CHAPTER 11

PREVENTING REPEAT RESIDENTIAL BURGLARY VICTIMIZATION*

Graham Farrell and Ken Pease
Midlands Centre for Criminology and Criminal Justice
Loughborough University

INTRODUCTION

This chapter reviews evaluations of the prevention of repeat residential burglary. These evaluations are a subset of the evaluations relating to the prevention of repeat victimization. The review methodology aims to follow that of the systematic review process proposed by the Campbell Collaboration, which has produced a series of recent reviews including, Farrington and Welsh (2002) and the set of reviews edited by Farrington and Welsh (2001). In keeping with that format, the authors acknowledge a possible interest: We have both previously worked on repeat victimization prevention efforts and elsewhere contended that preventing repeat victimization is a potentially attractive crime prevention strategy.

BACKGROUND

A general definition of repeat victimization is that it is the repeated criminal victimization of a person, household, business, other place or target however defined. The prevention of repeat victimization has gained prominence in the crime prevention literature in recent years in the wake of the Kirkholt burglary prevention project (reviewed below). Although repeat victimization had been recognized as an important component of crime, the Kirkholt project sparked recognition of its potential importance for policy and practice, spurring a range of empirical studies of repeat victimization for different crime types (see Farrell, 1992, 1995; Farrell and Pease, 1993, 1997; Pease, 1998). Efforts to prevent repeat residential burglary to date have been undertaken disproportionately in Britain where repeat victimization has permeated crime policy at the national level.

* Thanks go to Brandon Webster for assistance with preliminary literature searches and data extraction. The first author would like to thank Brandon Welsh and David Farrington for their remarkable patience and friendly encouragement during the preparation of this chapter.

Brandon C. Welsh and David P. Farrington, eds.
Preventing Crime: What Works for Children, Offenders, Victims, and Places, 161–176

Repeat victimization was identified as a potential performance indicator for policing (Tilley, 1995) and by 2000, all police forces in England and Wales had a policy for the prevention of repeat residential burglary, with many having policies to prevent the repetition of other types of crime (Farrell et al., 2001). Readers wishing for an overview of the "repeat victimization story" and the development of the research program in the U.K. since the mid-1980s to the present are referred to Laycock (2001, 2002) and Laycock and Farrell (2003).

Evaluations relating to repeat residential burglary form a prominent part of the evaluation literature relating to the prevention of repeat victimization more generally. However, there is some justification for undertaking a preliminary review for a particular crime type rather than all crime types, as this approach may facilitate the identification of crime-specific aspects of repeat victimization prevention strategies that could go unnoticed if all crime types were reviewed together.

SUMMARY OF RESEARCH METHODS

Criteria for Inclusion of Evaluation Studies

Evaluation studies relating to repeat victimization for all crime types were first identified, and those relating to repeat residential burglary were selected. Both published and unpublished reports were included where identified. Many of the evaluations reviewed herein were familiar to the authors due to previous research on repeat victimization and were also due to contacts with other academics and practitioners working on repeat victimization in Australia, the U.K., and the U.S.

Evaluations with comparison-group designs were included in the review where the comparison groups sometimes had varying degrees of comparability – and in keeping with the keystone notion of methodological transparency, the research designs are assessed.

Search Strategies

Ten online academic and other databases were searched: Criminal Justice Abstracts (1968–2002); Psychological Abstracts (1967–2002); Sociological Abstracts (1963–2002); Criminal Justice Periodicals Index (1970–2002); National Criminal Justice Reference Service (NCJRS) (1972–2002); Child Abuse and Neglect Abstracts (National Child Abuse and Neglect or NCCAN Clearinghouse) (1997–2002); Educational Resources Information Clearinghouse (ERIC) (1966–2002); Lexis-Nexis (1969–2002); Dissertation Abstracts (1861–2002); and Government Printing Office, Monthly catalogue (GPO monthly) (1976–2002).

Key search terms and combinations of terms were entered into each database. Truncation and 'wildcards' were used where possible. In particular, victim* (where * is the wildcard symbol) was used since it is inclusive of victim, victims,

victimized, victimization, or any other words that began with 'victim'. The truncation and wildcard use of victim* also captures alternative spellings such as victimisation and victimization, that is, with 's' and with 'z', respectively. The key search terms entered were: repeat victim*; revictim*; re-victim*; multiple victim*; and recidivist victim*. A series of additional search terms combined 'repeat*' with a list of more specific crime-types: property crime; burglary; burglarization; residential burglary; and residential burglarization. Additional searches using key terms were undertaken using popular Internet search engines to try to capture publications that had not reached the electronic databases.

