

Fear of Victimization and Health

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Fear of victimization may have consequences for subjective well-being. I develop and test a model linking fear of victimization to subjective health. I hypothesize that two processes link fear to subjective health—psychological and behavioral. Specifically, I hypothesize that fear of victimization increases psychological distress, and fear decreases outdoor physical activity, especially walking. High levels of psychological distress and low levels of walking, in turn, are associated with poor self-reported health. I find empirical support for the hypothesized processes in a representative national sample of 2031 adults aged 18 to 90 interviewed by telephone in 1990. The negative association between fear and health is explained largely by psychological distress and walking. However, a significant direct effect remains. I conclude with suggestions for future research linking crime and health, focusing on the need for collecting information on community disorganization. Community context is likely the ultimate exogenous variable—the one that sets in motion the destructive cycle of fear, distress, inactivity, and poor health described here.

KEY WORDS: fear; victimization; distress; community; health.

1. INTRODUCTION

Does the fear of victimization have consequences for subjective well-being? Although a number of researchers speculate about the consequences of fear for well-being, few systematically examine them. Research on the fear of crime examines largely the antecedents (i.e., Garofalo and Laub, 1978; Clemente and Kleiman, 1977), not the consequences for individual well-being. If the fear of victimization is a social problem in and of itself, apart from actual victimization (Lewis and Salem, 1986), one must ask why it is a problem. Garofalo and Laub (1978) develop, but do not test, the idea that fear of crime affects the subjective quality of life. Moore and Trojanowicz (1988) speculate, but present no evidence, that fear “produces a loss in personal well-being” (p. 3): fear makes people feel vulnerable,

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isolated, and anxious; it means that people stay indoors instead of enjoying a walk to the grocery store, school, or work. I develop and test a model linking fear of victimization to subjective health. I hypothesize that there are two processes that link fear to health—psychological and behavioral. Specifically, I hypothesize that fear of victimization increases psychological distress, and fear decreases outdoor physical activity, especially walking. Increases in psychological distress and decreases in walking, in turn, negatively affect health.

2. THE CONSEQUENCES OF FEAR

2.1. Behavioral Consequences: Walking

People who are afraid of being robbed, attacked, or physically injured, who are afraid to leave the house, may limit their outdoor physical activity. A disorganized urban environment, characterized not just by crime, but by the erosion of commonly accepted standards and values, is the prototype of a fear-creating context (Lewis and Salem, 1986). Here the young men hang out on the streets; they engage in minor deviance and create the impression of danger. The hallways and the streets are dirty, noisy, and menacing. People who feel vulnerable such as women or the elderly stay inside and try to keep their children inside. Many do not walk outside unless they have to. At the other extreme is the pleasant middle-class neighborhood. The streets are clean and well lit; the sidewalks are wide and inviting. During the day, especially, there is no appearance of danger and people are not afraid. People take walks for pleasure and exercise. Commuters walk to the train station or to work.

Although there is evidence for these antecedents of fear, there is little direct evidence in the literature that fear, in turn, reduces outdoor physical activities such as walking. Women, the elderly, nonwhites, the poor and poorly educated, and those living in disorganized communities characterized by high crime rates are more afraid of being victimized (Garofalo and Laub, 1978; Garofalo, 1979; Clemente and Kleiman, 1977; Lewis and Salem, 1986; Erskine, 1974; Parker and Ray, 1990). There is speculation that fear, in turn, limits activities. Clemente and Kleiman (1977, p. 519), for example, speculate that “people change their usual behavior. They stay off the streets at night, avoid strangers, curtail social activities.” Both actual victimization and fear of crime correlate with reporting a “limitation in activities *because of crime*” (Garofalo, 1979; Liska *et al.*, 1988; Miethel *et al.*, 1990). In contrast, however, Hindelang *et al.* (1978) found that people were more likely to say that others had changed behaviors because of crime than to say that they had, and Skogan (1976, p. 16) claims that “people are concerned about crime . . .

but life goes on.” Comparing two cities, Ginsberg (1984–1985) found that elderly Jews in deteriorating neighborhoods who feared crime retreated behind closed doors in Boston but continued their daily outdoor activities in London. Ward *et al.* (1986, p. 327) found that fear had “little relation to activity patterns.”² Thus, the literature leaves unanswered the question of whether fear of victimization has direct behavioral effects on activities such as walking.³ I suspect that it does. I examine walking as the indicator of outdoor physical activity because it is the most common one (Ross and Hayes, 1988).

