

CRIME COMMUNICATION AT INFORMATION MEETINGS

M. KUTTSCHREUTER and O. WIEGMAN*

In a quasi-experiment the effects of information meetings concerning residential burglary were investigated. The objective was to increase knowledge of burglary in order (1) to bring the fear of burglary more into line with the risks involved and (2) to encourage adequate preventive behaviour. The information led to an increase in knowledge, outcome expectation and self-efficacy expectation and an intention to implement preventive behaviour. Risk assessment and fear of burglary were not affected. Our conclusion was that information meetings are a useful strategy to increase knowledge of crime and to encourage preventive behaviour.

Introduction

Given the recent increase in crime, the Dutch government has tried to develop a policy directed at crime prevention (Commissie Kleine Criminaliteit 1984, 1986; *Samenleving en Criminaliteit* 1985; Stuurgroep Bestuurlijke Preventie van Criminaliteit 1988, 1991; Wetenschappelijk Onderzoek- en Documentatiecentrum 1995¹). Such a policy aims at a reduction in the harmful effects caused by acts defined as criminal by the state (Van Dijk and De Waard 1991). The objective of crime prevention is not only to prevent crimes from occurring, but also to reduce their consequences (Bureau Landelijk Coördinator Voorkoming Misdrijven 1981; Rosenbaum 1988), for example fear of crime (Van Dijk and De Waard 1991). In developing and executing crime prevention strategies, the police play a central role (Henig and Maxfield 1978; Cordner 1986; Bennett 1991; Van den Bogaard and Wiegman 1991, 1992; Skogan 1990, 1994). In order to develop an effective crime prevention policy, systematic analysis of developments, causes, prevention strategies and their effects is necessary (Willemse and De Waard 1992). In the Netherlands, an acknowledgement of all these factors has led to the stimulation of scientific research into the effects of crime prevention strategies (Stuurgroep Bestuurlijke Preventie van Criminaliteit 1988), and consequently to a meta-analysis of crime prevention strategies (Polder and Van Vlaardingen 1992). Such analyses have also been undertaken in Great Britain (Poyner 1991) and the United States (Rosenbaum 1988).

A new crime prevention strategy has been carried out by police forces in the region of Twente in the eastern part of the Netherlands, which has an average crime level and a population of 567,000 (made up of one municipality of 144,000 inhabitants, two municipalities of 50,000–100,000 inhabitants and 18 municipalities of less than 50,000 inhabitants). Police officers had observed an increase in the number of individuals with a high level of fear of crime. Their assumption was that among a considerable proportion of this group, particularly women and the elderly, this fear may have been

* Vakgroep Psychologie, University of Twente.

¹ Petty Crimes Commission 1984, 1986; Community and Crime, 1985; Crime Prevention Steering Group 1988, 1991; Scientific Research and Documentation Centre, 1995.

based on an overestimation of the risks involved.² Moreover, they recognized that others, in particular male youths, did not pay enough attention to crime risks and thought that this may have been based on an underestimation of the risks involved. It was, therefore, judged to be desirable to increase knowledge of local crime among the general public in order to bring the fear of crime more into line with the true risks involved. Police officers, however, had also observed that the general public did not seem to be implementing effective preventive measures. Again, a shortage of knowledge was assumed. It was decided to try to solve these problems by executing a so called 'tell-the-truth' campaign. The objective was to increase knowledge of crime in order to bring fear of crime more into line with the risks involved and to encourage the implementation of adequate preventive behaviour (Openbaar Ministerie Almelo *et al.* 1986³).

Models of the Possible Effects of a 'Tell-the-Truth' Campaign

A 'tell-the-truth' campaign entails the giving of objective (statistical) information concerning the magnitude and nature of local crime in order to bring fear of crime more into line with the true risks involved (Skogan 1985; Maxfield 1987). In such campaigns (Lavrakas *et al.* 1983; Lavrakas 1986) this information has been supplemented with information about effective preventive measures. This seems obvious: fear develops when the individual feels threatened, and yet feels unable to cope with these threats (Bandura 1982, 1986; Ferraro and LaGrange 1987; Van der Wurff 1990, 1992).

Our model of the influence of a tell-the-truth campaign on *fear of crime*, adapted from Garofalo (1981), is visualized in Fig. 1. The model assumes that fear of crime is based on the individual's image of crime. When this image is incorrect, the extent of fear of crime based on this image will not be in line with the true risks involved. By providing objective (statistical) information concerning the magnitude and nature of local crime and information about adequate preventive behaviour, the individual's knowledge of crime can be increased. This would give the individual a better image of the crime threats in the immediate environment and the ability to cope with these threats. This enables him to make a more realistic assessment of his own situation, that is the risks of being victimized (perceived likelihood of victimization, perceived seriousness of the consequences) and the ability to cope with these risks (perceived ability to prevent victimization). A change in risk assessment could bring about a change in fear of crime.

The dissemination of objective information is postulated to have a differentiated effect. Among individuals holding a relatively pessimistic image of local crime risks, the information would lead to a more optimistic image of the situation and, consequently, to a decrease in risk assessment and fear of crime. Among individuals holding a relatively optimistic image, however, the information would lead to a more pessimistic image and, consequently, to an increase in risk assessment and fear of crime. In practice, an undifferentiated effect is possible, if the majority of the population holds the same (too opti-

² Such an image may be the result of disproportionate attention being paid to serious crime in the mass media (Coenen and Van Dijk 1976; Antunes and Hurley 1977; Graber 1980; Sheley and Ashkins 1981; Roshier 1981; Fishman 1981; Van Dijk 1982; Ditton and Duffy 1983; Smith 1984; Liska and Baccaglioni 1990).

³ Public Prosecutor Almelo, 1986.