Evaluations relating to the prevention of repeat residential burglary were identified by reading summaries, abstracts or full reports as necessary. Some evaluations, including Tilley and Webb (1994) and Webb (1996) were excluded due to absence of comparison groups or a paucity of information. At the time of writing, some newly published promising results from the U.K.'s national Burglary Reduction Initiative are still emerging but were not disaggregated to allow assessment of the evaluations of individual projects focused upon repeat burglary prevention (see e.g., Bowers et al., 2003; Kodz and Pease, 2003).

RESULTS

Critical information on evaluation design, implementation and outcome measures is shown in Tables 1 and 2, with evaluations in chronological order. The details on the projects noted below primarily give the big picture in each case and include any new analysis or reinterpretation of data and findings. Readers should refer to original sources for more detailed information, and page numbers are given to facilitate that process where possible.

Kirkholt, U.K.

The Kirkholt burglary prevention project (Forrester et al., 1988, 1990; Farrington, 1992; Pease, 1991) was the first to explicitly utilize repeat victimization as the focus of a crime prevention strategy. Treatments included security upgrades at burgled homes with special attention to preventing repeat burglary by the same method of entry. Neighbors of victims were offered free security upgrades as an incentive to develop localized watch groups, each called a Cocoon Neighborhood Watch. In burgled households, coin meters (boxes that held coins used to pay for electricity) were replaced since they were easy and frequent targets. In the second phase of the project, analysis of probation data identified debt as a motivator of burglary, and offenders were offered debt-management services.

The comparison group for the Kirkholt project comprised the remainder of the adjoining police subdivision – a larger area with some privately owned properties and a lower burglary rate. Implementation rates for prevention tactics were 68% for security upgrades (402 of 592 burgled households: see Farrington, 1992: 10–11) and close to 100% for Cocoon Watch, since by the end of the project close

TABLE 1. Features of Treatment and Comparison Groups and Intervention Tactics by Evaluation

Title (Authors)	Treatment Area	Comparison Group(s) (Any differences to treatment area)	Intervention Tactics (Who paid for intervention)
Kirkholt Burglary Prevention Project (Forrester et al., 1988, 1990; Farrington, 1992)	Area of 2,280 households	Remainder of police subdivision (larger area; some privately-owned houses; lower burglary rate)	Victim-oriented: Free focused security upgrades; coin-box removal; cocoon neighborhood watch; Offender-oriented: debt counseling; arrests (free – paid by project)
Site ?R1 (Tilley, 1993)	Area of 8,000 households	Remainder of police subdivision (larger area)	Target-hardening security measures (locks, and Cocoon Watch – also at some non-burgled, vulnerable properties (free to households)
Site ?R2 (Tilley, 1993)	Area of 835 households	Remainder of police subdivision (larger area)	Target-hardening security measures, but offered to all households not just victims (free to households)
Site ?R3 (Tilley, 1993)	Area of 3,936 households	Remainder of police subdivision (larger area)	Target-hardening security measures (free to households)
Huddersfield Biting Back (Anderson et al., 1995; Chenery et al., 1997)	Huddersfield police subdivision with 22,000 population	Remainder of West Yorkshire police force area. Contiguous areas used to examine displacement (larger area)	Graded response system: bronze, silver, gold according to risk, each with multiple tactics including letters to offenders, security, patrols, loan of alarms (mixed: some free, some partially-sponsored security measures)
Preventing Residential Burglary in Cambridge (Bennett and Durie, 1999)	Castle – 2,665 households; Arbury – 3,024 households; one hot spot	Similar non-adjacent local areas and hot spots plus some computer generated treatment and comparison groups	Combined package of victim-oriented security, guardianship measures, and offender-based measures (key security measures depended on means-tested eligibility or purchase by victims)

Continued

TABLE 1. Continued

Title (Authors)	Treatment Area	Comparison Group(s) (Any differences to treatment area)	Intervention Tactics (Who paid for intervention)
Baltimore – Hot Dots in Hot Spots (Weisel et al., 1999)	Three patrol sectors	Patrol sectors matched on population, area, environment, housing stock, socio-economic status	Warning cards of security advice to victims; alert cards and warnings for neighbors; security checks; free property registration; police patrols (all free but note no funding for actual security)
Dallas – Hot Dots in Hot Spots (Weisel et al., 1999)	Part of Northeast police district – 12 square miles, 54,652 population	Comparison area matched on burglary rate; larger area (28 square miles) but similar size population of 45,520	Written notification to generate victim awareness; apartment managers notified of increased risks; home security surveys (all free but note no funding for security)
San Diego – Hot Dots in Hot Spots (Weisel et al., 1999)	Western Division: 26 sq, miles, 173,835 population	Mid-City Division with similar number of burglaries and housing stock	Emphasis on better investigations; home security checks; security brochure for victims (free but note no funding for security)
Beenleigh – Lightning Strikes Twice (Budz et al., 2001)	Area of 41,000 population	Non-neighboring area matched on burglary rate and socio-demongraphic characteristics	3-tiered responses: Stop Break Response to one-time victims (security advice and materials); Hot Dot Response to two-time victims (more extensive prevention materials); Hot Spot Response to hot spot areas (home-security assessments; property marking)
Tee Tree Gully, Adelaide – Repeat Break and Enter (Ball Public Relations and Walters, 2002; Henderson, 2002)	Tee Tree Gully plus 3 police subdivisions: total population 207,000	Similar non-neighboring comparison areas; similar neighboring areas to measure displacement	Security audit; informal support; referral to other agencies; referral for property marking; links to neighbors

