# Fear of Crime in the United States: Avenues for Research and Policy

by Mark Warr

Fear of crime affects far more people in the United States than crime itself, and there are sound reasons for treating crime and fear of crime as distinct social problems. After assessing the state of knowledge on fear, this chapter considers whether public fear of crime can and ought to be controlled, and the moral and practical implications of doing so. The discussion draws on the literatures of risk perception and risk communication, as well as research on the etiology of fear and public beliefs about crime. A final objective of the chapter is to identify the most pressing unanswered questions about fear confronting investigators today.

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riminal events capture the attention of the general public in a way that few other events can (cf. Skogan and Maxfield 1981). One reason is that crimes receive extraordinary emphasis in the mass media, from news coverage to feature films to television dramas to crime fiction (Graber 1980; Skogan and Maxfield 1981; Warr 1994). But even without this sort of amplification, crimes are intrinsically interesting events. As condensed and emblematic accounts of human conflict, they raise profound questions about the nature and sources of human motivation, the misfortune of fellow humans, the ability of the state to maintain social order, and, ultimately, the presence or absence of justice in human affairs.

There is another, perhaps more crucial, reason that crimes generate such acute public interest. Criminal events, at their most elemental level, are *frightening* events. They are reminders to all that the world is not a safe place, that danger can strike at any time or location, and that life, in the end, is tenuous and precious.

Judging from the attention it elicited from criminologists, public fear of crime was regarded as a trivial consequence of crime through most of the history of criminology. None of the great names of 19th-century criminology gave the matter much attention, and the situation changed relatively little during the first half of the 20th century. Many investigators, it seems, adopted the commonsensical but questionable notion that fear is directly proportional to objective risk, and assumed that strategies to control crime are ipso facto strategies to control fear. Although the serious personal consequences of criminal victimization were apparent to criminologists, no one allowed that fear *alone* could be debilitating.

Some three decades ago, however, the President's Commission on Law Enforcement and Administration of Justice (1967, 3) offered this brief but trenchant observation: "The most damaging of the effects of violent crime is fear, and that fear must not be belittled." That statement prefigured a fundamental shift in the way that criminologists think about the consequences of crime, one that was to heavily influence the course of criminological research in years to come. To fully understand the social consequences of crime, criminologists came to realize, investigators cannot focus merely on those who become direct victims of crime. Important as these individuals surely are, researchers must also concentrate on those who suffer forms of *indirect* victimization (Conklin 1971, 1975), the most egregious of which is fear of crime.

The wisdom and awful implications of this insight were quickly borne out by survey research demonstrating that fear of crime in the United States is far more prevalent than actual victimization (often by orders of magnitude), and that Americans react to this fear through a variety of precautionary behaviors so pervasive and normative that they form a significant and defining element of American culture (Warr 1994).

Since the days of the President's Commission, hundreds of studies of fear of crime have been conducted, and the topic regularly appears in the journals of the field. For reasons that remain elusive, however, the study of fear seems to have stalled at a rudimentary phase of development, a situation that is in danger of turning into outright stagnation. Investigators continue to revisit the same well-worn issues, and, even after three decades, the meaning of the term "fear" remains a matter of controversy.

This chapter has three principal purposes. One is to identify the most pressing unanswered questions about fear of crime, giving proper recognition to existing lines of research and traditions in the field. Another goal is to consider the merits and prospects for controlling public fear of crime, recognizing that fear has beneficial as well as deleterious consequences, that individuals can be too unafraid as well as too afraid, and that fear depends in part on subjective factors for which there is no objective standard or valuation. The logistic and ethical complexities of controlling fear have thus far deterred researchers from any protracted discussion of the matter, but it is far too important an issue to ignore or defer. A final purpose of the chapter is to offer a brief recounting of the history of research on fear of crime to those unfamiliar with the field.

#### The Nature of Fear

Despite decades of research and debate, investigators have yet to settle on a definition of fear of crime. Over the years, the phrase has been equated with a variety of emotional states, attitudes, or perceptions (including mistrust of others, anxiety, perceived risk, fear of strangers, or concern about deteriorating neighborhoods or declining national morality). Even those whose work is otherwise laudable seem to have trouble defining fear of crime. Ferraro and LaGrange, for example, initially defined fear as "negative emotional reactions generated by crime or symbols associated with crime" (1987, 73). Under that definition, however, it would be difficult to distinguish fear from sadness, anger, despair, or resignation.

Much of the confusion over the meaning of fear seems to arise from a failure to recognize elementary distinctions between perception, cognition, and emotion. Notwithstanding the claims of some, fear is not a perception of the environment (an awareness or experience of sensory stimuli), but a reaction to the perceived environment. Although fear may result from the cognitive processing or evaluation of perceptual information (e.g., a judgment that an approaching male is armed, or that a sound signals danger), fear is not itself a belief, attitude, or evaluation. On the contrary, fear is an emotion, a feeling of alarm or dread caused by an awareness or expectation of danger (see Sluckin 1979). This

affective state is ordinarily (though not invariably) associated with certain physiological changes, including increased heart rate, rapid breathing, sweating, decreased salivation, and increased galvanic skin response (Thomson 1979; Mayes 1979).

Were it not such a serious matter, the disarray among criminologists over the meaning of fear might be amusing. Whatever confusion criminologists may suffer, however, the concept of fear is routinely and profitably used in psychology and the life sciences, with considerably less dispute as to its meaning. In everyday life, the emotion of fear is a common experience for most human beings, for whom it is no more mysterious than anger, joy, or despair. For their part, criminologists continue to exhibit a tendency to isolate or compartmentalize "fear of crime," to assume that it differs in some fundamental way from other ordinary fears, such as fear of traffic accidents, fear of falling, or fear of disease. But there is no evidence that fear of crime is qualitatively different from other forms of fear. What differentiates one from another is merely the object or stimulus of fear.

One common source of confusion when it comes to defining fear of crime occurs when investigators equate fear of crime with the perceived risk of victimization (i.e., the subjective probability of victimization). However, there are compelling reasons (among them predictive accuracy, convergent validity, and logical necessity) to believe that perceived risk is a proximate cause of fear—not fear itself (see Warr and Stafford 1983; Warr 1984, 1985, 1991, 1994; Ferraro 1995). And there is corroborating evidence that measures of fear and measures of perceived risk do not measure the same phenomenon and do not behave similarly with respect to other variables (Rountree and Land 1996; Ferraro 1995). In short, fear is not perceived risk; by all indications, it is its consequence.

Fear of crime may be aroused by an immediate danger, as when an individual is confronted by an armed attacker or is verbally threatened with harm. This type of intense, immediate experience appears to be what some have in mind when they speak of fear of crime. As sentient and symbolic beings, however, humans have the ability to anticipate or contemplate events that lie in the future or are not immediately apparent. Hence people may experience fear merely in anticipation of possible threats or in reaction to environmental cues (e.g., darkness, graffiti) that imply danger. Psychologists commonly use the terms fear and anxiety to differentiate reactions to immediate threats (fear) from reactions to future or past events (anxiety). This terminological clarity has not been adopted in research on fear of crime, but it appears that most measures of fear are designed to capture anxiety rather than fear of victimization. This practice evidently rests on the assumption that anxiety about future victimization is much more common among the general public than fear associated with actual

encounters with crime, a reasonable assumption (see Warr 1994). Hereafter, I will draw the distinction between fear and anxiety where it is heuristically useful or otherwise appropriate.

By its very nature, the term fear seems to imply a deleterious emotional or psychological condition. Unlike love, pleasure, or happiness, fear is not a state that people (thrill-seekers aside) ordinarily pursue. To assume that fear is therefore dysfunctional for an organism, however, is to commit a serious error. On the contrary, the presence of fear in virtually all animals is no accident. Without fear, prey animals would walk amid predators, and humans would stroll across busy freeways, knowingly ingest toxic substances, or leave their infants unprotected. From an evolutionary point of view, animals that lacked fear would be unlikely to live long enough to reproduce, suggesting that fear is a potent natural selection factor (Russell 1979; Mayes 1979).

Fear, then, is not intrinsically bad. It is when fear is out of proportion to objective risk that it becomes dysfunctional. We will return to that issue later as we consider the control of fear.