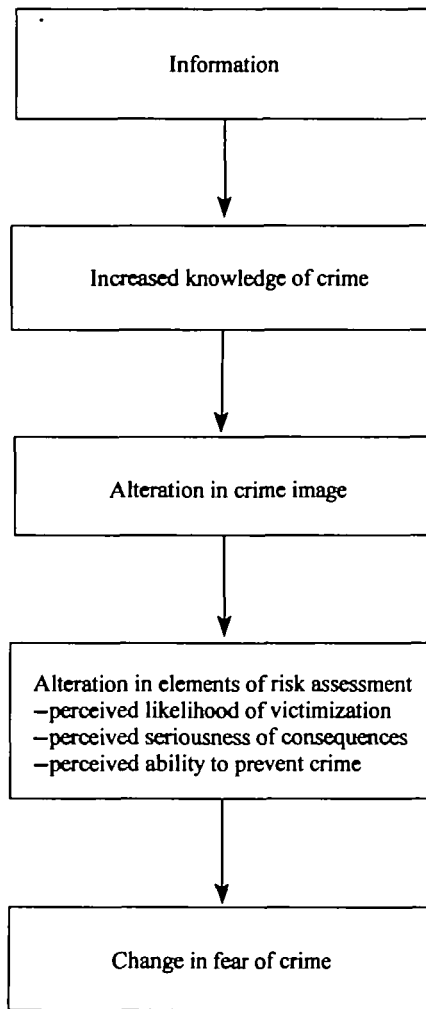


FIG. 1 The influence of a tell-the-truth campaign on fear of crime (adapted from Garofalo 1981)

mistic or too pessimistic) image of crime. In a homogeneous population an undifferentiated effect is expected, in a heterogeneous population a differentiated effect.

To our knowledge, only Lavrakas *et al.* (1983) and Lavrakas (1986) have studied the effects of transmitting information about local crime, using a newsletter from the police. Their results were not consistent. From the first (pilot) study (Lavrakas *et al.* 1983) it appeared that the newsletter influenced the image of local crime, but not the fear of crime. However, the follow-up research (Lavrakas 1986) showed that the newsletter influenced neither the image of crime nor the fear of crime. The discrepancy could possibly have been the result of the mode of disseminating the newsletter: handing out personally versus sending by mail.

CRIME COMMUNICATION

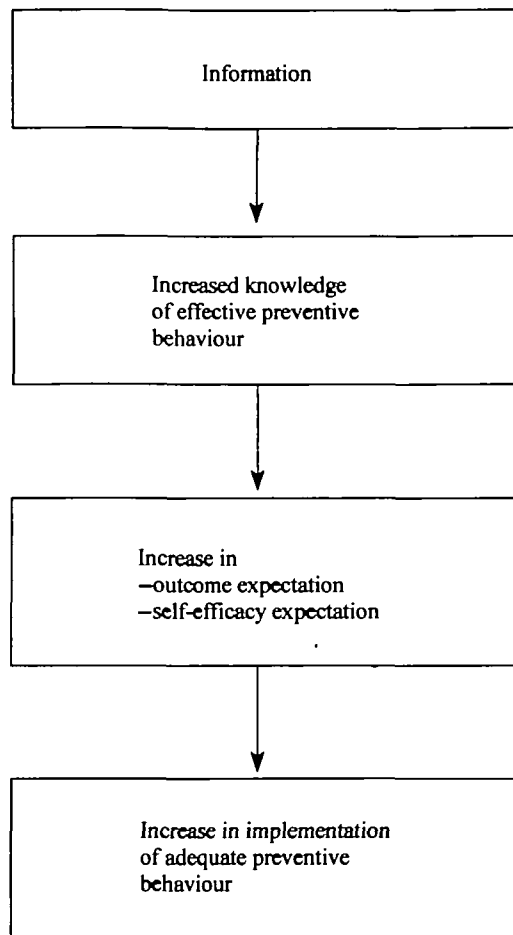


FIG. 2 The influence of a tell-the-truth campaign on the implementation of preventive behaviour (adapted from Bandura 1986, 1991)

Bandura's model (1986, 1991) forms our theoretical basis for the putative influence of a tell-the-truth campaign on the *implementation of preventive behaviour* (Fig. 2). The model assumes that dissemination of information concerning adequate preventive measures increases knowledge of the feasibility and outcomes of these measures. This would lead to an increase in self-efficacy expectation and outcome expectation, which in turn would encourage the implementation of effective preventive measures. Little is known about the effect of providing information on the implementation of preventive behaviour (O'Keefe 1986; Sacco and Trotman 1990). The main reason is that research designs have often not permitted causal inferences (O'Keefe 1986; Rosenbaum 1988; Kuttschreuter 1994). This particularly applies to the research done in the Netherlands into the effect of disseminating information during information meetings, in which a survey has usually been carried out (Eijken and Van Oosterzee 1992). The conclusions then depend on the personal opinion of the subjects with respect to the way and the

extent in which they have been influenced. The police newsletter evaluated by Lavrakas *et al.* (1983), which consisted of information about local crime and crime prevention, led to an increase in crime prevention behaviour among individuals who personally received them. However, though the Houston and Newark newsletters increased knowledge of crime prevention among those exposed, they had no effect on self-efficacy expectation and crime prevention behaviour (Lavrakas 1986).