TABLE 2. Measures of Implementation and Outcome by Evaluation

Title (Authors)	Implementation – Measures and Issues	Outcome Measure 1 – Reduced Repeat Burglary	Outcome Measure 2 – Reduction in Overall Burglary (source)	Displacement/Other Issues Arising
Kirkholt Burglary Prevention Project (Forrester et al., 1988, 1990; Farrington, 1992)	68% for security upgrading; close to 100% for Cocoon Watch	Yes – Repeat burglary fell to zero within 6 months (recorded crime data). Pattern of burglary reduction linked temporally to security measures	Burglary fell 60% within 6 months and 75% over 3 years (recorded crime data)	Displacement examined – none found
Site ?R1 (Tilley, 1993)	Cocoon Watch achieved 25% coverage	Not measured	24.3% reduction relative to control area but increase in absolute terms (recorded crime data)	Displacement not measured/The project was not located in a very high crime area
Site ?R2 (Tilley, 1993)	80% of all households in area received security which was offered to all	Not measured	Burglary prevalence fell 57.9% from year 1 to year 3. Burglary incidence fell 65.8% in pre-post comparison of 20 months (recorded crime data)	"Some evidence of displacement to an adjoining beat" (p. 8). Comparison area data not given but inferred from fact that adjoining beat was "the only beat in the subdivision experiencing an increase in burglary" (p. 8)
Site ?R3 (Tilley, 1993)	55% of victims (187 households) received target hardening and 424 households overall	Yes – (1) 40.4% reduction in proportion of repeat burglary; (2) increased mean time to repeats from 81 to 137 days; (3) properties secured without prior burglary did not benefit	54% reduction in burglary incidence relative to comparison group (recorded crime data)	Displacement not measured

Continued

TABLE 2. Continued

Title (Authors)	Implementation – Measures and Issues	Outcome Measure 1 – Reduced Repeat Burglary	Outcome Measure 2 – Reduction in Overall Burglary (source)	Displacement/Other Issues Arising
Huddersfield Biting Back (Anderson et al., 1995; Chenery et al., 1997)	Interviews with victims "suggest implementation a factor in any continuing repeats" (1997: 17)	Victims more satisfied; increased arrests from alarms at victimized properties; reduction over time in number of silver and gold responses suggests reduced repeat burglaries	30% reduction in burglary incidence relative to comparison group (recorded crime data)	Displacement examined – none found
Preventing Residential Burglary in Cambridge (Bennett and Durie, 1999)	Very low for key tactics: 3.5% (6 of 171 victims) received free Keepsafe door locks; "Some" victims acted on security advice; 9% of victims (n = 15) received loan-alarms; 0% of visited victims required alley gates (p. 36)	No – similar or greater reductions in comparison areas. No – similar or greater reductions in comparison areas	Reduction not attributable to intervention: Reductions greater and/or similar in control areas (recorded crime data)	"The right medicine but the wrong dosage" (p. 41). Implementation failure
Baltimore – Hot Dots in Hot Spots (Weisel et al., 1999)	Few process measures given: police distributed cards and alerted neighbors	No	Police data showed 5.2% decrease in treatment and 24% increase in comparison, but probably spurious – no explanation for it (recorded crime data)	Weak treatment (advice) suggests theory failure produced implementation failure (no strong preventive tactics introduced)
Dallas – Hot Dots in Hot Spots (Weisel et al., 1999)	Victim survey showed: 87% implemented some crime prevention strategy; 13% alarms; 27% moved or moving; 9% boarded windows; 18% changed or added locks (p. 107)	No: Victim survey (51% response rate) showed no change relative to comparison group (but – victims more satisfied with police response – p. 108)	Slight burglary increase relative to control (p. 91) (recorded crime data)	Weak treatment (advice) suggests theory failure combined with implementation failure (no strong preventive tactics introduced)