Fear of crime can be characterized according to a number of properties, including intensity (the English language recognizes many degrees of fear: terror, worry, alarm, apprehension, dread), prevalence (the proportion of a population that experiences fear during some reference period), and duration, both among individuals and within social units (e.g., communities, cities, nations). Because actual criminal events or exposure to immediate signs of danger are usually brief, episodes of fear (strictly defined) are usually brief as well. Anxiety, on the other hand, can become a chronic or obsessive condition (Sluckin 1979).

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When individuals face an ostensibly dangerous environment, they may naturally experience fear for their own personal safety. At the same time, they may also fear for other individuals (e.g., children, spouses, friends) whose safety they value. It is essential, therefore, to distinguish personal fear (fear for one-self) from altruistic fear (fear for others). The prevalence and power of altruistic fear are illustrated by the enormous public reaction that often attends crimes committed against children (e.g., Polly Klaas, Columbine High School). Such reactions surely reflect not only distress for the victim, but also parents' profound concern for the safety of their own children.

One of the strongest indictments that can be leveled against research on fear of crime is the continuing failure of investigators to collect systematic data on altruistic fear, or even to recognize its existence. It is entirely possible that altruistic fear is as prevalent as personal fear (perhaps more so) and has consequences that are distinct from or amplify those arising from personal fear. Research on altruistic fear could also provide insights into the sociometry of fear in social organizations. For example, in family households, do wives fear for their husbands as much as husbands do for wives? Do they share equal fear for their children? How does the age or sex of children affect their parents' fear?

#### The Measurement of Fear

Fear of crime can be measured by soliciting self-reports from individuals or by monitoring physiological processes associated with fear. The emotion of fear is ordinarily accompanied by certain involuntary physiological changes, and these can be used as indicia to measure the presence or intensity of fear (Thomson 1979; Mayes 1979). One of the potential advantages of physiological measures of fear is that it enables the measurement or monitoring of fear *as it is occurring*, that is, in real time in natural settings. Because fear is often a fleeting emotion and may occur at inopportune times or places (e.g., late at night in a downtown parking lot), this is no minor advantage. Another related benefit of physiological measures of fear is that they eliminate many of the problems associated with self-reports, including errors in recall, demand effects, or reluctance to disclose emotions.

Physiological measures of fear have certain limitations, however. They cannot directly reveal the source of fear, i.e., the persons, things, or events to which the subject is reacting. Furthermore, they cannot distinguish fear of crime from other forms of fear (e.g., fear of accidents or threatening weather). These limitations may present few problems in controlled laboratory experiments (when, for example, subjects are presented with dangerous or innocuous scenes) because the cues or stimuli of interest can be isolated and confounding cues eliminated or controlled. However, the number and variety of cues that appear in natural settings suggest that physiological measures of fear may be of limited value in nonexperimental research. Moreover, the physiological changes commonly associated with fear can accompany other emotional states as well (Thomson 1979; Mayes 1979). Thus, for example, there appears to be little physiological basis for distinguishing between persons who react to a violent threat with anger and those who react with fear. Still another problem is that feelings of fear and physiological reactions appear to be more strongly coupled under some circumstances (when, for example, fear is intense) than others (Mayes 1979).

Despite these possible pitfalls, there is a pressing need to explore the uses of physiological measures of fear, because the payoff in knowledge is potentially great. Consider some of the questions that might be answered using a continuous, unobtrusive measure of fear:

- Does fear follow a reliable daily or weekly periodicity?
- What microenvironments—blocks, businesses (e.g., bars), neighborhoods—are most conducive to fear?
- How is fear affected by the presence or absence of companions or bystanders?
- Do certain kinds of persons (minority members, the homeless) evoke fear among some individuals?
- Is being alone in public places more frightening than being with strangers?
- In which types of routine activities—school, work, shopping, or home—is fear most pronounced?
- Does carrying a weapon outside the home reduce or actually exacerbate fear?
- What are the less obvious precautionary behaviors that people undertake in response to fear (e.g., scheduling habits, monitoring the whereabouts of others)?

## Survey measures of fear

Survey research on fear of crime is extensive, but a truly bewildering variety of questions have been used by investigators over the years to measure fear of crime (see Ferraro 1995; Ferraro and LaGrange 1987; DuBow, McCabe, and Kaplan 1979). Much of this diversity stems from variation in the context stipulated in survey questions. Some questions ask about fear during the day; others, about fear at night. Some pertain to fear at home, whereas others question respondents about their fear in their own neighborhood or in their city. Still others ask respondents about their fear when alone or with others. Such sensitivity to context among researchers is commendable, but it is of little value unless such contextual variables are systematically varied and their effects evaluated. Unfortunately, that is rarely the case.

One item, however, has become the *de facto* standard for measuring fear of crime: "Is there anywhere near where you live—that is, within a mile—where you would be afraid to walk alone at night?" The item has become conventional not because it was chosen by social scientists, but because it has been routinely

used by the Gallup Organization and the National Opinion Research Center (NORC) to measure fear since the 1960s. During the past three decades, approximately 40 to 50 percent of Americans surveyed each year have responded affirmatively to this question (for a review, see Warr 1995a).

The Gallup/NORC item has been criticized (e.g., Ferraro 1995) on many grounds: it is hypothetical (how afraid would you be), is limited to nighttime, does not mention crime, and only crudely measures intensity. In fairness, the measured prevalence of fear obtained with this item is not radically different from that measured in other national surveys (see Warr 1995a), and the routine use of the item permits longitudinal comparisons of fear, if only in relative terms.

Much deeper issues are raised by questions of this kind, however. Almost two decades ago, Warr and Stafford (1983) asked residents of Seattle to report their everyday fear, not of "crime" in general, but of a variety of specific offenses ranging from violent crimes like homicide, rape, and robbery to various property and public order offenses. Even today, the rank order of offenses that emerged from their analysis remains startling to many. Murder, for example, was low on the list of fears, while residential burglary outranked all other offenses on fear. Warr and Stafford demonstrated that these findings were not anomalous or even counterintuitive. Contrary to common assumption, they showed, fear is not determined simply by the perceived seriousness of an offense. Instead, the degree of fear attached to particular crimes is a multiplicative function of the perceived seriousness and perceived risk of the offenses. To generate strong fear, an offense must be perceived as both serious and likely to occur. Residential burglary is the most feared crime in the United States because it is viewed as both relatively serious and rather likely. Murder, on the other hand, is perceived to be very serious but unlikely to occur.

Since the publication of Warr and Stafford's findings, only scattered offense-specific data on fear have been gathered (see Warr 1995a; Ferraro 1995; Haghighi and Sorensen 1996). These data generally corroborate the hierarchy of fears observed by Warr and Stafford (insofar as they use comparable offenses), but fear continues to be monitored primarily through generalized, omnibus measures of the sort used by Gallup and NORC. As a consequence, important questions about fear remain unanswered today. For example, when respondents report fear of "crime" in social surveys, what specific offenses do they have in mind? Are those offenses similar across individuals? The answer is that they almost surely are not; fear of rape, for example, is very pronounced among women but presumably not among men (see Warr 1985). On a different question, are particular precautionary behaviors, such as spatial avoidance and timeshifting (carrying out the same activity at an ostensibly safer time), linked to fears of particular crimes?

Another limitation of current survey data is that there are no time-series data on fear of individual offenses. Is rape feared today more than in the 1980s? Do offense-specific fears follow offense-specific trends in the incidence of crime, or do they respond to some "master" offense? Geographic variation in fear should also be considered. Do residents of large cities fear the same offenses as suburbanites or small-town residents? How far does the fear inspired by a particular incident spread, and how does it vary with the nature of the offense? Without systematic, offense-specific data on fear of crime, questions of this sort cannot be answered.

None of this is necessarily to discount the value of omnibus measures of fear. It is not unreasonable to assume that individuals can report an overall assessment of their fear about "crime" as a category of risk, any more than it is possible to list and measure all conceivable offenses that individuals might fear. Omnibus measures, in short, are useful as a complement to, but not a substitute for, offense-specific measures of fear.

