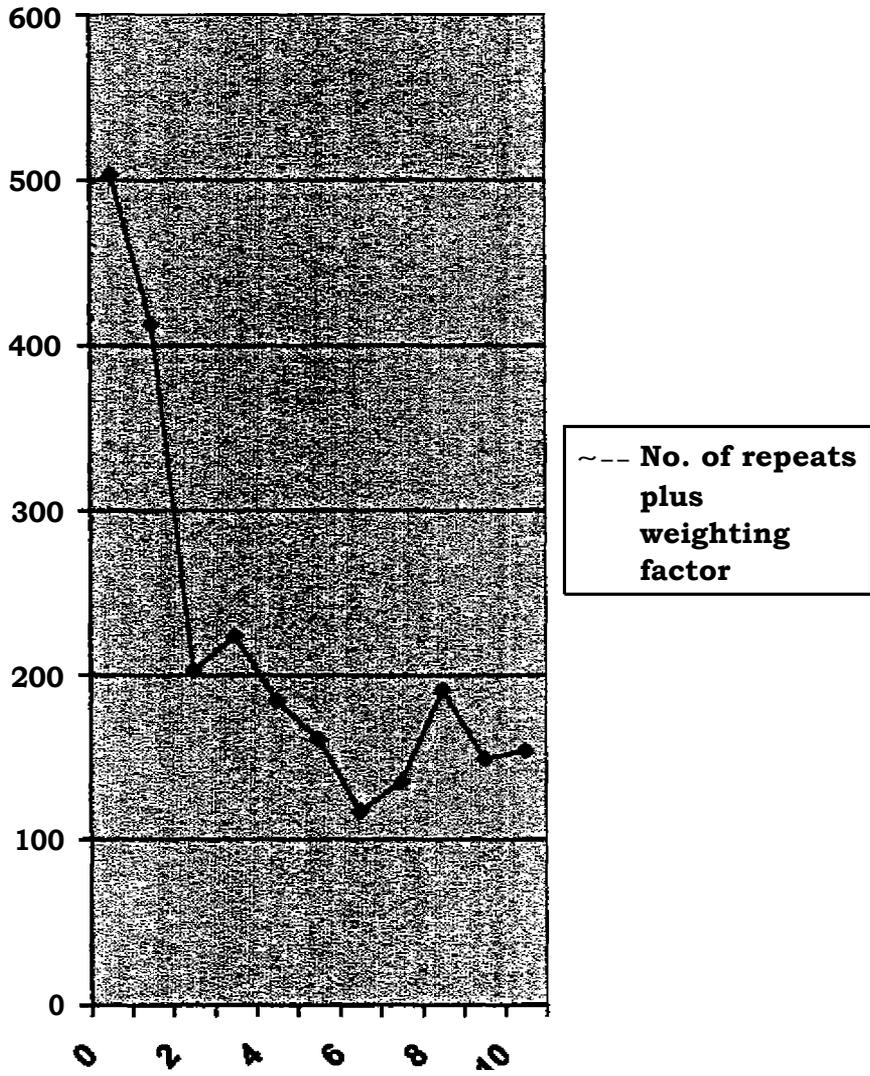
Figure 4 Repeat dwelling house burglary time course-graph for individual council tax bandings

X-AXIS = TIME INTERVAL BETWEEN REPEATS

Y-AXIS = NUMBER OF REPEATS
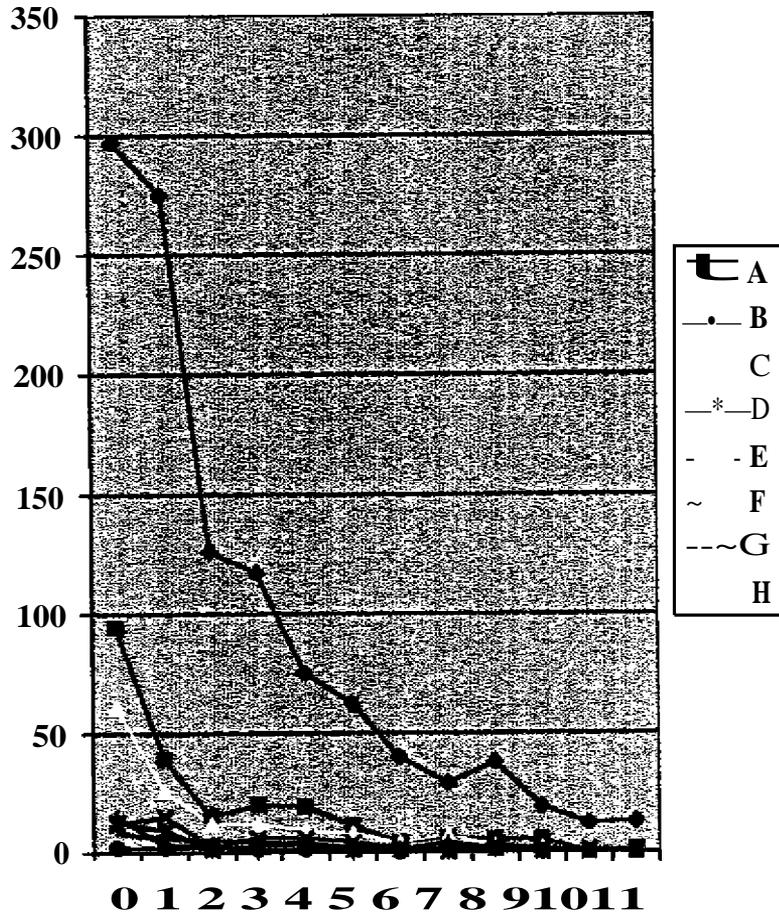
Figure5 Repeat dwelling house burglary time course-graph for individual council tax bandings including weighting factor

