# Social Support and Victims of Crime: Matching Event, Support, and Outcome<sup>1</sup>

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Investigated the buffering properties of six types of social support (three perceived, three received) with regard to four psychological consequences (depression, anxiety, fear of crime, hostility) of criminal victimization (violent crime, property crime). These relationships were examined using longitudinal data collected from a sample composed of representative subsamples of victims and nonvictims. Effects of the perceived support measures (perceived appraisal support, perceived tangible support, self-esteem) were more pervasive than those of the received support measures (received informational support, received tangible support, received emotional support). Perceived support consistently exhibited buffering effects, protecting both violent and property crime victims against various symptoms they would have otherwise experienced. The stress-buffering capabilities of received support were limited to informational and tangible help protecting victims of violence from experiencing excessive fear. These findings are discussed in the context of recent theoretical developments concerning the stress-support matching hypothesis.

Fifteen years of research have established the stress buffer model as the most prominent way of depicting how social support operates to promote

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or protect well-being. In this model (Cassel, 1976; Cobb, 1976), stress is assumed to affect persons with strong social support less adversely than it affects persons with weak social support. Because of initially contradictory findings, it has been recommended that research on the buffer hypothesis move toward greater specificity (S. Cohen & McKay, 1984; Hobfoll, 1988; Kessler, 1983; Vaux, 1988). Three recommendations have been made most often. The first is to study life events singly rather than as part of aggregate measures of life-event stress. The second is to give greater attention to the efficacy of specific types or functions of social support with regards to specific life events. The third is to identify event-specific outcomes in addition to examining more global psychological consequences. The present study follows these recommendations in studying social support and victims of crime.

# THE SINGULAR EVENT OF CRIME

Kessler (1983) pointed out that aggregate life-event measures do not allow for an explicit examination of stress-support relations. However, the problem with sampling life events singly is that many events are either too ambiguous (relocation, retirement, pregnancy) or too trivial (traffic violation, home repairs) to warrant studying alone. Hobfoll (1988) advocated examining unambiguous life events, such as disaster, bereavement, or war, because cognitive appraisals are less of a factor in determining whether they are stressful or not. From this perspective, criminal victimization is a good choice for research because this event is specific, unambiguous, and serious, yet general enough to exemplify the process of coping with stressful life events.

# MATCHING SOCIAL SUPPORT TO THE EVENT OF CRIME

What types of social support would be most effective in alleviating the psychological consequences of criminal victimization? Two recently advanced models provide valuable guidance here. The first of these is Cutrona and Russell's (1990) model of optimal stress-support matching that is based on understanding the psychological processes associated with different stressful life events. In this model, an event's location on various dimensions, such as controllability, desirability, or life domain, determines the coping needs of people experiencing that event. As these needs differ, so does the importance of different types of social support.

Cutrona and Russell classified criminal victimization as an uncontrollable, negative event that may affect psychosocial assets such as material

goods or physical health. For uncontrollable events, emotional support (e.g., having a confidant) is seen as most beneficial since it fosters feelings of acceptance and comfort. When victimization also involves loss of valued assets, social support capable of replacing the loss (i.e., tangible support) would also be helpful. The model implies that informational support (e.g., guidance or advice) or esteem support (e.g., reassurance of worth) would be less applicable since these supports are associated with controllable events (e.g., divorce). Although many studies reviewed by Cutrona and Russell supported their theoretical framework, the three studies specifically examining criminal victimization were less than conclusive. In a study of persons experiencing crime or other legal matters, Krause (1986) reported a clear buffer effect for emotional support but no effect for tangible help. Popiel and Susskind (1985) assessed many different aspects of support but found that none moderated the effects of rape on psychological distress. Mitchell and Hodson (1983) found some aspects of social integration (e.g., visits with relatives/friends unaccompanied by one's spouse) to be associated with less distress among battered women. As noted by Cutrona and Russell (1990), it is difficult to draw conclusions from this small number of victimization studies that produced such divergent results.

When the available literature is reviewed more broadly (i.e., not necessarily from the perspective of the buffer model), it suggests that many other types of social support, including guidance and reassurance of worth, may prove beneficial for those coping with this stressful event (e.g., Bard & Sangrey, 1986; Coates & Winston, 1983; Kutash, 1978; R. L. Silver & Wortman, 1980). Thus, it may be that criminal victimization does not easily lend itself to Cutrona and Russell's event classification scheme. In their model, the controllability dimension was considered the strongest determinant of social support needs. The problem is that although victimization may actually be uncontrollable, its occurrence may not necessarily be perceived as such. Research has shown that individuals believe that their own probability of victimization is subject to their own control and prevention efforts (Kaniasty, 1989; Tyler, 1981). In fact, various crime prevention strategies often rest on the assumption that fostering beliefs about the controllability of crime will promote precautionary behaviors that reduce one's risk of being victimized (see Rosenbaum, 1986). Whether these actions are effective (e.g., Norris & Johnson, 1988) or mere illusions of invulnerability (see Perloff, 1983) is not germane to this analysis. The important fact is that reclassifying criminal victimization as having the potential to be either uncontrollable or controllable would imply that the entire spectrum of social support might be important for victims of crime.

A model of stress developed by Hobfoll (1988) complements Cutrona and Russell's scheme with regard to identifying the types of social support that may help crime victims. Hobfoll's "conservation of

resources" model defined stress as a reaction to circumstances that constitute a loss (or threat of loss) of valued resources. Resources are defined as those objects (e.g., home, socioeconomic status), personal characteristics (e.g., self-esteem, mastery), conditions (e.g., marriage, employment), or energies (e.g., time, money) that are important to the individual. The concept of loss may be found in many accounts explaining psychological reactions to criminal victimization. Among the resources that may be diminished by crime are self-esteem, feelings of security, and assumptions of invulnerability, as well as material goods and energies (Bard & Sangrey, 1986; Gottfredson, Reiser, & Tsegaye-Spates, 1987; Janoff-Bulman & Frieze, 1983; Kilpatrick, Veronen, & Best, 1985; Murphy et al., 1988).

According to Hobfoll's model, social support is not encompassed by any single resource category. Rather, social support is considered an asset to the extent that it promotes the preservation or recovery of valued resources (Hobfoll, Freedy, Lane, & Geller, 1990). Thus, if appropriately matched, social support could provide those resources that the victimization experience depletes. Emotional support, by providing acceptance and opportunities to ventilate emotions, may prevent the assessment of the world as threatening, untrustworthy, and rejecting (e.g., Kutash, 1978; R. L. Silver & Wortman, 1980). Tangible support in the form of money, shelter, or transportation, could actually replace lost possessions, help to reestablish a sense of security (e.g., Bard & Sangrey, 1986), or enable victims to seek help from all available sources (e.g., Norris, Kaniasty, & Scheer, 1990). Informational support in the form of guidance and advice could assist victims in problem solving or in deciding how to deal with the crime (e.g., Ruback, Greenberg, & Westcott, 1984). Esteem support, by validating beliefs in their own competence and worth, could block the lowering of self-esteem so often experienced by victims of crime (e.g., Kutash, 1978; Murphy et al., 1988; Symonds, 1980; S. Taylor, Wood, & Lichtman, 1983). In sum, because the losses involved are diverse, Hobfoll's model implies that emotional, tangible, informational, and esteem support are all important for victims of crime.

