

AN OBSERVATIONAL STUDY OF SHOPLIFTING

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OUR knowledge about the nature and incidence of offending and about factors influencing it is severely limited by our methods of measurement. For many years, the official criminal statistics and records were the major sources of information about offending. However, these have many well-known deficiencies (see, *e.g.* Farrington, 1979b). For example, official statistics reflect the behaviour of official agencies as well as that of offenders, and these two aspects are difficult to disentangle.

The widespread dissatisfaction with official statistics has led to the increasing use of interview or self-completion methods of measuring offending, notably self-report and victim surveys. However, these are also rather biased and indirect measures of offending. Unfortunately, they often have to be validated against official records as an external criterion (see, *e.g.* Farrington, 1973; Sparks, Genn and Dodd, 1977).

More valid information about offending could be obtained if more direct methods of measurement were used. In particular, our knowledge about the nature and incidence of offending would be increased greatly if more research projects were carried out in which offences were observed as they occurred. Direct, systematic observation of offending is not easy to arrange. As McCall (1975) pointed out, offences occur with low predictability and low probability, observers may have reactive effects in deterring potential offenders, and observers may be in physical danger. Furthermore, offenders often try to commit offences in such a way that they are not observed.

While direct, systematic observation of offending is not easy, the argument here is that more efforts should be made by criminologists to use this method. There are a number of unsystematic participant observation studies in the literature (*e.g.* Parker, 1974; Gill, 1977), but systematic non-participant observation of offending is rare. It is likely to be most feasible with offences which are relatively frequent and which are committed in public. As a recent example, Graham (1981) studied institutional vandalism by counting broken windows twice a day. However, he did not observe these offences actually being committed.

One possible solution to the problem of observing offending is for researchers to provide systematic, controlled opportunities for offending to members of the public. For example, Farrington and Kidd (1977) carried out research in which members of the public were given opportunities to claim dishonestly coins which had apparently been dropped on

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the pavement. Farrington and Knight (1979, 1980) gave people opportunities to steal money found in apparently lost letters, and Farrington, Knapp, Erickson and Knight (1980) gave them opportunities to steal money during a coin-sorting task. However, these studies raise ethical issues (*e.g.* of encouraging offending) and can be carried out only with rather minor acts of dishonesty (for a fuller discussion, see Farrington, 1979a).

Observing Shoplifting

It would clearly be better to use systematic observation with more naturally occurring offending. One type which lends itself to this approach is shoplifting. Three well-known observational studies have been carried out (Astor, 1971; Group 4, 1972; Marks, 1975) in which random samples of shoppers were followed through stores by security officers and store detectives. The results of these studies are shown in Table 1, and they have been reviewed by Mayhew (1977) and referred to in standard textbooks (*e.g.* Feldman, 1977, p.7).

TABLE 1

Observational studies of shoplifting

| Study | Description and location of shops | % Shoplifting (N) | | |
|----------------|--|-------------------|-----------|-----------|
| | | All | Men | Women |
| Astor (1971) | New York department store 1 | 8.4 (500) | 6.4 (156) | 9.2 (344) |
| | New York department store 2 | 5.2 (361) | 5.7 (135) | 5.3 (226) |
| | Boston department store | 4.4 (404) | 2.6 (149) | 5.4 (255) |
| | Philadelphia department store | 7.8 (382) | 6.0 (132) | 8.8 (250) |
| Group 4 (1972) | U.K. department stores | 0.8 (524) | 1.9 (158) | 0.3 (366) |
| | U.K. supermarkets | 2.0 (494) | 2.3 (131) | 1.9 (363) |
| Marks (1975) | 5 Dublin department and convenience stores | 5.5 (567) | 4.4 (180) | 5.9 (387) |

The most striking result is the much higher shoplifting rate in the Irish (5.5 per cent.) and American (6.6 per cent. overall) research than in the English study (1.4 per cent. overall). Mayhew (1977, p.560) suggested that this might be because, in the English study, “the store detectives who followed shoppers were instructed to apprehend any shoplifter they saw. Thus, the requirement of proof of shoplifting may have been at a much higher level than it was in the other two exercises.” In the American and Irish studies, the followers were separate from the detectives employed by the stores involved, and virtually none of the shoplifters was apprehended (1 out of 109 in the American studies, and 0 out of 31 in Dublin).