Continued

TABLE 2. Continued

Title (Authors)	Implementation – Measures and Issues	Outcome Measure 1 – Reduced Repeat Burglary	Outcome Measure 2 – Reduction in Overall Burglary (source)	Displacement/Other Issues Arising
San Diego – Hot Dots in Hot Spots (Weisel et al., 1999)	Few process measures available; changes in police personnel "challenge to implementation" (p. 43); Police "skeptical" about repeat burglaries (p. 43)	No	Burglary fell 12% more than in comparison areas (p. 92), but probably spurious (no explanation for it)	Weak treatment (advice) suggests theory failure produced with implementation failure (no strong preventive tactics introduced)
Beenleigh – Lightning Strikes Twice (Budz et al., 2001)	Victims more likely than controls to use warning stickers (45% v 11%), property marking (42% v 12%), inventory lists (34% v 13%), and lock fitting (39% v 27%); more expensive measures (alarms; new doors or screens) more likely to be adopted than controls but still unlikely overall	Yes – Repeat victims fell 16% and repeat incidents 15% in treatment area and increased in comparison areas. 80+ % of victims reported police advice to be helpful – but no difference in satisfaction	No – burglaries increased relative to comparison group. Report suggests repeats may have displaced to other households within treatment group area but provides no evidence (multiple data sources)	Displacement measured – none found. Evaluation difficult because: "It was difficult to distinguish possible project effects from.. random or seasonal fluctuations" and project was in an area with "low incidence of repeat victimization" (p. 14)
Tee Tree Gully, Adelaide – Repeat Break and Enter (Ball Public Relations and Walters, 2002; Henderson, 2002)	Treatment (advice) given at 31.7% of properties. Result was locks and alarms adopted by 8% and 4% of victims, respectively – low implementation rate	Repeats reduced relative to control (but repeats stable in absolute terms)	No – burglary increased relative to comparison area	No evidence of spatial displacement

to the whole housing area was covered. There were three main outcome indicators: Burglary incidence fell 60% and repeat burglary to zero within six months of the start of the program (Forrester et al., 1990: 4); burglary incidence fell 75% over three years (Forrester et al., 1990: 27); and burglaries declined at households where security was introduced but not at other households. The third indicator was developed by Farrington (1992) in an independent analysis that also excluded regression to the mean as a significant influence. There was no evidence of spatial displacement (Forrester et al., 1990: 29). The evaluators concluded that the project's key characteristic was preventing repeat residential burglary by all locally appropriate means; that is, tailoring multiple tactics to the local crime problem via a crime analysis approach.

Three Putative Replications of Kirkholt

Tilley (1993) evaluated three putative replications of the Kirkholt project. The replications were 'putative' because they varied in the nature and method of replication. Tilley referred to the projects as sites ?R1, ?R2, and ?R3, wherein the question mark raises the issue of whether or not they should be considered replications. The comparison group area constituted the beats of the surrounding police subdivisions in each case – though information on the comparison group for ?R2 is largely inferred and therefore weak. The sites differed from the Kirkholt project in approach and method so that Tilley (1993) argued that only ?R3 could be classified as a replication, but all three are reviewed here. The assessments below involve some re-analysis of the original data.

Site ?R1 contained 8,000 households and was "not a very high crime rate area" (Tilley, 1993: 6). In addition to burgled properties, other "vulnerable," publicly owned households were target hardened while some privately owned burgled homes were not (p. 7). Burglaries in treatment Site ?R1 increased from 571 in the year prior to the project to 991 during the second year of implementation. The comparison group experienced a 229.6% increase from 671 to 1,538 burglaries over the same period (p. 7). If the treatment area had experienced the same magnitude of change, 1,309 burglaries would be expected. Therefore, relative to the control group, the burglaries in the treatment area were 24.3% lower than expected. Data on burglary prevalence was not reported.

Site ?R2 contained 835 dwellings with a 9% burglary prevalence rate in the year prior to the treatment (Tilley, 1993: 7). Instead of a focus upon victims, target hardening "was offered to all on the estate. Security work.. was undertaken at 81% of the properties" but had been offered to all properties in the treatment area (Tilley, 1993: 8). Two outcome measures were reported. The first was the annual change in burglary prevalence which fell from 9.1% (76 households or 1 in 11) in the year before the project, to 1.9% (16 households or 1 in 52) during the second year, to 3.8% (32 households or 1 in 26) during the third year. From the first to the third year this is a 57.9% net reduction in burglary prevalence (76 compared to 32 households). The second outcome measure compared two periods of twenty months before and after the four-months of target hardening in

which the number of burglaries fell from 111 before to 38 after, indicating a 65.8% reduction in burglary incidence. Comparison to the control groups found that "there was some evidence of displacement to an adjoining beat, the only beat in the subdivision experiencing an increase in burglary" (Tilley, 1993: 8), though the specific levels of control group burglary rates are not reported. Hence, while the report implies that at any change in the control group was insignificant relative to the findings, the exact data are not reported. The general availability of the treatment suggests this project may not have targeted repeat victimization (this is in agreement with Tilley's interpretation), while the dearth of information available to Tilley for the comparison area detracts from the strength of the overall evaluation design.

