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THE PSYCHOLOGY OF FEAR OF CRIME

Conceptual and Methodological Perspectives

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Since the very beginnings of research on the fear of crime in the early 1970s, authors have emphasized the need for theoretical clarification of the meaning and measurement of the concept. The present article outlines a theory of fear of crime from the psychological perspective. In particular, psychological concepts of emotions, most notably the state/trait distinction and the notion of emotions as involving multiple components, are applied to fear of crime. The outcome of this conceptual clarification is a two-dimensional taxonomy which can be used to differentiate between instruments applied to assess fear of crime. Finally, taking into account the results of psychological research on survey methodology, the practical value of this taxonomy for the assessment of fear of crime is discussed.

Over the past three decades, fear of crime has been a recurrent theme in public policy and academic debate. The discussion has frequently been prompted by empirical research on fear of crime; the body of literature has grown substantially in recent years (see Hale 1996, for a review), and only lately has a collection of classic articles on fear of crime been published (Ditton and Farrall 2000). Although the results of so-called 'crime surveys' suggest that fear of crime is a prevalent social problem, the need for a theoretical clarification of the meaning and measurement of 'fear of crime' has been emphasized repeatedly (e.g. Ditton *et al.* 1999; Farrall *et al.* 1997; Taylor and Hale 1986; Thompson *et al.* 1992). The perspective taken here is based on the hypothesis that previous interpretations of empirical results lack the theoretical background necessary for sensitive conclusions to be drawn. In other words, we argue that empirical data on fear of crime are often 'seen through the wrong spectacles'.

While the investigation of fear of crime has a long tradition in criminology, the investigation of fear has an even longer tradition in psychology. The purpose of this paper is to render the findings of psychological research usable for work on fear of crime. Accordingly, psychological concepts of emotions, notably the state/trait distinction and the notion of emotions as involving multiple components, will be applied to fear of crime, thus providing the outlines of a psychological conception of fear of crime.

Our discussion proceeds in two major steps. In the first step, we investigate the conceptual structure of fear of crime. We start by focusing on the conceptual and empirical links between the fear of crime as a state on the one hand, and as a disposition on the other. Recent psychological approaches consider emotions to be affective states characterized by responses that include physiological, behavioural-expressive and subjective facets. The state of fear of crime will thus be assumed to be multidimensional,

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and we will examine whether this multidimensional approach can also be applied to fear of crime as a trait. We will then turn to the specific object of fear, the concept of crime. In a second step, we discuss the methodological consequences of this conceptualization, particularly with respect to the assessment of fear of crime. Finally, we discuss common explanations for fear of crime in the terms of our conceptualization.

Two preliminary remarks may help to avoid potential misunderstandings:

- First, the term 'fear of crime' is used throughout this paper to mean the individual's fear of personally becoming a victim of crime (in contrast to a general concern about crime, Skogan 1993, or the perceived extent of crime);
- Second, the distinction between feelings and emotions as well as the relationship between anxiety and fear have prompted extensive debate in the field of psychology (Frijda 1993; Öhman 1993; Power and Dalgleish 1997). For our purposes, it is not necessary to try to resolve these issues, because we focus on reactions to a definite and recognizable external threat, although this threat ('crime') may be something quite vague.

The Fear of Crime

In general, discussion of fear of crime focuses on a person's characteristic perception and evaluation of a particular type of event (namely crime) in the sense of an individual parameter. Criminal policy and criminology also tend to focus on personal traits with respect to fear of crime rather than on situational states. Individual differences in fear of crime and explanations for these differences are thus our focus here.

It is important, however, to distinguish conceptually between this personal trait and the actual fear as a momentary affective state that varies within a person according to the situation at hand. This distinction was introduced by Catell (Catell and Scheier 1961) and further elaborated by Spielberger and colleagues (Spielberger 1966, 1972). Despite some empirical difficulties (Schwenkmezger 1985), the conceptual reasoning behind this distinction seems clear, and it can be applied to fear of crime as follows:

I may be afraid of becoming a victim of crime in situations such as walking in a dimly lit park, talking to a stranger, and/or hearing a strange noise behind me. Here, fear of crime is a transitory state that will generally pass quickly. In the long term, however, such emotional occurrences (Frijda 1993) may contribute—particularly if experienced repeatedly—to my general disposition of being afraid of becoming a victim of crime.