Thus, from either the Cutrona and Russell model or the Hobfoll model, one could infer that victims of crime with strong (and diverse) social supports should be less vulnerable than other victims to experiencing adverse psychological consequences. Yet, before drawing this conclusion, two additional issues must be considered. The first issue concerns the negative aspects of social support. Unfortunately, some research suggests that even people quite close to the victim may ostracize her (e.g., Bard & Sangrey, 1986; Coates, Wortman, & Abbey, 1979), or hold him responsible for and deserving of misfortune (e.g., Lerner, 1980;

Symonds, 1980). Instances of "social support" like these undoubtedly add to the adverse effects of crime (e.g., Davis, Brickman, & Baker, 1991) rather than buffer them. Thus, to be protective in this context, social support not only has to match the needs of victims but it also must overcome its own potential to augment their burden.

The second issue concerns the distinction between perceived and received social support. From the stress-support matching perspective, the relative importance of perceived support (the belief that help would be available if needed) and received support (actual receipt of help) has not been established. Whereas research has strongly documented the buffering role of perceived social support, the role of received support is less clear (S. Cohen & Wills, 1985; Kessler & McLeod, 1985). However, most of the studies that have failed to show buffering characteristics for received support have used aggregate life-stress measures. Thus it is possible that the appropriate test of buffering properties of received support should be also undertaken in the context of specific life events (Dunkel-Schetter & Bennett, 1990; Eckenrode & Wethington, 1990). Actual helping behaviors such as giving advice about crime precautions (informational help) or escorting the victim from work at night (tangible help) seem to match the needs of crime victims quite well. Perhaps, in this context, believing is not always enough. Thus, we expected that both perceived and received support would buffer the stress of criminal victimization.

# MATCHING THE OUTCOMES TO THE EVENT OF CRIME

Relatively little attention has been paid to the outcome variables in social support research. Although various psychological consequences have been investigated, their specific relations with social support types stand, for the most part, unexplored.

Research on criminal victimization delivers a long list of reactions experienced by victims (see Frieze, Hymer, & Greenberg, 1987; Mc-Cann, Sakheim, & Abrahamson, 1988). As with other stressful events, depression and anxiety are common reactions, especially among, but not limited to, victims of violence (e.g., Bard & Sangrey, 1986; Kilpatrick et al., 1985; Resick, 1987; Siegel, Golding, Stein, Burman, & Sorenson, 1990; Sorenson & Golding, 1990; Wirtz & Harrell, 1987). For most victims, these global reactions gradually diminish within 6 months of the incident (e.g., Atkeson, Calhoun, Resick, & Ellis, 1982; Davis & Friedman, 1985; Kilpatrick & Calhoun, 1988). However, there is also evidence

that for some victims the psychological consequences of crime may persist for many months or even years (e.g., Ageton, 1983; Burman et al., 1988; Ellis, Atkeson, & Calhoun, 1981).

Crime victims are also subject to certain outcomes that may not necessarily follow from other stressful life events. Among these more event-specific reactions are fear of crime and hostility. Fear of crime is usually defined as a self-reported affective worry about being victimized (e.g., Ferraro & LaGrange, 1987). A number of studies have shown that fear of crime may be the most frequent and lasting consequence of criminal victimization (Burgess & Holmstrom, 1974; Calhoun, Atkeson, & Resick, 1982; Kilpatrick, Resick, & Veronen, 1981; Lurigio, 1987; Norris & Johnson, 1988; Skogan, 1987). Accompanying these fears are feelings of hostility, anger, and rage (e.g., Kilpatrick et al., 1981; Smale & Spickenheuer, 1979; Wirtz & Harrell, 1987).

Diversity of outcome measurement is important because it may eventually explain many inconsistent findings in stress buffering research. It may also eventually lead to the development of specific models depicting interrelations among the stress, type of support, and outcome (see Vaux, 1988). Meanwhile, knowledge of the types of social support capable of alleviating event-specific as well as global consequences of crime would benefit intervention efforts aimed at improving the quality of life of crime victims.

#### PRESENT STUDY

The present study investigated the buffering properties of six different types of social support (three perceived, three received) with regards to four potential psychological consequences (two global, two event-specific) of criminal victimization (both violent and property crime). These relationships were examined using longitudinal data collected from a sample composed of representative subsamples of victims and nonvictims.

#### **METHOD**

# Sample and Data Alignment

These data are from a three-wave panel study of criminal victimization conducted in the state of Kentucky between January 1988 and February 1989. A statewide sample of telephone households was generated using random-

digit dialing procedures. A five-item screening instrument was used to classify all contacted households (N=12,226) into three groups (Violent, Property, and Nonvictim) based on crime incidence for the preceding 6 months.<sup>3</sup> Because the probability varied that a household would belong to a given category, the probability of selection for an interview also varied according to the screener classification. All households reporting violent crime were selected for an interview. To provide comparison samples of approximately equal size, 2 in 5 Property households and 1 in 28 Nonvictim households were also selected. The end result of this procedure was three samples, each of which may be considered approximately representative of its respective population in Kentucky.

Once a household was selected to participate in the study, the potential respondent was selected according to procedures developed by Kish (1949). For Violent and Property households, one person was randomly selected from all adult household members experiencing the incident (but only those members). For Nonvictim households, one person was selected randomly from all adults residing in that household. Among those selected, interviews were completed for 175 (71%) Violent households, 328 (71%) Property households, and 304 (79%) Nonvictim households. The average length of the interview was 37 minutes.

<sup>3</sup>To establish contact with 12,226 households, it was necessary to complete 98 replicates of 224 randomly generated phone numbers. Each replicate provides a representative sample of telephone households in Kentucky. The vast majority of calls to other than the successfully contacted households were placed to nonworking or nonresidential numbers. Because the screener was only five questions long, and because we had permission from the Attorney General of Kentucky to use his name and endorsement in introducing the study, the refusal rate at this stage of the sampling procedure was negligible. The initial screener contained five questions pertaining to crimes affecting the informant's household in the past 6 months (e.g., "did anyone damage, steal, or try to steal something that belonged to you?") If the informant answered "no," the question was repeated, this time referencing "any adult living with you," to emphasize that we were seeking information on the entire household. Of the five questions, two assessed property crimes, one assessed robbery (violent and property), and two assessed violent crimes.

<sup>4</sup>The study relied on both "informants" and "respondents." The informant was the person who answered the phone. Given that the calls were placed at different times of day and night and on different days of the week, there seemed to be little reason to expect a randomly selected household member to be better informed about crimes than any other member. The advantages of random selection of informants had to be weighed against the disadvantages of calling a different person to the phone (higher nonresponse) and having to enumerate all households including those not subsequently selected for the interview (higher cost, thus fewer households could be screened). Once a household was selected for the interview, the designated respondent (see text) was interviewed on the phone either during this first contact or was reached at later point of time.

For methodological purposes, an additional sample of 310 nonvictims was selected using the same procedures. They were given a shorter interview (about 10 minutes) composed mainly of mental health measures. As might be expected, this supplemental sample had a high response rate (84%).<sup>5</sup>

The interview contained an 18-item crime-incidence battery designed to prompt memories of any incident occurring in past 6 months. It was similar to, but substantially revised from, the one used in the National Crime Survey (Lehnen & Skogan, 1984). This battery was considerably more detailed than the five-item screening instrument used for household selection. Although most persons (88%) were classified correctly by the screener, some persons switched categories based on interview data. (Final ns were approximately the same.) The actual assignment of respondents to the nonvictim, property, or violent crime victim groups was based on responses to the 18-item crime battery.