#### Behavioral indicators of fear

Nearly all those who have investigated the emotion of fear agree that fear reveals itself through behavior, from the myriad responses of nonhuman species (distress cries, freezing, defecation, tonic immobility, or feigning death) to the complex and sometimes subtle avoidance behaviors of humans (Sluckin 1979). A major problem with behavioral indicators of fear in humans, however, is the difficulty of ascertaining exactly what people are *not* doing (or are doing) out of fear, and convincingly linking it back to fear. Is it obvious that a person with fear of heights is intentionally avoiding tall buildings, bridges, or amusement rides? Is it evident that a person who fears drowning showers rather than bathes for that reason?

However difficult it may be to establish, the link between fear and behavior underscores one of the great ironies of fear: Those most profoundly affected by fear—fear of flying, fear of automobile accidents—may rarely experience it because they have taken extraordinary measures to avoid the source of their fear (Kenny 1963). In the end, then, behavior may be the best indicator of fear, but the behaviors through which fear makes itself known are not always easily identifiable or detectable.

## Transient public episodes of fear

When it comes to measuring fear of crime, what are the appropriate units of analysis (individuals, neighborhoods, cities, nations)? And what is the appropriate time interval for measurement (hourly, daily, monthly, yearly)? The answers depend, of course, on the question to be answered, but the conventional method

for measuring fear—annual surveys employing national samples—is apt to overlook crucial aspects of fear.

Consider an example. No close observer of American society will fail to notice that certain horrific criminal events seize the attention of the general public and become matters of almost universal discussion, speculation, and concern. Although some gain national attention, most remain matters of more local concern, affecting a particular city or portion of a city. In my own city of Austin, Texas, the gruesome murder of four teenage girls in a yogurt store created something approaching mass hysteria in the city and remained the lead story on local television news for many weeks thereafter. Landlords reported that it was difficult to lease apartments in the part of town where the crime occurred, and nearby business owners reported significant declines in revenues.

The annual national surveys ordinarily used to measure fear of crime are too coarse, both spatially and temporally, to capture these sorts of events. Put another way, the scale of such surveys simply does not match the scale of certain events that ought to be measured. Because of this, little is known about the natural history of localized urban "panics," even though they are perhaps the most common social outbreaks of fear. How long do events of this kind ordinarily last? Does fear decay gradually or subside suddenly? Once initial media attention wanes, does fear decline as well? Does the arrest of a suspect affect the course of fear? Does fear decay at different rates among various segments of the population (young and old, male and female)? Even after fear fades, do events of this kind become part of the collective memory and lore attached to districts of a city? ("The south side is dangerous—remember that girl who was killed?") Put differently, is there a permanent "residue" of fear that remains behind after such events?

Filling such gaps in existing knowledge will require surveys of social units much smaller than the nation as a whole. And because the events that incite such incidents are unpredictable and require pre-event (i.e., baseline) measures and repeated postevent measures, the only feasible research strategy is to implement routine surveys in selected jurisdictions. The best design would be a series of small, periodic (e.g., monthly) sample surveys in perhaps a dozen cities over several years. Capturing one transient episode is not enough to adequately describe such events because the duration and intensity of events is likely to depend on characteristics of the crime. (What age and sex were the victim and offender? Was the event provoked?)

Why is it important to measure smaller scale events of this sort? Apart from determining the frequency and geographic dispersion of such events, initial public reactions to criminal events often seem to be based on local media

reports that are sketchy, hasty, and so short on critical details (Did the victim know the suspect? Is the suspect still at large? Has this happened before?) that an intelligent evaluation of the event is all but impossible. In such situations, some individuals will assume the worst and act accordingly. Understanding the features of criminal events that determine the intensity and duration of public panics might lead to more judicious reporting on crime and less unnecessary fear.

# **Regulating Public Fear of Crime**

Social scientists are inclined to approach fear of crime by asking the sorts of questions they raise about other human phenomena: What are its causes? What are its consequences? What are its contemporary and historical parameters (incidence, prevalence, social distribution)? Policymakers may be interested in these questions as well, but ultimately they must confront other immediate issues, some empirical and some normative. Can this phenomenon be controlled, and, if so, at what expense? Assuming it can be controlled, *should* it be controlled? Are there harms as well as benefits associated with intervention? These questions will frame our discussion of this complicated issue.

#### Should fear be controlled?

Imagine for a moment that we possessed a magic dial through which we could control or regulate fear of crime in the United States. Turn the dial to the left and fear immediately decreases proportionately; turn it to the right, and fear rises proportionately.

With the public interest in mind, no doubt our first inclination would be to reduce fear substantially by rotating the dial far to the left. Suppose, however, that the risks of crime are in fact real and substantial. Were we to greatly reduce fear of crime with our device, we would concomitantly increase the chances that individuals would fail to take necessary precautions to protect their own safety (or the safety of others), and thereby increase the risk of victimization.

Reducing fear, in other words, is not necessarily an unqualified good or costfree; by relieving fear, we stand the chance of increasing public injury. On the other hand, were we to turn the dial too far to the right, people would engage in needless precautions and unnecessarily constrain their own lives. At the extreme is a "fortress society" in which citizens withdraw from public life altogether and everyday social intercourse is sharply curtailed.

Which way should the dial be turned, then, or should it in fact be touched at all? In the real world, of course, there is no magic dial or any direct way to

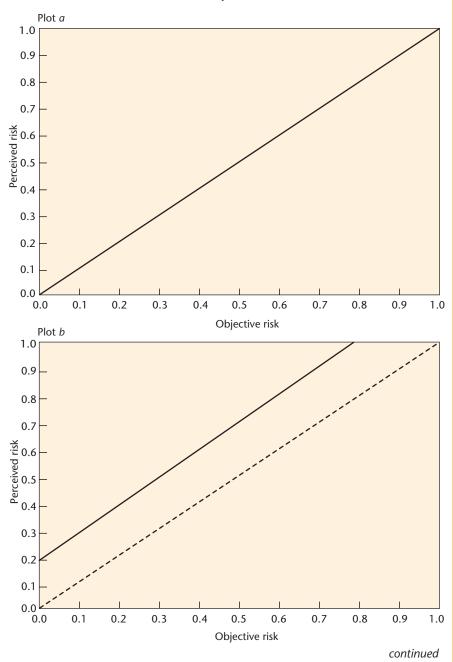
manipulate an emotion like fear (unless one were to propose dispensing sedatives or other pharmacological agents to the public). Instead, we must attempt to control fear by controlling its causes. As noted earlier, research by Warr and others consistently suggests that the proximate cause of fear for any one crime (that is, ignoring differences in the seriousness of crimes) is the perceived risk of that crime. Altering fear, then, requires altering perceptions of risk.

Reformulating the question somewhat, then, which way should the "perceived risk" dial be turned? The answer ultimately depends on the relation between perceived risk and objective risk. Plot a in exhibit 1 illustrates a situation in which perceived risk precisely matches objective risk; any increase or decrease in the latter (over time or place or across crimes) is always matched by a change in the former. In plot b, however, perceived risk always exceeds objective risk by a fixed amount; the public consistently overestimates the risk of victimization. In plot c, exactly the opposite is true; objective risk is greater than the public realizes. In the final plot, d, the relation between objective and perceived risk is more complex. When objective risk is low, the public overestimates risk; when objective risk is high, the public underestimates risk.

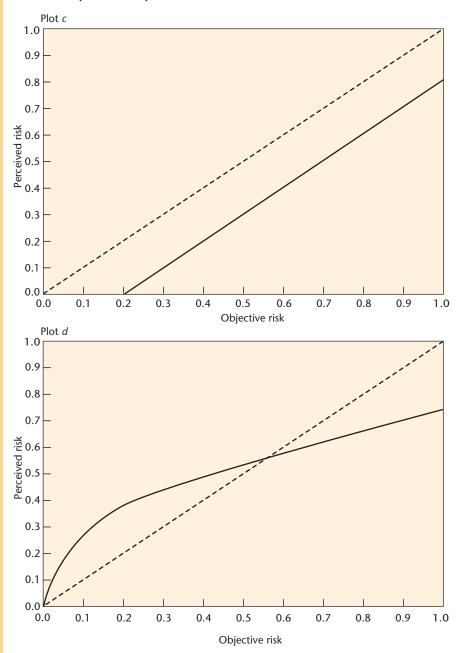
What are the policy options implicit in these examples? If the world truly operated as in plot *a*, the policy choice would be abundantly clear: Do not touch the perceived risk dial; public perceptions are accurate and existing levels of fear are justified. As noted earlier, many criminologists tacitly assume a tight connection between perception and reality when it comes to crime, and thus feel free (indeed, obliged) to set aside perceptions in favor of concentrating on crime reduction itself. The same seems to be true of politicians, who often advocate crime reduction without questioning whether public beliefs about crime are accurate or in need of alteration. Such approaches rest on an implicit but untested assumption, to wit, that any reduction in objective risk will be noticed and appreciated by the public.