X –AXIS = TIME INTERVAL BETWEEN REPEATS (MONTHS)

Y- AXIS = NUMBER OF REPEATS
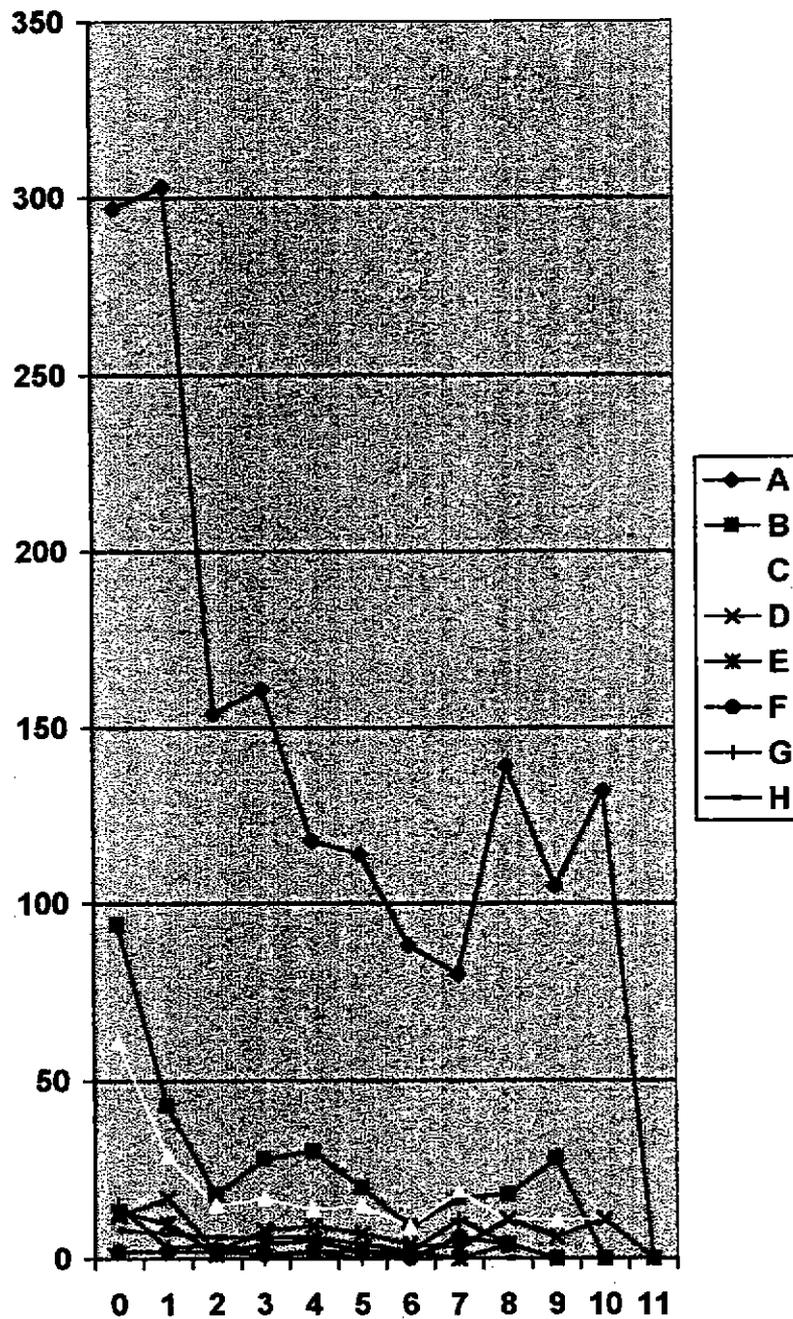
The research unearthed a number of general statistics concerning domestic burglaries as well as repeats in the Nottinghamshire Area. These are highlighted and discussed in the following section: -

A The total number of burglaries committed in Nottinghamshire over the period

under observation were as follows (refer to page 13 for definition): -

Aggravated burglary -- dwelling	42
Burglary in dwelling	6,062
Burglary in dwelling with violence	
or threats of violence	397
Other burglary in dwelling	
(burglary with intentlattempted burglary)	7,452
TOTAL	**13.953**

(Source: Nottinghamshire Police)

B The total number of houses recorded as at 12th January 1999 in Nottinghamshire

was **437,973.**

(Source: Valuation Office [Inland Revenue] Nottinghamshire)

C The total number of premises recorded in the research, as being subjected to a

repeat burglary was 1,192.