2.2. Walking and Health

Exercise of all kinds improves health. Although some researchers once thought that only aerobic exercise improved health, recent evidence indicates that regular exercise of all kinds does. Compared to the inactivity of a sedentary life-style, any physical inactivity reduces mortality (Berkman and Breslow, 1983). For example, walking, gardening, and leisurely bicycling reduce the risk of coronary heart disease (Magnus *et al.* 1979). Walking reduces the risk of back pain, osteoporosis, obesity, high blood pressure, constipation, varicose veins, adult-onset diabetes, and possibly colon cancer; and walking improves subjective, self-reported health (U.S. Preventive Task Force, 1989; Segovia *et al.*, 1989; Leon *et al.*, 1987). Thus, walking is a likely mediator of the hypothesized link between fear and health.

2.3. Psychological Consequences: Distress

People who are afraid of being robbed, attacked, or physically injured, who are afraid to leave the house, may feel depressed and unhappy. Garofalo and Laub (1978) propose a link between fear of victimization and subjective quality of life, and others speculate that fear of victimization increases anxiety, worry, and psychological discomfort (Clemente and Kleiman, 1977; Garofalo, 1979), but few have tested these suggestions. Among the elderly, however, there is evidence that fear reduces subjective well-being, including morale and satisfaction with one’s neighborhood (Ward *et al.*, 1986; Yin, 1982).

²Shotland *et al.* (1979) assessed emotional and behavioral responses to crime by the use of hypothetical vignettes. Student subjects read a story about crime and were asked about their responses. Hypothetical responses may or may not be related to actual emotional and behavioral responses.

³Fear of crime has been shown to have other behavioral effects, especially avoiding certain areas and high-risk situations and increasing home security and other protective behaviors (DuBow *et al.*, 1979; Garofalo, 1981; Skogan and Maxfield 1981; Warr, 1985).

As used here, the term psychological distress refers to an unpleasant subjective state characterized by depressed mood and the absence of positive emotions (Mirowsky and Ross, 1989). Depression includes feeling sad, demoralized, lonely, hopeless, worthless and not feeling happy, hopeful about the future, or that life is enjoyable. Depression has two components: mood, described above, and malaise, or bodily states. The malaise of depression, for example, includes having trouble sleeping, feeling tired, run down, and listless, having trouble concentrating, and feeling that everything is an effort. For this analysis I use only the mood components of depression, so as not to confound psychological distress with physical health, the final outcome. I conceptualize psychological distress and well-being as opposite poles of a single continuum. At the well-being end people usually feel happy, enjoy life, and feel hopeful about the future; at the distress end they feel demoralized, sad, and lonely (Mirowsky and Ross, 1989).

2.4. Psychological Distress and Health

Psychological distress is associated with poor health (Gove and Hughes, 1979). People who are depressed lack motivation; many have given up. Without motivation and energy, people who are depressed are less likely to quit smoking, exercise, or eat right. They are more likely to drink heavily (Aneshensel and Huba, 1983). Thus distress has indirect effects on health, mediated by health behaviors. Distress also has direct effects on the body's biological system. For example, the fight or flight reaction can cause minor physiological responses such as sweating, shortness of breath, rapid heart beat, and trembling; continued activation in situations of chronic stress can lead to ulcers and high blood pressure (Selye, 1985). The helplessness of depression weakens the body's immune system, making it less able to fight off disease (Seligman, 1975). Many of the symptoms of depression are physiological: feeling tired, run down, not having any energy, and having stomach aches, headaches, and backaches (Mirowsky and Ross, 1989; Ross *et al.*, 1990). Depression and other forms of psychological distress reduce survival (Somervell *et al.*, 1989). The severely depressed die at a rate two to four times that of others, adjusting for age, sex, socioeconomic status, preexisting chronic health problems (hypertension, heart disease, stroke, cancer), and fitness (blood cholesterol, lung capacity, overweight, smoking); only a small part of the excess mortality among the depressed is due to suicide (Bruce and Leaf, 1989). Thus, distress affects minor health problems and life-threatening health problems. Psychological distress is a likely mediator of the hypothesized link between fear and health.