Site ?R3 contained 3,936 households and had a prior burglary prevalence rate of 5% (Tilley, 1993: 8). Free target hardening was introduced at the homes of victims. Fifty-five percent of victims (187 households) received security upgrades. Other properties that were "informally identified as at risk" – usually neighbors of victims, elderly, disabled or single-parent residents – were also target hardened (p. 9). From the year prior to the project to the year following, the treatment site experienced a 9% increase in domestic burglaries compared to a 139% increase in the control group (p. 9). When a 139% increase is expected, a 9% increase always produces a figure that is 45.6% lower than the expected level. Hence, relative to the control group, the treatment area experienced the equivalent of a 54.4% reduction in burglary incidence (i.e., 100% minus 45.6%). Three outcome indicators are reported for repeat burglary: There was a steady decline in repeat burglaries from 22.8% to 20.1% to 13.6% of total burglaries over the three-year period, for an overall 40.4% reduction in the proportion of repeat burglaries; the time between burglaries and repeats increased from a mean of 80.5 days to 136.6 days; and those residences which were target hardened due to an informal recommendation (rather than upon being burgled) did not experience less burglaries than the properties that were not target hardened. Each outcome indicator is consistent with an interpretation that the intervention reduced repeat burglaries at previously burgled residences that received the intervention.

Tilley's (1993) report argues that only ?R3 can be considered a replication of Kirkholt according to its method. For present purposes, the set of evaluations also raise the important issue (which can be difficult for evaluation to disentangle) that efforts to prevent repeat victimization can be inappropriately located (in low crime areas) and impact can be difficult to disentangle if tactics focused on repeats are combined with general prevention efforts.

Biting Back – Huddersfield, U.K.

The Huddersfield "Biting Back" project (Anderson et al., 1995; Chenery et al., 1997; Anderson and Pease, 1997) aimed to routinize the prevention of repeat burglaries across a large area. Arguably, the key additional innovation of the project was the introduction of graded responses to repeat victimization – more prevention resources were allocated to more frequently burgled households that

remained more at risk (Chenery et al., 1997: 5). The three levels of response were: bronze (the least resource-intensive), silver, and gold (the most resource-intensive for the highest-risk households). The comparison group was the remainder of the area covered by West Yorkshire police, an area larger than that receiving treatment. Victims reported greater satisfaction with the police and were more likely to report having received various types of crime prevention advice from the police. There was an increase in arrests based upon the use of temporary alarms, from 4% of installations to 14% of installations when they were allocated to burgled premises. The main crime rate outcome measure was the 30% reduction in burglary incidence relative to the force as a whole. The evaluation examined burglary patterns by known offenders before and after implementation and found no evidence of spatial displacement.

Cambridge, U.K.

Bennett and Durie (1999) evaluated efforts to prevent residential burglary in two areas (Arbury and Castle) and an overlapping burglary hot spot in Cambridge. Measures were aimed at improving victim security (various measures), increasing guardianship (surveillance measures), and offenders (after-school and youth schemes) (p. 19). This study arguably had the strongest evaluation design of the projects reviewed herein. Multiple comparison groups were similar areas, some with similar pre-treatment burglary rates, plus the city as a whole. Outcome measures of burglary incidence and repeat burglaries showed the small reduction in treatment areas were outweighed by larger reductions in the comparison areas. Any reductions could not be attributed to the treatment. Few victims were eligible for security or wanted advice, and of those who received treatment, few measures were implemented. Re-analysis of implementation data suggests that, of 171 burglary victims in treatment areas, 3.5% ($n = 6$ victims) received free Keepsafe door locks, and 9% ($n = 15$ victims) received loan-alarms, and zero secure alley-gates were purchased. These may well have been the tactics with the strongest prevention mechanisms. Overall, victims declined or did not adopt measures even though project staff implemented them at fairly high rates among those eligible and willing. This reanalysis indicates implementation failure, perhaps more than that identified in the original report where the evaluators concluded there was "the right medicine but in the wrong dosage" (p. 41).

Baltimore, Dallas, and San Diego

The three evaluation sites are shown separately in Tables 1 and 2 but grouped here for brevity. Weisel et al. (1999; see also Stedman and Weisel, 1999) evaluated police efforts to prevent repeat burglaries in Baltimore, Dallas, and San Diego. The report notes that, "no monetary resources were provided to the cities for developing or implementing responses" (p. 19). Police officers were given crime prevention training in each site but "police were not provided with any additional revenue for purchasing crime prevention or intervention tools" (p. 19). The main

responses focused on improving information gathered by police at burglary scenes rather than on implementing prevention. Advice leaflets and warning cards were given to victims but there was no provision of security or other measures (see p. 130). The evaluation determined there was implementation failure, noting:

> "The problem-solving efforts developed and implemented by police personnel in each city were relatively weak. The provision of target hardening or other crime prevention advice to the victim was a very hit-or-miss proposition – depending on the knowledge, interest, and motivation of the officer taking the report." (Weisel et al., 1999: 113–114)

The result in relation to Dallas was that: "most of the victims in the experimental area received police advice ... [but] victims in the comparison area were about as likely as victims in the experimental area to make any changes in behavior" (Weisel et al., 1999: 97). These results seemed applicable for each site. This is an important lesson regarding implementation.