In contrast, fear of crime as a disposition (trait) describes my tendency to experience fear of crime in certain situations; it is comparatively stable within subjects, but varies between subjects. Such an individual disposition is characterized by experiencing more situations as being relevant to fear, being more likely to experience fear in a given situation, and possibly experiencing fear more intensely. Therefore, persons with such a disposition are more likely to experience the state of 'being afraid' (Spielberger 1972: 39).

Dispositional fear of crime is one of the parameters that regulate, influence or determine its actual occurrence, i.e. the situational fear of crime (as a state). In principle, dispositional fear of crime can also change within subjects. This variability does not imply that dispositional fear is evoked or allayed by acute changes in the situational context,

however. (Such changes would rather relate to the situational fear of crime, i.e. a dynamic process that has a beginning and an end, and that lasts for a specific length of time.) In contrast, the 'changeability' of the dispositional fear of crime reflects developmental changes within the person, such as 'growing' in fearlessness or timidity. The dispositional fear of crime is the result of a long-term (ontogenetic) developmental process that is influenced by personal conditions and attributes (such as anxiousness, perceptive tendencies and coping resources) on the one hand, and by individual experiences of fear-relevant situations on the other, as well as by the interaction of these two factors.

The relationship between the dispositional fear of crime and the situational fear of crime is a conceptual one: the dispositional fear of crime is conceptualized as the individual tendency to react 'fearfully'. As (dispositional) fear of crime increases, so does, *ceteris paribus*, the probability that certain situations will evoke fear of crime (as a state). In a given (sufficiently high) number of situations, an individual with a higher dispositional fear of crime will experience the state 'fear of crime' more frequently. If this pattern of results fails to emerge in empirical research, either the disposition has been incorrectly diagnosed, or the situations considered did not evoke sufficient fear of crime.

Conversely, the relation of any actual occurrence of situational fear of crime to dispositional fear of crime is an empirical one. Whether or not a current state of situational fear of crime results in an increase or decrease in the dispositional fear of crime depends on various intrapersonal conditions. These include the ability to cope with situations evoking fear of crime (How do I cope with the fear while being afraid?) on the one hand, and the ability to cope with such fear-of-crime episodes on the other (How do I cope with having had that episode of fear?).

As illustrated in Figure 1, the influence of states on the dispositional fear of crime might be moderated, for example, by self-efficacy (Bandura 1977, 1986), i.e. expectancies about one's ability to control future incidents. It seems reasonable to assume, for example, that people who believe that they possess such abilities (high self-efficacy) are better able to cope with threatening situations than people who are less convinced of their own abilities in this respect. Other variables (particularly individual coping resources, physical health and social support) might also moderate this interrelation (Greve 1998, 2000).

It should be noted, though, that fear-of-crime episodes (states) may themselves influence individual conditions. Perceived self-efficacy, for example, is (partly) determined by experiences in which a person learns about his or her own efficacy and that of others. Fear-of-crime episodes may represent relevant experiences in this sense, and are worth being examined more closely.

In examining the state of fear, fear of crime can be conceived of as a multifaceted concept. The phenomenologically salient aspect—the (conscious) experience of feeling fearful—is a conglomerate of these facets, reflecting mainly the affective facet. However, the affect of fear must always be accompanied by a cognitive facet, i.e. the cognitive perception of the situation as threatening or dangerous. Being afraid implies that the situation at hand is perceived as dangerous, regardless of how vague this perception may be. It is logically impossible to be afraid but not to judge the situation as threatening.