3. METHODS

3.1. Hypotheses and Analysis

I expect that fear of victimization affects health through two processes: fear reduces the probability of walking, and fear increases distress. Walking in turn is associated with good health, and distress with poor health. Thus, fear reduces the health-enhancing behavior of walking, and fear increases the health-damaging feelings of psychological distress. These processes are illustrated in Fig. 1. Because the data are cross-sectional, they cannot be used to demonstrate the validity of the hierarchy assumptions. However, the data could fail to substantiate the theory, if, given the order assumptions, I fail to find the hypothesized processes. In this sense, the data in combination with the assumptions provide a test of the theory. The processes I postulate are not meant to deny that there may be reciprocal effects. For example, depression and poor physical health affect each other (Aneshensel *et al.*, 1984). Over time, fear, distress, inactivity, and poor health may form a self-amplifying system, each exacerbating the effect of the other. In this first attempt to link fear and health, I test a preliminary model. Hypotheses derived from the theory and the analyses to test them are described below.

*H*₁: Fear of victimization is negatively associated with walking (adjusting for age, sex, marital status, race, education, and income).

*H*₂: Fear of victimization is positively associated with psychological distress (adjusting for age, sex, marital status, race, education, and income).

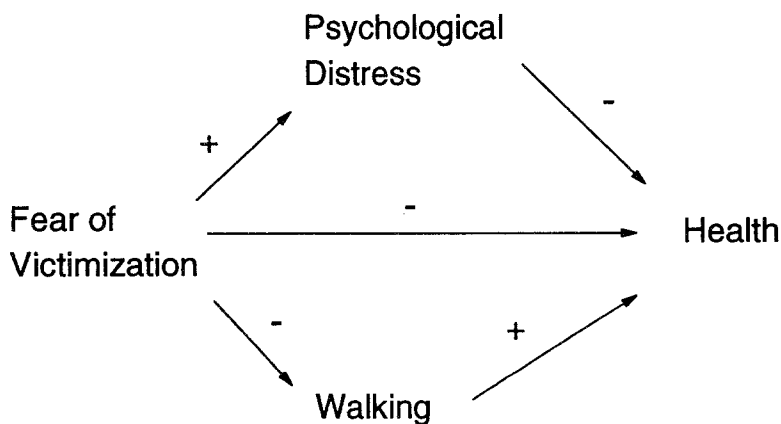


Fig. 1. Model of the processes by which fear of victimization affects subjective health.

*H*₃: Walking is positively associated with health (adjusting for age, sex, marital status, race, education, income, fear, and distress).

*H*₄: Psychological distress is negatively associated with health (adjusting for age, sex, marital status, race, education, income, fear, and walking).

*H*₅: Walking and psychological distress explain the negative association between fear and health

The primary focus concerns the health consequences of fear, mediated by walking and distress. First, however, I briefly look at who is afraid of being victimized. I predict fear of victimization from age, sex, race, education, family income, and marital status. Next, I examine the consequences of fear by first predicting the probability of walking and of psychological distress from fear, controlling for sociodemographic characteristics. Finally, I predict health in two steps. In the first step I regress health on fear, controlling for sociodemographics. In the second step I add walking and psychological distress to the equation to see if they explain the effect of fear on health.

