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Repeat Victimization in the ICVS and the NCVS

Graham Farrell, Andromachi Tseloni and Ken Pease¹

Overall, 40 per cent of crimes reported to the International Crime Victims Survey (ICVS) in 2000 were repeats against the same target within a year, with variation by crime type and country. However, policy makers have yet to realise the potential of victim-oriented crime reduction strategies. A preliminary comparison of repeat victimization uncovered by the ICVS and the US National Crime Victimization Survey (NCVS) finds ICVS rates are double those of the NCVS. The NCVS may be seriously flawed in the manner in which it measures repeat victimization, and hence crime overall. Further study is needed, but since the NCVS is an influential survey, the possibility that it is misleading may have widespread implications for crime-related research, theory, policy and practice in the United States and elsewhere.

Key Words: Repeat victimization; repeat victimisation; International Crime Victims Survey; National Crime Victimization Survey

Introduction

Crime prevention resources are scarce and, *ceteris paribus*, should be allocated where crime is most concentrated. Prolific offenders, hot spots, hot or frequently stolen products, and repeat victimization are studied because they manifest crime's tendency to cluster (Tilley and Laycock, 2002). Repeat victimization is the present focus, but it has important overlaps with these others. It overlaps with hot spots insofar as repeat victimization of the same targets generates spatial concentration on a map, and because victimization increases risks for nearby potential targets (Townsend *et al*, 2003; Johnson *et al*, 2004). Repeat offenders disproportionately commit repeat victimization (Everson, 2003), so targeting the latter may prove an efficient means of detecting the former. Preventing repeat victimization is not necessarily straightforward, but it is emerging as central to community safety practices and victim support services (see Farrell (2005) for a recent review). The measurement of repeat victimization (sometimes termed 'rv') is therefore far more than solely a technical issue—it may have direct consequences for local, national and/or international community safety practices and crime control policies and for their evaluation. More broadly, due to the significance of repeat victimization in the overall makeup of crime, its improper measurement could have significant implications for the development of criminological theory and for the overall orientation of criminological enquiry. Hence measurement issues can be profoundly important. While previous work has examined the measurement of rv using police recorded crime data (Farrell and Pease, 2003), particular aspects of crime victim surveys are the subject of the present study.

The first section of this paper reviews methodological issues relating to the measurement of repeat victimization using the International Crime Victims Survey (ICVS). This is followed by an overview of rates of repeat victimization found in the survey's 2000 sweep. The study then compares repeat victimization found in the ICVS to that found in the US National Crime Victimization Survey (NCVS). An explanation of the differences between the findings of the two surveys is sought in their methodological differences, and the implications are

discussed. It is concluded that there is strong preliminary evidence to suggest that the NCVS grossly misrepresents the extent of repeat victimization and, thereby, crime in the US.

If the NCVS is significantly flawed, as suggested here, the potential implications may be widespread. The NCVS is an influential victim survey. It has been the principal measure of the crime rate in the US for three decades. It has been the foundation for many empirical studies and for the generation of key criminological theories, from Hindelang *et al*'s (1978) 'lifestyle' theory onwards.² Undertaken by the Bureau of Justice Statistics of the US Department of Justice, its word is gospel for some audiences. Due to the prominence of American research in criminology, and due to the prominence of the US in global political circles, it is hard to gauge the overall impact of the NCVS. Indeed, to suggest that the NCVS may significantly misrepresent the crime rate may be viewed as tantamount to criminological heresy in some circles. Hence we recognize that the topic is of sufficient gravity that the present study and its implications should be viewed as preliminary, and that the subject warrants further examination.

The under-counting of repeat victimization by the ICVS

This section sets the scene, and develops the ICVS as a backdrop against which the NCVS is presented. It discusses the manner in which the ICVS measures repeat victimization and presents some aggregate descriptive findings.