Another result to which Mayhew drew attention was the similarity between the shoplifting rates of men and women. She suggested that, if opportunity was held constant, men and women might be equally likely to commit offences. It was interesting that, in the American shoplifting studies, women were more likely to steal than men, and this difference was almost statistically significant overall (7.4 per cent. of 1,075 as opposed to 5.1 per cent. of 572; $\chi^2=3.03$, 1 d.f., $p<0.10$).

Unfortunately, none of the observational studies of shoplifting was carried out by social scientists or published in a scholarly journal. It is impossible to be sure in all cases that the shoppers followed were selected at random from all those entering a store. Furthermore, the reports provide little information about such things as how people shoplifted, amounts stolen or bought, and the average time spent in stores by shoplifters and other shoppers. A time measure is useful in trying to derive an index of opportunity.

In all the observational studies, it appears that only one observer followed each shopper from the moment of entering to the moment of leaving a store. However, only a small amount of pilot work convinced us that it is extremely difficult, in most shops, for one observer to keep a shopper under constant, unobtrusive surveillance. In order to be sure that someone has taken an item, it is vital that the person's hand and arm movements should be visible at all times. This requires at least two observers watching from two different directions.

Because only one observer was used in the existing studies, it may be that they missed a number of shoplifting incidents, and hence provide under-estimates of the true incidence. Alternatively (at least in the American and Irish studies), it may be that they tended to count a number of doubtful cases where the field of vision was obscured, and hence over-estimated shoplifting. We thought that the best way of minimising the observational problems noted here was to have two observers, one man and one woman, working together to observe each subject.

The Present Study

The main aim of the present research was to develop an observational methodology suitable for investigating the nature and incidence of shoplifting. The research was essentially exploratory, and was severely limited by the small amount of funding available for it.

Shoplifting was operationally defined as taking an item from a store without authority and without paying for it. In legal terms, this establishes the *actus reus* of theft but not the *mens rea*, or intention to steal. Only the courts can adjudicate on legal questions of intent and hence decide whether any given act was technically a criminal offence. The definition of shoplifting used here was behavioural rather than legal (see also Farrington, 1983).

The store used in the present research was a small department store, part of a national chain. It was similar to many other department stores in having a wide range of goods on display which were attractive to people of different sexes and ages. It was also similar in being partly self-service and partly counter-service. An important reason for selecting the store (as with much criminological research) was that the controlling company and staff working in it were willing to co-operate with the researchers. Another factor was that, unlike larger department stores, customers did not spend much time in it. In addition, it was not unusually difficult or easy to observe customers in this store. In order to get a reasonable estimate of

the incidence of shoplifting, it was thought essential to observe at least 500 people. Within the constraints of the present research, this would not have been possible if each person spent an average of 45 minutes in the store (as was the case in a large West End department store which was initially studied).

The store was described by senior security personnel of the company as being typical of those in the chain. The inventory loss, or "stock shrinkage" figure, was five per cent. for the year 1980, the year before the research was carried out. This figure was obtained independently from two sources within the company and was said to be about average for stores in the chain. The store claimed that it did not operate any regular exclusion practices (*e.g.* of vagrants, groups of unaccompanied children or known shoplifters), and the researchers did not observe any person being refused admission.

The store was located in one of the main shopping streets of a city in the South East of England. The city was not a tourist centre, and its unemployment rate was near the national average. The store's customers were drawn mainly from the city and the surrounding rural areas, and the majority were white, British and local in origin. On the basis of their dress, accents, manners and general behaviour, most could be crudely designated as belonging to the lower-middle or working classes.

The study was carried out during three consecutive weeks in August 1981. This month might have been an unusual one, in that the schools were on holiday. The sample consisted of 503 shoppers, randomly chosen from those entering the store. Before starting the research, a list of random numbers was compiled by tossing a dice, and this list determined which shopper was chosen as the subject. The observers took up their starting positions, signalled to each other that they were ready, and then followed the *N*th person (*N* between 1 and 6) through the store. The starting positions were systematically varied, from door to door. The research was carried out on all days of the week and on all hours of the day during which the store was open.

The store had two entrances, a wide front entrance which opened to the main shopping street, and a relatively infrequently used rear entrance. A count taken between 10 a.m. and 11 a.m. on a Tuesday morning in August 1981 showed that 574 people entered the store by the front entrance and 29 by the back entrance. Tuesday was thought to be an averagely busy day, and 10–11 a.m. an averagely busy hour. Since the number of people who entered by the front entrance was about 20 times as great as those who came in at the back, it was decided to select 25 subjects from those coming in at the rear entrance. The remaining 478 who were observed entered at the front.