The third component of fear is an expressive facet: fearful behaviour (e.g. avoidance behaviour and self-protection). The conceptual link to the behavioural aspect of fear of

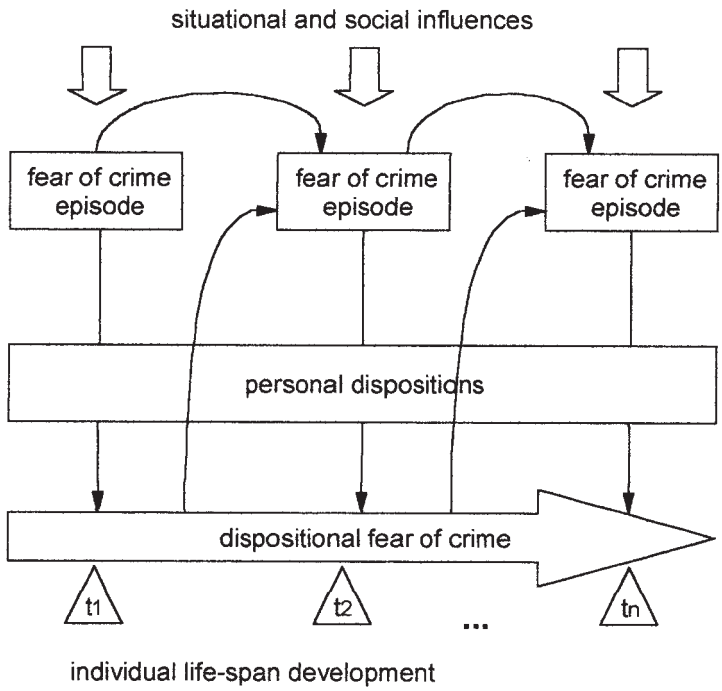

FIG. 1 Development of dispositional fear of crime dependent on personal prerequisites and experiences of episodes of fear

crime is less clear than the link between the affective and cognitive facets, however. Imagine a situation in which you are afraid, but nobody notices. You might be paralysed with fear or able to control yourself perfectly as a result of years of practice. In either case, even a good observer who knows you well would not be able to tell whether or not you are afraid simply by watching you. This illustrates the difficulty in determining the conceptual status of the behavioural component of fear.

An integral part of this problem is based on the question of what to subsume under the term 'behaviour'. First of all, the term covers (1) overt, intentionally planned and controlled behaviour (e.g. taking the tear gas spray out of one's handbag). Clearly, restricting 'behaviour' to such actions would be too narrow a definition. Moreover, 'behaviour' would then not be a criterion of fear, but merely a—fairly uncertain—indication of it. Particularly, (2) visible behaviour that is not intentionally planned and controlled is also indicative of fear (involuntary expressions and gestures are paradigmatic here). The conceptual status of (3) physiological reactions, i.e. non-visible reactions that may only be detected with the help of appropriate equipment, is controversial. Subject to the accuracy of measurement, the 'physiological instrument' 'human being' will register a change of some kind in the physiological state (i.e. react to something) at any given time. However, there is no evidence that fear (or any other emotion) is inevitably accompanied by a specific pattern of peripheral physiological activity (Cacioppo *et al.* 1993; Zajonc and McIntosh 1992). Since physiological events are ambiguous (e.g. 'elevated heartbeat' allows for a number of possible interpretations),

behaviour in such a broad sense would not be an indication of fear because it would not be an indication of anything. It may well be that a set of typical physical patterns turns out to be characteristic of fear (Stemmler *et al.* 2001). It is unlikely, however, that such patterns will ever be characteristic (let alone indicative) of fear of crime.

The question of what to subsume under the term 'behaviour' might be answered by assuming the visible behaviour to reflect a motive (action tendency). A motive may actually be reflected in visible behaviour, but this is not necessarily the case. Such an action tendency could be regarded as constitutive for the state of fear. We would then no longer be dealing with the question of visibility of behaviour, but with the question of how to recognize the motive reliably. Furthermore, the necessary conditions for translating a motive into behaviour still need to be investigated empirically.

To summarize, we consider affect, cognition and motive to be necessary conditions for a state to be labelled as 'fear'. If this state is correctly diagnosed, all three components will have to be 'given', i.e. exceed a threshold value. Fear would then consist of

- the individual's cognitive perception of being threatened (C),
- a corresponding affective experience (A) and
- an appropriate motive or action tendency (M).