The ICVS under-counts repeat victimization for at least three reasons. They warrant some explanation lest they be ignored or overlooked:

- First, the survey's one-year reference period for which information on crime is collected serves to artificially truncate repeat victimization. In brief, the number of 'single' crimes is inflated and of repeat crimes deflated, since repeats occur over time. Some incidents that are related to those occurring in the reference period are necessarily cut off if they occur before or after the period in question. These issues have been examined in depth elsewhere. One study of repeat burglaries showed that a three-year period captures 57 per cent more repeats than one year (Farrell *et al*, 2002).
- Second, the survey places a limit on the number of crimes that a person is allowed to report for a crime type.
- Third, motorcycle and motor vehicle theft have deceptively low repeat rates, due to vehicle recovery times. Prior to recovery or replacement, a vehicle is 'ineligible' for repeat victimization.

A related methodological issue is that ICVS-generated national crime rates mask significant within-country variation (though this does not necessarily lead to an under-statement of repeat victimization overall). In high-crime areas, rates of repeat victimization for some crimes will be greater than the mean rate for a country, or even for a city (Trickett *et al*, 1992; Lamm Weisel and Faggiani, 2001). However, due to its small sample size, the ICVS does not allow geographically small high-crime areas to be distinguished. It is also possible that the survey undercounts repeats due to survey fatigue on the part of respondents who learn that they are asked considerably more questions for each crime that they report.

The issue of telescoping is also relevant for any crime survey (see Skogan (1981) for what remains a classic statement). Telescoping refers to instances when respondents report crimes that occurred before (forward telescoping) or after (backward telescoping) the reference period as if they had occurred within it. In theory this could lead to an over-statement of repeats if respondents proved more likely to include in this way crimes that had occurred outside the reference period. In practice, telescoping is probably overwhelmed by memory decay issues, wherein respondents forget to, or otherwise do not, report crimes which did occur within the reference period.

Overall therefore, there is good reason to believe that the rates of repeat victimization presented below are somewhat lower than the actual rate. The rate of repeat victimization is defined here as the percentage of crime in a year that is repeated against the same targets. In calculating the repeat rates, note that the first crime of the year against a given target is excluded. If these were included in the measure, as they are in many studies, then the repeat victimization rates would be considerably higher.

Note on sample sizes

The ICVS obtains modest sample sizes when individual countries are considered, as there are typically a couple of thousand respondents per country (Nieuwbeerta, 2002). The effects of this are pronounced when it comes to repeat victimization, as the samples can become small. As a result, high standard errors are anticipated in the derived rates of repeat victimization, with particular highs and lows due to the presence of one or two outliers. When all 17 countries of the 2000 ICVS are considered, the standard errors will be lower, increasingly so when the samples from four sweeps of the ICVS are considered. Consequently, the strong and consistent patterns of repeat victimization that emerge here suggest that errors due to sampling are far from insurmountable, will decline over time as sample sizes grow, and certainly should not preclude analysis such as that presented here.

Findings by country and crime type

Some ICVS findings on repeat victimization that focused on particular crime types have been presented elsewhere (Farrell and Bouloukos, 2000). The present analysis found that repeat victimization constitutes 40 per cent of all crime for the 11 crime types and 17 industrialised countries of the 2000 ICVS. This includes across-crime-type as well as within-crime-type repeats. Aggregate rates were highest in the UK (52 per cent of all crime), the Netherlands (48 per cent) and the US (47 per cent). Japan was the only country where repeat victimization constituted less than a third of all crime reported to the ICVS (Figure 1). Though previous work on rv in the ICVS did not conclude that Japan had lower rates, the present findings sit well with the fact that Japan has lower overall crime incidence rates when compared to most other industrialized countries.

Figure 1. Repeat victimization by country: ICVS 2000
percentage of all crimes that are repeats

Note: Switzerland excluded due to frequent absence of incidence rates.

Across all 17 industrialised countries in the 2000 ICVS, sexual incidents had the highest rates of repeat victimization, at over 40 per cent of all incidents of that type, followed by assaults and threats, and car vandalism (Figure 2).³ Repeat rates were lowest for car theft and motorcycle theft, though, as noted, these are the crimes where replacement periods could significantly reduce the period of ‘eligibility’ for repeat victimization.

While rv rates varied between countries and crime type, it was not the case that those crime types with the highest rv rates had the greatest range. Sexual assault had relatively little variation between countries, and the inter-quartile range was typically narrow for most crimes, with the exception of robbery and, to a lesser extent, motorcycle theft (Figure 3).

