Fear of burglary: Refining national survey questions for use at the local level

Jason Ditton* and Stephen Farrall

'Scottish Centre for Criminology, University of Sheffield, Faculty of Law, Glasgow; Tel: 0141 946 4325; Fax: 0141 946 1778; E-mail: jasonditton@lineone.net;

Received: 16th February, 1999

Jason Ditton is Professor of criminology at Sheffield University. He conducts research into the fear of crime, crime prevention initiatives, and the use of illegal drugs.

Stephen Farrag is *Research* Fellow in criminology at Keele University. He *conducts* research **into the fear** *of* crime, criminal careers *and* probation.

ABSTRACT

Repeated monitoring at local levels of the fear of crime is becoming more common, as the demonstration of the efectiveness of local crime prevention - andfear-of-crime prevention — becomes more important. Hitherto, many attempts to demonstrate positive effects fail. Here, it is suggested that this may be a result of measurement failure, rather than lack of practical success. Based on a large experimental survey conducted in Scotland, new survey questions, and novel ways of analysing data thereby collected, are suggested for future police-force-wide crime surveys.

INTRODUCTION

Irrelevant only a few years ago, monitoring local levels of the fear of crime now has an important role in strategic police thinking. The 1998 Crime and Disorder Act has pushed this even further to the centre of forward planning.

One difficulty is that ways of measuring

the fear of crime were developed for deployment at the national level, and were not designed to assess the efficacy of preventive measures oriented to reducing it. The British Crime Survey (BCS) is often taken as the role model for local survey design, fieldwork and analysis. Unfortunately, what works at the national level may not necessarily amount to best practice locally.

For example, BCS-collected survey data related to worry about burglary are typically analysed by compressing ordinal response scales into binary variables. This has constructed worry as an attitude which respondents either have or do not have. In this way, respondents who become less worried are cancelled out by those who feel more so. This may well be acceptable nationally, as the BCS is designed to feel the national pulse rather than test local initiatives. The problem of compression is recognised nationally (where it is less of a problem), but not locally, where it is much more problematic. This is because police-forcewide surveys that adopt the same data compression techniques may miss significant reductions in burglary worry (for example, in areas where burglary reduction schemes have been in place) by adding them to increases in such worry in other areas where no such schemes exist.

International Journal of Police Science and Management. Vol. 3 No. I. 2000. PP. 9-18. ®Henry Stewart Publicanom, 1461-3557 Slight changes in the way that questions are asked, and more analytic interaction between the resulting datasets, would first permit worry to be presented as the near normally distributed variable that common sense suggests worry to be, and second allow subtle reductions in fear levels to be traced, and thus the efficacy of local crime prevention measures to be judged more fairly. This paper outlines how this may be achieved.

BACKGROUND

Rates of 'fear' of burglary¹ seem remarkably stable. From some recent national crime survey reports,2 it is clear that the number of respondents who claim that they:

- are a bit worried or very worried about being burgled is 60 per cent -!- 5 per cent
- feel a bit or very unsafe when home alone at night is 10 per cent ± 1 per cent
- feel a bit or very unsafe when walking alone in their area at night is 35 per cent ± 6 per cent.

The first specific fear of burglary rate is typically derived from a direct question on worry about being burgled, and the second two general observations from indirect questions on feelings of unsafety which do not refer to crime as such. In the UK, closed response options are technically crude (yet respondent acceptable) ordinal scales. For example, for burglary, respondents are offered the following options to the question, 'could you tell me how worried you are about [burglary]?': 'very worried', 'worried', 'not worried' and 'not at all worried'. For safety at home alone, and when out alone walking at night, the questions are 'how safe do you feel walking alone in the area after dark?' and 'how safe do you feel when you are alone in your own home at night?' Response options for each are: 'very safe', 'safe', 'bit unsafe', and 'very unsafe'. 'Don't know' options are offered for all three questions (Hough, 1995, p. 55).

The questions are asked of each respondent once only, and respondents are only interviewed on one occasion. For the purposes of most published analyses, 'very worried' respondents are added to worried' ones, and 'not worried' ones to 'not at all worried' ones. Those who feel 'very safe' are batched with those who feel'safe', and those who feel a 'bit unsafe' to those who feel 'very unsafe'. Such recoding pen-nits relatively easily understood cross-tabulations with, chiefly, age and gender data; and significant differences are usually discovered.