As indicated above, it was thought desirable to have two observers in this study, one male and one female. They were both English, white and in their mid-thirties. They dressed conventionally, and wore dull rather than bright-coloured clothing, so that their dress would blend in with the surroundings. The observers communicated with each other using a

system of hand signals. One always kept ahead of the subject and the other always behind.

Both observers were trained as psychologists and skilled and experienced in observing children and adults in classroom situations. One had accompanied store detectives around large department stores for five months, and had been trained by them in methods of unobtrusively observing customers. In addition, both researchers had completed 27 hours of practice observation and data collection in this and other stores before beginning this study.

There was one store detective permanently allocated to the store. She performed other tasks in addition to detective work (*e.g.* collecting till rolls), and was known to the staff and regular customers. The store's policy was to prosecute all apprehended shoplifters, and notices were displayed stating that "thieves will be prosecuted." The store detective (like the store manager and security officer) knew that the aim of the research was to observe shoplifting. She initially followed the researchers at a distance, but soon gave this up and did not hinder the observations in any way. The store assistants were told that the researchers were studying shopping behaviour.

For each person followed, the observers recorded the date and day, the time of entry into and exit from the store, the total cost of all purchases made, and the sex, race and estimated age of the person and of any companions. In addition, of course, they made a detailed record of the behaviour of anyone who shoplifted.

Results

The major results of this research are summarised in Table 2. Nine of the 503 customers followed (1.8 per cent.) took at least one item without paying for it. None of the shoplifters was apprehended by the store detective, possibly because she was keeping out of the way of the researchers. Four of the 142 males shoplifted (2.8 per cent.) in comparison with five of the 361 females (1.4 per cent.). These figures are not too dissimilar from those obtained in the Group 4 survey (combining department stores and supermarkets: 1.4 per cent. overall, 2.1 per cent. of males, 1.1 per cent. of females).

Shoplifting was most frequent among those estimated to be aged over 55 (4.9 per cent. took items, in comparison with 1.0 per cent. of the remainder; $p < 0.04$, two-tailed, on a Fisher exact probability test). None of the 24 thought to be juveniles took anything. As far as the researchers could tell, none of the shoppers noticed that they were being observed. The observations of eight customers (not included in the above 503) had to be abandoned, because both researchers lost sight of the subject's hands or failed to observe the total amount charged for items purchased. There is no reason to suppose that any of these subjects shoplifted.

TABLE 2
Summary of results

| | All | Males | Females | Aged over 55 | Aged 55 or less |
|--|-------|-------|---------|--------------|-----------------|
| Number followed | 503 | 142 | 361 | 102 | 401 |
| Percentage shoplifting | 1.8 | 2.8 | 1.4 | 4.9 | 1.0 |
| Average amount bought | £1.82 | £2.38 | £1.60 | £1.30 | £1.95 |
| Value of goods stolen as percentage of value of goods taken out of store | 0.9 | 1.2 | 0.6 | 2.3 | 0.6 |
| Average time in store (min.) | 6.9 | 5.7 | 7.3 | 7.3 | 6.7 |
| Number of items stolen (per 10 customer-hours) | 2.1 | 5.2 | 1.1 | 4.0 | 1.6 |
| Value of items stolen(per 10 customer-hours) | £1.37 | £3.18 | £0.81 | £2.46 | £1.06 |

Three of the nine shoplifters (all men) stole two items each, while the other six stole one item each, making a total of 12 items stolen. The total value of these 12 items was £7.86, or £0.66 each on average. The purchases of these 503 shoppers totalled £915.31, or £1.82 per customer on average. The value of the items shoplifted was only 0.9 per cent. of the total value of the items taken out of the store by these customers. Table 2 shows that shoplifting accounted for 1.2 per cent. (by value) of goods taken out of the store by males, and for 2.3 per cent. by value of goods taken out of the store by those over 55.

Assuming that the stock shrinkage figure is five per cent., the total purchases (£915.31) represent 95 per cent. of the stock, and the corresponding value of stock lost is therefore £48.17. The value of items shoplifted (£7.86) therefore represents about 16 per cent. of stock loss. This estimate is of the same order as that reported by Gibbens (1981), based on data from a security firm. He stated that 25 per cent. of stock loss was attributable to shoplifting, 35 per cent. to short deliveries, 25 per cent. to theft by shop assistants, and 15 per cent. to shopsoiled goods.