Figure 2. Repeat victimization by crime type: ICVS 2000 means for 16 countries

Figure 3. Repeat victimization by crime type—16 industrialized countries: ICVS 2000

Repeat burglaries constituted 45 per cent of all burglaries reported in the US (an outlier in Figure 3; France and Poland are the other extreme values in relation to sexual assaults), and 40 per cent of those in Finland. There was significant variation in the rates for other countries around the overall mean of 22 per cent repeat burglaries. However, some of the variation, such as the contrast between actual and attempted burglary in Spain, is suggestive of errors due to the small national sample sizes, as discussed earlier.

As crime prevalence increases, crime incidence appears to increase faster, due to more repeat victimization. The most compelling illustration of this relationship was that of Trickett *et al* (1992) in relation to high-crime areas within England and Wales. Although the relationship need not necessarily hold across any variable (it would arguably be more surprising if it did), it appears to hold, but without the same exponential increase, for national crime rates. Using all countries and all individual crime types as well as the ‘all crime’ category, for all four sweeps of the survey since 1989, the relationship between the prevalence of a crime and its incidence (and hence the extent of its repetition) is strong and consistent (Figure 4). With incidence as dependent and prevalence as independent variable, the coefficients, and 95 per cent confidence intervals for the relationship, are shown in Table 1. The prevalence rate measures the number of victims per capita, while incidence measures the number of crimes per capita, the difference between the two being due to repeat victimization.

Figure 4. Incidence/prevalence relationship, all crime—four ICVS sweeps: trendline and 95% CIs (Rsq = 0.9060)

Table 1. Coefficients and 95 per cent confidence intervals for incidence/prevalence relationship

	Coefficient Beta	Coefficient standard error	Lower 95% CI	Upper 95% CI
Constant	-9.74	2.173	-14.128	-5.42
Slope	2.159	0.094	1.971	2.347

Comparison of the ICVS and NCVS

This section uses the ICVS to frame a criticism of the measurement of repeat victimization by the national crime survey used in the US. Rates of repeat victimization found by the 1989, 1996 and 2000 ICVS sweeps reveal that, despite expected variations due to sample sizes, it is a substantial and continuing phenomenon in the US (rates for the 1992 survey were not available for that country). Close to half of all sexual incidents against women, and assaults and threats, were repeats against persons already victimized (Figure 5). At least a third of burglaries reported were repeats in each iteration of the survey. Motorcycle theft was not reported as being repeated in any of the three sweeps of the survey. While recovery times may lower rv rates, we offer no particular explanation for the absence of repeat motorcycle theft in the US. It may warrant some investigation if there is a practice being undertaken that discourages the repetition of that crime. The first fact to establish would be the rates of replacement purchasing. Low rates (perhaps insurance premiums become unaffordable after a claim) would suggest an explanation.

Figure 5. Rates of repeat victimization in the United States: 1989, 1996 and 2000 ICVS

Other studies and data sources suggest repeat victimization in the US is at least as significant as elsewhere (eg Sherman *et al*, 1998; La Vigne, 1994; Boba and Farrell, 2000; Robinson's 1998 study of burglary in Florida). The comparison of repeat victimization rates across countries in the present study suggests that the aggregate rates in the US are often higher than elsewhere. Yet, despite this, there has been comparatively little attention paid to repeat victimization, or official effort made to encourage prevention efforts, in that country. It is possible that this is due to a failure of the influential NCVS to adequately measure repeat victimization, and this is the point discussed below.

The US National Crime Victimization Survey: a travesty of justice?