Two consequences of the way that the presentation of survey results has developed are, firstly, the perception that feelings of both 'worry' and 'unsafety' are binary variables - one either worries about burglary, or one does not; one either feels safe, or not. Secondly, possibly unsupported assumptions about the levels of general fear of crime are made from respondent statements about levels of perceived safety.

This paper addresses both these issues by analysing data from a major survey conducted as part of a methodological reassessment of the fear of crime. First, in the analysis developed below, the response scales for worry about burglary are stretched rather than compressed; specifically, when the data were collected, by asking the same question twice during one interview. This permits worry about burglary to be presented as a near normally distributed variable rather than as a binary one. Secondly, the two usual indirect safety questions (in or out of the home alone at night) were asked, but the

addition of a further question (on how often respondents actually went out or, by implication, stayed in at night) permitted considerable refinement to the analysis of the data from the first two.

METHOD

The research in part reported here was funded within the ESRC's Crime and Social Order research programme.³ The project design emphasised an initial openended and qualitative investigation of people's general feelings about crime and a gradual compression and operationalisation of whatever was discovered into survey questions capable of administration in a standard crime survey.

All the research was conducted in the Strathclyde region of Scotland. region enclosed a substantial part of the west of Scotland, nearly half the Scottish population, and Glasgow, Scotland's biggest city.4 Research involved an initial quantitative trawl wherein 168 respondents were interviewed by a fixed schedule which concentrated on individual concern about possible victi misation, and estimated risk of actual victimisation. Secondly, all 168 were classified in terms of their fear and risk self-ratings along two further dichotomies (high/low fear and high/low risk), producing four distinct groups. A considerably more extensive quantitative questionnaire was administered to a randomly selected 16 from each of these four groups. Thirdly, this group of 64 were also interviewed in an individual, open-ended and tape-recorded session, and the qualitative material transcribed and closely analysed. Fourthly, the range of feelings about crime revealed in the first two stages was extensively aired in two discussion groups drawn from the 64-strong subsample, one group male, the other female. Fifthly, a completely

new full crime survey questionnaire was developed, exhaustively piloted, and administered to a simple random sample of 1,629 Strathclyde region respondents aged 16 years or over, and to a quota-achieved ethnic booster sample of 613 in early 1996. Finally, validity checks were conducted by the research team.

RESULTS

Direct questions on 'fear' of burglary

One question asked was a fairly standard one, slightly rephrased to take account of suggestions from other researchers: 'in your everyday life, are you afraid of someone breaking into your home?'. Respondents were given the following response options to choose from: 'not at all', 'hardly ever', 'don't know', 'some of the time', or 'all the time'.

Typically, in most other crime survey reports, the 'don't know' responses are dropped, and the 'not at alls' are combined with the 'hardly evers', and the some of the times' are combined with the 'all the times'. With these data, 5 this would sum as 40 per cent (n = 461) who worry about burglary, and 60 per cent (n = 694) who do not. 6

As a check, and unusually for crime surveys, the question was asked again later in the interview, albeit in a slightly different form. The second time respondents were asked, 'could you tell me how worried you are about having your home broken into and something stolen?'. Here, the closed response options were 'not at all', 'not much'. 'don't know', 'quite a bit' and 'a lot'. The aggregated results were broadly similar, with 35 per cent (n = 402) worrying 'quite a bit' or 'a lot', and 65 per cent (n = 734) worrying 'not much' or 'not at all'.

So far, so good. But if the data from the

Table 1: Recoded burglary question responses compared

	Not at all +not much	Quite a bi + a lot	t
Not at all +	514	144	658
Hardly ever	46%	13%	59%
Some of the time	199	256	455
+all of the time	18%	23%	41
	713	400	1,113
	64%	36%	100%

two questions are cross-tabulated (rather than just compared at the level of the aggregated results), some apparent inconsistency of response creeps in. This is illustrated in Table 1. Here, it can be seen that 13 per cent of those who worried not at all' or 'hardly ever' the first time the question was asked, said that they worried 'quite a bit' or 'a lot' the second time it was asked. Further, 18 per cent who were not worried to start with were worried by the time the second question was asked.