The information meetings

The crime prevention strategy entailed a regional campaign lasting six weeks, from the middle of April to the beginning of June 1988. Local police officers who specialized in crime prevention organized 33 information meetings on residential burglary. Residents of the relevant municipalities or neighbourhoods were informed of these meetings by announcements in door-to-door local newspapers, posters or mailed personal invitations. Information was provided about the magnitude and the nature of burglary in the immediate environment, about effective preventive measures and about direct practical and financial aid to victims, as well as emotional support. Emphasis was laid on providing information about specific preventive measures. The measures not only concerned the prevention of burglary but also how to reduce loss and the chance of physical injury. The 'Regionaal Bureau Voorkoming Misdrifven Overijssel Oost'⁴ instructed the local police officers and supplied them with the necessary information, demonstration materials and detailed guidance for the programme. The programme included:

- Presentation of statistical information: number of burglaries at various locations, time of day/night, month of the year, means of entrance, type of residence, type and value of stolen property, injuries. The rise in number of burglaries was clarified by means of graphs displayed on an overhead projector, with the other information being presented verbally.
- Discussion of the significance of reporting to the police: claiming on insurance and tracking down burglars and goods.
- Presentation of information about the effects on victims, in particular feelings of anger or distress due to loss of irreplaceable belongings with a sentimental value and intrusion into one's privacy, the development of fear and victim support.
- Presentation of the film 'Open Huis'⁵ about burglary prevention: a house-owner catches a burglar red-handed and, over a bottle of beer, makes him explain how he does his 'work'.
- Comments upon the film and extensive information about burglary prevention (management, constructional and electronic measures, the marking and registering of valuables). Emphasis was laid upon the fact that catching burglars red-handed increases the chance of physical injury and that, from that point of view, it is better to scare away a burglar by making a noise or switching on a light.

The local officers were to follow these guidelines. The content of the meetings was identical, as far as possible. A difference existed with respect to the local crime rates, which referred specifically to the municipality in which the meeting was held. The

⁴ Regional Office for Crime Prevention in Eastern Overijssel.

⁵ Open House.

meeting lasted one hour and a half to two hours approximately. Those interested were free to take home written information concerning crime prevention.

Research questions

The first step in both models is an increase in knowledge. Had the information given resulted in an increase in knowledge about burglary? In relation to the putative influence on fear of crime, it was investigated whether the information exerted a differentiated or undifferentiated effect on the elements of risk assessment concerning burglary (perceived likelihood of victimization, perceived seriousness of the consequences, perceived ability to prevent victimization) and the fear of personally becoming a burglary victim. Moreover, in relation to any encouragement of effective preventive behaviour, it was examined whether there was an increase in outcome expectation and self-efficacy expectation concerning burglary prevention. The effect on people's intention to implement preventive measures was also studied.

Method

Design

Because the information meetings constituted a real-life campaign, the identity of the subjects was unknown prior to their attending the meeting. Random assignment of subjects to the experimental versus control condition was, therefore, not possible, which implied a quasi-experimental design. Another consequence was that pre-test measurement had to take place during the meeting. It was judged to be important to keep the situation for the pre-test and the post-test equivalent. In view of the length of the questionnaire, performing a pre-test as well as a post-test during the same meeting was not feasible. Instead a between-subjects design was executed (Scheme 1). The pre-test sample constituted the control group, the post-test sample the experimental group. Pre-test measurement took place at the beginning of the meetings, before presentation of the information. Post-test measurement took place at the end of the meeting, after presentation of the information. In order to increase the equivalence of samples with respect to social background, pre-test and post-test measurements were performed in the same municipalities as far as possible.⁶ Measurement took place during ten meetings. To preclude time effects, during the entire six-week period pre-test as well as post-test measurements were taken.

Data analysis requires that the experimental and control group have a similar profile with regard to relevant variables (Cook and Campbell 1979). The profile of the two groups barely differed. With respect to personal characteristics (see Table 1), only the difference in education was significant (Mann-Whitney U-test, $z = 2.58$, $p = 0.01$, two-tailed): the experimental group had a higher level of education than the control group. For the variables measured at an interval level this difference was taken into

⁶ In three municipalities (Almelo, Enschede, Rijssen) pre-test and post-test measurements were taken. The two municipalities in which only a pre-test, respectively a post-test, was performed (Haaksbergen, Hengelo) were comparable with respect to crime rate and number of inhabitants.

SCHEME 1 *The research design*

	t1	information meeting	t2
Experimental group		yes	observation
Control group	observation	yes	

t1: just before the presentation of information.

t2: just after the presentation of information.

TABLE 1 *Difference between the pre-test and post-test samples with respect to personal characteristics and already executed preventive behaviours*

Personal characteristics	Test*	Value	p
Age	t	1.34	0.18
Sex	t	1.20	0.23
Number of household members	t	1.15	0.25
Type of dwelling	t	0.20	0.84
Political attitude	χ^2	6.74	0.08
Education	z	2.57	0.01
Performing household duties	t	0.42	0.67
Holding a paid job	t	0.27	0.79
Unemployment	t	1.21	0.23
Retirement	t	0.78	0.43
Unable to work	t	0.23	0.82
Preventive behaviours			
Locking up when gone for five minutes	z	0.29	0.77
Keeping belongings out of sight	z	0.58	0.56
Keeping cheques dispersed in the house	z	1.16	0.25
Having little cash around the house	z	0.42	0.68
Marked valuable belongings	t	0.36	0.72
Photographed valuable belongings	t	0.92	0.36

* t = t-test (t absolute).

z = Mann-Whitney U-test corrected for ties (z absolute).

χ^2 = chi-square test.

account by performing an analysis of covariance, treating education as a covariate. For the variables measured at an ordinal level, education did not play a mediating role;⁷ so the differences between the experimental and control group could be analysed by means of the Mann-Whitney U-test. There was no significant difference between the groups with respect to the implementation of already executed preventive behaviours.

Procedure and subjects

In the pre-test session, immediately after entering the room, the visitors were requested to fill out a short questionnaire (n = 96). In the post-test session this request was made at the end of the meeting (n = 78). The Regional Bureau Voorkoming Misdrijven Overijssel-Oost estimated the number of visitors to have been approximately n = 247

⁷ Education only plays a mediating role when there is also a significant relationship between education and the dependent variables. This was not the case.