3.2. Sample

This research is based on a 1990 telephone survey of a national probability sample of U.S. households. Random digit dialing was used to ensure the inclusion of unlisted numbers (Waksberg, 1978). Within each household, the person 18 years or older with the most recent birthday was selected as respondent. [This is an efficient method to select randomly a respondent within the household (O'Rourke and Blair, 1983).] The response rate of 82.3% yielded a total of 2031 respondents, ranging in age from 18 to 90. This analysis is part of a larger project entitled "Work, Family, and Well-Being."

3.3. Measurement of the Variables

Health is measured as the person's subjective assessment of general health. It is a self-report of subjective health, coded very poor (-2), poor (-1), satisfactory (0), good (1), or very good (2). Although it is a single question, self-reported health is a valid and reliable measure of health (Davies and Ware, 1981; Idler and Kasl, 1991; Maddox and Douglas, 1973; Mossey and Shapiro, 1982). Health is a multidimensional concept that is more than the absence of morbidity. According to the World Health Organization (1958), health is a state of physical and mental well-being, not simply the absence of disease. Well-being is best assessed by the subjective judgment of the individual (Sagan, 1987). The idea that a physician knows an individual's health best has been replaced by the idea that the person is best at assessing his or her own health (Maddox and Douglas, 1973). Furthermore, self-reported health is highly correlated with physician's assessments and

with measures of morbidity and mortality (Mossey and Shapiro, 1982; Kaplan, 1987; Idler and Angel, 1990; Idler and Kasl, 1991). Compared to those who rated their health as excellent, people who rated their health as poor were three times more likely to die in the following 6 years (Mossey and Shapiro, 1982). Controlling for physician diagnosis and for health behaviors such as smoking, alcohol consumption, and physical activity, the self-reported health of middle-aged men was a strong predictor of subsequent mortality (Idler and Angel 1990). Self-reported health was a significant predictor of men's and women's mortality, controlling for chronic conditions, health behaviors, use of health services, and social resources (Idler and Kasl, 1991). Men who rated their health as poor at the baseline interview had a death rate 6.75 times higher than that of men who rated their health as excellent; for women, the death rate was 3.12 times as high (Idler and Kasl, 1991). The fact that self-rated health is a predictor of mortality over and above traditional measures of chronic and acute disease, physician assessment, made by clinical examination, physical disability, and health behaviors such as smoking, indicates that self-reported health is capturing a multidimensional concept that is more than the absence of disease (Davies and Ware, 1981; Idler and Kasl, 1990; Liang, 1986).

Outdoor physical activity is measured as walking. Respondents were asked, How often do you take a walk (includes walking to work, the train station, etc.)? Responses were coded never (0), once a month or less (1) about twice a month (2), about once a week (3), twice a week (4), three times a week (5), more than three times a week (6), or every day (7).

Psychological distress is measured as depressed mood and lack of positive mood (Mirowsky and Ross, 1989). Respondents were asked, How often in the past week have you felt sad, felt lonely, felt you couldn't shake the blues, enjoyed life, felt hopeful about the future, and felt happy? The first three symptoms are coded from 0 (never) to 7 (every day), and the final three are coded in reverse. The distress index is the mean of the nine items and has an alpha reliability of 0.85.

Fear of victimization is measured as the response to the question, "How many days in the past week, have you feared being robbed, attacked, or physically injured?" Responses are coded from 0 to 7. The mean response is 0.387, with a standard deviation of 1.348. This measure of fear is conceptually distinct from perceived risk of victimization (i.e., "How likely is it that someone around here might be held up or attacked?" or "What do you think your chances are for getting robbed, etc?"). The survey contains a second question that taps fear of victimization indirectly: "On how many days have you felt afraid to leave the house?" This item is correlated 0.273 with the first. I ran all analyses with the first item only and with an index of both questions, coded as the mean response. The results were substantively the