Beenleigh, Queensland, Australia

Budz et al. (2001) evaluated efforts to prevent repeat burglary in Beenleigh, a town of 41,000 people with a burglary rate above the regional average (p. 2). Three tiers of response were introduced: 'Stopbreak' was a package of crime prevention material provided to once-burgled households (623 provided); 'Hot Dot' was a response of higher-grade security provided to households burgled more than once (67 such responses provided); and 'Hot Spot' was a response of a security survey and crime prevention advice offered to residents in high burglary rate areas (580 such responses provided). The evaluation design compared burglary for the year of the project to the preceding year for the treatment areas, neighboring areas (to capture displacement), and a comparable non-neighboring area with a similar burglary rate, socio-economic and demographic characteristics (p. 12). Repeat burglaries fell 15% in the treatment area but increased in the comparison areas. There was no reduction in burglary incidence (burglaries fell 2% in the treatment area when one prolific offender was excluded but fell 13% in the comparison area), but since the tactics were focused on preventing repeat burglaries, this second outcome measure does not indicate project failure.

Tee Tree Gully, Adelaide, Australia

The South Australian Residential Break and Enter Pilot Project Evaluation Report details the evaluation of efforts to prevent repeat burglary in Tee Tree Gully and three nearby police subdivisions (Ball Public Relations and Walter, 2002). Five measures composed the treatments introduced at burgled households: a security audit; informal support; referral to other agencies; referral for property marking, and links to neighbors. Implementation occurred at 31.7% of eligible properties ($n = 994$ of 3,137 burgled properties) which "may be the result of police reluctance (during the first half of the project) to ask victims to participate or a victims'

willingness to 'get involved' even if the offer is put in the best possible light" (p. 9). However, only 61.2% of treatments resulted in victims following any security advice (833 interventions) – equivelant to a 19.6% implementation rate of any security. Smaller proportions of victims adopted specific measures: 7.4% ($n = 233$) installed door locks, 8.4% ($n = 263$) installed window locks, 3.8% ($n = 121$) installed alarms, and 12.4% ($n = 390$) followed 'some advice' (p. 10). This is a reanalysis of the report data that suggests extremely low implementation rates for key prevention tactics. This strongly indicates implementation failure since a reduction in either repeats or overall burglaries would not be expected based on such low rates of improved security.

The Adelaide project evaluation design incorporated both similar neighboring areas to assess displacement effects, and non-neighboring comparable control areas to assess burglary reduction. The evaluation report concludes that the project reduced repeat burglaries relative to the comparison areas (though repeat burglaries remained stable in the treatment area but increased in the control area), while the treatment areas experienced a 31.3% increase in burglaries compared to a 16.7% increase in the comparison areas (Henderson, 2002: 22).

DISCUSSION AND CONCLUSIONS

There remains a paucity of evidence regarding what works to prevent repeat residential burglary. The most successful efforts appear to involve: (1) A strong preventive mechanism. Specific prevention tactics should be tailored to and be crime and context specific. (2) Multiple tactics. The currently available evidence suggests multiple tactics working together can produce a synergistic effect. While there is little conclusive evidence regarding the effectiveness of particular tactics, opportunity-blocking security aimed at preventing repeat residential burglary by the same modus operandi seems the most likely candidate for effectiveness. (3) Strong implementation. Some prevention efforts failed because the preventive mechanism was not introduced. (4) A focus on high-crime and high-burglary rate situations. Those times and places where rates of repeat burglary rates are highest are the most appropriate focus for prevention efforts.

Conclusions regarding what does not work must be as cautious as those regarding what works. This review suggests (and some of these are mirror-images of what works) the following characteristics of prevention efforts do not work to prevent repeat residential burglary: (1) Weak preventive mechanisms do not work. Further, the same prevention tactic in a different context does not necessarily work if the nature of the burglary problem is different. (2) Poor implementation does not work. In particular, victim-education is an indirect route that does not necessarily mean that effective preventive tactics are implemented: some victims may be unable or unwilling to spend money on security. This suggests better sources of funding for security and other equipment or better motivation and incentives for victims may be required in some instances. (3) Replicating tactics without attention to context does not necessarily work, though some strategic application of measures, such as security upgrades to prevent repeat

residential burglary by the same modus operandi appear more generally applicable. (4) Overall impact is less where repeat residential burglary rates are low. This is an issue that may hinge on the apparent disproportionate increase in repeat burglaries in the highest burglary rate areas.