This is rather worrying, and more so when the five original closed response options were cross-tabulated, and then the original distributions for the two questions were reinstated. This is presented in Table 2.

What can be made of this? One approach would be to complain of response inconsistency, but this is merely a possible description, not an explanation. It may be that some respondents chose responses with insufficient care (although all were offered a 'don't know' response); and indeed, other inconsistencies were discovered both within other sections of the questionnaire data (Farrall et al., 1997b), and between the questionnaire data and follow-up validity checks (Farrall and Ditton, 1999).

For the purposes of this paper, however, another more creative use can be made of the data by accepting that a respondent who claims to 'worry' about burglary at one point, but not to do so 20 minutes later, is somebody who sometimes' worries about burglary (and sometimes' does not). Such an approach permits the allocation of a worry score to respondents, and thereby recreates worry as an ordinal, rather than as a binary variable.

The result of scoring in this way is shown in Table 3, where it can be seen that somebody answering 'not at all' to

Table 2: Raw burglary question responses compared

	Not at all	Not much	Don't know	Quite a bit	A lot	
Not at all	120	145	17	44	9	335
1 100 000 0011	10%	12%	1%	4%	1%	29%
Hardly ever	49	200	15	83	8	355
111111) 0.01	4%	17%	1%	7%	1%	30%
Don't know	9	12	3	1	1	26
	1%	1%	_		_	2%
Some of the time	68	93	4	165	29	359
	6%	8%	_	14%	.3%	31%
All the time	23	15	_	40	22	100
	2%	1%	_	3%	2%	9%
	269	465	39	333	69	1,175
	23%	40%	3%	28%	6%	100%

Table 3: Raw burglary question responses scored

	Not at all: 0	Not much: 1	Don't know: 2	Quite a bit: 3	A lot: 4
Not at all: 0	0	1	2	3	4
Hardly ever: 1	1	2	3	4	5
Don't know: 2	2	3	4	5	6
Some of the time: 3	3	4	5	6	7
All of the time: 4	4	5	6	7	8

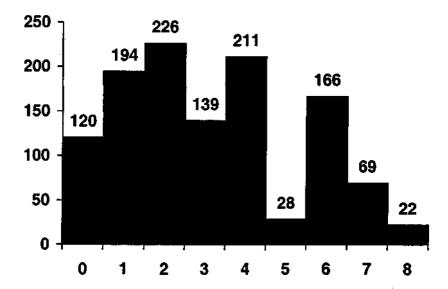


Figure 1

both questions scores 0 for worry, through to somebody who answers 'all the time' to the first one, and 'a lot' to the second, scores 8.

What does the result look like? The distribution is in Figure 1, ranging from the 120 respondents (to the left) who scored 0 points (didn't worry at all at either question) down to the 22 respondents (the right-hand bar) who worried 'all the time' and 'a lot' (and thus scored 8). What does this tell us? First, survey reporting conventions aside, that how many respondents can be deemed to be

'worriers' is a matter of choice rather than of fact. Is it just the 22 full-time worriers? Or all but the 120 who never worry?

Secondly, worry clearly is, when the data are analysed in this way, a matter of degree, and this must logically present not a single policy problem of 'fear', but different degrees of problem, and probably, different problems.

This is perhaps the most significant practical implication of analysing data this way. Those policies designed to reduce fear and/or increase safety may well show little conversion from fearful to fearless and/or from unsafety to safety but, if these subtle worry categories are subsumed in the catch-all category of the 'worried', they will inevitably miss minor but crucial one-point shifts (eg) scores from 8 to 7 etc. There are many examples of the apparent failure (or unmeasurable success) of attempts to reduce such worry.

It may further be the case that the blanket attempts to reduce apparent worry are themselves partly misplaced. If relatively 'at risk' groups can also be shown to have very low levels of worry, then a plausible policy option might well be to try to increase their proclivity to worry in order, in turn, to reduce their risk.