Thus, we need to investigate whether these three components (C, A, M) can occur independently and, if so, whether any other combinations could also be labelled 'fear'.

Table 1 presents all combinations of the three facets, each with a description of the attributed state. Only the eighth and final combination—'+ + +'—embodies a typical or paradigmatic example of fear.

TABLE 1 *C-A-M combinations and attributed state*

	C: Cognitive perception of being threatened	A: Feeling of fear	M: Action tendency	Attributed state
(1)	–	–	–	= *No fear*
(2)	+	–	–	Apathy: 'This situation should actually threaten me because it's dangerous; it's strange but I don't care and don't have any inclination to move'
(3)	–	+	–	Free-floating anxiety
(4)	–	–	+	Cautious behaviour that is not motivated by actual appraisals or emotions (e.g. behaviour that has become routine or reflex behaviour)
(5)	+	+	–	This combination might best be illustrated by some 'odd cases', namely (1) paralysed with fright, (2) bravery, (3) helplessness, (4) nightmare
(6)	+	–	+	Someone behaves 'fearfully' in view of a perceived threat, but 'keeps cool' (e.g. a well-trained and experienced body guard)
(7)	–	+	+	Panic attacks, phobia
(8)	+	+	+	= *Fear*

From this, we can deduce that if our theoretical assumption holds (i.e. that C + A + M is a necessary condition for the state of fear) and if the state in question is fear (leaving open the question of how this would be measured), then combinations other than '+ + +' are impossible. Thus, if the state *is* fear, an 'incomplete occurrence' (in the sense that one of the components is missing) merely indicates assessment problems.

It should be emphasized that an individual will usually sense momentary fear of crime without reflecting upon these complicated 'cognitive-evaluative dynamics', which are nevertheless covered by fear-provoking situations. A threatening situation combines (previous) expectations, an actual awareness, appraisal, attributions, evaluations as well as the affect and typically—as an indicator and external sign of the state of 'being afraid of crime'—visible behaviour.

These components are linked to each other by complex trigger and feedback processes (for example: 'Hearing footsteps, I think "That's my mother", and this calms me down' vs. 'Hearing footsteps, my heart starts pounding, and because I can't stop my heart racing, my fear intensifies even further'). As such, positive or negative 'escalation loops' are conceptually coherent (and thus empirically possible, DeFronzo 1979; Liska *et al.* 1988; Rosenbaum and Heath 1990; Vander Ven 1998). This has an ambiguous effect upon precautionary measures: For instance, many underground car parks now reserve a number of parking spaces for women. We would usually expect that reading the sign 'Reserved for Women Drivers' would reassure women who feel uncomfortable when entering the car park. However, it is also conceivable that reading such a sign might worry women (or men) who had not previously perceived any risk, but who are now reminded that car parks are 'dangerous places'. In other words, the same cue may either *trigger* or *allay* fear—depending on the individual's affective-cognitive state before exposure to the cue.

If the arguments presented thus far can be accepted, the ongoing criminological discussion of fear of crime needs to be refined in at least two respects. The first involves the temporal perspective (fear as state vs. fear as disposition), the second, the component approach (fear as consisting of affect, cognition, motive). As discussed above, we regard the cognitive perception of being threatened, a corresponding affective experience, and an appropriate action tendency as necessary conditions for the situational fear of crime. This raises the question as to whether the multidimensional conception of situational fear of crime also applies to dispositional fear of crime.

To begin with, it makes no sense to use the term 'facets' to refer to a disposition in the same way as has been done for a state. Rather, it should be expressed as a disposition to (the coincidence of) these facets. Because dispositional fear of crime is defined as 'experiencing the state of being afraid comparatively easily', it follows that frequent occurrence of all aspects described as being necessary for situational fear of crime is constitutive for dispositional fear of crime.