Other Evaluation Issues

Evaluations to date have provided only cursory insight into the impact of prevention efforts upon the time-course of repeat residential burglaries. Evaluations that have shown an extension of the time-between-burglaries have used the mean time to a repeat as the outcome measure. Future research might seek additional measures. Similarly, there is relatively little evaluation data relating to the differential impact of graded responses to higher volume repeat residential burglaries. Evaluation can sometimes be difficult since repeat burglaries can be difficult to measure from recorded crime data (see Farrell and Pease, 2003). Few of the evaluations reviewed herein used pre- and post-treatment victim surveys to develop more accurate outcome measures. Similarly, few evaluations measured the use of prevention tactics in comparison areas, except Weisel et al. (1999) who found that a significant proportion of untreated victims took some form of preventive action. The evaluations demonstrating the greatest reductions in residential burglary and repeats tended to be demonstration projects (notably Kirkholt and Huddersfield's "Biting Back") where researchers were involved with tactic-development and implementation as part of an action-research process.

It is also clear that a key issue relating to implementation is: Who pays for prevention equipment? The evidence suggests that victims are often unable or unwilling to invest in additional security even when warned of increased crime risks. Some evaluation outcomes may need closer examination: Strict adherence to experimental analysis suggests success with a finding of a relative reduction in repeat burglaries even if actual repeat levels are stable or declining (success being relative to the control group), or when a reduction in repeats is concurrent with an overall increase in burglary incidence. Such ambiguities may be due to the inability of most area-based evaluations to assess outcomes based on analysis of individual households, suggesting more discerning evaluation is required.

The widespread adoption of policies to tackle repeat residential burglary by police forces in the U.K. does not necessarily mean that quality prevention efforts have been implemented (Farrell et al., 2000). More recent developments in the empirically derived understanding of repeat residential burglary, such as the 'near-repeat' phenomenon (nearby neighbors are more likely to be victimized; see Townsley et al.; 2001; Johnson and Bowers, 2004) have yet to be integrated into evaluated prevention efforts.

A separate issue of relevance to evaluation is that repeat victimization is a strategy rather than a tactic. As such it can, and should, be integrated with other crime prevention and detection strategies, including more general crime prevention strategies, offender detection efforts, tackling hot spots of crime, preventing

theft of hot-products, and environmental design to reduce crime. The combinations of strategies may produce synergies. If so, future evaluations will need to be particularly sophisticated to tease out the various mechanisms at work.

This review and its findings should provide a platform from which to undertake further reviews of efforts to prevent repeat victimization of different types of crime. The current review suggests the need for further evaluation of efforts to prevent repeat residential burglaries. There is evidence the repeat burglary can be prevented when a locally appropriate prevention effort is properly introduced, but prevention does not occur in the absence of either a thorough implementation or a strong preventive mechanism. Hence, the evidence regarding preventive effectiveness is quite sobering in light of the significant progress that has been made in the more general empirical investigation of the nature of repeat residential burglary and repeat victimization.

REFERENCES

Anderson, David, and Ken Pease. 1997. "Biting Back: Preventing Repeat Burglary and Car Crime in Huddersfield." In *Situational Crime Prevention: Successful Case Studies*, Second ed., edited by Ronald V. Clarke, 200–208. Guilderland, New York: Harrow and Heston.

Anderson, David, Sylvia Chenery, and Ken Pease. 1995. *Biting Back: Tackling Repeat Burglary and Car Crime*. Crime Detection and Prevention Series Paper, No. 58. London: Home Office.

Ball Public Relations and Christine Walter. 2002. *The South Australian Residential Break and Enter Pilot Project Evaluation Report – Summary Volume*. Canberra. Australia: Commonwealth Attorney-General's Department.

Bennett, Trevor H., and Linda Durie. 1999. *Preventing Residential Burglary in Cambridge: From Crime Audits to Targeted Strategies*. Police Research Series Paper, No. 108. London: Home Office.

Bowers, Kate, Shane Johnson, and Alex Hirschfield. 2003. *Pushing Back the Boundaries: New Techniques for Assessing the Impact of Burglary Schemes*. London: Home Office.

Budz, Dennis, Neil Pegnall, and Michael Townsley. 2001. *Lightning Strikes Twice: Preventing Repeat Home Burglary*. Queensland, Australia: Criminal Justice Commission.

Chenery, Sylvia, John Holt, and Ken Pease. 1997. *Biting Back II: Reducing Repeat Victimization in Huddersfield*. Crime Detection and Prevention Series Paper, No. 82. London: Home Office.

Farrell, Graham. 1992. Multiple Victimisation: Its Extent and Significance. *International Review of Victimology* 2: 85–102.

——. 1995. "Preventing Repeat Victimization." In *Building a Safer Society: Strategic Approaches to Crime Prevention. Crime and Justice: A Review of Research*, vol. 19, edited by Michael Tonry and David P. Farrington, 469–534. Chicago: University of Chicago Press.

