

## ENVIRONMENTAL IMPROVEMENTS AND THE FEAR OF CRIME

### *The Sad Case of the 'Pond' Area in Glasgow*

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*Studies investigating the positive effect that improved street lighting has on crime and the fear of crime have become remarkably popular. Impressive results have regularly been reported. However, while most use the 'before-and-after' interview format, many neglect to have a long enough follow-up period or to control for the effect that interviewing at different times of the year may have.*

*The study reported here is based on a twelve-month follow-up period, and controls exactly for time of year at follow-up interview stage. Further, in addition to relighting the area surrounding the homes of respondents, other external environmental improvements were effected, and the security precautions of the homes of respondents were substantially improved.*

*In spite of this, little improvement in victimization or fear of victimization could be documented. Some improvement might have been noticed had respondents been consulted when the nature and type of improvements were being planned. It is more likely that improved street lighting is no panacea for all ills, and may only be effective under certain conditions.*

Improvements to street lighting, as a means of preventing both crime and the fear of crime, have become remarkably popular in the last five years. Prior to 1990, most of this research was carried out by Kate Painter in London (Painter 1988, 1989a, 1989b, 1991) and frequently reported dramatic reductions in criminal victimization following the installation of improved street lighting.

1991 was a watershed year in two senses. First, that year saw the publication of the reports from the five research studies, organized by the British Parliamentary Lighting Group, which were simultaneously conducted in different parts of Britain during 1990 and 1991 (Glasgow Crime Survey Team 1991; Barr and Lawes 1991; Herbert and Moore 1991; Davidson and Goodey 1991; Burden and Murphy 1991). Secondly, 1991 also witnessed the publication by the Home Office of the long-awaited Wandsworth study (Atkins *et al.* 1991).

Results from the five simultaneous studies conducted independently during 1991 were more mixed than those from studies carried out by Painter. Whilst all discovered reductions in fear amongst affected populations following improved street lighting (with more emphatic reductions noticed by several for women and the elderly), some discovered reductions in criminal victimization (Glasgow Crime Survey Team 1991; Barr and Lawes 1991) whilst others encountered increases (Herbert and Moore 1991; Davidson and Goodey 1991).

Probably the most significant limitation of both the early Painter studies and the

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British Parliamentary Lighting Group sponsored studies is the very short follow-up period—usually just six weeks. One American authority has claimed that the minimum period that should elapse before a follow-up survey should be contemplated is twelve months (Tien 1979: 24). Perhaps to take account of this view, Painter's most recent study (Painter 1991) reports a return to the site of an earlier study (Painter 1989*b*) to carry out just such a twelve-month review.

In that study, of forty-three householders interviewed during February 1989, forty were reinterviewed slightly over twelve months later in March 1990. Painter found very considerable improvements twelve months after, and because of, relighting (summarized on pp. 107–9 of Painter 1991). This seems to deal at least partly with criticisms of short follow-up, although no effective assessment of the 'taper-off' effect is possible as Painter usually reports the six-week-before data with the twelve-months-after data without giving the original six-week-after data. Full data are given for one score—the number of respondents who 'felt safer' at home after relighting—which was 62 per cent six weeks after relighting, and 77 per cent twelve months after relighting. Understandably, Painter feels that the effect of street lighting 'is consolidated and increased over the twelve-month period' (Painter 1991: 48).

Most recently, Atkins *et al.* (1991) reported the results of the huge Wandsworth study. Here, in stark contrast to the now conventional relighting of one or two dark alleys, the whole borough was relit with some 3,500 new street lights. The research team collected very detailed data on crimes reported to the police for all thirty-nine separate zones, monitoring each for the twelve-month period before and after each was relit. This was complemented with interviews (held seven weeks before and after relighting) with 248 householders in areas being relit, and with 131 householders in a control area.

A fourfold increase in intensity of street lighting was achieved, yet no evidence could be discovered to support the hypothesis that improved street lighting reduces crimes reported to the police. Interviewed householders reported a fall in personally remembered victimizations from 39 to 25, but the control group reported an even bigger percentage fall from 13 to 4. There was also very little evidence of general fear reduction, although 'there was clear evidence that the perceived safety of women walking alone after dark had been improved in the treated area' (Atkins *et al.* 1991: 20).