If the world were as in plot b—the public overestimates risk and is needlessly afraid—then one would want to turn the dial down and reduce what is clearly unnecessary fear. This is surely the most desirable and morally unequivocal situation because it results in a gain in the public good without any increased exposure to danger. This situation would be difficult to ignore once it is recognized, and it is every social engineer's dream. If, conversely, plot c were true, we would be obligated to raise perceived risk so that the public would be suitably afraid. This is a morally defensible but politically difficult task, one in which the objective is literally to frighten the public. Though it might seem extreme, it is not without precedent; public campaigns against smoking, teenage pregnancy, AIDS, lead paint, dietary salt, and prescription drug risks are but a few examples (e.g., Slovic, Fischhoff, and Lichtenstein 1982;

Exhibit 1. Perceived risk versus objective risk



#### Exhibit 1 (continued)



Fischhoff, Bostrom, and Quadrel 1997). Plot *d* presents a more complicated case, but the policy implication is no different from the preceding instances: take steps to bring objective and perceived risk into congruence.

One might perhaps want to entertain other policy options, of course. If fear reduction were the only consideration, one might argue that no change is required for plot c; in other words, ignorance is bliss. As we have seen, however, ignorance in this case is not the absence of harm, and there is no morally defensible theory that would justify that strategy. Similarly, the situation depicted in plot b would in all

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likelihood produce the lowest possible rate of criminal victimization, but at a personal and social cost that would be difficult to justify.

In the end, then, the question comes down to this: Which of these plots describes the real world? The weight of contemporary evidence suggests that the general public probably exaggerates the risk of serious criminal victimization in a way that resembles plot d.

What is this evidence? A small but persuasive body of studies in cognitive psychology (see Lichtenstein et al. 1978; Slovic, Fischhoff, and Lichtenstein 1979, 1980, 1982, 1987) indicates that individuals tend to significantly exaggerate the risk of rare lethal events (that is, causes of death like tornadoes, homicide, floods, fire, accidents, or botulism), while underestimating the risk of common lethal events (e.g., deaths due to heart disease, diabetes, or cancer). Slovic, Fischhoff, and Lichtenstein (1980, 1982) attribute this tendency to a common error of judgment arising from the availability heuristic (Tversky and Kahneman 1982) or the tendency to judge the frequency of events by the ease with which they can be recalled or imagined.

Why would individuals readily imagine or remember what are actually rare causes of death? Slovic, Fischhoff, and Lichtenstein (1980, 1982) cite evidence from Combs and Slovic (1979) showing that public perceptions concerning the frequency of causes of death closely match the frequency with which those causes are reported in newspapers. Newspaper accounts, in turn, are glaringly at odds with reality:

[M]any of the statistically frequent causes of death (e.g., diabetes, emphysema, various forms of cancer) were rarely reported by either paper during the period under study. In addition, violent, often catastrophic, events such

as tornadoes, fires, drownings, homicides, motor vehicle accidents, and all accidents were reported much more frequently than less dramatic causes of death having similar (or even greater) statistical frequencies. For example, diseases take about 16 times as many lives as accidents, but there were more than 3 times as many articles about accidents, noting almost 7 times as many deaths. Among the more frequent events, homicides were the most heavily reported category in proportion to actual frequency. Although diseases claim almost 100 times as many lives as do homicides, there were about 3 times as many articles about homicides as about disease deaths. Furthermore, homicide articles tended to be more than twice as long as articles reporting disease and accident deaths. (Slovic, Fischhoff, and Lichtenstein 1982, 468)

These investigators did not insist on a causal connection between media reports and public perceptions, but they suggested that the pattern of errors in the two is much too similar to be coincidental.

How do perceptions about one class of hazards (causes of death) relate to another (the risk of criminal victimization)? Because the most serious crimes (homicide, rape, robbery) are also the rarest forms of crime, the preceding findings suggest that the public is likely to exaggerate the frequency of rare, serious crimes and underestimate the frequency of more common, less serious ones. In the early 1980s, Warr (1980; see also Bordley 1982) presented direct evidence of this phenomenon, showing that the objective and perceived incidence of offenses in four cities were related by a power function  $(y=aX^b)$ . That is, people tended to systematically overestimate the frequency of rare offenses while underestimating the frequency of common ones. Public perceptions

were remarkably accurate as to the relative frequency of different crimes (for example, people recognize that homicide is less common than burglary), but considerably less accurate as to absolute frequencies.

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are thus a powerful amplifying mechanism when it comes to crime; information known only to a few can within hours or days become known to thousands or millions.

Aside from these findings, there is an another reason to suspect that the true relation between perceived and objective risk probably resembles plot d (or perhaps b). When the general public is asked where they obtain most of their information about crime, the resounding answer is the mass media, especially news coverage of crime. Graber (1980), for example, reported that 95 percent of respondents in her survey identified the media as their primary source of information on crime, although 38 percent cited other sources as well (conversations or, more rarely,

personal experience). Skogan and Maxfield (1981) found that more than three-quarters of respondents in the three cities they surveyed reported watching or reading a crime story on the previous day (44 percent had read a newspaper crime story, 45 percent had watched a crime story on television, and 24 percent had done both). The mass media are thus a powerful amplifying mechanism when it comes to crime; information known only to a few can within hours or days become known to thousands or millions.

The media are most likely to report precisely those crimes that are least likely to occur.

What is the image of crime presented in the mass media? A number of forms of distortion in news coverage of crime have been identified and documented, distortions that tend to exaggerate the frequency and the seriousness of crime. In the real world, for example, crimes occur in inverse proportion to their seriousness; the more serious the crime, the more rarely it occurs (e.g., Erickson and Gibbs 1979). Thus, in the United States, burglaries occur by the millions, robberies by the hundreds of thousands, and homicides by the thousands. In news coverage of crime, however, the emphasis is on "newsworthiness," and a key element of newsworthiness is seriousness; the more serious a crime, the more likely it is to be reported. By using seriousness as a criterion, however, the media are most likely to report precisely those crimes that are least likely to occur (Skogan and Maxfield 1981; Sherizen 1978; Sheley and Ashkins 1981; Roshier 1973), or exactly the same pattern outlined previously for lethal events.

Among other things, this "mirror image" depiction of crime means that the media place extraordinary emphasis on violent crime. Skogan and Maxfield (1980) reported that homicides and attempted homicides constituted one-half of all newspaper crime stories in the cities they examined, even though homicides are but a minute fraction of all offenses. Furthermore, the number of homicide stories reported in city newspapers, they found, did not closely match the actual homicide rates of the cities examined, suggesting that the amount of space devoted to crime has more to do with the "newshole" allocated to crime by editors than with the true crime rate.

News coverage of crime has been criticized on other grounds as well, including the practice of using crime news as "filler" when other news is slow, the use of crime news ("If it bleeds, it leads") to attract larger audiences, and the tendency to report trends in crime using numbers rather than rates, thereby ignoring changes in population (see Graber 1980; Warr 1980, 1994, 1995b).

The fact that the media present a distorted image of crime, of course, is no guarantee that the public believes or heeds what it sees, hears, and reads. And public

perceptions (or exaggerations) of the incidence of crimes do not necessarily translate into estimates of personal risk (Slovic, Fischhoff, and Lichtenstein 1982). Still, the evidence on public perceptions of crime and media distortion of crime news is strikingly corroborative, and it is difficult to believe that the media have little or no effect on perceptions, especially when the public cites the media as their primary source of information on crime and spends so much time watching, reading, and listening to the media (Skogan and Maxfield 1981).