Only 59 of the 503 shoppers (11.7 per cent. did not purchase anything (9.2 per cent. of the males and 12.7 per cent. of the females). Similarly, only one of the nine shoplifters did not purchase anything. For the remainder, the value of the items purchased was greater than that of the items stolen in seven out of eight cases. The average amount spent in the store by the nine shoplifters was much greater than the average value of the items which they stole (£3.00 as opposed to £0.87).

Table 2 shows that the average time spent in the store was 6.9 minutes, with females spending a little longer than males (7.3 minutes as opposed to 5.7). The shoplifters spent an average of 11.0 minutes in the store. The average rate of theft was 2.1 items (average value £1.37) per 10 customer-hours. Males had a considerably higher shoplifting rate (5.2 items per 10 customer-hours), as did those aged over 55 (4.0).

There are problems in generalising from a sample to a population when a relatively infrequent event is being studied. Assuming random sampling, the 95 per cent. confidence limits for a shoplifting rate of 1.8 per cent. in a sample of 503 are ± 1.2 per cent. In other words, we can be 95 per cent. certain that the shoplifting rate in the population is between 0.6 and 3.0 per cent., but this seems rather a wide range. Assuming a sample

shoplifting rate of about two per cent., it would require a sample size of about 3,000 to reduce the confidence limits to ± 0.5 per cent.

Another problem in estimating the shoplifting rate is to establish how many customers are at risk. Shoplifting acts can be committed by two people jointly, as when one person takes an item from a shelf and places it in a bag held open by another. It would be reasonable to count this as one act committed by two people. Subjects who were accompanied by companions were three times as likely to be involved in shoplifting as those who were alone (3.1 per cent. of 195 accompanied subjects as opposed to 1.0 per cent. of 308 alone). The subjects were accompanied by a total of 222 companions, so it might perhaps be more realistic to relate the 12 items stolen to 725 people at risk rather than 503. The major problem with this is that the 222 companions were not continuously under surveillance, so shoplifting acts which they committed and which did not involve the subjects might have escaped the attention of the researchers. Therefore, the rate of 12 items stolen by 725 people is probably too low, just as the rate of 12 items stolen by 503 people is probably too high.

This discussion is important in regard to estimating the weekly rate of shoplifting from the store. Taking the previous figure of about 600 people entering per hour, and the lower estimate of 12 items stolen by 725 people, leads to an estimate of about 10 items per hour stolen by customers from the store. Since the store was open for 52 hours per week, it can be estimated that over 500 items were being stolen per week. This is, of course, a rough estimate, but it does give some idea of the order of magnitude of shoplifting in this store.

It is instructive to compare this estimate with the number of shoplifting crimes recorded by the police. For the whole police force area containing this city, just over 7,000 crimes of shoplifting were recorded for the year 1981, or about 135 per week. The police division including this city accounted for about one-third of all recorded crimes in the area, or for an estimated 45 shopliftings per week. It can be seen that the estimated number of over 500 shopliftings in one store per week is more than 10 times the estimated number recorded by the police in the whole of the city and its surrounding rural area. Assuming that the total number of shopliftings actually committed in this police division is between 10 and 100 times the number in this particular store, it follows that the police are recording between 1 in 100 and 1 in 1,000 shoplifting incidents.

Of the 7,000 crimes of shoplifting recorded by the police in 1981, nearly 97 per cent. were classified as detected, no doubt because a shoplifting was only recorded when a suspect was apprehended. Therefore, the likelihood of a shoplifter being apprehended and reported to the police for any given shoplifting incident is similar to the likelihood of a shoplifting being recorded. The likelihood of a shoplifter being caught by a store detective is almost certainly higher than this.

Results obtained in the survey by West and Farrington (1977) also suggest that the probability of being apprehended by the police for shoplifting is less than one per cent. The 389 youths who were interviewed

at age 18–19 reported that they had committed a total of 1,214 shopliftings in the previous three years. According to police records, these youths had been convicted of only five offences of shoplifting committed during this period. Therefore, this survey suggests that the probability of being convicted for any given shoplifting offence is 0.4 per cent.

Discussion

The results obtained in this research agree with those reported by Group 4 (1972) showing that between one and two per cent. of customers entering a store shoplift and that men are proportionally twice as likely to shoplift as women. In addition, in agreement with results obtained by West and Farrington (1977), this research suggests that the probability of any given shoplifting leading to apprehension and official police action is less than one per cent. This study also suggests that the majority of stock shrinkage is not attributable to shoplifting, and that customers aged over 55 are especially likely to shoplift.