The study reported here was carried out in an area of Glasgow's Castlemilk housing scheme surrounding a small park called the Pond, and serendipitously offers a cautious development in the general area of the British study of the relationship between improved street lighting, crime, and the fear of crime. Serendipitous, as the study was originally envisaged as a then conventional (now outdated) simple before and after study in an area where the local authority had decided—independently of any involvement with the researchers—to improve local street lighting.

Originally, it had been planned crudely to control for extraneous influences by 'matching' before and after interviewing phases for identical lighting up times, with Phase I scheduled for the week beginning 12 November 1990 (sunset time 16.15), and Phase II scheduled for the week beginning 15 January 1991 (sunset time also 16.15). However, lighting improvements were not completed eventually until 8 August 1991. Although the initial plan, therefore, had to be suspended, this change offered the unexpected opportunity to reinterview in November 1991, which was both exactly

twelve months after the original 'before' interviews, and exactly three months after relighting. Since most of the victimization frequency and perceptual change questions on the main household questionnaire were of the 'in the last three months . . .' variety, this offered a unique chance to control for time of year in the assessment of attitudinal and perceptual change, although it can offer no assessment of the possible 'taper-off' effect described by Ramsay (1991: 17).

A random sample of one hundred addresses was taken from those streets bordering the Pond area, and interviewers used a table of random numbers to select a respondent from those living in each household successfully entered. In Phase I (November 1990) some sixty-nine individuals completed a long and detailed questionnaire. In November 1991 interviewers returned to the area and attempted to re-contact the original respondents. Interviewers were ultimately successful in carrying out repeat interviews with thirty-three respondents (48 per cent of the original number polled). The analysis which follows is restricted to those thirty-three respondents surveyed both before and after environmental improvements were effected.

In addition to being able to control for the time of year with the repeat interviews, this study also offers the opportunity to test just how malleable individuals' perceptions and attitudes are. Relighting was merely one of a whole range of general environmental and specific domestic improvements which were implemented at the same time. In the early summer of 1991 Glasgow District Council carried out an extensive programme of improvements in the Pond area: lighting was greatly enhanced, paths widened and resurfaced, and trees, bushes, and undergrowth drastically cut back. In addition, the local housing authority was in the midst of an extensive public housing rehabilitation project which involved very considerable improvements to the common areas of the tenement blocks (installation of remote door entry systems, for example), together with massive improvements to the flats within them. (In part, this explains the rather poor repeat interview success rate: some tenants had been decanted during Phase I interviewing, and some of those interviewed during Phase I were living temporarily elsewhere during Phase II, and the local Housing Officer was not prepared to release the information which would have allowed individuals to be traced accurately).

So, given the massive set of community and domestic enhancements affecting residents, and the short time elapsed since lighting improvements were effected (allowing no chance for beneficial effects to 'taper off') we would expect that if such environmental improvements do indeed have a beneficial effect on fear of crime and crime, then this clearly should be demonstrable.

Respondents ranged in age from 16 to 88, and three-quarters of those interviewed were women. They were mostly long-term residents of the area (mean length of residence was 19.8 years), and over 90 per cent rated it a 'good' or 'very good' place to live. Respondents were asked about a series of fourteen potential local problems, including street lighting quality, and asked to say (on both interview occasions) whether each had improved, stayed the same, or got worse over the previous three months. Before improvements were carried out, 17 per cent felt that there had been recent improvement in street lighting: afterwards 18 per cent felt that there had. Thus fewer than one respondent in five had apparently noted the relighting carried out three months previously. Those 'satisfied' with the Roads and Lighting Department rose from 19 per cent to 30 per cent of the total, although this department remained, with the police, at the bottom of a 'league' of eight local services so evaluated.

TABLE 1 *Worry about Victimization (%)*

	Before	After	Net change
Assault	15	9	-6
Sexual assault	15	9	-6
Harassment	18	12	-6
Break-In	24	24	0
Nuisance telephone call	18	21	+3

As Table 1 shows, there was a decrease in those worrying 'always' or 'sometimes' about being a victim of assault, sexual assault, and harassment. This decrease, in the case of sexual assault and assault, is almost entirely located among younger respondents in the 16-35 age group.

TABLE 2 *Precautions Taken after Dark (%)*

	Before	After	Net change
Avoid going out at all	36	33	-3
Avoid going out alone	42	51	+9
Avoid certain areas	70	79	+9
Carry a personal alarm	9	6	-3
Take a means of defence	3	12	+9

Respondents reported little relaxation in the precautions they took when going out alone after dark (see Table 2). A third still avoided going out at all, and over half, after environmental improvements, would avoid going out alone. Overall, this group seemed to feel less rather than more safe.