Direct questions on unsafety Some recent examples of how data from the usual indirect questions on safety (when at home, or out alone at night) are presented are as follows. First, the authors of the main report of the 1996 Scottish crime survey:

'Across Scotland as a whole, 16% of respondents said that they would feel "very unsafe" walking alone in their own neighbourhood after dark. Feelings of safety after dark are strongly associated with whether or not respondents ever actually do go out alone after dark or spend time away from home. Of those who never go out alone after dark, 32% said they would feel very unsafe doing so, compared with only 8% of those who do go out alone. Similarly, of those who spend almost every evening away from home, 8% said they felt very unsafe walking alone after dark, compared with 27% of those who "never" spend an evening away from home. It is not possible from the data to establish whether people stay at home because they are anxious about personal safety or vice

versa: (Anderson and Leitch, 1996, pp. 43-44)

Secondly, two separate quotations from Hough's excellent monograph on anxiety about crime:

'Street robbery is certainly salient in many people's minds when answering the question, but there are also more formless threats and dreads which oppress some people - the dark itself, for example - as well as the simple risk of physical accidents which accompanies walking in the dark. When respondents in the 1984 BCS who said they felt unsafe were asked the reasons, just over a third mentioned diffuse fears to the effect that "something might happen"; slightly less than a third referred explicitly to robbery and mugging; a fifth referred to gangs, people "hanging around" and the like, and 14 per cent to the dark.' (p. 2 and, p. 33, on why some 7 per cent never go out after dark.)

'Overall, seven per cent of the sample said that they never went out after dark ... Age or infirmity was the most commonly cited reason (30 per cent), followed by lack of inclination (27 per cent). Third came a group of reasons which identified practical obstacles to going out such as having to look after children, lack of transport and lack of anywhere interesting to go (25 per cent). Finally, crime-related reasons were given by 18 per cent of those who never went out, or 1.3 per cent of the sample. (Hough, 1995).

Thirdly, an extract from the main report from the 1996 British Crime Survey:

'Overall, 11% of women and 5% of men said they never went out after

Table 4: Relevance of feeling nightly 'unsafeness'

Row	Score	n	%
1 Feel unsafe in, stay in, feel unsafe out	3	45	4
2 Feel safe in, stay in, feel unsafe out	1	152	14
3 Feel unsafe in, go out, feel unsafe out	3	14	l
Feel safe in, go out, feel unsafe out	2	26	2
Feel unsafe in, stay in, feel safe out	2	14	l
6 Feel safe in, stay in, feel safe out	0	627	57
7 Feel unsafe in, go out, feel safe out	1	8	1
8 Feel safe in, go out, feel safe out	0	206	19
Total		1,092	99

dark. Just under a third mentioned practical obstacles, such as having to look after children, lack of transport, and having nowhere interesting to go. Age and infirmity was given as the reason by over a third of men, and even more cited lack of inclination. Crime-related reasons were given as part of the reason for never going out by 31 % of women who stayed at home, or 3% of the total sample of women. The respective figures for men were 15% and 1%: (Mirrlees-Black et al., 1996, p. 55)

The believed superiority of these indirect measures - also their weakness - is that by not mentioning crime, any 'automatic' fear response that the word 'crime' triggers will not be included.¹⁰

At one level the simple unanalysed frequency of various responses to such questions has often been used to paint a bleak picture. For example, with this sample, 23 per cent said that they would feel very or fairly unsafe walking alone in their area after dark, and 9 per cent said that they would feel very or fairly unsafe alone at home at night. A third question, which is not usually asked, was: how often do you walk around alone locally after dark?'. ¹¹ Although only 23 per cent

said that they sometimes or often walked around alone locally after dark, the addition of this third question hugely increases the analytic value of the first two. If all three questions are asked, it can be discovered whether or not people go out alone at night or stay in, whether or not they feel unsafe when they are out alone, and whether or not they feel unsafe when they are at home alone. The responses can then be combined in one new variable with eight separate values, as shown in Table 4.

The possible responses for apparent degree of 'unsafeness' have again been scored, but differently. Notice, first, that the largest number of respondents (row 6: 57 per cent) stay in, feel safe there, and reckon they would feel safe if out. The second largest number (row 8: 19 per cent) feel safe in, go out, and feel safe when out. A small proportion (row 7: 1 per cent) feel unsafe in, but they go out, and they feel safe there. A larger group (row 2: 14 per cent) would feel unsafe out, but they stay in and feel safe there. So far, this amounts to 91 per cent of the sample who do not really have a problem.12

This leaves only 8 per cent of the sample with an 'unsafety' problem. Notice how they do not have a shared

Table 5: Direct victimisation 'worry' and indirect 'unsafeness'

Worry scale	Row 1 'unsafe'	Row 3 'unsafe'	Rows 1 + 3 'unsafe'
0			
1	2	3	
2	6	_	6
3	4	1	
4	10	3	13
5	3	1	4
6	13	3	16
7	5	_	5
8	2	3	5
Total	45	14	59

one, but constitute four different types of problem. Two groups have a minor problem: those who feel safe in, but go out and feel unsafe out (row 4: 2 per cent), and those who would feel safe out, but stay in where they feel unsafe (row 5: 1 per cent). It is a bit flippant to suggest that to reduce 'unsafety', those in the first group should stay in, and those in the second should go out, but why not?