(Postma and Eertman-Nijland 1989), which means a response rate of 70 per cent. Since the estimates of attendance at the meetings seem to have been exaggerated (our own estimates were smaller), the true response rate was probably even higher. The difference in response between pre-test and post-test was not significant ($\chi^2 = 0.004$, $df = 1$, $p = 0.95$). Ninety-nine men (57 per cent) and 75 women (43 per cent) participated (ns). Half of the subjects were 45 or younger. Ninety per cent of the subjects lived in a one-family dwelling. Most subjects (52 per cent) held a paid job for 15 hours a week or more; 28 per cent primarily performed household duties. The educational level of 21 per cent was low, 49 per cent medium and 30 per cent high.

Operationalization

There was no reason to assume that the questionnaire items formed a homogeneous scale; Cronbach's coefficient of internal consistency is, therefore, not reported.

Knowledge of burglary Each person had to indicate whether 11 statements about burglary were correct or not (yes/no). The formulation of the statements was such that six items were to be affirmed and five to be denied. The split-half reliability was $r = 0.54$.

The perceived likelihood of victimization Each person was asked how highly he or she estimated the chance of becoming a victim of burglary (five-point rating scale).

The perceived seriousness of the consequences Each person was asked how serious the consequences would be if he or she became a victim of burglary (five-point rating scale).

Perceived ability to prevent victimization Each person was asked whether he or she felt able to prevent becoming a victim of burglary (five-point rating scale).

Fear of victimization Each person was asked how afraid he or she was of becoming a victim of burglary (five-point rating scale).

Outcome expectation Each person was asked whether, in relation to his or her personal situation, seven actions to prevent burglary might be effective strategies (five-point rating scale). These actions included those to reduce the likelihood of becoming a burglary victim, to limit the extent of the consequences if there was a burglary, to limit any consequences in the case of an encounter with a burglar, and to increase the ability to recover from a burglary.

Staff-efficacy expectation Each person was asked whether he or she felt able to take seven preventive actions if he or she wanted to (five-point rating scale). The actions were identical to those used to measure outcome expectation.

Making a noise Each person was asked whether he or she would make a noise if suspicious noises were heard in the house (five-point rating scale).

Going to look Each person was asked whether he or she would go to look if suspicious noises were heard in the house (five-point rating scale).

Implementing constructional and organizational measures The intention to implement constructional and organizational measures was only measured during the post-test. Each person was asked whether the information meetings prompted him or her to take seven preventive measures (yes/no). Items: see Table 2.

TABLE 2 *Intentions to implement constructional and organizational measures as a reaction to the information meetings (post-test subjects, n ≈ 70)*

	%
Registering personal belongings	91
Marking or engraving personal belongings	90
Improving door locks	78
Improving window locks	77
Locking up more carefully when leaving	68
Installing outdoor lights	62
Renting a safe	35
Other actions	31

Personal characteristics Each person was questioned as to age, sex, the number of household members, type of dwelling, political attitude, education, performance of household duties, holding a paid job, unemployment, retirement and inability to work through ill health. Residence was deduced from the locality of the information meeting attended.

Implementing preventive measures Each person was asked how frequently he or she took four habitual actions (five-point rating scale).

Marking and photographing valuable belongings Each person was asked whether he or she had marked or photographed valuable belongings (yes/no).

Results

Internal validity

First it was investigated whether the internal validity of the design had been established. Of the threats to internal validity (Cook and Campbell 1979), selection and local history were of most relevance.

Selection By performing pre-test and post-test measurements in all municipalities in which the information meetings took place, the equivalence of the experimental and control samples with respect to social background was increased. The number of significant differences obtained (1 out of 17, see Table 1) could be expected on the basis of chance. Because the observed effects of the information meetings were not influenced by this difference, the internal validity of the study was not threatened.

As a consequence of differences in attendance levels at the meetings, there was a significant difference between the experimental and control group with respect to residence ($\chi^2 = 39.94$, $df = 3$, $p < 0.001$). Again, this difference did not pose a threat to internal validity. For all interval variables, there were only marginal differences between the results obtained from the analysis of covariance incorporating only education as a covariate, and those obtained from an identical analysis using education as well as residence as covariates.⁸ For all ordinal variables Kruskal-Wallis one-way

⁸ Residence was coded by means of three dummy variables. The regression analyses showed that adding these three dummy variables into the equation when education had already been incorporated did not result in a significantly better prediction of knowledge of burglary ($F_{3,125} = 1.52$, $p = 0.21$), outcome expectation ($F_{3,125} = 0.85$, $p = 0.47$) or self-efficacy expectation ($F_{3,125} = 1.61$, $p = 0.19$).

analysis of variance showed the relationship with residence to be insignificant: residence therefore did not play a mediating role. The observed effects of the information meetings were, thus, not influenced by the difference in residence.

Local history Because the measurements in the experimental and control group were not taken simultaneously, local history could have played a role. However, it is not plausible that this threatened internal validity. The measurements were taken within the relatively short period of six weeks. Additionally, during the entire period pre-test as well as post-test measurements were taken. Time effects thus seem to be implausible.

Conclusion Due to the specific situation in which the crime communication took place, the best design to be realized was a between-subjects quasi-experimental one. Selection and local history are the most relevant threats to the internal validity of this design. Neither selection differences nor local history served to threaten the internal validity of the design. Because as far as we know there were no differences in personal characteristics or undertaking preventive behaviour between the experimental and control group except for educational level, and because education was entered as a covariate in the analyses of covariance or proved not to play an intermediating role, differences between the experimental and control group may be ascribed to the information given to the experimental group during the information meetings.