Changes in security precautions taken in the home, set out in Table 3, illustrate the extent of the home improvement scheme carried out by the District Council. Most homes were provided with door and window locks, an entryphone system on the common entry to the tenements, and a front door spyhole. Given the extent of this domestic property target-hardening, it is surprising that respondents felt if anything less safe at home (see Table 4). There had in fact been a 7 per cent swing towards 'unsafety' in respondents' perceptions.

TABLE 3 *Precautions in the Home (%)*

	Before	After	Net change
Door chains	12	33	+21
Door locks	24	82	+58
Window locks	33	70	+37
Spyhole	61	85	+24
Burglar alarm	6	9	+3
Entryphone	67	85	+18
Guard dog	6	21	+15

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TABLE 4 *Feelings of Safety at Home (%)*

	Before	After	Net change
Very safe	70	70	0
Fairly safe	19	12	-7
Bit unsafe	0	9	+9
Very unsafe	11	9	-2

Lighting and other environmental improvements seemed similarly to have had only slight effects on perceptions of safety out of doors after dark, as Table 5 shows.

TABLE 5 *Feelings of Safety Outside (%)*

	Before	After	Net change
Very safe	31	30	-1
Fairly safe	19	21	+2
Bit unsafe	13	18	+5
Very unsafe	38	30	-8

This is reinforced by taped unstructured street interviews carried out with local residents (not questionnaire respondents).

'Would you walk through (the park) on your own?'

'Not at night, no.' (Woman, mid-30s)

'I never go through there after dark myself, never do. I think it's just too out of the way. There's still nothing round about here—even with the lights being on there's still nothing round about you.' (Woman, late 30s)

People had not been persuaded that the area was any safer than it was before: indeed those thinking that women, in particular, are unsafe after dark rose from 56 per cent to 64 per cent (see Table 6). Pedestrian interviewees too felt that there were particular dangers for women.

'I wouldna let my girlfriend go through at night—it's not safe.' (Man, early 20s)

TABLE 6 *Safety of Others (%)*

	Before	After	Net change
Children	31	31	0
Women	44	36	-8
Men	72	75	+3
Elderly	34	30	-4

One woman felt that far from dangers being alleviated by enhanced lighting, they may even have been increased:

'I think it's worse now. With the lights people can see you. When they couldn't see you they didn't know who you were. You could be anybody. Now they can see you're a lassie . . . Oh no, I wouldn't use it. I'd be safer without the lights than with the lights.' (Woman, late 20s)

The justification for reporting this study is, paradoxically, that it can be seen as a project that failed. Fortuitous circumstances enabled controlling for time of year; and simultaneous improvements to respondents' domestic environments as well as to the external local environment could have been expected to contribute greatly to enhanced feelings of safety. Furthermore, 'after' interviewing, at three months after the completion of relighting and other environmental improvements, should in theory have picked up perceptions at their most favourable point, before any 'taper-off' effect had time to mitigate impact. Yet results confounded expectations. The substantial fall in the fear of crime which might confidently have been predicted failed to materialize. What lessons can then be learned from the Pond study?

First, the effects of improved street lighting, while beneficial in many circumstances, cannot be guaranteed. Here they were tied to a whole range of environmental improvements, yet the complete package failed to produce a significant increase in local feelings of safety.

Secondly, we see what an intractable and resistant phenomenon the fear of crime really is. It is far from simple either to address or to solve. The possibility is even raised that the solution—for instance in the case of domestic target-hardening—might worsen the problem, underlining dangers and undermining feelings of safety.

One positive recommendation does emerge. Respondents and street interviewees called for greater local consultation before environmental improvements are undertaken. Several of those interviewed indicated that they rarely if ever used the routes through the park itself, and that, in their opinion, whilst the improvements were definitely improvements, the net effect had been to turn a poorly lit bad area into a well lit bad area. They frequently remarked that they would much have preferred to see environmental improvements on more heavily used pedestrian routes such as the paths leading away from the park, and towards the local shops.

We are left, though, with a central problem. If massive improvements to domestic safety measures coupled with enhanced local street lighting, path widening, and so on fail to make a significant impact on residents' fear of crime, what is there left to try?

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