The tendency (motive) to behave fearfully was identified as being constitutive for the situational fear of crime. With respect to the dispositional fear of crime, it is (conceptually) necessary for such behaviour to be exhibited sufficiently frequently. It is meaningless (i.e. inappropriate) to call someone fearful or anxious if they rarely behave in such a way (compared to others in the same social environment).

To summarize, dispositional fear of crime does not consist of three components, but the components of situational fear of crime are conceptual indicators of dispositional fear of crime. The measurement of dispositional fear of crime must therefore reflect

these three components. We now turn to the second distinguishing feature of fear of crime, and refine the notion of the object of fear.

What is "Fear of Crime"?

The stereotypical 'crime' takes place outdoors and involves the violent activity of a stranger. In reality, of course, crime is not limited to mugging; the term covers a wide range of undesired behaviours, such as theft, burglary, fraud, rape, and murder. Because of the heterogeneity of crime, the possibility that someone might be breaking into one's car at this moment, for instance, is not automatically labelled 'crime'. In the same way, the fear that might accompany this thought is not automatically labelled 'fear of crime'. Fear of crime is a construct that includes quite different kinds of threats, e.g. the threat of physical harm, material loss, shame or humiliation. The common factor is that these threats result from behaviour commonly considered to be criminal. Therefore, fear of crime represents a unique mixture: it is *homogeneous* by normative evaluation (crime!), but *heterogeneous* in terms of individual relevance, explanation and consequences.

Which aspect(s) of crime elicit fear of crime?

It may be threatening if a person behaves in a norm-violating way, i.e. intentionally disregards social or moral rules in the pursuit of personal goals. If this behaviour is performed frequently (by many persons or by a single person on many occasions), it symbolizes 'an erosion of values that is offensive and threatening to the normative system that people in groups rely on' (Tyler *et al.* 1997: 109). The victim of this behaviour (or an observer) may feel intimidated by the signs of this erosion, threatened by the ensuing insecurity, and thus feel threatened in every single case.

Crime often has further psychological, physical and material consequences. The precise nature and severity of these consequences depends on the criminal behaviour itself, as well as on attributes of the person(s) concerned. For instance, the snatching of a handbag may result (from the victim's perspective) in either loss of handbag and torn trousers or loss of handbag and broken leg. Accordingly, the perceived threat of crime is dependent not only on objective features of the criminal behaviour, but also on subjective parameters (the subjectively perceived/expected consequences).

As criminological research (usually) focuses on the effect of objective features of crime on fear, these have to be structured for use in empirical research, the most common approach being to classify crime into offence types. Such classifications, which vary in their level of refinement, are usually based on the course of the offence or its intended consequences. (An example of a rather rough categorization would be the division into violent offences and property offences; see Bennet and Flavin 1994; Fishman and Mesch 1996; Hough 1985; Rountree 1998.)

Criminal offences can also be distinguished according to the circumstances under which they are committed (inside/outside, daytime/night-time, by stranger/acquaintance, etc.). Because certain characteristic situations are associated with certain types of offence (e.g. 'being alone, outside, at night' with robbery and rape), crimes occurring in such 'scenarios' can be conceived as 'bundles of offences' (see Warr 1984: 'perceptually contemporaneous offences'). Grouping offences according to the settings in which they (stereotypically) occur in seems to reflect the way people usually construct crime (as qualitative research methods show, Lupton 1999; Vander Ven 1998). When measuring

fear of crime, we should therefore consider whether it should be measured for such offence bundles (in addition to or instead of for legal definitions of offence types).

Consequences for the Measurement of Fear of Crime

As a logical consequence of our discussion on fear, we would argue that the dispositional fear of crime can be assessed by measuring the disposition to each of the three components identified above. This can be done by assessing the frequency with which the situational fear of crime is experienced (Spielberger and Sydeman 1994). Accordingly, one could ask the following:

- Affect: 'How often do you *feel* afraid of . . . ?'
- Cognition: 'How often do you *think* "something's about to happen"?'
- Behaviour: 'How often do you *behave* "fearfully", for example . . . ?'

These kinds of questions assess how many 'fear (of crime) occurrences' the person experiences, or the relative frequency of such occurrences in daily life.