Table I. Means, Standard Deviations, and Correlations Among the Variables

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 1. Fear | | | | | | | | | | |
| 2. Age | -0.018 | | | | | | | | | |
| 3. Male | -.085 | -.069 | | | | | | | | |
| 4. Married | -0.094 | -0.001 | -0.014 | | | | | | | |
| 5. Ed | -0.071 | -0.177 | 0.045 | 0.072 | | | | | | |
| 6. Income | -0.058 | -0.115 | 0.100 | 0.274 | 0.353 | | | | | |
| 7. White | -0.041 | 0.028 | -0.005 | 0.145 | 0.058 | 0.067 | | | | |
| 8. Distress | 0.218 | -0.049 | -0.029 | -0.183 | -0.122 | -0.112 | -0.044 | | | |
| 9. Walking | -0.053 | 0.036 | 0.038 | -0.010 | 0.061 | 0.035 | -0.033 | -0.108 | | |
| 10. Health | -.0145 | -.0289 | 0.087 | 0.086 | 0.277 | 0.214 | 0.099 | -0.252 | 0.094 | |
| Mean | 0.387 | 43.548 | 0.369 | 0.606 | 13.222 | 38.354 | 0.872 | 1.001 | 4.288 | 1.171 |
| SD | 1.348 | 17.218 | 0.483 | 0.489 | 2.593 | 28.349 | 0.334 | 1.356 | 2.616 | 0.888 |

same in all cases, except those noted. Therefore I present all results with the first item only because it is the most conceptually clear and because some people are afraid of victimization inside the home as well. (Analyses with the two-item index are available from the author on request.)

Age, sex, marital status, education, and family income are sociodemographic controls. Age is coded in number of years, education in number of years of formal education completed, and family income in thousands of dollars. Sex is coded 1 for males and 0 for females, and marital status is coded 1 for people who are married or living together as married and 0 otherwise.

Table I shows the means and standard deviations of all the variables and the correlations among them.

4. RESULTS

4.1. The Antecedents of Fear

The regression analysis in Table II shows that men, married people, and the well educated are significantly less afraid than women, the nonmarried, and the poorly educated. In addition, results of the two-item index analysis indicate that whites are also significantly less afraid than nonwhites ($b = -0.127$, $SE_b = 0.065$, $\beta = -0.043$, $P < 0.055$). Controlling for other characteristics, family income is not significantly associated with fear. In these data, age is not significantly associated with fear either. A number of these findings deserve discussion. First, multivariate analysis indicates that it is education, not family income, that reduces fear. Second, married people are less afraid than the nonmarried. This finding, while not previously established, is predicted from a life-style theory of victimization: guardianship, as measured by household size, reduces victimization (Miethe *et al.*, 1990). Compared to the nonmarried, married people are more likely to live with

Table II. Fear of Victimization Regressed on Sociodemographic Characteristics ($N=2016$)^a

| | <i>b</i> (SE _{<i>b</i>}) | β |
|---------------|------------------------------------|---------|
| Age | -0.003 (0.002) | -0.036 |
| Male | -0.236** (0.062) | -0.085 |
| Married | -0.235** (0.063) | -0.085 |
| Education | -0.033* (0.012) | -0.063 |
| Family income | -0.000 (0.001) | -0.010 |
| White | -0.098 (0.090) | -0.024 |
| Constant | 1.277 | |
| R^2 | 0.022 | |

^a*b*, unstandardized regression coefficient; SE_{*b*}, standard error of *b*; β , standardized regression coefficient.

* $P < 0.01$.

** $P < 0.001$.

and to go out of the house with at least one other person, which probably reduces fear. Third, in contrast to earlier findings, age does not significantly increase fear. This could be because this is a representative national sample, not just a sample of cities, where older people might be more afraid (i.e., Garofalo, 1979), since urban dwellers fear crime more than do rural dwellers (Belyea and Zingraff, 1988). [Clemente and Kleiman (1977) found a small positive effect of age on fear in a representative national sample but do not report whether it is significant.] Until replicated and explained, the nonsignificant effect of age on fear reported here should be viewed with caution, although others have suggested that the fear of crime among the elderly has been overstated (LaGrange and Ferraro, 1987). Fourth, race has a larger effect on an index that includes fear of leaving the house than it does on fear of victimization alone. This could indicate that nonwhites live in more dangerous neighborhoods that increase fear of going outside. Marital status and sex have the largest effects on fear, followed by education.