Given the gravity of fear as a social problem and the presumptive role of the mass media, it is truly astonishing to find that there is virtually no systematic research that assesses the impact of the media on public perceptions of crime or fear of crime. To be sure, there is known to be a positive correlation between fear of crime and the number of hours spent watching television (Skogan and Maxfield 1981), but the causal direction is unclear and the correlation may well be spurious with respect to age and other viewer characteristics.

In the end, the causal influence of media crime coverage cannot be established without simultaneous measurements of (1) media content, (2) public exposure to that content, and (3) the postexposure effects of media communications. Such research is difficult to conduct in natural settings because of the enormous quantity and variety of media and interpersonal messages on crime to which the public is exposed (e.g., Graber 1980). Remarkably, a great deal of Federal money is spent today to document the extent of crime and violence on television, but rarely is there any accompanying research on the effects of such televised violence on those who are exposed to it. It is, in essence, a research design with no dependent variable.

One study that approaches an ideal design and points the way for future research was conducted by Heath (1984). She questioned samples of newspaper readers in 36 cities and examined their fear of victimization in light of the characteristics of the newspapers they read. Heath found that fear was higher among readers of newspapers that emphasized local crimes and crimes that were sensational (bizarre or violent) or random (apparently unprovoked). However, reports of sensational or random crimes evidently reduced fear if those crimes were not local. Apparently, readers were reassured by learning that such crimes were occurring to other people in other places.

### Can fear be regulated?

The discussion thus far leads to a tentative conclusion that the public exaggerates the risk of serious criminal victimization. It is worthwhile to reiterate that this situation, if true, is the most desirable problem to remediate; fear can legitimately be reduced without any attendant increase in the risk of victimization.

Let us turn now to the second question posed earlier. Assuming that fear ought to be regulated, can it be regulated, and, if so, how?

There are two general approaches to this problem. One might be called self-corrective, meaning that it focuses on means to alter the way that crime is presently depicted in the mass media. The other approach could be described as counteractive, meaning that it attempts to discount or replace messages promulgated through the mass media.

Let us begin with the former approach, bearing in mind that media news coverage is the public's primary source of information about crime. Assuming that such coverage substantially affects public perceptions of crime, how might news coverage of crime be changed for the better?

Consider the characteristics of everyday news coverage. Crime is ordinarily reported in the form of isolated, discrete incidents ("three young adults were injured today in a standoff with police") or occasionally as counts ("thus far this year, 13 robberies have been reported to the police"). (See, for example, Graber 1980.) These reported events are not a complete or exhaustive list of all crimes. Instead, they are selected from a much larger pool of crime events available for reporting. What is more, the selection process is not random or representative, but quite the opposite. Not only are violent crimes disproportionately emphasized (particularly homicides), but crimes may be selected merely because they are odd or unusual, involve prominent persons or public figures, or fit a preestablished journalistic theme like "crimes against the elderly" or "careless tourists" (Skogan and Maxfield 1981; Gordon and Heath 1981; Sherizen 1978; Ericson, Baranek, and Chan 1987; Fishman 1978, 1981).

To imagine the consequences of such reporting practices, consider this question: Could an individual reliably estimate the magnitude and causes of population growth in a city through isolated, incomplete, and nonrepresentative interviews with those who have left or

From a public information perspective, what often seems to be missing in news coverage of crime is not raw information on criminal events (on the contrary) but an informed perspective about crime risks. Only occasionally are criminal events presented as population-based rates, from which one could estimate personal risk or risk to loved ones. And rarely are such rates placed in any sort of seasonal, historical, demographic, or geographic context. From the point of view

have moved in?

Trying to detect patterns or achieve valid inferences about crime from isolated, sporadic news accounts is an exercise in futility.

of readers or viewers, trying to detect patterns or achieve valid inferences about crime from isolated, sporadic news accounts is an exercise in futility.

What is seriously lacking in news reporting, and might be of greatest benefit to the public, is information about the risk of criminal victimization relative to other aversive or benchmark life events. To illustrate, what is the probability that I will be robbed this year compared with the chances that I will be involved in a serious automobile collision, eat contaminated food in a restaurant, contract an infectious disease at work or school, or suffer a heart attack? How does my age, sex, racial/ethnic identity, or location affect my chances? Many Americans, including journalists, might be surprised to learn that they are more likely to be a victim of suicide than homicide, that automobiles kill more individuals than all violent crime, or that, as a group, children face greater danger from their parents than from strangers.

The didactic value of what I have called informed perspective can be illustrated by comparing two possible television news accounts of the same hypothetical event. The first reads:

A homicide occurred late last evening at 223 East Lansing. The victim, a 23-year-old male, was stabbed twice and died shortly thereafter at Our Lady General Hospital. According to the police, no arrest has been made.

#### Now add these words:

Fewer than 1 in 10,000 persons living in our city are victims of homicide each year. Most, as in this case, are young males who die in alcohol-related arguments with persons they know. The number of homicides thus far this year—27—is no higher than average for the previous 5 years, and two-thirds of those homicides occurred within the same three census tracts of the city. For more information, contact the Metro Police Department at 366–8942.

Journalists may object that the latter version is too long and dull, but a crime worth reporting is surely worth properly contextualizing. In defense of journalists, police crime reports often are sketchy or incomplete, and there is the pressure of deadlines. On the other hand, it is not the police who are eager to release incomplete reports, and reporters' professions about public safety are sometimes little more than transparent ruses to be the first to release the story. In any event, audiences are likely to fill in sketchy or missing information by assuming the worst, which is all the more reason to place reports of crime within a larger factual context.

#### Counteractive measures

Aside from (or in addition to) changing media crime-reporting practices, information on crime can be promulgated through alternative channels. Messages about crime can be disseminated through a variety of means, including pamphlets; billboards, transit ads, and other signage; magazine and newspaper ads; Web sites; and oral presentations at public gatherings. Such a strategy might seem inconsequential compared with the awesome power of television and newspapers, but messages of this type have figured heavily in public campaigns about smoking, heart disease, and other health risks (see generally, National Research Council 1989).

When it comes to crime, at least two public agencies are a natural choice for conveying such messages. One is the municipal police department. Most modern police departments have a public information office to dispense information on crime to persons (often journalists) on request. There is no major logical or logistical jump in moving from a reactive function of this type to a more proactive version of public information. The logical connection between crime and the police makes the police a perfect agent for crime communications, and, notwithstanding occasional scandals, the police enjoy enormous public support in the United States (e.g., Warr 1995a). I witnessed this function of the police when they embarked on a door-to-door campaign to inform residents of one Austin neighborhood that several rapes had recently occurred there. Where the costs of distribution pose a problem to police departments, there is no lack of civic organizations and volunteers willing to place pamphlets or booklets in mailboxes or on front porches.

Slovic, Fischhoff, and Lichtenstein (1982, 484) have also argued that a proper setting for communicating risks is the school:

Informing people, whether by warning labels, package inserts, or extensive media programs, is but part of the larger problem of helping people cope with the risks and uncertainties of modern life. We believe that some of the responsibility lies with our schools. Public school curricula should include material designed to teach people that the world in which they live is probabilistic, not deterministic, and to help them learn judgment and decision strategies for dealing with that world. [T]hese strategies are as necessary for navigating in a world of uncertain information as geometry and trigonometry are to navigating among physical objects.

Although modern schools are swamped with demands for their time and suggestions about their curriculums, a case can be made that the risks of crime are of sufficient size and gravity that at least some time ought to be devoted to them, if only to alleviate unnecessary fear throughout life. In occasional

lectures to schools and churches, I have been struck by the almost desperate hunger of many people for objective information on crime and its risks.

No matter who the messenger is, what is the content that messages about crime should convey? In recent years, an entirely new field of research in science has emerged known as risk communication (cf. National Research Council 1989). Concerned with the methods, problems, and efficacy of communicating risk to the general public, the field has concentrated largely on new technological risks (nuclear power, pesticides, toxic waste disposal), medical/health risks (recombinant DNA, smoking, seat belt use, high cholesterol, alcohol abuse, cancer) and both natural and manmade disasters (hurricanes, floods, aircraft crashes, lightening, tornadoes, earthquakes). No one, to my knowledge, has grappled with risk communication about crime, but the lessons of this field are nonetheless useful and enlightening.