The NCVS, the ongoing survey conducted by the US Department of Justice, can reasonably be called the mother of all crime surveys.⁴ It was developed in the wake of the 1966–7 US President's Commission on Law Enforcement and the Administration of Justice. Compared to other surveys it has arguably made an unparalleled contribution to the study of crime, and we acknowledge this at the outset. In the early days of victim surveys, the US Department of Justice commissioned some fine methodological studies of victim surveys. Among these, several examined 'series incidents' (eg Dodge, 1975; 1977; Dodge and Lentzner, 1978; Reiss, 1977), and led to studies of repeat victimization (Reiss, 1980; Feinberg, 1980). A six-month reference or reporting period of the survey was introduced in an attempt to minimize reporting errors due to memory decay (as Skogan (1980) elegantly details). However, at this time there was an underdeveloped—and, it turns out, largely incorrect—understanding of the nature of the distribution of crime across targets due to repeat victimization. In addition, the decision was made to exclude series incidents of crime (repeated occurrences of a crime where the respondent could not distinguish between the incidents) from the official national crime counts.

In Wesley Skogan's wonderful reviews of methodological issues (Skogan, 1980; 1986) he noted that Albert Reiss had observed that excluding series crime incidents served to reduce the official crime rate in the US by 18 per cent! This is still shocking to read when the implications are understood. A bureaucratic counting rule was introduced that effectively excluded one in five crimes in the country! It is also possible that Reiss's 18 per cent is a conservative estimate of the undercount. However, what is perhaps more disturbing is that the accounting practice that excludes the voices of many victims has continued, largely unquestioned, for three decades.

Recent evidence suggests that the six-month reporting period used in the NCVS serves to systematically under-record crimes against the same targets. This methodological issue was touched on in the introduction to this study because it relates to all studies of limited duration. However, the 'time window' problem is more acute with shorter survey reference periods. Elsewhere, a six-month reference period (as used by the NCVS) has been shown to capture 42 per cent less repeat victimization than the one-year reference period (used by the ICVS and most other crime victim surveys) (Farrell *et al*, 2002).

A comparison of rates of repeat victimization captured by the ICVS and the NCVS was conducted for crime types that could reasonably be compared (Figure 6). The ICVS data is, for each crime type, the average rate found across the three sweeps of the survey when it was conducted in the US. The NCVS data is for 1993, and was calculated from counts given in Table 1 of the excellent study by Miller *et al* (1996) published by the US National Institute of Justice. The crime types were matched as far as possible, and in Figure 6 the ICVS labels are shown first and the NCVS labels in parenthesis below the respective bars. The differences between the amounts of repeat victimization revealed by the two data sources are large. The ICVS reveals 123 per cent more repeat sexual incidents, 76 per cent more repeat assaults and threats, 112 per cent more repeat burglary, 29 per cent more repeat robberies, 18 per cent more repeat thefts from the person, and 119 per cent more repeated car thefts. That is, the ICVS often captures twice as much repeat victimization for three of the six crime types, and always a significant proportion more than the NCVS.

The work of Miller *et al* (1996) from which the NCVS data was taken is one of the few studies that *includes* series incidents (whereas most studies exclude them, as discussed above). This data was selected because it can be expected to have higher rates of rv than most NCVS studies. The usual practice of excluding series (in this instance, a limit of ten crimes was placed on a series) would have made the differences far greater. The data from Miller *et al* was used not because we wanted to criticise it, but because it is unusually good.⁵

Figure 6. Comparison of repeat victimization in the United States using ICVS and NCVS

Discussion of ICVS-NCVS comparison

This preliminary comparison of the ICVS and the NCVS with respect to repeat victimization has several possible implications. NCVS series crimes may have significant crime prevention implications. The nature of series crimes is that the respondent cannot distinguish between them. This suggests they were often by the same perpetrator, and that they recurred quickly over a short period of time. Such crimes would be ripe for interventions, including offender detection efforts to prevent repeat crimes.

There is a case for either reconsidering the manner in which the NCVS accounts for repeat victimization, or for conducting an alternative survey that more adequately measures crime. Even with the existing methodology, there is a strong *a priori* case for including series crimes in official US crime counts. There is evidence to suggest that the rates of crime in most previous NCVS studies have been grossly misleading if they largely undercount or exclude repeat victimization. Indirect evidence in support of this statement is also found in the local US studies of repeat victimization cited earlier. Clearly there is a need for further investigation of these possibilities. However, the US Department of Justice should consider commissioning further studies of repeat victimization, including series crimes, and tackling the issues related to the awkward six-month reporting period of the survey, and the difficulties incurred in linking individuals across reporting periods. Such difficulties include those relating to attrition and panel effect (Ybarra and Lohr, 2002) as well as people who relocate after victimization (Reiss, 1977; Ellingworth and Pease, 1998; Dugan, 2001).