Usually, the cognitive component of fear of crime is assessed by measuring perceived risk, i.e. a future-directed estimate going beyond definite experience. However, such risk estimations are nothing but anticipated relative frequencies, and anticipation is constitutive for fear. This procedure (assessing the cognitive component of fear of crime by measuring perceived risk) therefore seems acceptable.

With respect to behaviour, not all behaviours indicative of fear are triggered by an acute fear situation. In contrast to 'having a scared look on one's face' or 'crossing to the other side of the road', for example, behaviours such as 'taking out insurance' or 'attending self-defence classes' are intentional, fear-related actions, the performance of which is temporally and locally separated from a concrete fear-evoking situation. In many cases, however, fear of crime is a sufficient, but not necessary condition for these behaviours. This raises the question as to whether such behaviours really do always indicate 'fear'. As we can imagine situations where motives other than fear instigate such behaviours (e.g. being asked by a friend to join her self-defence class), we need to bear in mind the problem of determining the forces behind the behaviour.

As argued in our discussion of crime, the aforementioned questions may refer to anything from crime in general to crime as a very specific offence. For our investigation, we split this continuum into three parts: (a) offence type, (b) offence bundle, and (c) crime. Table 2 shows exemplary measures distinguished along the two dimensions. In all, 12 cells result, each illustrated by an exemplary item and by relevant research papers.[1] The question now is which of these '12 ways of assessing fear of crime' is the best approach to measuring dispositional fear.

Clearly, any measurement of fear of crime has to satisfy two main requirements. First, all necessary theoretical aspects need to be represented empirically in some way. Empirical intercorrelations between the indicators might serve as an argument for

[1] Research papers that operationalized fear of crime by the term 'worry' (e.g. Krahn and Kennedy 1984: 703 'How much do you worry about crime in this area?'; see also Bennett and Flavin 1994; Gomme 1988; Keane 1995; Rountree and Land 1996; Sacco and Glackman 1987; Skogan 1987; Williams *et al.* 2000) were not taken into account, because it remains an open question as to whether this term reflects the cognitive or the affective facet of fear of crime.

TABLE 2 *Taxonomy of fear of crime measurements*

	Facets			Global
	(1) Affective	(2) Cognitive	(3) Behaviour	(4)
(A) Offence-specific	*A-1:* How often are you afraid[a] of becoming a *victim of physical assault*?[b]	*A-2:* How likely do you think it is that you will become a *victim of physical assault* (during the next twelve months)?[c]	*A-3:* Do you carry anything to defend yourself? (against physical assault)[d]	*A-4:* Do you fear becoming a victim of physical assault?
(B) 'Offence bundle'	*B-1:* How often are you afraid of becoming a victim of crime *outside your apartment*?[e]	B-2: How likely do you think it is that you will become a victim of crime *outside* (during the next twelve months)?[f]	B-3: Do you avoid public transport when out at night? (outside)[g]	B-4: Do you fear becoming a victim of crime outside your apartment?
(C) Non-specific	C-1: How often are you afraid of becoming a victim of *crime*?[h]	C-2: How likely do you think it is that you will become a victim of *crime* during the next twelve months?	C-3: Is there anything you do to protect yourself from crime? (or: What do you do to . . .)[i]	C-4: Do you fear becoming a victim of crime?[j]

[a] The formulations 'How afraid are you . . .' and 'How often are you afraid . . .' are conceptually not identical (the latter covers a mixture of affective and cognitive aspects), but empirically closely linked.
[b] Ditton *et al.* (1999); Ferraro (1996); Thompson *et al.* (1992).
[c] Baumer (1985); Denkers and Winkel (1998); Ditton *et al.* (1999); Ferraro (1996); Keane (1992); Sacco and Glackman (1987); Tyler and Rasinski (1984); Vitelli and Endler (1993) Winkel (1998).
[d] Ferraro (1996).
[e] Kury *et al.* (1998); Taylor and Hale (1986); Van der Wurff and Stringer (1988); Warr (1990).
[f] Norris and Kaniasty (1992); Tyler and Rasinski (1984).
[g] Ferraro (1996); Gomme (1988); Keane (1992); Kury *et al.* (1998); Liska *et al.* (1988); Silverman and Kennedy (1985); Tyler and Rasinski (1984).
[h] Winkel (1998) (applying a Semantic Differential rating scale).
[i] Krahn and Kennedy (1985); Norris and Kaniasty (1994).
[j] Gomme (1988).