The effects of the information meetings

Knowledge of burglary The analysis of covariance showed that there was a significant difference between the experimental and control group in knowledge of burglary ($F_{1,126} = 17.10, p < 0.001$):⁹ the post-test group which had received information concerning crime and crime prevention had more knowledge of burglary than the control group which had received no such information. The difference was 1.7 points (effect size: 0.76). This is a large effect (Hedrick *et al.* 1993). In particular, the items concerning the magnitude and the nature of burglary and the help provided to victims contributed to the difference between the groups. This difference is ascribed to the effect of the information given to the experimental group during the information meetings.

Risk assessment and fear of burglary The information meetings did not exert an undifferentiated effect: the Mann-Whitney U-test showed no significant difference between the experimental and control groups with respect to perceived likelihood of victimization ($z = 0.05, n = 169, p = 0.96$), perceived seriousness of consequences ($z = 0.14, n = 168, p = 0.89$), the perceived ability to prevent victimization ($z = 0.03, n = 168, p = 0.98$) or fear of victimization ($z = 0.78, n = 170, p = 0.44$). A differentiated effect of the information meetings would mean that the most extreme scores would become less extreme. The result would be that the variance of the scores of the experimental group would be smaller than that of the control group. The Kolmogorov-Smirnov two-

⁹ The covariate (education) was not significant: knowledge $F_{1,126} = 2.39, p = 0.13$; outcome expectation $F_{1,131} = 0.45, p = 0.51$; self-efficacy expectation $F_{1,132} = 3.63, p = 0.06$.

sample test which, among other things, is sensitive to differences in variance, showed that there were no significant differences between the experimental and control group with respect to the distribution of the scores (perceived likelihood: K-S $Z = 0.18$, $p = 0.99$; perceived seriousness: K-S $Z = 0.31$, $p = 0.99$; perceived ability to prevent: K-S $Z = 0.36$, $p = 0.99$; fear: K-S $Z = 0.60$, $p = 0.87$).¹⁰ So the information meetings did not exert a differentiated effect.

Outcome expectation The analysis of covariance showed that there was a significant difference between the experimental and control group in outcome expectation: ($F_{1,131} = 8.17$, $p = 0.005$).¹¹ The post-test group who had received information concerning crime and crime prevention, perceived the outcomes of the seven preventive measures to be more effective than the pre-test group who had received no such information. In particular the item 'making noise' contributed to the difference of 2.2 points (effect size: 0.52). This is a moderate effect (Hedrick *et al.* 1993). The difference between the groups is ascribed to the effect of the information given to the experimental group during the information meetings.

Self-efficacy expectation The analysis of covariance showed that there was a significant difference between the experimental and control group in self-efficacy expectation ($F_{1,132} = 6.23$, $p = 0.01$).¹² The post-test group which had received information concerning crime and crime prevention perceived their ability to implement the seven preventive measures to be higher than the pre-test group which had received no such information. The item 'making a noise' made the largest contribution to the difference of 1.9 points (effect size: 0.48). This is a moderate effect (Hedrick *et al.* 1993). The difference between the groups is ascribed to the effect of the information given to the experimental group during the information meetings.

Making a noise The Mann-Whitney U-test showed a significant difference between the experimental and control group ($z = 3.55$, $p < 0.001$, one-tailed). More experimental than control subjects said they certainly would make a noise (45 per cent versus 27 per cent). The information meetings thus seem to have positively influenced people's intention to make a noise if they were to hear suspicious noises in the house.

Going to look The Mann-Whitney U-test showed that the difference between the experimental and control group was not significant ($z = 0.62$, $p = 0.27$, one-tailed). In both groups 40 per cent said they certainly would go and see what was the matter.

Implementing constructional and organizational measures During the post-test many subjects said the information meeting persuaded them to mark and register their valuable belongings (Table 2). Additionally, a considerable number said the information meeting induced them to improve their locks. This is the more remarkable because a number of subjects indicated they could not implement these measures any further because they had already taken such measures. This applied, for instance, to renting a safe.

¹⁰ There are too many ties between groups for the Moses-test of extreme reactions.

¹¹ See note 9 above.

¹² *Ibid.*

Discussion

This research evaluated the short-term effects of providing objective information about the magnitude and prevention of residential burglary presented during information meetings. In contrast to other Dutch research (Eijken and Van Oosterzee 1992), we departed from a theoretical model in relation to the effect of such education which incorporates cognitive, emotional and behavioural variables.

Knowledge of burglary

The objective of the information meetings was to increase knowledge of burglary, in order to bring fear of burglary more into line with the true risks involved and to encourage the implementation of adequate preventive behaviour. In accordance with the first step in the Garofalo and the Bandura model the information meetings proved to increase knowledge of burglary. Transmitting information by means of a police newsletter (Lavrakas 1986) and a national prevention campaign in the United States (O'Keefe 1986) also proved to bring about such an increase. Because an increase in knowledge is a prerequisite in many effect models, this is an important result.

Fear of burglary

According to the tell-the-truth model, the information meetings should indirectly have a differentiated effect on risk assessment and fear of crime (Garofalo 1981; Skogan 1985; Maxfield 1987). Individuals maintaining a too pessimistic image of the burglary risks would become more positive, while those holding a too optimistic image would become more negative. The analyses showed this was not the case. The increase in knowledge of the local burglary risks and the ways of coping with these risks, did not therefore differentially affect risk assessment and fear of burglary. If there had been a homogeneous population, the information meetings might have had an undifferentiated effect on risk assessment and fear of burglary. This was not the case, either.