4.2. The Consequences of Fear

The total association between fear and health is -0.145 ($P < 0.05$) (see Table I). People who are afraid of being robbed, attacked, or physically injured report worse health than those who are not afraid. What is the empirical process by which fear affects health?

Table III shows that fear is positively associated with distress, and fear is negatively associated with walking. Controlling for sociodemographic characteristics, people who are afraid of being victimized report significantly higher levels of psychological distress. (In addition, older people, married people, and those with high educational attainment have lower levels of psychological distress than young people, the nonmarried, and the poorly educated.) Controlling for sociodemographic characteristics, people who are afraid of being victimized walk significantly less than those who are not afraid. (In addition, older people and the well educated walk more than younger people and the poorly educated.) Fear has a larger effect than any sociodemographic characteristic considered here on psychological distress, and it has a moderate, significant effect on walking.

Equation (1) in Table IV shows that, controlling for sociodemographic characteristics, fear is negatively associated with health. People who are afraid of being victimized report significantly worse health. (In addition, men, the well educated, those with high family incomes, and whites report better health than women, the poorly educated and poor, and nonwhites. Older people report worse health than younger.) Equation (2) shows that psychological distress is associated negatively with health. Walking is associated positively with health. Furthermore, walking and distress explain a

Table III. Distress and Walking Regressed on Fear of Victimization and Sociodemographic Controls ($N=2016$)

| | Distress | | Walking | |
|---------------|----------------------|---------|--------------------|---------|
| | $b(SE_b)$ | β | $b(SE_b)$ | β |
| Fear | 0.194*** (0.022) | 0.193 | -0.091* (0.043) | -0.047 |
| Age | -0.005** (0.002) | -0.068 | 0.008* (0.003) | 0.051 |
| Male | -0.033 (0.060) | -0.012 | 0.173 (0.121) | 0.032 |
| Married | -0.409*** (0.062) | -0.147 | -0.098 (0.124) | -0.018 |
| Education | -0.051*** (0.012) | -0.097 | 0.062** (0.024) | 0.062 |
| Family income | -0.002 (0.001) | -0.038 | 0.002 (0.002) | 0.021 |
| White | 0.018 (0.088) | 0.005 | -0.301 (0.176) | -0.038 |
| Constant | 2.179 | | 3.343 | |
| R^2 | 0.089 | | 0.013 | |

* $P < 0.05$ (two-tailed tests).

** $P < 0.01$ (two-tailed tests).

*** $P < 0.001$ (two-tailed tests).

Table IV. Health Regressed on Fear of Victimization, Sociodemographic Controls [Eq. (1)], Distress, and Walking [Eq. (2)] (*N*=2016)

| | Equation (1) | | Equation (2) | |
|-----------------------|------------------------------------|---------|------------------------------------|---------|
| | <i>b</i> (SE _{<i>b</i>}) | β | <i>b</i> (SE _{<i>b</i>}) | β |
| Fear | -0.080*** (0.014) | -0.122 | -0.052** (0.013) | -0.079 |
| Age | -0.013*** (0.001) | -0.247 | -0.014*** (0.001) | -0.264 |
| Male | 0.081* (0.038) | 0.044 | 0.072* (0.037) | 0.039 |
| Married | 0.049 (0.039) | 0.027 | -0.005 (0.038) | -0.002 |
| Education | 0.064*** (0.007) | 0.187 | 0.056*** (0.007) | 0.163 |
| Family income | 0.003*** (0.001) | 0.091 | 0.003*** (0.001) | 0.081 |
| White | 0.213*** (0.055) | 0.080 | 0.217*** (0.053) | 0.081 |
| Distress | | | -0.136*** (0.014) | -0.207 |
| Walking | | | 0.021** (0.007) | 0.062 |
| Constant | 0.549 | | 0.774 | |
| <i>R</i> ² | 0.172 | | 0.218 | |

* *P* < 0.05 (two-tailed tests).
 ** *P* < 0.01 (two-tailed tests).
 *** *P* < 0.001 (two-tailed tests).

large part, but not all, of the association between fear and health. Together they explain 35% of the association: $-0.080 - (-0.052) / -0.080 = 0.35$. Nonetheless, a significant direct effect of fear on health remains.