Six months after the first interview, attempts were made to reinterview all study participants, again by telephone. Wave 2 response rates were quite high (81% for nonvictims, 83% for property crime victims, 85% for violent crime victims). At this time respondents from the supplemental nonvictim sample were given the full-length interview. The response rate for this group was 86%.

The third and final wave of the study was conducted 6 months following the second interview. The Wave 3 interview was attempted only if a Wave 2 interview had been obtained. Response rates at Wave 3 were also adequate (83% for nonvictims, 82% for property crime victims, 76% for violent crime victims, and 81% for supplemental nonvictims).

For the present study, only two consecutive waves of data were needed. Thus, we realigned the available three waves to create a two-wave sequence that included as many victims of crime as possible. Some non-victims at Wave 1 reported crimes at Wave 2, making their Wave 2-Wave 3 sequence more valuable than their first two-wave sequence. Also, the availability of Wave 2-Wave 3 data allowed us to include most of the supplemental nonvictims who gave their first full-length interview at Wave 2.

We refer to this realigned sequence as Wave A-Wave B. For crime victims, Wave A was always the wave at which the crime was reported for the first time. For nonvictims, Wave A was always the wave with the first full-length interview. In either case, Wave B was the next interview, 6

<sup>&</sup>lt;sup>5</sup>This additional sample was drawn to increase the project's power to detect subsequent victimization among nonvictims. Having previctimization measures of psychological functioning, even if only with a small number of respondents, may prove valuable when addressing some of the more general cause-and-effect issues inherent in victimization research.

months later. Nonvictims who experienced crime prior to the 6-month time frame used in the screener were excluded from the present study. Together, these procedures yielded a total AB sample of 690 respondents, of whom 436 were crime victims.

#### Measures

# Psychological Symptoms

Depression, anxiety, and hostility were assessed using subscales of the Brief Symptom Inventory (BSI) developed by Derogatis and Spencer (1982). The BSI has been used successfully to assess psychological symptoms in a variety of community populations. The depression and anxiety subscales each consisted of six questions, whereas the hostility subscale was composed of five items. (The final score on each subscale is the mean.) All questions had a 1-month report period, and a 5-point response format: not at all (0), a little bit (1), moderately (2), quite a bit (3), extremely (4). Internal consistency coefficients (Cronbach's alpha) and test-retest reliability coefficients (6-month interval) were .84 and .68 for depression, .79 and .65 for anxiety, and .74 and .64 for hostility. Fear of crime was the mean value of scores on 6 questions selected from a larger pool of pretested items (Kaniasty, 1988). All items had a 4-point response format: never (0), rarely (1), sometimes (2), often (3). For the present analysis, however, they were recoded to give them the same potential range (0-4) as items on the BSI. The scale reflects the worries people have about being victimized and their concerns regarding perceived levels of crime in their neighborhoods (e.g., "When you leave your house or apartment, how often do you think about being robbed or physically assaulted"; "How often does fear of crime prevent you from doing things you would like to do?"). The scale has an alpha of .75 and a test-retest reliability coefficient of .67.

# Perceived Social Support

Perceived social support measures were based on the Interpersonal Support Evaluation List (ISEL; S. Cohen & Hoberman, 1983; S. Cohen, Mermelstein, Kamarck, & Hoberman, 1985). The original ISEL consisted of 40 statements designed to assess the perceived availability of social sup-

<sup>&</sup>lt;sup>6</sup>Abbreviated version of the Brief Symptom Inventory was used with special permission from L. Derogatis.

<sup>&</sup>lt;sup>7</sup>Cronbach's alphas were computed using Wave 1 data (ns ranged from 754 to 846), test-retest correlations were computed with Wave 1-Wave 2 data (ns ranged from 635 to 967).

port. Several studies reported strong psychometric characteristics of the ISEL, and the scale appears to be sensitive to the stress-buffering properties of social support (see S. Cohen et al., 1985). A shorter version of the ISEL, adapted for use with telephone surveys (S. Cohen, personal communication, October 1987), includes only 18 items scored on a 4-point scale: definitely false (0), probably false (1), probably true (2), definitely true (3). This version of the ISEL assesses three separate support functions (6 items each). Perceived appraisal support is the perceived availability of both emotional support and guidance (e.g., "There are several people that I trust to help solve my problems"). Perceived tangible support is the perceived availability of material aid (e.g., "If I needed an emergency load of \$100, there is someone I could get it from"). Perceived self-esteem support is the availability of reassurance of self-worth. Only the first two subscales were included in this study. The internal consistency and test-retest coefficients were .73 and .64 for appraisal support and .70 and .66 for tangible support.

The self-esteem subscale was not included because it contributed little information that could not be provided by Rosenberg's (1965) Self-Esteem Scale. Self-esteem support is highly related to "trait self-esteem" since the latter is strongly influenced by the feedback one receives from others. S. Cohen and his colleagues (1985) reported high correlations (r = .74) between their self-esteem subscale and Rosenberg's measure. Because of the importance of the self-esteem construct in life-stress research we decided against using the ISEL subscale in favor of a 6-item adaptation of Rosenberg's scale advanced by Pearlin and Schooler (1978). This six-item scale (e.g., "I feel that I am a person of worth, at least on an equal basis with others"), scored strongly disagree (0), somewhat disagree (1), somewhat agree (2), and strongly agree (3), correlated .93 with the original 10-item measure (Kaniasty, 1988). Its alpha coefficient was .78 and 6-month test-retest reliability was .65.

# Received Social Support

Received support measures were derived from the Inventory of Socially Supportive Behaviors (ISSB, Barrera, Sandler, & Ramsay, 1981). This 40-item scale assesses the frequency with which, in the past month, individuals have actually received specific supportive behaviors from the people around them. Whereas considerable data are available regarding the robust psychometric properties of the ISSB, only a few studies have obtained the stress-buffering effect using this type of social support measurement. In fact, the ISSB was found to be positively correlated with both negative events and psychological symptoms, leading some authors to ex-

press concern about the potential confounding between receipt of support and stress (e.g., S. Cohen & Wills, 1985).

Based on the pretest (Kaniasty, 1988), 12 items were selected with a 4-point response format: not at all (0), once or twice (1), about once a week (2), several times a week or more (3), for use in the study. The resulting scale assesses three types of received support (4 items each). Received informational support refers to provisions of information, guidance, and advice (e.g., "Suggested some action you should take . . ."). Received tangible support is concerned with the receipt of material aid (e.g., "Provided you with some transportation"). Received emotional support encompasses expressions of emotional closeness, concern, and acceptance (e.g., "Told you that she/he feels very close to you."). Alphas and test-retest coefficients were .74 and .65 for informational support, .58 and .46 for tangible support, and .80 and .55 for emotional support.