D The total number of repeats recorded was **1,623.** The inference being that one

premises may suffer more than one repeat.

E The number of dwelling house burglaries forming part of the repeat victimisation phenomenon, i.e. first and subsequent burglaries, is given by (C+D) = **2,815.**

F The number of repeat dwelling house burglaries as a percentage of the total number of dwelling house burglaries in Nottinghamshire (EJA x 100) = **20.18%.**

G The percentage of dwellings burgled in Nottinghamshire during the period is given by (A-D)IB x 100 = **2.82%.**

H The percentage of dwellings subjected to repeat burglaries is given *by* CB *x* 100 =**0.17%.**

I The percentage of repeats by council tax banding were found to be as follows: -

A 68%

B 13.5%

C 9%

D 3%

E 2%

F 1%

G 1.5%

H 2%

As illustrated in the findings the percentage of dwellings burgled in Nottinghamshire during the time period under observation was found to be around 3%, which incidentally coincides with the National Average of 3% (Source: Digest 1998). However, perhaps the most compelling statistic is that over one fifth of all burglaries committed in Nottinghamshire form part of the repeat victimisation phenomenon. This statistic gives a clear indication that policies directed towards its reduction are given a degree of vindication in Nottinghamshire.

Upon examination of the time course graphs (see figs. 2 & 3), it has been found that 54% of repeats, for all council tax bandings, occur within a one-month time gap. Likewise, 52% of repeats, with regard to the `A' category of council tax banding, occurred within a one-month time gap (see figs. 4 & 5).

As with previous research findings, the gradient of the graph produced is severe in the initial month and thereafter tapering away. Thus, the levels of risk are much reduced after the initial month of intensity, or conversely, the period of greatest risk is readily identifiable. This was also found to be the case when the time course was analysed for each individual council tax banding. The `traditional' curve was found more evidently in bandings `A' to `C', (see figs. 4 & 5), and specifically in band `A.' It follows, therefore, that the crime prevention *measures* outlined in strategies throughout England and Wales should be implemented within a number of hours of he initial victimisation. As a practitioner, the researcher accepts there are practical constraints surrounding such a recommendation. It is conceded that these measures may be **temporary** in nature, but nonetheless, if the *strategy is to* be effective then time and resources should be set aside to afford such protection.

The research has also established that in Nottinghamshire 68% of repeat dwelling house burglaries are inflicted upon the occupants of category `A' houses, thus leaving only 32% for the remainder. It is, therefore, clear that the phenomenon impacts most severely on those people relatively less affluent, in financial terms, in our society. The previous statement relies on that fact that the value of one's property (owned mortgaged; rented or paid for by the State) directly reflects our status in society. The researcher recognises the generality of that statement and, as such, cannot legislate for individual discrepancies. The research is based on the recognition that there is a class society within England and Wales. The observation is made in the knowledge that 49% of Nottinghamshire's dwellings consist of `A' category housing.

It is also observed **that** when comparing the time course-graphs of the weighted and non-weighted data, the overall characteristics of the graphs were very similar.

Observations/recommendations

The most important findings of the research are that: -

- Repeat victimisation-domestic burglary, forms a significant part of the overall recorded dwelling burglaries in Nottinghamshire.
- The vast majority of those repeats are committed against those people living in category `A' housing.
- The overwhelming majority of repeats occur within one month of the initial burglary.

The strength of the research is inherent in its methodological simplicity (whilst remaining accurate and ethical) in that it gives the reader a clear indication as to where and when resources should be applied to both reduce the number of repeats and increase the number of detection's. It will impact on future policy decisions as well as future policy structure within Nottinghamshire Police. There is also a great potential for similar research in other parts of the country, which in turn could lead, to changes in national policy. This in the main due to the fact that for the first time a piece of research identifies which type of housing is most susceptible to the phenomenon. On this basis the research advances our knowledge about repeat victimisation. The work also leads the author to hypothesis that those living in category `A' housing are more likely to be burgled than in any other form of housing. If such a statement were to be vindicated along with the findings of this research then politicians, civil servants, crime managers/administrators etc. would find it difficult to argue against the need for greater financial assistance to those living in such housing to assist them in installing more crime prevention measures.