This research also draws attention to a neglected dimension in criminology—time. The idea that offending is a dichotomous variable, and that a minority are offenders to be compared with the majority of law-abiding people, was abandoned years ago. It has been replaced with the idea that people vary in their frequency and seriousness of offending. This study suggests that offending *per unit time* might be a feasible dependent variable. The time measure might be regarded as an index of opportunity. Furthermore, it might be possible to draw conclusions about causes and effects, or to derive equations specifying the effects of independent variables on dependent variables, by studying changes in the rate of offending over time. The concepts of acceleration or deceleration of offending might come into use in criminology, and in turn equations specifying cause and effect might include time variables.

The present research has many limitations, of course. The limited funds meant that the number of shoplifters who could be observed was very small. As already explained, the margin of error in generalising the shoplifting rate from the sample to the population is relatively high. In particular, how far the male-female difference in shoplifting would hold up in a larger sample is unknown. Again, how far similar results would be obtained in other stores, other areas or at other times of the year are essentially empirical questions to which we do not yet know the answers. It would be desirable to study shoplifting in a random sample of shops, but this might be difficult to arrange in practice, because of the problem of securing co-operation. It would also be desirable to follow shoppers through all the shops in which they went, but this would also be difficult to achieve in practice.

This research involved non-participant observation, but not necessarily non-reactive observation. We believe that no shopper was aware of being observed, but we cannot be certain of this. The fact that each customer spent a very short time in the store helped the observation to remain unobtrusive. American research on the reporting of staged shoplifting

incidents suggests that shoppers are extremely unobservant. For example, Steffensmeier and Terry (1973) reported that the shoplifting had to be "blatant and aggressive" before anyone noticed it. However, the mere presence of the observers may have deterred some people from shoplifting. It might be thought that shoplifting could be observed in a completely non-reactive way using close-circuit television cameras, but a large number of cameras would be needed to identify all shoplifting incidents with certainty. The use of television cameras would be more feasible in studying shoplifting in one particular area of a store.

Some kinds of theft did not occur in this research, notably price-tag switching, using goods on display (*e.g.* using cosmetics or eating sweets) and collusion between shoppers and store employees such as till operators. The first and second of these, at least, may be rare. The third may have been inhibited in this study, since the till operators knew that the amounts which they rang up were being observed and recorded.

The shoplifters in this research seemed very concerned to minimise their likelihood of being detected, by (a) looking round carefully to check that nobody was watching them, (b) stealing small, low-cost items, and (c) buying goods as well as stealing. It is reasonable to argue that shoplifting could be reduced if the subjective probability of detection could be increased. The effect of such devices as mirrors, television cameras or prominent warning signs on shoplifting is essentially unknown, because of the difficulty of measuring shoplifting.

In order to test any hypothesis about shoplifting, it is desirable to carry out a randomised experiment with observed shoplifting as the dependent variable. This raises a number of problems. Perhaps the major one is to secure co-operation from a store or a chain of stores, since shops may be understandably worried about frightening away customers or occupying staff time. Another problem is that the rate of shoplifting seems so low that it would require very large samples to detect a reduction in it. This difficulty might be overcome either by restricting the observation to "high-risk" shoppers (*e.g.* persons estimated to be over 55) or by discovering shops with relatively high shoplifting rates. An alternative method of studying shoplifting would be to take an inventory of specified items every day (see, *e.g.* McNees, Egli, Marshall, Schnelle and Risley, 1976; McNees, Kennon, Schnelle, Kirchner and Thomas, 1980). However, direct observation would be preferable, since it would be difficult to determine from inventory checks whether items were taken by customers or employees.

The observational method could be used with other kinds of crimes which do not require permission (because they occur on the street) and which are likely to occur relatively frequently. An obvious example is exceeding the speed limit. This could be observed and recorded using equipment already in use by the police. If filming cars without their owners' or drivers' consent is considered ethical, it would also be possible to link up subjects observed at one time with those observed at another (by means of number plates). It is surprising that more studies involving

the observation of motoring offences have not been carried out (see, e.g. Konecni, Ebbesen and Konecni, 1976; Jonah, Dawson and Smith, 1982).

This research is an example of the study of offending using direct, systematic observation. The increased use of this method can lead to a great increase in criminological knowledge. It is not argued that other methods should not be used. On the contrary, there is considerable merit in studying a phenomenon using a variety of methods, and it would be useful to study shoplifting using both interviews and observation, for example. The argument here is that direct, systematic observation has rarely been used, and should be used more. The challenge to criminologists is to overcome the difficulties and develop it as a method of studying offending.

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