#### Criminal Victimization Measures

Criminal victimization was assessed using an 18-item battery probing for the occurrence of any type of crime over the past 6 months. Two Wave A victimization measures, coded as dummy variables, were derived. *Violent crime* reflected whether or not the victimization involved any form of physical violence (1 = violent crime, 0 = no crime or property crime). *Property crime* reflected the occurrence of other, nonviolent crimes. Respondents who reported property crimes received scores of 1, whereas nonvictims and victims of violent crimes received scores of 0. Crimes involving both property loss and violence were classified as violent crimes. Among violent crimes, 6% involved rape or attempted rape, 17% robbery, 23% aggravated assault (i.e., accompanied by use of weapon and/or serious injury), and 55% simple assault (i.e., no serious or aggravated injuries) or serious threats of violence. Among property crimes, 28% involved burglary, 53% larceny and 19% vandalism. On the average, both types of crimes occurred 3 months prior to the Wave A interview.

#### Control Variables

To control for the potential of one's social network to exert a negative influence on psychological well-being, we included a measure of "negative social support." Social burden was a 4-item scale (e.g., "How often have you had some kind of conflict or argument with your friends?") ranging from never (0), rarely (1), sometimes (2) to often (3), that assessed, at Wave B, the extent to which respondents may have

experienced troublesome interactions with family and/or friends in the last 6 months. The scale's alpha and test-retest coefficient were .66 and .57, respectively.

A measure of *Wave B life events* reflected whether, in the past 6 months, the respondent had moved, changed marital status, changed employment status (e.g., retired, fired), experienced some other work change, or had a birth, serious illness, or death in the family. Numerous studies attest to the potential of life events such as these to affect psychological symptoms. Scores on this scale ranged from 0 to 7.

An additional measure of victimization, Wave B crime, was included to control for the impact of crimes occurring in the Wave A-Wave B interval on Wave B symptoms. Respondents reporting a crime in this interval received a score of 1 (0 = no crime). Among 169 respondents who were victims of Wave B crimes, 46 experienced violent crimes and 123 experienced property crimes.

The following sociodemographic variables were examined. All were taken at Wave A. *Education* was the highest grade or years of education completed. *Marital status* was represented by a dichotomous variable (0 = never married, widowed, separated/divorced, 1 = married). *Occupational status* was scored using seven categories developing by Hollingshead and Redlich (1958) (e.g., 1 = unskilled laborer, 7 = higher executive/professional). *Urbanicity* was based on respondents' area of residence (0 = non-metropolitan, 1 = metropolitan). The respondent's age and sex (0 = male, 1 = female) were also included in the analyses.

#### RESULTS

#### Sample Characteristics

Table I presents descriptive data on each of the subgroups constituting the AB sample. Post hoc comparisons were conducted using Scheffé method (testing means) or chi-square analyses (testing frequencies). Several significant differences between subgroups exist. Relative to nonvictims, crime victims were disproportionately younger, urban, professional, well educated, and were more often victimized at Wave B. Fewer violent crime victims were married.

Victims of violent crime were consistently lower in their perceived social support than both property crime victims and nonvictims. This difference could not be accounted for by differences in sociodemographic variables such as marital status. Victims of either crime reported higher levels of received support than nonvictims despite their greater burden in rela-

Table I. Sample Characteristics by Victimization Status

Table 1. Sample Characteristics by Victimization Status									
	No crime $(n = 254)$			Property crime $(n = 299)$		Violent crime $(n = 137)$			
			(11 -	233)	(n - 137)				
Independent variables									
	Wave A frequencies (%) and standard errors <sup>a</sup>								
Female	61.4	(.031)	58.2	(.029)	58.4	(.042)			
Urban	44.9	(.031)	$59.5^{b}$	(.028)	51.8	(.043)			
Professional	21.7	(.026)	$36.5^{b}$	(.028)	$32.1^{b}$	(.040)			
Married	65.0	(.030)	59.9	(.028)	43.8 <sup>c</sup>	(.043)			
Wave B victimization	3.5	(.012)	$32.1^{b}$	(.027)	$46.7^{c}$	(.043)			
	Wave A means and standard deviations <sup>a</sup>								
Education	12.07	(3.02)	$13.06^{b}$	(2.52)	$13.29^{b}$	(2.22)			
Age	46.65	(17.07)	$38.32^{b}$	(13.25)	33.16 <sup>c</sup>	(11.62)			
Perceived appraisal support	14.84	(3.28)	14.88	(3.60)		(3.95)			
Perceived tangible support	15.85	(3.14)	15.91	(2.71)	14.39 <sup>c</sup>	(4.08)			
Self-esteem	16.13	(2.36)	16.10		15.12 <sup>c</sup>	(3.21)			
Received informational support	3.77	(2.95)	$4.83^{b}$	(2.84)	5.44 <sup>b</sup>	(3.20)			
Received tangible support	1.89	(2.21)	$2.43^{b}$	(2.51)	$2.80^{b}$	(2.70)			
Received emotional support	7.57	(3.62)	$8.46^{b}$	(3.40)	8.20	(3.31)			
	•	Wave B m	eans and	standard o	deviations	7			
Social burden	2.30	(2.36)	$3.61^{b}$	(2.47)	4.95 <sup>c</sup>	(2.67)			
Life events	0.70	(0.86)	$1.13^{b}$	(1.11)	1.34 <sup>b</sup>	(1.22)			
Outcome variables									
	Wave B means and standard deviations <sup>a</sup>								
Depression	0.27	(0.40)	$0.39^{b}$	(0.50)	$0.76^{c}$	(0.75)			
Anxiety	0.33	(0.39)	$0.44^{b}$	(0.47)	$0.85^{c}$	(0.72)			
Fear of crime	0.72	(0.65)	$0.92^{b}$	(0.72)	1.28 <sup>c</sup>	(0.87)			
Hostility	0.28	(0.34)	$0.46^{b}$	(0.50)	$0.72^{c}$	(0.61)			
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<sup>&</sup>lt;sup>a</sup>Standard errors/standard deviations are given in parentheses.

tions with family and friends. They also experienced more recent life events (other than the crime.) An analysis of the specific events reported indicated that this difference was more likely due to correlates such as age (and other status factors) rather than to the victimization itself.

Crime victims were clearly more symptomatic. Although victims, especially victims of violence, reported more depression, anxiety, and hostility than did nonvictims in this sample, their scores fell below those of psychiatric patient samples (Derogatis & Spencer, 1982).

For descriptive purposes only, we compared the three samples on a Wave A measure of crime controllability, borrowed from Tyler (1981),

<sup>&</sup>lt;sup>b</sup>Significantly different from no crime group at the .05 level.

<sup>&</sup>lt;sup>c</sup>Significantly different from both no crime and property crime groups at the .05 level.

Table II. Intercorrelations Among Perceived and Received Social Support Scales,
Psychological Distress Measures, and Wave A Crime $(N = 690)$

Measure	1	2	3	4	5	6	7	8	9	10	11
1. Perceived appraisal		.48 <sup>c</sup>	.24 <sup>c</sup>	.19 <sup>c</sup>	.07ª	.30°	23°	22 <sup>c</sup>	17°	18 <sup>c</sup>	04
2. Perceived tangible			.29 <sup>c</sup>	$.13^{c}$	.05		$26^{c}$				
3. Self-esteem			_	.03	02	$.14^{c}$	46 <sup>c</sup>	36 <sup>c</sup>	21 <sup>c</sup>	29 <sup>b</sup>	$06^{a}$
4. Received informational				_	.41 <sup>c</sup>	.45 <sup>c</sup>	.11 <sup>b</sup>	.17 <sup>c</sup>	$.08^{a}$	.18 <sup>c</sup>	.20°
5. Received tangible						.32c	.11 <sup>b</sup>	.14 <sup>c</sup>	.15 <sup>c</sup>	$.20^{c}$	.13c
6. Received emotional						_	-01	$.08^{a}$	.02	.09 <sup>b</sup>	.11 <sup>b</sup>
7. Depression								.73 <sup>c</sup>	.34 <sup>c</sup>	.59°	$.20^{c}$
8. Anxiety								_	.43 <sup>c</sup>	.60 <sup>c</sup>	$.22^{c}$
9. Fear of crime									_	.22 <sup>c</sup>	$.20^{c}$
10. Hostility											$.26^{c}$
11. Wave A crime											-

ap < .05.bp < .01.