simplifying or economising the measurement. This introduces at least two problems, however. First, a critical value would have to be agreed. Only if the empirical correlation exceeds this critical value would simplification of the measurement be justified. Yet what criteria should be used to determine this value? Second, it would be necessary to be ensure that this correlation is attained in all (potentially interesting) subsamples. This may impose limits on the parsimony of the measurement.

The second main requirement of any measurement of fear of crime is that methodological objections and difficulties with certain measurements are counterbalanced by alternative and additional measurements. As a rule, any assessment based on self-reports must assume that the respondent (a) uses terms in the way they are generally understood and (b) is both willing and competent to report self-related information in an appropriate manner. To answer a question, a respondent must perform several tasks (e.g. Schwarz 1996). He or she must comprehend or interpret the question being posed, recall or reconstruct information from memory, decide on the accuracy of the information recalled, 'compute' an answer, and edit and format this answer. The fact that the respondent might not be willing or able to competently and accurately fulfil all of these tasks must be taken into account when posing the question. Risk assessments, for instance, might be influenced by lay theories or by other biases (e.g. availability bias), while evaluations might be modified and distorted by relevant cues or moods (e.g. Schwarz and Sudman 1995; Sudman *et al.* 1996). The measurements obtained should be judged against this background.

Table 2 presents two kinds of global measurements. Those listed in the third row and in the fourth column address crime and fear respectively as a whole. Responding to a global question is a particularly difficult mental task. To provide an answer, the respondent has to think about all relevant aspects of the global construct. This not only requires cognitive effort, but also time. Social cognition research predicts that, unless the question provides adequate hints and information, respondents will focus on the most accessible aspect of the construct.

As far as the measurements presented in the third row are concerned, this means that the (manifold) meanings of crime must be explicated before the question is posed. Otherwise, respondents will interpret the word 'crime' in their own individual way, and it is highly unlikely that they will all have the same interpretation (see also Ferraro and LaGrange 1987: 74). The measurements listed in the fourth column are also problematic. These measurements are meta-indicators that do not specify what respondents should refer to when answering the question. Again, if such a global judgement is to be assessed, all facets of fear need to be made salient. Cell C-4 ('extensive global') is a special case in that what the answer is referring to needs to be clarified with respect to both dimensions (namely 'fear' and 'crime').

For the measurements presented in the first and second columns (affect/cognition), more or less conscious effects of self-presentation and socially desirable answering can be anticipated. Furthermore, such effects may be confounded with other respondent characteristics; that is, it might be more threatening for the members of one subsample to report on a specific question than for the members of another subsample (e.g. age cohorts, ethnic groups, occupational groups).

Subjective assessments of a person's own behaviour (third column) may be preferable if such assessments are less susceptible to these influences (this is an empirical question). With respect to the assessment of behaviour, it can be argued that we (sometimes) use

our own behaviour as an indicator for attitudes/beliefs, etc. We seem to infer our attitudes from our behaviour ('I'm obviously a bit miserly', Salancik and Conway 1975). The reverse also seems to occur, however, in that attitudes influence behaviour recall. People use their (current) attitudes to reconstruct past behaviour (Ross and Conway 1986). This latter effect, however, is less pronounced if the behaviour is highly accessible and can be retrieved without difficulty, as is the case for behaviours that are shown regularly and consistently (Sudman *et al.* 1996). Finally, questions about behavioural frequencies need to be unambiguously related to crime, i.e. the behaviour must be recognizably motivated by one's own need for protection, and not by the special offer of an insurance company or the complaints of one's husband, who grumbles if the doors are left unlocked.