——, and Ken Pease. 1993. *Once Bitten, Twice Bitten: Repeat Victimization and its Implications for Crime Prevention*. Crime Prevention Unit Paper, No. 46. London; Home Office.

——. 1997. Repeat Victim Support. *British Journal of Social Work* 27: 101–113.

——. 2003. "Measuring and Interpreting Repeat Victimization Using Police Data: Findings from Repeat Burglary in Charlotte, North Carolina." In *Theory for Practice in Crime Prevention. Crime Prevention Studies*, vol. 16, edited by Marti Smith and Derek Cornish, 265–289. Monsey, NY: Criminal Justice Press.

Farrell, Graham, Louise Hobbs, Alan Edmunds, and Gloria Laycock. 2000. *RV Snapshot: UK Policing and Repeat Victimization*. Policing and Reducing Crime Unit Paper, No. 5. London: Home Office.

Farrington, David P. 1992. Was the Kirkholt Burglary Prevention Project Effective? Unpublished paper. Cambridge, U.K.: Institute of Criminology, Cambridge University.

——, and Brandon. C. Welsh. 2002. Improved Street Lighting and Crime Prevention. *Justice Quarterly* 19: 313–342.

——, eds. 2001. What Works in Preventing Crime? Systematic Reviews of Experimental and Quasi-Experimental Research. [Full issue.] *Annals of the American Academy of Political and Social Science* 578.

Forrester, David, Mike Chatterton, and Ken Pease. 1988. *The Kirkholt Burglary Prevention Project, Rochdale*. Crime Prevention Unit Paper, No. 13. London: Home Office.

Forrester, David, Samantha Frenzz, Martin O'Connell, and Ken Pease. 1990. *The Kirkholt Burglary Prevention Project: Phase II*. Crime Prevention Unit Paper, No. 23. London: Her Majesty's Stationery Office.

Henderson, Monika. 2002. *Preventing Repeat Residential Burglary: A Meta-Evaluation of Two Australian Demonstration Projects*. Barton, Australia: Commonwealth Attorney-General's Office.

Johnson, Shane D., and Kate Bowers. 2004. The Spatio-Temporal Distribution of Repeat Burglaries. *European Journal of Criminology* 1: 237–255.

Kodz, Jenny, and Ken Pease. 2003. Burglary Reduction Initiative: Early Findings on Burglary Reduction. Home Office Research and Statistics Directorate Findings, No. 204. London: Home Office.

Laycock, Gloria. 2001. Hypothesis-Based Research: The Repeat Victimization Story. *Criminal Justice* 1: 59–82.

——. 2002. "Methodological Issues in Working with Policy Advisers and Practitioners." In *Evaluation for Crime Prevention. Crime Prevention Studies*, vol. 13, edited by Nick Tilley, 205–237. Monsey, NY: Criminal Justice Press.

——, and Graham Farrell. 2003. "Repeat Victimization: Lessons for Implementing Problem-Oriented Policing." In *Problem-Oriented Policing: From Innovation to Mainstream. Crime Prevention Studies*, vol. 15, edited by Johannes Knutsson, 150–175. Monsey, NY: Criminal Justice Press.

Pease, Ken. 1991. The Kirkholt Project: Preventing Burglary on a British Public Housing Estate. *Security Journal* 2: 73–77.

——. 1998. *Repeat Victimisation: Taking Stock*. Police Research Group Paper, No. 90. London: Home Office.

Stedman, John, and Deborah Lamm Weisel. 1999. "Finding and Addressing Repeat Burglaries." In *Problem-Oriented Policing: Crime-Specific Problems, Critical Issues and Making POP Work*, edited by Corina S. Brito and Tracy Allan. Washington, DC: Police Executive Research Forum.

Tilley, Nick. 1993. *After Kirkholt – Theory, Method and Results of Replication Evaluations*. Crime Prevention Unit Series Paper, No. 47. London: Home Office.

——. 1995. *Thinking About Crime Prevention Performance Indicators*. Crime Detection and Prevention Series Paper, No. 57. London: Home Office.

——, and Janice Webb. 1994. *Burglary Reduction: Findings from Safer Cities Schemes*. Crime Prevention Unit Paper, No. 51. London: Home Office.

Townsley, Michael, Ross Homel, and Janet Chaseling. 2003. Infectious Repeats: A Test of the Near Repeat Hypothesis. *British Journal of Criminology* 43: 615–633.

Webb, Janice. 1996. *Direct Line Homesafe*. Lincolnshire, U.K.: Janice Webb Research.

Weisel, Deborah L., Ronald V. Clarke, and John.R. Stedman. 1999. *Hot Dots in Hot Spots: Examining Repeat Victimization for Residential Burglary in Three Cities*. Final Report Submitted to the National Institute of Justice. Washington D.C.: Police Executive Research Forum.