We are not aware of other research into the effect of information meetings on risk assessment. Mass media crime prevention campaigns have been found not to exert any influence on the perceived likelihood of victimization (Sacco and Silverman 1981; Winkel 1987; Vrij *et al.* 1990) and the perceived seriousness of the consequences of burglary (Winkel 1987). O'Keefe (1986), however, found such a campaign to lead to an increase in perceived ability to prevent crimes. With respect to fear of burglary, our results do not agree with those from other Dutch research which showed that information meetings would lead to a decrease in this fear (Eijken and Van Oosterzee 1992). The difference from our results may be ascribed to differences in research design. Eijken and Van Oosterzee (1992) drew their conclusions on the basis of survey research, in which statements with respect to the effect of information meetings rested on the visitor's own opinion. We, however, used quasi-experimental research, in which statements with respect to the effect of the information meetings stems from the difference between pre-test and post-test. Our finding that 53 per cent of the visitors judged the presented information to be reassuring (Kuttschreuter and Severijn 1989) supports the interpretation of the differences in results in terms of differences in research methodology. In other (quasi)-experimental research into a diversity of

information strategies no effect on fear has been found (De Graaf 1981; Lavrakas *et al.* 1983; O'Keefe 1986; Lavrakas 1986; Winkel 1987; Vrij *et al.* 1990).

A first explanation for the lack of support for the putative effect on risk assessment and fear of burglary is that the relevant measuring instruments consisted of one item only. The differentiation of the instruments was, therefore, restricted. Moreover, due to the ordinal level of measurement, for some variables less powerful analysis techniques had to be used. The lack of effect on fear of burglary and risk assessment may thus be interpreted in terms of research methodology (Bickman 1987).

A second explanation is that the information did not lead to an alteration in the image of the magnitude and nature of local crime (second step in the Garofalo model).¹³ Maybe the new information confirmed an already existing image (incorrect model, see Bickman 1987). The fact that the visitors were more afraid of becoming victims than the general public (Kuttschreuter 1994) and, therefore, perhaps interpreted the presented information differently (Winkel 1981) may have played a role here. Another possibility is that the statistical information was still too general (incorrect implementation, see Bickman 1987). The police forces did not want to transmit information that only pictured the instant situation. Because of large fluctuations it was, however, not feasible to obtain reliable data concerning the magnitude of local crime. For example, an exceptionally high number of burglaries took place on one night, but after the apprehension of a particular burglar, the number of burglaries dropped. Reliably comparing crime rates with other neighbourhoods or other periods was only possible by enlarging the areas and the periods. This made the information concerning the magnitude of local crime more general. This could be a fundamental problem pertaining to the implementation of a tell-the-truth campaign.

A third explanation could be that the change in the image of local crime did not result in a change in risk assessment and fear of burglary (third step in the Garofalo model). This explanation seems to be implausible. Other research into the effect of presenting statistical information about local crime (Kuttschreuter 1994) has shown a significant positive relationship between changes in the image of local crime and changes in the perceived likelihood of victimization ($r = .22$, $p < 0.002$) and between the perceived likelihood of victimization and fear of crime ($r = 0.20$, $p = < 0.002$). So the lack of effect on risk assessment and fear does not seem to be attributable to the fact that a change in the image of local crime does not correspond to a change in risk assessment and fear of burglary.

Prevention of burglary

The Bandura model proved to be helpful in studying the effects of crime prevention information on crime prevention behaviour. The information meetings led to an increase in outcome expectation with respect to burglary prevention (second step in the Bandura model). This agrees with findings from other Dutch research into the effects of information meetings (Eijken and Van Oosterzee 1992). The information meetings proved also to have led to an increase in self-efficacy expectation (second step in the Bandura model). This stands in contrast to the finding that the police newsletters

¹³ In cases in which the implementation of a programme may be criticized, distinguishing between an incorrect model and incorrect implementation is not feasible (Bickman 1987).

did not influence self-efficacy expectations (Lavrakas 1986), possibly because the audience was more susceptible or maybe a meeting is a more intrusive medium than a news bulletin. Because self-efficacy expectation is the most important determinant of crime prevention behaviour (Wiegman *et al.* 1992),¹⁴ our result provides education about burglary prevention by means of information meetings with a new point of view.

The information meetings also led to people intending to implement constructional and organizational preventive measures (third step in the Bandura model). Such results were also observed in other Dutch research: about 60 per cent of the visitors to information meetings, stands and the 'Crime Prevention Bus' claimed they intended to implement preventive measures as a result of the information they had acquired (Riemsma and Kutschreuter 1988; Eijken and Van Oosterzee 1988, 1992). Whether the information meetings we studied also influenced the actual implementation of preventive behaviour could not be evaluated from our research design. The effects that were found, however, may be viewed as necessary conditions for such an effect to occur.

During the information meetings, special attention was given to the prevention of physical injury by advising the visitors to make a noise or switch on the lights if they thought they were being burgled. The visitors proved to have taken this to heart: after attending the information meetings they felt it to be more meaningful, felt more able and were more inclined to make a noise. Still, an equal number of exposed as well as not-exposed subjects would go and see what was the matter. This contradiction is only apparent. The exposed subject might first make a noise and/or put on the lights, and only then investigate what is happening.

Conclusion

Information meetings on burglary are a suitable strategy for transmitting complex information because people have taken time to attend the meeting. The information about the magnitude of burglary and about adequate preventive behaviour increased knowledge about burglary. This increase in knowledge, however, did not affect risk assessment and fear of crime. The information meetings also brought about an increase in outcome expectation, self-efficacy expectation and in people's intentions to implement adequate preventive behaviour. Research into how it is possible to affect the image of local crime is necessary.

REFERENCES

- ANTUNES, G. E., and HURLEY, P. A. (1977), 'The Representation of Criminal Events in Houston's Two Daily Newspapers', *Journalism Quarterly*, 54: 756-60.
- BANDURA, A. (1982), 'Self-efficacy Mechanisms in Human Agency', *American Psychologist*, 37: 122-47.
- (1986), *Social Foundations of Thought and Actions: a Social Cognitive Theory*. Englewood Cliffs, NJ: Prentice Hall.

¹⁴ This research was carried out among victims of residential burglary.