It is to be hoped that the incorporation of a repeat victimization perspective into the NCVS does not disqualify all previous NCVS-based research. Indeed, the present authors have previously

developed studies of repeat victimization using the NCVS database (Tseloni *et al.*, 2004; Tseloni and Pease, 2003; Farrell *et al.*, 2001). These were efforts that sought to ‘make the best’ of the NCVS data as it stands. Nevertheless, to take the present arguments to their logical conclusion, it could be argued that the knowing and systematic under-counting of repeat victimization by the Bureau of Justice Statistics of the US Department of Justice is an official abuse of crime statistics that has misled the public and potentially misguided crime policy. If the true extent of repeat victimization in the US were known, it is possible that more effort would be put into strategic thinking as to how the prevention of repeat victimization could be developed, there and elsewhere. The NCVS is an influential survey, and US crime policy is influential in the international sphere; the extent to which damage has been done elsewhere may be considerable, but will be difficult to gauge.

Conclusions

The ICVS, despite some methodological limitations, presents further evidence that repeat victimization is an important component in the overall make-up of crime in every country that has been studied to date. Several conclusions are based upon the present study:

- The extent and importance of repeat victimization is such that its prevention should be more fully incorporated into crime and victim support policies and practices at the international, national and local levels.
- Analyses of repeat victimization should be routinely incorporated into the main publications of the ICVS. Further cross-national examination of the correlates of repeat victimization should be encouraged.
- The ICVS findings lend support to the argument that the NCVS is seriously flawed in the manner in which it measures crime. It is possible that most if not all NCVS-generated crime rates should be reconsidered.

Postscript

During the final stages of preparation of this paper—that is, after its peer review and its acceptance for publication—we learned of a study by Dr Mike Planty, of the American Institutes for Research. His study addresses some of the issues raised herein by analysing repeat victimization in the NCVS. He compares NCVS crime counts using the ‘traditional’ method of excluding series crimes with those including crimes reported in a series by victims. Planty’s study, currently unpublished, concludes:

If the number of victimizations reported in these series incidents are accurate, annual estimates published by the government are severely under-estimated. For example, in 1993, the current government counting rules would not include 79% of all violent victimizations or about 4 out of every 5 violent victimizations. (2004)

Framed in terms of how much the US crime rate would increase, this becomes: ‘a 313% increase for all violent victimizations between 1993–2002’ (Planty, personal communication).

We anticipate that Planty’s finding that incorporating repeat victimization produces a threefold increase in personal crime in the US will prove to be a landmark study.

Notes

- 1 Graham Farrell and Ken Pease are both Professors of Criminology in the Midlands Centre for Criminology and Criminal Justice, Loughborough University; email g.farrell@lboro.ac.uk. Andromachi Tseloni is an Associate Professor in the University of Macedonia.

An earlier version of this paper was presented at a workshop on the International Crime Victimization Survey in Leiden, the Netherlands, in June 2001. The authors would like to thank Paul Nieuwbeerta and colleagues at the Netherlands Institute for the Study of Law Enforcement (NSCR), who sponsored the workshop, and two anonymous peer reviewers for helpful comments.
- 2 Strictly speaking, Hindelang *et al* (1978) used a survey that was a precursor of the full-blown NCVS.
- 3 Often there was 16 rather than 17 countries: Switzerland was excluded, except in relation to sexual incidents, assaults and threats, robbery, attempted burglary, and burglary, because crime incidence and prevalence rates were not distinguished.
- 4 However, when we used this term, our colleague Jan van Dijk suggested that Dutch victim surveys preceded the NCS studies.
- 5 Lest this be misunderstood as a criticism of the work of Ted Miller, Mark Cohen and Brian Wiersema (1996), which it is not intended to be, we also note here that the Miller *et al* work was an excellent piece that has pioneered a whole new area of the assessment of the costs of crime. It is a study that the current authors greatly admire.

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