"How much would you say that your own changes of becoming a victim of crime depend upon what you do to protect yourself?: not at all (0), a little (1), some (2), a great deal (3). Group means were as follows: no crime 1.88, property crime 2.10, and violent crime 2.33 (both types of victims were significantly different from nonvictims). Thus all three subsamples believed that they themselves could, to some extent, control their risk of victimization, a finding that substantiated our concern that crime should not be classified exclusively as an uncontrollable event. Interestingly, this belief was held most prominently by crime victims, especially violent crime victims, which may be an indication of their efforts to restore shattered feelings of control by a postevent analysis to identify ways to prevent reoccurrence of their misfortune. For some victims this "retrospective control" (Fiske & Taylor, 1991; Thompson, 1981) could actually translate into an adoption of precautionary behaviors (see Weinstein, 1989).

Table II presents correlations among social support scales, symptom measures, and a dichotomous measure of Wave A crime (0 = no crime)1 = any crime). Correlations among the six scales assessing different types of social support ranged from -.02 to .48 indicating at least a moderate degree of independence. Not surprisingly, symptom measures showed a greater degree of interdependence, with correlations ranging from .20 to .73. Measures of perceived support had significant and negative associations with psychological symptoms; their correlations with a dichotomous measures of crime were close to zero. Not unexpectedly, measures of received support correlated positively with symptoms measures and Wave A crime.

 $c_p < .001$ .

# Data Analytic Strategy

We tested the effects of social support on crime victims' psychological symptoms in a series of hierarchical regression analyses. The outcome variables, assessed 6 months postcrime, were depression, anxiety, fear of crime, and hostility. Each analysis proceeded as follows. First. Wave A ascribed status measures (age and sex) were entered followed by four achieved status measures (education, occupational status, urbanicity, and marital status). These respondent characteristics were entered into the equation to limit the potential confounding of these factors with criminal victimization or levels of social support. Next, Wave B social burden and Wave B life events were entered to account for their potential to affect psychological symptoms. A dichotomous measures of Wave B criminal victimization followed alone to control for the impact of a more recent victimization on symptoms. At the next step in the hierarchy, two dummy variables (violent crime and property crime) representing Wave A victimization were entered. Then, a Wave A social support measure was entered to test its impact on symptoms, independent of criminal victimization. Finally, two interaction terms (each scored as the product of the mean deviations of the constituent measures) were entered: violent crime by support and property crime by support. These interactions tested whether or not there was a differential effect of social support on psychological symptoms across levels of victimization. This procedure was repeated separately for each of the social support measures so that their total contributions could be assessed regardless of the variance they shared.

This analytical strategy allows for a test of the effects of crime and social support on symptoms at a point 6 months after the crime. The purpose of the study was not to assess changes in symptoms over the 6-month interval bounded by Wave A and Wave B. Therefore, Wave A symptom measures were not included among the predictors, as required for a prospective design (see S. Cohen & Wills, 1985; Kessler, 1985). However, the independent measures (social support and victimization) were assessed 6 months before the dependent measures, which reduces the threat that they are confounded. Furthermore, controlling for Wave B social burden and life events accounted for the potential of these concurrent stressors to have impact on Wave B psychological symptoms. The inclusion of Wave B crime also reduced the risk that our findings could be explained by the tendency for more distressed people to report more crime. Undoubtedly, a longitudinal prospective design that included prevent measures would have been best. Unfortunately, such a design is rarely feasible when studying low-frequency events such as

violent crime. The results of the regression analyses are summarized in Table III.

# Predicting Depression

The two sets of sociodemographic factors accounted for 9.5% of the variance in Wave B depression. Female, younger, and single persons reported higher depressive symptoms. Social burden and current life events explained together 12% of the variance. Respondents reporting more burden from family and friends and/or more life events exhibited greater levels of symptoms. Wave B crime also contributed significantly to depression, accounting for 1.9% of the variance.

Wave A victimization (violent crime and property crime entered together) accounted for the additional 2.6% of variance in Wave B depression, F(2, 678) = 12.17, p < .001. Only violent crime significantly contributed to this effect, F(1, 678) = 19.16, p < .001,  $\beta = .19$ . Victims of violent crimes, as compared to nonvictims, had greater levels of depressive symptoms at least 6 months postcrime.

Perceived Social Support. Wave A perceived appraisal support had a significant main effect on depressive symptoms F(1, 677) = 28.53, p  $< .001, R^2 = .030$ ; respondents perceiving greater availability of others with whom to share problems and concerns reported less symptoms. The set of two interactions, violent crime by appraisal support and property crime by appraisal support, did not contribute to the prediction of depression. Wave A perceived tangible support also predicted depression, F(1, 677) = 21.32, p < .001,  $R^2 = .023$ ; respondents perceiving greater availability of material aid reported less depression at Wave B. The set of victimization by support interactions also made a significant contribution,  $F(2, 675) = 9.70, p < .001, R^2 = .020$ . Both types of crime significantly interacted with tangible support, F(1, 675) = 9.26, p < .003for violent crime, and F(1, 675) = 18.02, p < .001 for property crime. Plotting these interactions showed that both victims of property crimes and victims of violent crimes experienced fewer symptoms if their tangible support was high. The form of these interactions conformed to predictions derived from the buffer model. Wave A self-esteem had a main effect, F(1, 677) = 120.10, p < .001,  $R^2 = .111$ ; respondents with higher self-esteem reported fewer depressive symptoms. The set of crime by support interactions was also significantly associated with depression,  $F(2, 675) = 3.84, p < .025, R^2 = .007$ , due to the contribution of the violent crime by esteem interaction, F(1, 675) = 7.26, p < .008. Victims of violence who had high levels of self-esteem evidenced less depression

Table III. Direct and Buffering Effects of Social Support Measures on Psychological Dis-
tress: Summary of Hierarchical Regression Analyses <sup>a</sup>