Those in rows 1 and 3 of Table 4 have a more major problem. Those who feel unsafe when they are in, stay in, but would feel unsafe if out (row 1: 45 respondents, 4 per cent of the total), and those who feel unsafe when in, go out, and feel unsafe when out (row 3: 14 respondents, 1 per cent of the total) offer a considerable challenge to those working to enhance community feelings of safety, but notice that they only number 59 respondents out of a sample of 1,092. Further, being a member of either group is not related to gender, age, or past victimisation (variables which are traditionally used to explain noticeable feelings of 'unsafety').

Combining the direct and indirect data

How did this group of 59 respondents fare on the earlier generated nine-point burglary worry scale? Table 5 has the data. ¹³ Putting the two scales together, and viewing the situation rather unsympathetically, there are only five persons who are 'really' worried. ¹⁴

DISCUSSION

The logic of the foregoing remarks is as follows. Survey attempts to assess levels of the fear of crime have been based historically on a small number of questions. It has not always been clear what these questions have been measuring. Data relating to levels of fear have typically been compressed into binary nominal variables. Hitherto, this has been sensible.

In the future, however, the analysis of locally collected police-force-wide crime survey data may generate enhanced benefits if some questions are repeated, and some new ones asked. This might enable different levels of worry/fear/unsafety/whatever to be pinpointed. In turn this might enable the monitoring and evaluation of fear-of-crime prevention initiatives to evaluate sensitively degrees of success, which have probably been achieved but are unrecognised using current measures.

NOTES

- (1) Burglary refers to occasions when individuals break into others' homes (or attempt to, but fail) and therein steal things (or attempt to, but fail). The empirical research on which this paper was based was conducted in Scotland, where burglary is known as housebreaking'.
- (2) The British Crime Survey reports for 1994 and 1996, and the Scottish

- Crime Survey reports for 1984,1992 and 1996.
- (3) Specifically, as J. Ditton and J. Bannister'Fear of crime: Conceptual development, field testing and empirical confirmation', L210 25 2007. Publications from this project are listed at the end.
- (4) The region was abolished as part of local government reform in April 1996.
 - This is a hybrid composed of part of the main sample (n = 569) and all of the ethnic booster quota sample (n = 613). These were the respondents who were asked the burglary question twice. The substantive results are of no obvious value. The way that the data is analysed may offer potential for future work, however.
- (6) Where any n values do not sum to 1,182, this is because those who answered only one or neither of the two questions being compared are excluded.
 - Note that the two questions are different in that the first asks about frequency of worry, the second about degree of worry.
- (8) Respondents were also asked sinularly paired questions about both assault and vandalism. They were scored in the same way, and on the three nine-point scales only between eight and 22 respondents worried 'all the time' and 'a lot' for each. The three scales were then summed to a 25-point scale, where only four respondents (0.3 per cent of the total questioned) worried all the time and 'a lot' about all three possible victimisations. All four were women aged between 43 and 53.
 - One of the most sophisticated analyses of these difficulties is to be found in Ekblom etal. (1996).