One lesson brings to mind the primary obligation of the physician: First do no harm. The effect of a communication can only be ascertained empirically. Untested messages can have unintended consequences, and therein lies the danger:

Poor risk communications may cause more damage than the risks they are intended to control. They can lead to wrong decisions by omitting key information or failing to contradict misconceptions. They can create confusion by prompting inappropriate assumptions or emphasizing irrelevant information and produce conflict by eroding the audience's faith in the communicator. They can cause recipients to be unduly alarmed or complacent or to undertake ineffective actions. Because communicators' intuitions about recipients' perceptions cannot be trusted, there is no substitute for empirical validation. (Bostrom et al. 1994, 796)

Fischhoff, Bostrom, and Quadrel (1997, 993) similarly observed:

Effective risk communication requires careful empirical research. Poor risk communication can often cause more public health (and economic) damage than the risk it attempts to describe. One should no more release an untested communication than an untested medical device.

In short, risk communications must be pretested before they are disseminated.

Fischhoff (1989) argues that an essential prerequisite for designing risk communication is the need to know what the public does not know, a matter that ordinarily requires empirical research and cannot simply be presumed. In that connection, Fischhoff, Bostrom, and Quadrel (1997) offer an ingenious idea for altering public perceptions of risk. In keeping with evidence that people are

often highly overconfident about the information or beliefs they hold, these investigators suggest that one function of communications is to give people "the appropriate degree of confidence in their beliefs," especially in cases "where people confidently hold incorrect beliefs that could lead to inappropriate actions" (1997, 997). As an example of misplaced confidence, they cite an investigation showing that a majority of teenagers are not aware that a single beer affects driving ability as much as a shot of vodka and that mistaken teenagers are usually very confident about their incorrect information. Studies of this kind are particularly useful for identifying misconceptions that need to be targeted in messages.

How should communications about risk be constructed? What elements should they contain? Information about risk is often highly technical, but technical terms and examples should be avoided (Covello, von Winterfeldt, and Slovic 1987; Fischhoff 1989). Risks can be presented in everyday terms using alternative examples. For example, the proportion of Americans who are murdered each year in the United States (fewer than 1 in 10,000 per year) is roughly the same as 1 day in 27 years, or 1 inch in 833 feet, or 1 gallon in a home swimming pool. By contrast, the crude probability that a household will be burgled in the United States is about 1 in 10–20 per year, or roughly the chance of drawing two consecutive cards of the same suit from a fresh poker deck. Crosshazard comparisons (where the risk of, say, murder is compared with the risk of an auto accident, disease, or lightning strike) can be useful for illustrating risk as well, but they can be difficult to interpret or understand if not properly constructed (Slovic, Fischhoff, and Lichtenstein 1982).

Information in communications must also be relevant to the audience:

Poorly chosen information can . . . be seen as wasting their time (indicating insensitivity to their situation), . . . can take up the place (in the media or school) that could be filled with pertinent information (imposing an opportunity cost), and . . . can lead them to misunderstand the extent of their knowledge. (Fischhoff, Bostrom, and Quadrel 1997, 997)

Communicators must also ensure that events or risks discussed in the communication have the same meaning to recipients as to themselves (e.g., Do respondents know what a burglary is? Do they confuse it with robbery?), and they need to be honest and straightforward about the limitations of their own information (Fischhoff 1994; Fischhoff, Bostrom, and Quadrel 1997). The public is often skeptical of experts and government officials, and honesty about the accuracy of their estimates can help to offset mistrust.

It is impossible to fully survey the literature on risk communication here, but it is useful to offer two summaries of effective communications by prominent investigators in the field. These are not merely seat-of-the pants recommendations but careful statements based on extensive research and experience. First, in an appendix to a National Academy of Sciences conference on risk assessment, Covello, von Winterfeldt, and Slovic (1987, 117–118) offer the following advice on risk communication:

- Use simple, graphic, and concrete material, avoiding technical or specialized language wherever possible.
- Compare risks within a carefully defined context that is relevant to the target audience.
- Avoid comparisons of risk that may appear to the audience to be non-comparable because of different qualitative characteristics—for example, the risk of smoking compared to that of living near a nuclear power plant.
- Understand and recognize qualitative concerns, such as concerns about catastrophic potential, dread, equity, and controllability.
- Identify and explain strengths and limitations of different risk measures, and present (whenever possible) alternative indexes of risk—for example, measured or expected fatalities or incidences of diseases for the entire population and for the most- and least-exposed individuals.
- Identify, acknowledge, and explain uncertainties in risk estimates.
- Provide opportunities for people to learn how to interpret risk information.
- Relate on a personal level—that is, when people ask personal questions such as "Can I drink the water?" respond in a personal way without minimizing risks and uncertainties.
- Recognize the power of subtle changes in the way that information is presented and use such knowledge responsibly.
- Understand and recognize that health and environmental debates often involve much broader considerations, including political values and ideologies.

In addition, Fischhoff, Bostrom, and Quadrel (1997, 998) offer this advice:

Once information has been selected, it must be presented in a comprehensible way. That means taking into account the terms that recipients use for understanding individual concepts and the mental models that they use for

integrating those concepts. It also means building on the results of research on text comprehension. That research shows, for example, that comprehension improves when text has a clear structure and, in particular, when the structure conforms to recipients' intuitive representation of a topic; that critical information is more likely to be remembered when it appears at the highest level of a clear hierarchy; and that readers benefit from 'adjunct aids,' such as highlighting, advanced organizers (showing what to expect), and summaries. Such aids might even be better than full text for understanding, retaining, and being able to look up information.

# Fear of Crime and the Perceived Seriousness of Offenses

The discussion thus far has concentrated on public perceptions of risk and the rationales and mechanisms for altering such perceptions. Although altering perceptions of risk is surely a defensible strategy, it is not the only means for reducing fear. Earlier we saw that the fear evoked by different crimes depends not only on their perceived risk but also on their perceived seriousness. Crimes vary enormously in their perceived seriousness, from homicide to trespassing and rape to shoplifting, and there is also variation (though to a much smaller degree) among individuals in the perceived seriousness of any particular crime (Wolfgang et al. 1985; Warr 1993, 1994).

The importance of seriousness when it comes to generating fear suggests that fear can be regulated or controlled by altering the perceived seriousness of crimes. At first glance, that suggestion may seem preposterous. Do we reduce fear of homicide by convincing people that homicide is not a serious crime? Of course not. However, one of the elements that enters into peoples' judgments of seriousness is the perceived harmfulness of a crime (see Warr 1993), and there is evidence that people sometimes attach greater consequences to criminal events than is warranted.

Some years ago, Warr (1985) uncovered strong correlations between fears of certain crimes. Examined closely, these configurations of offenses often consisted of crimes that can occur contemporaneously or in sequence (e.g., burglary and rape, robbery and homicide). The strong correlations between fear of these offenses suggested that the general public often views these offenses as crimes that ordinarily accompany one another in the same event (what Warr called "perceptually contemporaneous offenses").

Perception and reality are sometimes at odds, however, when it comes to criminal events. For example, rape and homicide appear to be perceptually contemporaneous offenses for many women ("If I'm raped, he'll probably kill me.") (Warr 1985). But rape rarely results in death. In 1996, for example, fewer than 1 in 1,000 rapes and attempted rapes known to the police in the United States resulted in death (U.S. Department of Justice, Federal Bureau of Investigation 1997). Because many rapes (but not homicides) fail to come to the attention of the police, that figure actually overstates the risk. Although rape is a serious crime, it is not ordinarily a lethal event.

Similarly, many people seem to associate residential burglary with violent attack or injury, but burglaries normally occur when no one is home, evidently because burglars do not want to be injured by armed homeowners (Miethe and McCorkle 1998). The point is that educating the public about the likely course and consequences of victimization might well prove to be an effective and morally defensible strategy for reducing fear. As in the earlier discussion of perceived risk, it appears to be a "win win" situation; fear can be reduced without deleterious side effects.