	Depression		Anxiety		Fear of crime		Hostility		
Predictor	b	β	b	β	b	β	b	β	
Perceived appraisal support Violent crime × Appraisal Property crime × Appraisal Adjusted R <sup>2</sup>	$ \begin{array}{rrrr}03 &18^d \\02 &06 \\02 &06 \\ .281^d $		03 04 01	17 <sup>d</sup> 11 <sup>c</sup> 02				$ \begin{array}{rrr}02 &15^d \\02 &06 \\01 &03 \\ .349^d \end{array} $	
Perceived tangible support Violent crime × Tangible Property crime × Tangible Adjusted R <sup>2</sup>	03 04 06		02 04 02	$12^{d}$ $10^{c}$ $04$ $40^{d}$	05 04 02	21 <sup>d</sup> 07 04	01 01 02	08 <sup>b</sup> 04 07	
Self-esteem Violent crime × Esteem Property crime × Esteem Adjusted R <sup>2</sup>	07 05 01	$35^{d}$ $10^{c}$ $03$ $58^{d}$	05 05 01	24 <sup>d</sup> 11 <sup>c</sup> 03	03 01 02	$12^{d}$ $02$ $04$ $01^{d}$	03 01 03	$17^{d}$ $03$ $09^{b}$ $51^{d}$	
Received informational support Violent crime $\times$ Informational Property crime $\times$ Informational Adjusted $R^2$		.01 03 07 51 <sup>d</sup>	.01 02 01	.06 04 03 24 <sup>d</sup>		$02$ $18^d$ $03$ $15^d$	.01 01 01 .33	.05 03 02 $30^d$	
Received tangible support Violent crime × Tangible Property crime × Tangible Adjusted R <sup>2</sup>	.00 02 .00	.00 04 .00 48 <sup>d</sup>	.00 02 .02	.00 04 .04 24 <sup>d</sup>	.02 09 01	.06 12 <sup>c</sup> 01	.01 02 .01	.04 05 .02	
Received emotional support Violent crime × Nondirective Property crime × Nondirective Adjusted R <sup>2</sup>	01 02 01	05 04 04 52 <sup>d</sup>	.00 01 .00	.02 03 .00	01 01 01 .19	04 03 03	.00 .00 .00 .32	.02 .01 .00 28 <sup>d</sup>	

<sup>&</sup>lt;sup>a</sup>The entries are unstandardized and standardized regression coefficients. Reported betas are those obtained when the variable was first entered. Control and victimization variables (not shown) were entered in earlier steps of each analysis. Each social support variable was entered alone followed by two interactions entered together. Adjusted R<sup>2</sup>s are given for the total set of independent variables included in each analysis.

than did victims with low self-esteem. As predicted by the buffer hypothesis, the difference between violent crime victims and others was greatest at low self-esteem.

Received Social Support. As it can be seen in Table III, none of three scales assessing received support (received informational, tangible, and emotional support) contributed to the prediction of Wave B depression.

 $<sup>^{</sup>b}I < .05.$ 

# Predicting Anxiety

Sociodemographic factors accounted for 11% of the variance in Wave B anxiety. This effect was again due to the contributions of sex, age, and marital status. Social burden and current life events accounted for 15% of the variance. Wave B crime was also significantly associated with concurrently assessed anxiety and explained 4.7% of the variance.

Wave A violent crime and property crime together accounted for the additional 2.9% of variance, F(2, 678) = 14.51, p < .001. Again it was violent crime that significantly contributed to this effect, F(1, 678) = 15.31, p < .001,  $\beta = .16$ . At least 6 months postcrime, victims of violence exhibited more symptoms of anxiety than nonvictims.

Perceived Social Support. Wave A perceived appraisal support was significantly associated with Wave B anxiety and accounted for 2.8% of the variance, F(1, 677) = 29.36, p < .001. The direction of this association was the same as it was for depressive symptoms; the more support the less anxiety. Criminal victimization interacted with appraisal support in the prediction of anxiety, F(2, 675) = 5.10, p < .007,  $R^2 = .010$ . The interaction of violence with appraisal support was responsible for this effect, F(1, 675) = 8.84, p < .003. The form of this interaction was consistent with the buffer hypothesis. Perceived tangible support had a significant main effect on anxiety, F(1, 677) = 13.54, p < .001,  $R^2 = .013$ ; again the most support the less anxiety. The set of victimization by support interactions was also significant, F(2, 675) = 3.80, p < .025,  $R^2 =$ .007, again due to violent crime, F(1, 675) = 7.58, p < .007. This interaction was also congruent with the buffer model. Self-esteem accounted for 5.3% of the variance in anxiety, F(1, 677) = 58.69, p < .001. The interactions were significant as a set, F(2, 675) = 5.13, p < .007,  $R^2 =$ .009, with the violence by esteem interaction making the significant contribution, F(1, 675) = 9.41, p < .003. The form of this effect was compatible with the buffer hypothesis.

Received Social Support. None of received social support scales had main or interactive effects on Wave B anxiety.

# Predicting Fear of Crime

Sociodemographic factors accounted for 9% of the variance in Wave B fear of crime. Women, younger persons, and those of lower occupational status reported greater levels of fear. Social burden and current life events explained 5.7% of the variance. Likewise, Wave B crime contributed significantly to fear of crime, accounting for 3.2% of the variance.

Wave A crimes also made a significant contribution to the prediction of fear, F(2, 678) = 12.07, p < .001,  $R^2 = .028$ . This effect was stronger for violent crime, F(1, 678) = 23.72, p < .001,  $\beta = .22$ , than for property crime, F(1, 678) = 4.41, p < .05,  $\beta = .09$ . Victims of all crimes experienced greater levels of fear than did nonvictims.

Perceived Social Support. Perceived appraisal support had a significant main effect on fear of crime, F(1, 677) = 16.82, p < .001,  $R^2 = .019$ ; the more appraisal support the less fear reported. The set of two interactions had a significant effect, F(2, 675) = 4.41, p < .025,  $R^2 = .010$ . It was violence by appraisal support that made a significant contribution, F(1, 675) = 8.65, p < .004. More strongly than true for others, victims of violence experienced less fear if they believed they had more appraisal support available to them. Perceived tangible support accounted for 3.8% of the variance in fear of crime, F(1, 677) = 34.20, p < .001. Those with greater tangible support reported less fear. Victimization by tangible support interactions did not reach significance. Wave A self-esteem also had a main effect on fear, F(1, 677) = 10.49, p < .002,  $R^2 = .012$ . The interactions were not significant.

Received Social Support. Received informational support had no main effect on Wave B fear of crime. However, the set of interactions was significant and accounted for 2.6% of the variance, F(2, 675) = 11.50, p < 11.50.001. This effect was due to the interaction of informational help with violent crime, F(1, 675) = 20.86, p < .001. This interaction was generally consistent with the buffer model in that victims of violence who received greater help in the form of guidance or advice reported less fear. However, the pattern of this interaction also indicated that nonvictims and victims of property crime who received greater amounts of informational support reported slightly more fear than those who received small amounts of help.<sup>8</sup> Wave A received tangible support also had no main effect. The interactions together made a significant contribution to the prediction of fear, F(2, 675)= 5.78. p < .004,  $R^2 = .013$ ; this was due again to the violent crime by received tangible support interaction, F(1, 675) = 9.23, p < .003. Among victims of violence, receipt of tangible support led to considerable decreases in fear, a pattern congruent with the buffer effect. Again however, receipt of support led to small increases in fear of crime among nonvictims and victims of property crime (see Footnote 8). Received emotional support had neither main nor interactive effects on Wave B fear of crime.

<sup>&</sup>lt;sup>8</sup>These were not crossover interactions, however. Although for nonvictims and property crime victims fear increased slightly with more support received, the amount of fear experienced by these groups was always less than the fear experienced by violent crime victims. The regression lines for violent crime victims descended across the levels of received informational and tangible support (the more support the less fear), a pattern very much consistent with the buffer hypothesis.