- (1991), 'Self-efficacy Mechanism in Physiological Activation and Health-promoting Behavior', in J. Madden, ed., *Neurobiology of Learning, Emotion and Affect*, 229–70. New York: Raven Press.
- BENNETT, T. (1991), 'The Effectiveness of a Police-initiated Fear Reducing Strategy', *British Journal of Criminology*, 31: 1–14.
- BICKMAN, L. (1987), 'The Functions of Program Theory', in L. Bickman, ed., *Using Program Theory in Evaluation*, 5–18. London: Jossey-Bass Inc.
- BUREAU LANDELIJK COÖRDINATOR VOORKOMING MISDRIJVEN (1981), *Oriënteringsnota Voorkoming Misdrijven*. Den Haag: Bureau Landelijk Coördinator Voorkoming Misdrijven.
- COENEN, A. W. M., and VAN DIJK, J. J. M. (1976), *Misdaadverslaggeving in Nederland, de Ontwikkeling van de Misdaadverslaggeving in de Nederlandse Dagbladen tussen 1966 en 1974*. Den Haag: Wetenschappelijk Onderzoek- en Documentatiecentrum, Ministerie van Justitie.
- COMMISSIE KLEINE CRIMINALITEIT (1984), *Interimrapport*. Den Haag: Staatsuitgeverij.
- (1986), *Eindrapport*. Den Haag: Staatsuitgeverij.
- COOK, T. D., and CAMPBELL, D. T. (1979), *Quasi-experimentation: Design and Analysis Issues for Field Settings*. Boston: Houghton Mifflin Company.
- CORDNER, G. W. (1986), 'Fear of Crime and the Police: an Evaluation of a Fear-reduction Strategy', *Journal of Police Science and Administration*, 14: 223–33.
- DE GRAAF, R. J. M. (1981), 'Geïntegreerde Aanpak van Inbraakbestrijding', *Algemeen Politieblad*, 130: 508–12.
- DITTON, J., and DUFFY, J. (1983), 'Bias in the Newspaper Reporting of Crime News', *British Journal of Criminology*, 23: 159–65.
- EIJKEN, T., and VAN OOSTERZEE, D. D. (1988), *Onderzoek Effecten van VM-stand Binnenhuis en Internationale Huishoudbeurs, 1988*. Den Haag: Bureau Landelijk Coördinator Voorkoming Misdrijven.
- EIJKEN, A. W. M., and VAN OOSTERZEE, D. D. (1992), *Voorlichting: Effecten van Voorlichting bij Misdaadpreventie, 1985–1988*. Den Haag: Ministerie van Justitie, Directie Criminaliteitspreventie, Stafafdeling Informatievoorziening.
- FERRARO, K. F., and LAGRANGE, R. (1987), 'The Measurement of Fear of Crime', *Sociological Inquiry*, 57: 70–101.
- FISHMAN, M. (1981), 'Crime Waves as Ideology', in S. Cohen and J. Young, eds., *The Manufacture of News: Social Problems, Deviance and the Mass Media*, rev'd edn. London: Constable.
- GAROFALO, J. (1981), 'The Fear of Crime: Causes and Consequences', *The Journal of Criminal Law and Criminology*, 72: 839–57.
- GRABER, D. A. (1980), *Crime News and the Public*. New York: Praeger.
- HEDRICK, T. E., BICKMAN, L., and ROG, D. J. (1993), *Applied Research Design: A Practical Guide*. London: Sage.
- HENIG, J., and MAXFIELD, M. G. (1978), 'Reducing Fear of Crime: Strategies for Intervention', *Victimology*, 3: 297–313.
- KUTTSCHREUTER, M. (1994), *De Waarheid over Criminaliteit: Evaluatie van een Tell-the-truth-voorlichtingscampagne*. Delft: Eburon.
- KUTTSCHREUTER, M., and SEVERIJN, J. (1989), *Informatie op Voorlichtingsbijeenkomsten over Inbraak in Woningen*. Enschede: Universiteit Twente, aspekt 17.
- LAVRAKAS, P. J. (1986), 'Evaluating Police-community Anticrime Newsletters: The Evanston, Houston and Newark Field Studies', in D. P. Rosenbaum, ed., *Community Crime Prevention: Does It Work?*, 269–91. Beverly Hills: Sage.