- (10) Notice that the key is how the word 'safe' is (but the word fear' is not) mentioned. Because the word crime' is not mentioned either, feelings of unsafety could refer to other matters. 'Alone' and 'after dark'/'at night' are common elements. For both questions respondents who do not go out at night alone are asked how safe they 'would' feel if they did; and those who do not stay in alone at night are asked how safe they 'would' feel if they did.
- (11) Had the researchers been sharp enough, they might also (and this is recommended to future researchers) have asked, 'how often do you stay in alone in your home at night?' to assess the consistency of going out/staying in responses.
- (12) Gender, perhaps surprisingly, is not significantly related to membership of any of the eight categories. Age is, however. Older people are more likely to be represented in all categories other than that described in row 6 of Table 4.
- (13) Incidentally, of the four respondents which earlier analysis indicated on a 25-point scale that they worried all the time' and 'a lot' about becoming a victim of assault, burglary and vandalism (all four were women aged between 43 and 53), one was a woman who feels unsafe when she is in, stays in, and would feel unsafe if out (ie in row 1 of Table 4 for 'unsafety'), but the other three were all women who have no problem on the'unsafeness' scores: all would feel unsafe out, but they stay in and feel safe there, that is, they are in row 2 of Table 4.
- (14) They only amount to less than 10 per cent of those 59 that have a safety problem (less than 0.5 per cent of the whole sample). Given

the levels of general clinical anxiety present in society, a fair guess would be that these respondents have a medical problem, not a social one.

REFERENCES

- Anderson, S. and Leitch, S. (1996) 'Main findings from the 1993 Scottish Crime Survey', Scottish Office Central Research Unit, Edinburgh.
- Ditton, J., Bannister, J., Farrall, S. and Gilchrist, E. (1999) 'Attitudes to crime and the police in Scotland: A comparison of white and ethnic minority views', Scottish Office Central Research Unit, Edinburgh.
- Ditton, J., Bannister, J., Gilchrist, E. and Farrall, S. (1999) 'Afraid or angry? Recalibrating the fear of crime', *International Review of Victimology, Vol.* 6, No. 2, pp. 83-99.
- Ditton, J. and Farrall, S. (2000) 'The fear of crime', International Library of Criminology, Criminal Justice and Penology, Dartmouth, Aldershot.
- Ditton, J., Farrall, S., Bannister, J. and Gilchrist, E. (1998) 'Measuring fear of crime', *Criminal Justice Matters*, No. 31, Spring, pp. 10-12.
- Ditton, J., Farrall, S., Bannister, J. and Gilchrist, E. (2000) 'Crime surveys and the measurement problem: Fear of crime', in Jupp, V, Davies, P and Francis, P (eds) 'Doing criminological research', Sage, London.
- Ditton, J., Farrall, S., Bannister, J., Gilchrist, E. and Pease, K. (1999) 'Reactions to Victimisation: Why has anger been ignored?', *Crime Prevention and Community Safety: An International Journal, Vol. 1*, No. 3, pp. 37-54.

- Ekblom, P, Law, H. and Sutton, M. (1996)
 'Safer cities and domestic burglary',
 Home Office Research Study No. 164,
 Home Office Research and Statistics
 Directorate, Hoine Office, London.
- Farrall, S., Bannister, J., Ditton, J. and Gilchrist, E. (1997a) 'Measuring crime and the "fear of crime": Findings from a methodological study', *British Journal of Criminology, Vol.* 37, No. 4, pp. 657-' 678.
- Farrall, S., Bannister, J., Ditton, J. and Gilchrist, E. (1997b) 'Open and closed questions', *Social Research Updatc*, 17.
- Farrall, S., Bannister, J. Ditton, J. and Gilchrist, E. (2000) 'Social psychology and the fear of crime: Re-examining a speculative model', *British journal of Criminology, Vol.* 40, No. 3, pp 399-413.
- Farrall, S. and Ditton, J. (1999) 'Improving the measurement of attitudinal response: An example from a crime survey', International Journal of Social Research Methodology, Vol. 2, No. 1, pp. 55-68.
- Farrall, S., Ditton, J. and Bannister, J. (2000) Quantitative testing of the fear of crime: The apparent demise of age and gender as key explanatory variables', (submitted).
- Gilchrist, E., Farrall, S., Bannister, J. and Ditton, J. (1998) 'Women and men talking about the "fear of crime": Challenging the accepted stereotype', *British Journal of Criminology, Vol.* 38, No. 2, Spring, pp. 283-298.
- Hough, M. (1995) 'Anxiety about crime: Findings from the 1994 British Crime Survey', Home Office Research Study No. 147, Home Office Research and Statistics Directorate, Home Office, London.
- Mirrlees-Black, C., Mayhew, P and Percy,
 A. (1996) 'The 1996 British Crime
 Survey, England and Wales', Home Office
 Statistical Bulletin, 19/96, Home Office,
 London.