# Predicting Hostility

Sociodemographic factors accounted for 13% of the variance in Wave B hostility. Female, younger, and unmarried persons experienced greater levels of hostility. Social burden and current life events together explained 19% of the variance in hostility. Wave B crime was also significantly related to hostility, accounting for 1.4% of the variance.

Wave A victimization accounted for only 1.0% of the variance, F(2, 678) = 4.26, p < .02, and only violent crime contributed, F(1, 678) = 8.10, p < .005,  $\beta = .11$ . Victims of violence experienced more hostility at least 6 months after their experience.

Perceived Social Support. Both perceived appraisal support and perceived tangible support had main effects on hostility: F(1, 677) = 20.33, p < .001,  $R^2 = .019$ , for appraisal support; F(1, 677) = 5.82, p < .02,  $R^2 = .006$ , for tangible support. The more support the less hostility. The interactions were not significant. Wave A self-esteem had a main effect that accounted for 2.7% of the variance in hostility, F(1, 677) = 29.28, p < .001. The set of victimization by esteem interactions was also significant, F(2, 675) = 3.09, p < .05,  $R^2 = .006$ . This time, it was the interaction of property crime and esteem that accounted for the effect, F(1, 675) = 5.72, p < .02. This interaction was consistent with the buffer model.

Received Social Support. None of received social support types had main or interactive effects on hostility.

#### DISCUSSION

At the outset, we note that criminal victimization (Wave A) had significant effects on all dependent measures, explaining up to 3% of the variance in depression, anxiety, fear, and hostility. These effects were over and above the variance accounted for by numerous control variables such as sociodemographic characteristics, concurrent social burden, life events, and more recent (Wave B) crimes, the latter of which had accounted for up to 5% of the variance in the outcome measures. Nine months on the average after the incident, property crime was associated only with fear. Violent crime, however, had uniformly strong effects on all measures of psychological states. All in all, the effects of victimization found in this study were at least comparable to, if not stronger than, those observed in most life-events research. Undoubtedly, there was stress in need of buffering here.

The study examined three types of perceived support. Appraisal support, a blend of emotional and informational support, promoted well-being

regardless of crime status. It also protected victims of violent crime from experiencing excessive anxiety and fear of crime. Tangible support, the perceived availability of material aid, also consistently promoted well-being, protected victims of violence from anxiety, and protected both types of victims against depression. Self-esteem, which is strongly influenced by the reassurance from others of one's own self-worth, also generally promoted well-being and protected victims of violence from depression and anxiety. In addition, it protected property crime victims from excessive feelings of hostility. Thus perceived social support consistently promoted well-being regardless of crime status. Although important for nonvictims, it was even more important for property crime victims, and most important for violent crime victims, protecting them mainly against the depression and anxiety they would have otherwise experienced.

We also examined three types of received support. Informational support (receipt of guidance or advice) and tangible support (receipt of material aid) had no main effects on any outcome measures. However, received informational support and received tangible support both protected victims of violence from experiencing high levels of fear, thus evidencing stress-buffering properties. Receipt of emotional support was unrelated to the well-being of either victims or nonvictims.

In general, these findings conform to our broad prediction that, because crime impacts many facets of well-being, a variety of social support types may be of value. As predicted by Cutrona and Russell's (1990) model, both emotional (i.e., appraisal) and tangible support were associated with better outcomes among victims. However, self-esteem and informational support also proved to be useful resources. Certainly, there is great promise in identifying those supports that facilitate optimal adjustment to different specific events. Nevertheless, the fact that some stressors command a broader approach has to be recognized.

Certain types of social support may extend their efficacy across a broad range of stressful events. S. Cohen and Wills (1985) suggested that esteem support and informational support are generally beneficial because they are broadly congruent with any stressful occurrence. Support–stress matching strategies acknowledge the universal effects of some supports but suggest that certain types are in relatively greater demand depending on characteristics of the event (Cutrona & Russell, 1990; Hobfoll et al., 1990). The problem is how to assess the relative importance of each social support component, especially if many show the buffering effect. In this study, tangible, esteem, and appraisal supports have all evidenced stress-protective properties. Future research should determine the relative hierarchy among different types of social support when many are congruent with a specific stressor.

This study sheds some light on the issue of the importance of perceived versus received social support. Whereas perceived support consistently promoted psychological health, received support was not directly related to well-being. The interactive effects of the received support measures were also less pervasive than those of the perceived support measures. The protection afforded by received support was restricted to victims of violent crimes and to an event-specific consequence, fear of crime. The protection afforded by perceived support extended to victims of property crimes, and to more global psychological states, depression and anxiety.

Many prior empirical tests of the buffer hypothesis also found perceived support, but not received support, to be consistently related to beneficial outcomes among those experiencing negative life events (see Barrera, 1988; S. Cohen & Wills, 1985). These findings led to the suggestion that stress buffering is not contingent on the actual provision of social support but on the mere perception that one's network is capable of providing support (Kessler & McLeod, 1985). Nevertheless, we found that received social support protected crime victims (violence only) against excessive fear of crime (although not the other symptoms). The very limited scope of the effects observed for received support may be in fact very instructive.

The few prior studies that demonstrated stress-buffering properties of received support did so either for certain individuals or for certain stressful conditions. For example, people with internal locus of control, low need for affiliation, or high need for autonomy have been shown to be successful in utilizing their actually occurring social support to better their coping in times of stress (e.g., Cummins, 1988; Lefcourt, Martin, & Saleh, 1984; Sandler & Lakey, 1982). This may suggest that received support should not be examined independently of recipient characteristics.

However, individual differences in the stress-buffering capacity of received support may be most influential when stressful life events are assessed as an aggregate. The studies that found locus of control to interact with received support in the stress-buffering process used global, undifferentiated, life-event checklists. Likewise, the majority of studies that failed to demonstrate stress-buffering properties of received support had used aggregate stress measures (e.g., L. Cohen, McGowan, Fooskas, & Rose, 1984; S. Cohen & Hoberman, 1983; Sandler & Barrera, 1984; Wethington & Kessler, 1986). When stress is defined globally, it may be that received support is beneficial only to certain individuals (e.g., internals) who are always capable of mobilizing and using appropriate support regardless of the type of stressful situation (see Eckenrode,

1983; Sandler & Lakey, 1982). Although person variables sometimes influence the receipt and utilization of support (e.g., Dunkel-Schetter, Folkman, & Lazarus, 1987; Kaniasty, Norris, & Murrell, 1990; Riley & Eckenrode, 1986) they may be less critical in the context of a more powerful stressor (e.g., Hobfoll & Lerman, 1989). If the event is sufficiently powerful and if the support received is congruent with demands of that stressor, the buffering effect should occur among all those experiencing the event (see Dunkel-Schetter & Bennett, 1990; Eckenrode & Wethington, 1990).

Several studies that examined the psychological impact of specific life events reported buffering effects of received support. Receipt of social support has protected psychological well-being in the events of illness (Arling, 1987; Wethington & Kessler, 1986), crime (Krause, 1986), financial difficulties (Krause, 1987), and child's delivery (Paykel, Emms, Fletcher, & Rassaby, 1980). Okun, Sandler, and Baumann (1988) assessed social support that was specifically provided in response to particular stressful episodes and found that support received from family and teachers buffered negative school events experienced by college students. Altogether, these studies indicate that tests of the buffering properties of received support may be successful if more variance is controlled for by either the assessment of individual differences or a focus on specific life events.