The processes by which fear affects health, illustrated in Fig. 1, are supported. Tables III and IV show that hypothesized effects are significant, and in the direction hypothesized.⁴

⁴The total causal association between fear and health is -0.122 [standardized regression coefficient (β) from eq. (1) in Table IV]. This total causal association is composed of a direct effect of fear on health (-0.079), an indirect effect mediated by walking ($-0.047 \times 0.062 = -0.003$) and an indirect effect mediated by distress ($0.193 \times -0.207 = -0.040$). ($-0.079 - 0.003 - 0.040 = -0.122$). [Note that the total causal association of fear and health (-0.122), adjusted for sociodemographic characteristics, is smaller than the total association (-0.145) shown in Table I. Thus some of the unadjusted association is spurious, due to common precursors to both fear and health—largely education and gender—illustrating the importance of multivariate analysis.] The model assumes that walking and distress are not causally associated, but in reality, they probably affect each other, thus amplifying the indirect effects of fear on health.

5. DISCUSSION

5.1. Summary

Tables III and IV and Fig. 1 indicate support for the model of the links between fear and health. People who are afraid of being assaulted, robbed, or physically injured report worse subjective health than those who are not afraid. The negative association between fear and health is explained in large part by psychological distress and outdoor physical activity. People who fear being victimized are more distressed and walk less, both of which worsen health. All of the hypotheses are supported. However, a significant direct effect of fear on health remains. The outdoor physical activity of walking and the psychological distress of depression explain much of the association between fear and health, but not all. Other social psychological attributes and other activities may explain the rest. People who fear being victimized likely have high levels of mistrust. Mistrust of others could worsen health by interfering with the establishment of social networks and the receipt of emotional support, crucial to health (Berkman and Breslow, 1983; House *et al.*, 1982). Fear also could have a direct behavioral effect on social support. People who are afraid of being victimized may not go out to see other people, to visit friends or family, to go to a social gathering; they may become more and more isolated in their house or apartment. People who are socially isolated have high rates of illness and death (Berkman and Breslow, 1983). Fear may reduce other physical activities, in addition to social activities. Healthful exercise other than walking—such as jogging, playing softball, dancing, skating, or simply playing with ones children outside—may be decreased by fear.

5.2. Limitations of the Data and Directions for Research

This model indicates the pervasive indirect effects of crime on health. However, I have no indicator of the concrete effects—actual victimization. Clearly one way crime and health are related is through direct effects of violent victimization causing injury and death. Homicide is the twelfth leading cause of death in the United States (National Center for Health Statistics, 1990). Injury and death are the most direct effects of crime on health. As Moore and Trojanowicz (1988, p. 1) articulate, “Their wounds, bruises, and injuries are the concrete signs of criminal victimization.” In addition, actual victimization increases fear of victimization.

Fear is more than just the subjective correlate of prior victimization, however. Prior victimization is a weak predictor of fear of crime (Garofalo and Laub, 1978; Skogan, 1976; Hindelang *et al.*, 1978; Garofalo, 1979; Moore and Trojanowicz, 1988; Donnelly, 1989). In some cases there are

wide discrepancies between the risk of victimization and the fear of victimization. For example, women are much less likely to be victimized than men but are more afraid, probably because they feel more vulnerable and less able to defend themselves (Garofalo and Laub, 1978; Garofalo, 1979; Skogan and Maxfield, 1981). Because actual victimization is not the major determinant of fear, it may not be a serious weakness that these data do not contain the information. Nonetheless, future research on the links between crime and health should collect victimization data.

If fear of crime is not simply a response to victimization, what is it? Individual-level feelings of fear are probably based on socialization that increases perceived vulnerability for some groups, such as women (who are not taught to fight or are taught to be dependent on others) (Garofalo, 1979); on lack of guardianship for others, such as the unmarried; and on the perception of real risks for others, such as those with little education (Skogan and Maxfield, 1981).