Much of the public also appears to be unaware that the outcome of criminal events often depends in part on the actions of victims. In robberies, for example, there is a strong correlation between resistance and the probability of injury, and law enforcement agencies often recommend against resistance in such situations. Risk communications notifying the public of these facts and discouraging resistance might be effective in reducing fear as well as unnecessary injury to those who become victims.

# Fear and Cues to Danger

What has been said thus far about controlling fear bears more directly on anxiety about crime (concern about future victimization) than fear of crime in the strict sense (reactions to immediate threats). In everyday life, fear of crime (strictly defined) is most likely to occur as people navigate their environment away from home—walking to school, grocery shopping, traveling to work, going out for entertainment, running errands—and encounter signs of danger in the environment.

What are such signs of danger? Using a factorial survey design, Warr (1991) identified several cues to danger that affect people in public places. One particularly potent cue is darkness; by its very nature, darkness obscures potential threats that may lurk in the vicinity. Another cue to danger is novelty; unfamiliar environments are more frightening than familiar ones (a phenomenon not limited to humans; see Russell 1979). Still another cue is the presence of bystanders or companions. The presence of other people in the immediate

vicinity ordinarily acts to alleviate the fear that individuals would otherwise feel if they were alone. This calming effect does not operate, however, if those "others" are perceived to be dangerous persons. Warr found that young males are frightening to many individuals, and few sights are more alarming to the public than a group of young males.

In additional to these cues, a number of investigators have examined various "signs of incivility" that can provoke fear (cf. Ferraro 1995). These include physical features of neighborhoods like graffiti, broken windows, trash and litter, stripped cars, or abandoned buildings, and social cues like beggars or homeless persons, raucous groups of young people, drug sellers or users, and prostitutes. Empirical evidence regarding the potency of such cues in producing fear is generally supportive (LaGrange, Ferraro, and Supancic 1992), although largely indirect, and investigators rarely control for objective crime rates when examining the effects of incivilities.

Manipulating environmental cues to danger offers a concrete and potentially powerful means for regulating public fear of crime. This is perhaps more feasible than altering established practices of news coverage or deemphasizing crime in popular entertainment. In many cases, the costs of adopting this strategy are likely to be minor—painting over graffiti, picking up litter and waste, or improving lighting. The efficacy of such measures could be readily measured by having impartial audiences judge the perceived safety of an area before and after implementation. The results are likely to show what architects and shopkeepers have known for centuries: that a clean, orderly, and aesthetically pleasing environment draws crowds and creates its own social definition of place.

Manipulating streets and neighborhoods to reduce fear, however, is not altogether uncontroversial. For example, should a genuinely dangerous neighborhood be made to appear less frightening, even if it remains dangerous? The risk, of course, is that innocent citizens will fail to recognize—indeed, be lured to—a location that is deceptively dangerous. On the other hand, the physical improvement of a neighborhood may help to restore community control and actually reduce the risk of criminal victimization. That is the sort of process envisioned by Wilson and Kelling (1982) in their famous broken windows hypothesis, but the evidence for it remains uncertain (e.g., Skogan 1990).

There is no easy answer to the question, but commercial and residential areas that appear frightening and dangerous are surely doomed in the long run. Perhaps the best answer to the problem is to upgrade law enforcement efforts, if only temporarily, in areas that are undergoing improvement, so that changes in apparent safety are accompanied by changes in *real* safety as well, and dangerous places do not become an invitation to unwary visitors. Beyond this, the

sorts of cosmetic but symbolically important measures discussed previously are surely justified—indeed, almost imperative—in areas that have experienced real declines in objective risk. To look dangerous and actually *be* safe is a tragedy that demands attention.

# The Rationality of Fear

All strategies for controlling public fear of crime presuppose an answer to this question: How much fear is justified or appropriate? The premise of this chapter is that fear is justified when perceived risk is congruent with objective risk. In research on fear of crime, however, the issue has often been framed by reference to the "rationality" of fear. Early investigators often expounded on the rationality of public fear of crime, particularly when applied to specific population groups who were viewed as inordinately afraid (women, the elderly).

When applied to fear of crime, however, the concept of rationality is an ill-advised notion. As it is most often used with respect to fear, the concept of rationality implies a high degree of correspondence between some subjective phenomenon (perceived risk, fear) and an objective standard or counterpart. Such a comparison is possible when it comes to risk because risk has both a subjective and objective component; one can estimate objective risk for many hazards and ask people to report their perceptions as well.

But the same is not true when it comes to fear, because fear is not simply a function of perceived risk. As we have repeatedly observed, fear also depends on the perceived seriousness of crimes, which in turn depends on the value that individuals place on persons and property. In general, people tend to judge the seriousness of crimes in a similar fashion (Wolfgang et al. 1985), but in real life there is ample room for variation. What price is to be put on a lost wedding album, a recording of a deceased parent, a lifetime collection of art, or the life of a favorite uncle? Ultimately, such valuations are wholly subjective and personal, and economists and insurers aside, attempts to quantify or objectify such matters are likely to prove futile.

Another reason for concentrating attention on perceived risk rather than fear itself is that the same level of perceived risk often produces different levels of fear among different people, especially between men and women and young and old (Warr 1984). The reasons for this seem to have a lot to do with perceptually contemporaneous offenses. Among women, for example, the threat of rape often carries over to other crimes. What for men is the perceived risk of robbery would for many women be the perceived risk of robbery, plus rape, plus additional injury (Warr 1985; Ferraro 1996). Yet even when two individuals

react differently to the same perceived risk of the same hazard, it would be difficult to characterize one person's fear as more "rational" than the other. Such differences in fear are likely to stem, once again, from the value placed on persons and property.

In the end, social scientists may legitimately judge the perceptions or information that underlie people's reactions to crime and gauge the gap between perception and reality. They are in no position, however, to tell people the value they should place on the eleThere are entire industries in the United States that rely on fear of crime to sell products and services.

ments of their lives and how much they should fear their loss or destruction.

# The Selling of Fear

Earlier we noted some distortions that arise in media news coverage of crime. Though it is beyond dispute that crime is sometimes used by newspapers and networks to attract readers or viewers, it is probably fair to say that media misrepresentations of crime are often inadvertent rather than intentional. The individual and social consequences of fear are so substantial, after all, that it is difficult to believe that any organization or individual would deliberately increase fear merely for reasons of self-interest.

In fact, however, there are entire industries in the United States that rely on fear of crime to sell products and services, from home security systems, anti-auto theft devices, and travelers checks to personal security devices (sprays, alarms, and other weapons), property insurance, and cellular phones. Some firms are responsible and circumspect in the claims they make for their products. Others deliberately exaggerate or dramatize the risks of criminal victimization in an effort to frighten potential purchasers into buying products, some of which are of questionable utility.

I personally experienced the extent of such practices a few years ago when I was building a new home and was contacted by a national home security service that wished to meet with me and explain their services. After politely listening to the agent, I told him that I wanted some time to think the matter over. On hearing this, the agent blithely told me that the last customer who had postponed just a few days came to deeply regret it because his daughter was raped by an intruder during the time he took to reach a decision. I did not believe this unlikely story, and perhaps the salesman did not expect me to. But some would believe it and would be pressured into a purchase by force of their own fear.

In a recent commercial that repeatedly aired on national television, a young woman is driving on a lonely road at night, when a man in a pickup truck suddenly appears from behind and pursues her. The narrator asks the viewer what he or she would do if pursued by a such a "human predator" and offers advice on how to get out of the situation. The logical connection between this staged incident and the company itself (a major petroleum company) was tangential at best. It seemed that the company was deliberately provoking fear, particularly among younger women, in an effort to trumpet its concern for public safety and garner public trust and gratitude.

There is no law, of course, against using fear of crime as a sales tool, and the rule of *caveat emptor* applies to crime prevention as much as any other realm of commerce. But there is something deeply cynical about exploiting people's concern for their safety (and their loved ones) for monetary reasons. If only as a research question, it would be intriguing to know whether certain segments of the population—the aged, those who live alone (widows and widowers), students, young women—are targeted by such industries for special attention and the degree to which fraudulent claims are used to sell products and services. To be sure, one of the strange ironies of life is that, even if they *are* fraudulent and unnecessary, such products may actually function to reduce fear among those who decide to invest in them.