In this context it is not surprising that we found received tangible and informational support to guard against fear of crime. Practical support is especially important in this context because many victims may require instrumental assistance for their recovery. Aid in daily activities, financial assistance, physical protection, and information about where to seek professional help are examples of provisions that might be wellsuited to the demands criminal victimization creates (Bard & Sangrey, 1986; Gottfredson et al., 1987; Norris et al., 1990). Fear of crime is paramount among all consequences of criminal victimization (e.g., Burgess & Holmstrom, 1974; Kilpatrick et al., 1981; Norris & Johnson, 1988; Skogan, 19887). It may be the first symptom to be noticed by, or acknowledged by victims to, members of their social networks. Fear may also be a symptom that is easier than others to remedy because it is not difficult to assess what kinds of help would alleviate it. Prior research has shown that social support sometimes backfires because among other reasons, people hold inappropriate conceptions about what is and is not helpful for those experiencing traumatic events (e.g., Dunkel-Schetter & Wortman, 1982; R. L. Silver & Wortman, 1980; Wortman & Lehman, 1985). In this case, the event (violent crime), its consequence (fear), and the needs of the victims (security) may have

been easily recognized and understood by people around the victim. These same people, however, may have been less aware of, and thus less capable of alleviating, more diffuse consequences such as depression or general anxiety.

At first, it may seem surprising that received support did not protect victims of property crime from experiencing intense fear. However, this discussion implies that received support is capable of beneficial influence only at greater and unambiguous levels of stress. Although property crimes occur more frequently than violent crimes, their negative consequences may not be as frequent and obvious. Thus network members may be less clear about the needs of victims of property crime. Also, property crime victims may use self-presentational strategies (see R. C. Silver, Wortman, & Crofton, 1990) that minimize or trivialize the importance of their experience. As a consequence, social networks may assume the responsibility to sensitize victims to the potential of recurrent victimization by providing anecdotal information about crime in general as well as advice about crime precaution. These provisions intended as protective may in fact be fear-arousing. A number of reports indicate that social interaction and communication often augment fear of crime for those involved (e.g., Rosenbaum, Lewis, & Grant, 1986; R. Taylor & Hale, 1986; R. Taylor & Shumaker, 19900; Unger & Wandersman, 1985). The pattern of received support interactions also lends some credence to this interpretation: For nonvictims and property crime victims, received support was associated with slight increase in fear. Hence the difference: Because greater fear is a predictable and unambiguous consequence of more serious crimes (violence), helping behaviors may be aimed directly at restoring a sense of safety. However, for victims of lesser crimes (property), these same provisions may be aimed at shattering the illusion that it could not happen again.

It has been argued that the failure of received support to protect against stress, together with its often positive correlation with psychological distress, indicates that receiving social support constitutes a failure in coping (e.g., B. Sarason, Sarason, & Pierce, 1990; Wethington & Kessler, 1986). It is possible that successful copers may need and receive fewer support provisions than less competent individuals. However, not all of those who rely on and use their actual networks in the course of coping with stressful events are failing in that process. In fact, providing cues to others regarding one's own needs may be a very successful coping strategy (Dunkel-Schetter et al., 1987). Actually, this is the simplest way to make sure that the support one receives is most congruent with the specific demands created by the stressor. Our findings provide evidence that received support is capable of protecting

against very specific and palpable consequences of a stressful event. Receipt of social support was beneficial only to victims of violence and it protected them only against excessive fear of crime. Thus, stress-buffering effects of received support may be manifested primarily under circumstances where the event, the support, and the outcome are each congruent with the others and have been all assessed at comparable levels of specificity (cf. Dunkel-Schetter & Bennett, 1990).

Our attention to the complexities of the received support effects should not overshadow the fact that the effects of perceived support were actually more pervasive. However, a wider scope of findings for perceived social support could be a reflection of a confounding between support and psychological distress measures due to their shared selfreport bias. Although both received and perceived support were measured with self-reports, it may be that perceived support appraisals are more vulnerable to the artifacts of assessment method because they are more subjective. In fact, correlations between distress and perceived support measures were stronger than those between the distress and received support measures (see Table II). This issue is part of a greater debate in literature concerning the sources of the link between support and mental health, with method bias being one of these sources. However, recent evidence indicates that the link between support and mental health cannot be easily dismissed as a measurement confounding. In a study specifically addressing these concerns, Cutrona (1989) collected perceived social support measures from both pregnant adolescents (target respondents) and those adult individuals (informants) who knew the adolescents well enough to assess their social support. In a series of concurrent and longitudinal analyses, the informants' ratings of the young women's social support predicted their depression scores before and after the birth of a child. Thus the relationship between social support and psychological distress could not be accounted for by self-report biases. Although the threat of confounding should never be overlooked, Cutrona's study provides convincing evidence against regarding the findings for perceived support as mere artifact. Nevertheless, some traces of this bias could be present in the main effects observed for perceived social support. We believe, however, that method bias cannot explain the significant interactions because it should not operate differently across different subgroups.

One practical application of this study would be to encourage natural support networks to persist in providing concrete and instrumental aid even when it appears trivial or unconnected with the immediate emotional trauma. Research indicates that some of victims' tangible needs (e.g., emergency financial assistance, legal advice) are not fully met with the help from

indigenous helpers (Friedman, Bischoff, Davis, & Person, 1982). Ironically, the growing number of victim service programs may not fulfill these needs either because of the traditional focus of such programs on the emotional needs of the victimized. Thus it may be desirable to expand the scope of victim assistance programs to include more tangible and practical forms of aid to supplement the victims' natural social supports (see Davis & Henley, 1990).

These efforts may not necessarily yield instantaneous and substantial results. In this study, the protective potential of receiving social support was quite limited, whereas perceived support exerted great protective powers. Unfortunately, the path from received support to perceived support is not straightforward. Perceived support is an outcome of an ongoing process involving an elaborate matrix of situational, interpersonal, and intrapersonal factors (Hobfoll et al., 1990; I. Sarason, Pierce, & Sarason, 1990; Vaux, 1988). Criminal victimization adversely influences some of the very antecedents of perceived social support, such as mastery, self-acceptance, and trust in others (Janoff-Bulman, 1985; Norris & Kaniasty, 1991). Therefore, support interventions with crime victims should seek to restore those social and psychological resources that feed into the sense of social support.

Providing support to crime victims is a very complex, involving, and delicate process. What is needed is a more proactive approach of educating the public about the role of social support, both perceived and received, in coping with criminal victimization. Many neighborhood watch programs already in place could provide a vehicle for implementing this strategy. Although their primary purpose is to prevent crime, these neighborhood groups should also be an important source of support at the time when crime prevention fails, that is when neighborhood residents become victims. Being informed about the benefits, difficulties, and risks involved in social support processes may help those of us who would be providers to provide more effectively, and help those of us who would be victims to believe that social supports are available. Crime statistics highly justify such a broad community approach. Whether as a victim or a provider each of us will be touched by crime at least once in our lives.

In summary, our findings attest to the importance of both perceived and received support in the lives of crime victims. Consistent with prior research, perceived support overall appears to dominate the stress-support process. However, the findings suggest that the idea that received support may also buffer stress should not be abandoned. So much has been written about the negative aspects of social support, especially in the context of victimization. It is therefore encouraging that, in this study, social support was what it is supposed to be—supportive.

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