These perceptions of risk are shaped by the reality of the community and the neighborhood in which the individual lives (Skogan and Maxfield, 1981; Skogan, 1990). Lack of social control, disorganization, and incivilities, more than just crime, likely increase fear. According to Lewis and Salem (1986, p. xiii), "Fear of crime is more than a response to a particular victimization event. Rather it is a consequence of the erosion of social control." In socially disorganized neighborhoods, people do not share values and standards; they do not perceive common interests; everyone is an enemy to be feared, not an ally to be relied on (Lewis and Salem, 1986; Garofalo and Laub, 1978). Lack of neighborhood cohesion increases fear (Box, Hale, and Andrews, 1988). Socially disorganized communities are characterized by minor deviance, noise, and trouble with neighbors. "It appears that the fear of direct predatory criminal attack is intimately connected with the concern about a whole range of misbehaviors" (Garofalo and Laub, 1978, p. 248). "Incivilities" associated with the breakdown of social control (such as vandalism, drug use, and loitering teenagers) increase fear among public housing tenants (Rohe and Burby, 1988) and Chicago residents (Lewis and Maxfield, 1980). For example, a woman may be afraid, not just of having her purse snatched, but of simply walking past a group of raucous teenage boys on the street, an X-rated movie theater or book store, a boarded-up building or vacant lot, or a drunk, drug addict, or pan-handler (Skogan 1986). Fear is a reflection of a larger concern for the community (Wilson, 1969; Garofalo and Laub, 1978; Moore and Trojanowicz, 1988). It is this information on community context, more even than actual victimization data, that is crucial to the continued study of fear of crime and health.

Community context is likely the ultimate exogenous variable—the one that sets in motion the destructive cycle of fear, distress, inactivity, and poor

health. I suggest that future research on fear and health measures two aspects of community context: objective characteristics of a community and people's perceptions of their community. The first might include the crime rate, the percentage of persons unemployed, the percentage of households headed by females, the average household size, the average family income, the housing density, the size of the city, town, etc., in which the neighborhood is located, and so on. (Of course, the geographic boundaries of a neighborhood or community must be defined in terms of what is subjectively considered a neighborhood or community.) People's perceptions of their community might include their views of others in the neighborhood and the degree of social integration: how well people get along with neighbors, how much they are bothered by noise from neighbors, how much they trust people in the neighborhood, whether mothers consider it safe to let the children outside, whether drug and alcohol abuse creates perceived danger in the neighborhood, whether neighbors talk to each other, lend each other things, get together for meals, and take care of each other's children.

Neighborhoods characterized by high levels of integration, order, and control likely reduce fear compared to those characterized by disintegration and lack of control. A deteriorated neighborhood may set in motion a self-amplifying system of fear, distress, mistrust, inactivity, social isolation, and poor health, all of which in turn affect each other and ultimately further destroy the community. Personal and interpersonal disintegration likely reinforce each other. Fear and mistrust may break down people's ability to form mutually supportive bonds to help each other deal with the threats in the neighborhood, which further destroys social organization (Moore and Trojanowicz, 1988; Skogan, 1986). Although it might be hypothesized that fear of crime would encourage people to become involved in their community's attempt to prevent crime, this is not the case (Lavrakas and Herz, 1982). It is not the fearful who become involved in neighborhood anticrime activities, but those who are integrated and active in the community (Lavrakas and Herz, 1982). I suspect that fear increases mistrust, decreases the formation of supportive networks, and further erodes community integration. I encourage further research on the reciprocal effects of the many aspects of subjective well-being set in motion by neighborhood environment.

In 1978, Garofalo and Laub (p. 242) developed and called for research on a "framework that treats the fear of crime as an aspect of the concern for community which is linked, in turn, with the experience of the quality of life." In the decade that followed, however, little research was done to examine the consequences of fear for the subjective quality of life, especially health. This study is a first step. It is a small part of the emerging field linking community, crime, and health.

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