- LAVRAKAS, P. J., ROSENBAUM, D. P., and KAMINSKI, F. (1983), 'Transmitting Information about Crime and Crime Prevention to Citizens: The Evanston Newsletter Quasi-experiment', *Journal of Police Science and Administration*, 11: 463-73.
- LISKA, A. E., and BACCAGLINI, W. (1990), 'Feeling Safe by Comparison: Crime in the Newspaper', *Social Problems*, 37: 360-74.
- MAXFIELD, M. (1987), *Explaining Fear of Crime: Evidence from the 1984 British Crime Survey*, Research and Planning Unit Paper No. 43. London: Home Office.
- O'KEEFE, G. J. (1986), 'The "McGruff" National Media Campaign: Its Public Impact and Future Implications', in D. P. Rosenbaum, ed., *Community Crime Prevention, Does It Work?* Beverly Hills: Sage.
- OPENBAAR MINISTERIE ALMELO, GEMEENTEPOLITIE ENSCHEDE, GEMEENTEPOLITIE ALMELO, GEMEENEPOLITIE HENGELO, GEMEENTEPOLITIE OLDENZAAL, GEMEENTEPOLITIE HELLENDOORN, RIJKSPOLITIE DISTRICT ZWOLLE, REGIONAAL BUREAU VOORKOMING MISDRIJVEN OVERIJSSSEL-OOST, and VAKGROEP PSYCHOLOGIE UNIVERSITEIT TWENTE (1986), *Subsidieaanvraag voor een Samenwerkingsproject in Overijssel-Oost gericht op Voorlichting en Beïnvloeding van het Publiek om de Nadelige Effecten van Criminaliteit te Bestrijden*. Enschede: Universiteit Twente.
- POLDER, W., and VAN VLAARDINGEN, F. J. C. (1992), *Preventiestrategieën in de Praktijk: een Meta-evaluatie van Criminaliteitspreventieprojecten*. Arnhem: Gouda Quint.
- POSTMA, H. F. P., and EERTMAN-NIJLAND, J. A. M. (1989), *Publiekvoorlichtingsproject Twente, een Procesevaluatie*. Enschede: Regionaal Bureau Voorkoming Misdrijven Overijssel-Oost.
- POYNER, B. (1991), *What Works in Crime Prevention, an Overview of Evaluations*. Paper presented at the British Criminology Conference, 25 July.
- RIEMSMAN, R., and KUTTSCHREUTER, M. (1988), *Voorlichting over Misdaadpreventie door middel van de VM-informatiebus*. Enschede: Twente University, aspekt 16.
- ROSENBAUM, D. P. (1988), 'Community Crime Prevention: A Review and Synthesis of the Literature', *Justice Quarterly*, 5: 323-95.
- ROSHIER, B. (1981), 'The Selection of Crime News by the Press', in S. Cohen and J. Young, eds., *The Manufacture of News: Social Problems, Deviance and the Mass Media*, rev'd ed. London: Constable.
- SACCO, V. F., and SILVERMAN, R. A. (1981), 'Selling Crime Prevention: The Evaluation of a Mass Media Campaign', *Canadian Journal of Criminology*, 23: 191-202.
- SACCO, V. F., and TROTMAN, M. (1990), 'Public Information Programming and Family Violence: Lessons from the Mass Media Crime Prevention Experience', *Canadian Journal of Criminology*, 32: 91-105.
- Samenleving en Criminaliteit: een Beleidsplan voor de komende Jaren*. Tweede Kamer, 1984-85, No. 18995, pp. 1-2.
- SHELEY, J. F., and ASHKINS, C. D. (1981), 'Crime, Crime News and Crime Views', *Public Opinion Quarterly*, 45: 492-506.
- SKOGAN, W. G. (1985), 'Enige nieuwe Politie-experimenten in de VS', *Justitiële Verkenningen*, 11: 101-16.
- (1990), *The Police and the Public in England and Wales: A British Crime Survey Report*. London: HMSO.
- (1994), *Contacts between Police and Public: Findings from the 1992 British Crime Survey*. London: HMSO.
- SMITH, S. J. (1984), 'Crime in the News', *British Journal of Criminology*, 24: 289-95.

- STUURGROEP BESTUURLIJKE PREVENTIE VAN CRIMINALITEIT (1988), *Tussenverslag Bestuurlijke Preventieprojecten*. Den Haag: Ministerie van Binnenlandse Zaken, Ministerie van Justitie.
- (1991), *Eindrapport: een Verslag over de Periode 1985–1990*. Den Haag: Ministerie van Binnenlandse Zaken, Ministerie van Justitie.
- VAN DEN BOGAARD, J., and WIEGMAN, O. (1991), 'Property Crime Victimization: The Effectiveness of Police Services for Victims of Residential Burglary', *Journal of Social Behavior and Personality*, 6/6: 329–62.
- (1992), 'Police Reactions to Victimization', in E. C. Viano, ed., *Critical Issues in Victimology: International Perspectives*, 205–16. New York: Springer.
- VAN DER WURFF, A. (1990), 'Angst voor Criminaliteit: een Begripsbepaling', in F. W. Winkel and A. van der Wurff, eds., *Angst voor Criminaliteit: Theorie Onderzoek Interventie*, 7–21. Lisse: Swets en Zeitlinger.
- (1992), *Aard en Achtergronden van Onveiligheidsgevoelens in de Woonomgeving*. Amsterdam: Universiteit van Amsterdam.
- VAN DIJK, J. J. M. (1982), *Misdaadverslaggeving in Nederland, Aanvullende Cijfers t/m 1981*. Den Haag: Wetenschappelijk Onderzoek- en Documentatiecentrum, Ministerie van Justitie.
- VAN DIJK, J. J. M., and DE WAARD, J. (1991), 'A Two-dimensional Typology of Crime Prevention Projects: With Bibliography', *Criminal Justice Abstracts*, 23: 483–503.
- VRIJ, A., WINKEL, F. W., FOPPE, J. H., and VOLGER, D. M. (1990), 'Politiële Preventieprogramma's en Angst voor Criminaliteit: het Rendement van een Planmatige Aanpak', in F. W. Winkel and A. van der Wurff, eds., *Angst voor Criminaliteit: Theorie Onderzoek Interventie*, 186–99. Lisse: Swets en Zeitlinger.
- WETENSCHAPPELIJK ONDERZOEK- EN DOCUMENTATIE CENTRUM (1995), 'Tien jaar Samenleving en Criminaliteit', *Justitiële Verkenningen*, 21: 3 (Themanummer).
- WIEGMAN, O., TAAL, E., VAN DEN BOGAARD, J., and GUTTELING, J. M. (1992), 'Protection Motivation Theory Variables as Predictors of Behavioural Intentions in three Domains of Risk Management', in J. A. M. Winnubst and S. Maes, eds., *Lifestyles, Stress and Health: New Developments in Health Psychology*, 55–70. Leiden: DSWO Press.
- WILLEMSE, H. H., and DE WAARD, J. (1992), 'Criminaliteitsanalyse en Preventie', *Justitiële Verkenningen*, 18: 50–72.
- WINKEL, F. W. (1981), 'Angst voor Criminaliteit, Verklarende Modellen', *Tijdschrift voor Criminologie*, 6: 289–306.
- (1987), *Politie en Voorkoming Misdrijven: Effecten en Neveneffecten van Voorlichting*. Amsterdam: Mens en recht.