If fear is useful as a sales device, it also has value to politicians, who are sometimes quick to exploit it as a political tool. By some accounts, the 1968 election campaign of Richard Nixon, with its emphasis on law and order, was the first to capitalize on crime and fear of crime for political advantage. In the Bush/Dukakis presidential contest, the infamous Willie Horton commercials appeared to play a pivotal role. Today crime continues to figure heavily in local and national political campaigns, and there appears to be little prospect for change. In a just world, the cynical exploitation of fear for political purposes would be appreciated for what it is. Yet, if nothing else, the eagerness of political figures to capitalize on public fear of crime is testimony to its central place in modern life.

# The Consequences of Fear: The Big Picture

In the final analysis, what makes fear of crime so important as a social problem is the depth and breadth of its consequences for our society. Over the years, investigators have identified many behavioral precautions associated with fear of crime. These range from relatively trivial and nearly universal behaviors (e.g., turning on lights and locking doors when leaving home) to more personally and socially consequential actions (not leaving the house at night or going out alone) (cf. Skogan and Maxfield 1981; Warr 1994).

What is often missing in research on fear of crime, however, are studies of the large-scale social consequences of fear. To illustrate, it appears that the ecology of American cities is regulated to a considerable degree by fear of crime. According to survey data, the single most common reaction to fear of crime in the United States is spatial avoidance; that is, staying away from places that are perceived to be dangerous (Warr 1994). In surveys of Seattle and Dallas, for example, 63 per-

The ecology of American cities is regulated to a considerable degree by fear of crime.

cent and 77 percent of respondents, respectively, reported that they "avoided certain places in the city," and when Dallas residents were asked to identify the most dangerous areas of their city, more than four of five reported that they did not go near or through those areas regularly. Along with spatial avoidance per se, fear of crime also seems to affect the routes that people take when they travel, the form of transportation they employ, and the times they choose to leave their residence (see DuBow, McCabe, and Kaplan 1979; Warr 1994).

Such habits of avoidance must inevitably affect commerce, road use, leisure activities, and social interaction. Retail businesses that are located in putatively dangerous areas are likely to suffer a shortage of customers, and reputedly dangerous neighborhoods are likely to find themselves socially isolated (Conklin 1975; Skogan 1990). Remarkably, however, there is no systematic evidence on the financial impact of fear of crime on retail business, nor evidence on the degree to which fear isolates neighborhoods from ordinary social intercourse. The same is true when it comes to leisure activities. The impact of fear on interstate and intercity tourism is an obvious topic for research, but aside from occasional journalistic accounts (as in the infamous murders of tourists in Florida in the early 1990s), there is little research on the economic consequences of fear on tourism. Additionally, public use of facilities such as parks, beaches, campsites, and other recreational areas is surely affected by fear, but the nature and magnitude of this effect remains unknown.

There is another potential consequence of fear. Some commentators have remarked on the apparent tendency of Americans to spend increasing amounts of time, including their own leisure time, in their own homes, in what amounts to a general withdrawal from the outside world. The trend is sometimes described in humorous terms (like "couch potato") and supported by reference to sale of items such as big-screen TVs, home theaters, and hot tubs. Assuming that this trend is indeed under way, what are its causes? One cause, of course, may be public fear of crime and the avoidance behavior it engenders. Although survey data show little change in the prevalence of fear in recent decades, a significant national increase in fear did occur in the late 1960s (Warr 1995a). Even a constant crude prevalence

rate of fear can produce changes in behavior if those changes stem from cumulative exposure to fear. If this process is in fact under way, its scale and depth are sobering: A "free" society increasingly retreats to its dwellings in a form of asylum from an ostensibly dangerous world.

The asylum argument touches on a major longstanding controversy concerning fear of crime. Is fear ultimately a disintegrative force in a society? Does it disrupt normal social intercourse, making citizens afraid to greet or talk to one another, and undermine the civility and trust that makes civic life possible? When substantial portions of the American public are in fact afraid to leave their house at night, when they are afraid to travel on foot or traverse certain sections of their city, it is difficult to deny the power of fear to tear the social fabric asunder. Nowhere is that more evident now than in Mexico City, where fear of crime, by disrupting transportation, recreation, and commerce, has threatened the city's ability to function as a coherent system. It has also apparently undermined the legitimacy of political leaders and law enforcement itself (Newshour with Jim Lehrer 1999).

What is so often overlooked in discussions of fear, however, is the apparent ability of fear to create or increase social cohesion. As the sociologist Emile Durkheim noted long ago, crime integrates communities by drawing them together in the face of danger. Today, many millions of Americans participate in community crime watch programs, cooperative police/community associations, "bring back the night" marches and rallies, and other forms of communal protection. Whether such integrative forces are capable of counteracting the disintegrative effect of fear is difficult to say. But even if such activities compensate for a decline in face-to-face interaction in everyday life, they may do little to repair what seems to be a loss of confidence in social and political institutions. If the first priority of government is to protect its own citizens, widespread public fear of crime can only be construed as a failure of government to meet that responsibility.

#### Conclusion

Fear is a natural and commonplace emotion. Under many circumstances, it is a beneficial, even life-saving emotion. Under the wrong circumstances, it is an emotion that can unnecessarily constrain behavior, restrict freedom and personal opportunity, and threaten the foundation of communities.

What differentiates fear of crime from some other hazards of life is that it often rests on highly uncertain information about risk. Most citizens have little scientific foundation for their beliefs about crime. In daily life, they are constantly confronted with information about crime from sources that may not appreciate nor care about the (in)accuracy of that information and that may use crime to entertain, sell, advertise, exploit, or win votes. In the end, most citizens are left to reason as best they can about the risks of crime. Because the consequences of victimization can be catastrophic for themselves and those they love, many are likely to err on the side of caution, worrying about and guarding against crime more than is necessary or defensible.

Given the ubiquity of messages about crime in our society and the costs of inaccurate information, it is incumbent on criminal justice officials to provide the public with reliable information about crime, including information about the risk of victimization for different criminal offenses, the sources and likelihood of error in those estimates, the nature of victimization events (including the risk of injury associated with those events), and, where known, the personal, social, and temporal/spatial characteristics that increase or reduce risk. Without information of this kind, citizens will remain uniformed about the risks of crime. In that condition they will indeed become victims, if only to those for whom crime and fear of crime are merely tools to entertain, titillate, or sell.

Crime, after all, is not like some virulent new disease whose risks and epidemiology are poorly understood. The risks associated with many criminal offenses are understood with a degree of certitude that would startle many casual observers, and such information was developed largely at public expense. The problem today is not the absence of knowledge itself, but rather the failure of criminologists and public officials to demystify crime for the general public and to present a reasoned and understandable version of the facts of crime. The gap that remains between the state of knowledge and public awareness is not merely unfortunate, it is dangerous.

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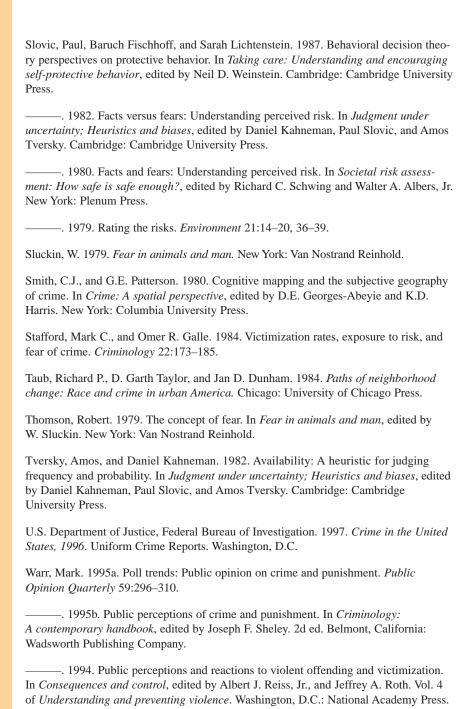
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