The discussion thus far has made it clear that there is no single way to assess fear of crime. However, the taxonomy presented offers a basis for discussing and empirically testing the advantages and disadvantages of different measures.

As survey research seeks parsimonious ways of measuring fear of crime, single-item measures are of great interest. But what are the costs and benefits of single-item measures? What measurement error do we accept, for example, by using the so-called 'standard question' ('How safe do you feel or would you feel being out alone in your neighbourhood at night?', e.g. Garofalo 1979; for an overview, see Hale 1996)? What exactly does this error consist of? Is it an overestimation or an underestimation? Is it an overestimation in one subsample and, at the same time, a valid estimation in another subsample (as suggested by Greve 1998, reporting on the overestimation of fear of crime among persons who perceive themselves as highly vulnerable)?

With reference to the often reported sex differences in fear of crime (see Hale 1996: 96ff, for an overview), the theory that measures of affect and cognition are biased by self-representational motives can be used as a methodological explanation (and thus be tested empirically). The stereotypical female role allows women to experience fear, whereas the stereotypical male role does not allow men to do the same (Goodey 1997). On the other hand, living a risky life (or at least thinking that one does) is part of the stereotypical male role. If this holds true, one would expect an interactional effect of sex and measurement, with men reporting 'less affect' but 'more cognition'.

General Discussion

In the introductory section, we stated that empirical results are often 'seen through the wrong spectacles'. This obliges us to cast a glance at some previous results through our own 'spectacles'. To this end, we selected three approaches frequently discussed in the criminological literature as explaining fear of crime (Hale 1996), namely (a) risk perception (e.g. Ferraro 1995), (b) vulnerability (e.g. Killias 1990; Killias and Clerici 2000; Warr 1984) and (c) experience of crime (Hale 1996:103ff; Winkel 1998).

(a): As mentioned above, the tendency to experience the different facets of situational fear of crime is *constitutive* of dispositional fear of crime. Therefore (synchronous) correlations between the cognitive, the affective, and the behavioural component are no indication of a causal relationship between these variables. Rather, they demonstrate that the logical connection between these components has been successfully (validly) reproduced on an empirical level. Thus, none of the components—including perceived

risk—can be used as a serious explanation of any other component or of the basic concept (see also Greve 1998: 288ff).

(b): Describing a glass as fragile denotes that even the slightest tremor could have grave consequences (i.e. cause it to break). Vulnerability is used in a similar way, describing a high probability that an event will result in grave consequences. (This probability is distinct from the probability that the event will take place.) The same (grave) consequences can, as a rule, be brought about by different events. The loss of a fair amount of money can, for instance, be due to falling share prices, a theft, or losing one's wallet. A person who is financially vulnerable fears financial loss. This fear is obviously not identical to fear of crime; nevertheless they overlap: criminal behaviour does not necessarily result in a loss of money, but some (if not many) criminal incidents do. Due to this overlap, the fear of financial loss can express itself (behavioural component) in a way that resembles fear of crime: The person might avoid carrying much money on her/him because, among other things, it could be stolen.

(c): If crime experience is a fear experience (= fear of crime as state), the question as to whether it increases or decreases dispositional fear is an empirical one (see the first section above). However, the question preceding this is whether the experience of crime can be equated with the experience of fear of crime, seeing as other emotional states such as anger, rage, shame or sorrow may also accompany the experience of crime (Ditton *et al.* 1999). From a psychological point of view, the interesting questions that this raises are (1) under what personal or situational conditions do crime experiences become fear experiences, and (2) under what personal or situational conditions do fear experiences increase (or decrease) the dispositional fear of crime.

Concluding Remarks

In applying psychological concepts to the criminological construct of fear of crime, we hope to have offered a conceptual as well as a methodological framework that will not only increase our understanding of previous results, but also be helpful for the design of future research.

With respect to previous results, we have argued that the validity of the measures used must be taken into account. As shown, this validity can be discussed, thus improving our understanding of empirical results. Where future research is concerned, we hope to have presented a convincing argument for fear of crime to be measured in a multifaceted way, with respect to specific offences on the one hand, and to the different components of fear on the other.

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