

Neighborhoods and Disorder: Resistance and Accommodation

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FINAL REPORT

April 1984

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72276

This report was prepared under grant 80-IJ-CX-0077 from the National Institute of Justice. Opinions are solely those of the authors and in no way reflect opinion or official policies of the National Institute of Justice or the Department of Justice.

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- 1 Gottfredson, S. D., & Gottfredson, D. M. (1979). Screening for risk: A comparison of methods. Washington, DC: U.S. Government Printing Office.
- 2 See for example Skogan, W. G. (Ed.). (1976). Sample surveys of the victims of crime. Cambridge, MA: Ballinger.
- 3 For a review see DuPow, F., McCabe, F., & Kaplan, G. (1979). Reactions to crime: A critical review of the literature. Washington, DC: U.S. Government Printing Office, or, Taylor, R. B., & Hale, M. M. (1983, November). Alternative models of fear of crime. Paper presented at the annual meeting of the American Society of Criminology, Denver, Colorado.
- 4 See, for example Lavrakas, P. J. (1981). Citizen participation and community crime prevention. Washington, DC: U.S. Government Printing Office.
- 5 Relations between these three lines of inquiry, since they have been pursued separately, have not been established. Some work has been done on links between fear and protection (see Taylor and Hale, 1983), but results have been contradictory.
- 6 Garofalo, J., & Laub, J. (1978). The Fear of crime: Broadening our perspective. Victimology, 3, 242-253.
- 7 See for example Skogan, W. G., & Maxfield, M. (1981). Coping with crime. Beverly Hills, CA: Sage. But for a view suggesting that the link is mediated by neighborhood perceptions see Sparks, R. F., Genn, H. G., & Dodd, D. J. (1977). Surveying victims: A Study of the measurement of criminal victimization. New York: Wiley.
- 8 See Hindelang, M. J., Gottfredson, M. R., & Garofalo, J. (1978). Victims of personal crime: An Empirical foundation for a theory of personal victimization. Cambridge, MA: Ballinger.
- 9 This perspective is explained by Skogan and Maxfield (1981). They also provide some empirical data in support of this view. The idea of local ties as bad news transmitters can be traced to Festinger, L., Schachter, S., & Back, K. (1950). Social pressures in informal groups. Stanford, CA: Stanford University Press. These authors "planted" a rumor and then observed how it spread.
- 10 See Garofalo, J., & Laub, J. (1978).

- 11 Hunter, A. (1978). Symbols of incivility. Paper presented at the 1978 meeting of the American Society of Criminology, Dallas, Texas.
- 12 For some evidence supportive of the incivilities hypothesis see, for example, Lewis, D., & Maxfield, M. (1980). Journal of Research in Crime and Delinquency, 17, 160-189.
- 13 See Taylor, R. B., & Hale, M. M. (1983).
- 14 Liska, A. E., Lawrence, J. J., & Sanchirico, A. (1982). Fear of crime as a social fact. Social Forces, 60, 760, 770.
- 15 Podolefsky, A. (1983). Case studies in community crime prevention. Springfield, IL: Charles C. Thomas.
Podolefsky, A., & DuBow, F. (1981). Strategies for community crime prevention: Collective responses to crime in urban America. Springfield, IL: Charles C. Thomoas.
- 16 Podolefsky, A. (1983).
- 17 For a review of this debate see Taylor, R. B., & Shumaker, S. A. (1982, June). Community crime prevention in review. Paper presented at the annual meeting of the Law and Society Association, Toronto, Canada.
- 18 See for example Washnis, G. J. (1976). Citizen involvement in crime prevention. Lexington, MA: Lexington.
- 19 Yin, R. K. (1977). Evaluating citizen crime prevention programs. Santa Monica, CA: Rand.
- 20 DuBow, P. C., Reed, D. E. (1976). The limits of victim surveys: A community case study. In W. G. Skogan (Ed.), Sample surveys of the victims of crime (pp. 151-171). Cambridge, MA: Ballinger.
- 21 Lavrakas, P. J. (1981).
- 22 For a review of the history of this concept see Janowitz, M. (1975). Sociological theory and social control. American Journal of Sociology, 81, 82-108. For a recent critical review of the uses of this concept see Meier, R. F. (1982). Perspectives on the concept of social control. Annual Review of Sociology, 8, 35-55. For a recent and very comprehensive synthesis in this area see Greenberg, S. (1982). Neighborhood responses to crime: A Consideration of conditional diversions. Paper presented at the annual meeting of the Law and Society Association, Toronto, Canada. The psychological counterpart to informal social control is bystander intervention. The similarity between these two is evident in Gillis, A. R. (1983). Bystander intervention and

- the territorial imperative. Sociological Inquiry, 53, 499-460.
- 23 Suttles, G. D. (1968). The social order of the slum. Chicago, IL: University of Chicago Press.
- 24 Maccoby, E. E., Johnson, J. P., & Church, R. M. (1958). Community integration and the social control of juvenile delinquency. Journal of Social Issues, 14, 38-51.
- 25 Hackler, J. C., Ho, K., & Urquhart-Ross, C. (1974). The willingness to intervene: Differing community characteristics. Social Problems, 21, 328-344.
- 26 See, for example Skogan & Maxfield (1981) or Hackler et al, (1974).
- 27 One exception is a study on policing, which included 60 neighborhood. See, Sharp, E. B. (1975). Citizen organization in policy issues and crime prevention: Incentives for participation. Journal of Voluntary Action Research, 7, 45-58.
- 28 For a detailed discussion of statistical power see Cohen, J. (1977). Statistical power analysis for the behavioral sciences (2nd ed.). New York: Academic.
- 29 Cohen (1977, Table 3.3.5).
- 30 Cohen (1977, Table 3.3.2).
- 31 Lewis, D., & Maxfield, M. (1980).
- 32 Podolefsky, A. (1983).
- 33 For an example of seriousness scaling of crime events see Gottfredson, S. D., Young, K. L., & Laufer, W. S. (1980). Additivity and interaction in offense seriousness scales. Journal of Research in Crime and Delinquency, 17, 26-41.
- 34 There are of course, exceptions, such as instances where the disorderly condition becomes the site for disorderly behavior. One of residents' greatest complaints about vacant houses is that they attract drug dealers and street bums, serving as a meeting place for the first and a sleeping place for the second. In the case of vacant lots at one community meeting the first author was told by a resident that the vacant lot next door was never any problem until people started leaving stolen cars there, and setting them on fire after stripping them.

- 35 For some comments on the relevance of such social involvement see Granovetter, M. (1973). The strength of weak ties. American Journal of Sociology, 78, 1360-1380. Or, Booth, A., & Edwards, J. (Eds.). (1973). Social participation in urban society. Cambridge, MA: Schenkman. Or, Suttles, G. D. (1968).
- 36 For a review of the attachment literature, and a presentation of a neighborhood level attachment model, see Shumaker, S. A., & Taylor, R. B. (1983). Attachment to place. In N. Feimer and E. S. Geller (Eds.), Environmental psychology: Directions and perspectives. New York: Praeger. For a recent work on the relevance of territorial functioning see Taylor, R. B., Gottfredson, S. D., & Brower, S. (1981). Territorial cognitions and social climate in urban neighborhoods. Basic and Applied Social Psychology, 2, 289-303.
- 37 The curved, bidirectional arrows on the far left hand side represent non-causal relations; these are not hypotheses but simply "givens."
- 38 Crenson, M. (1983). Neighborhood politics. Cambridge, MA: Harvard University Press.
- 39 Fried, M. (1982). Residential attachment: Sources of residential and community satisfaction. Journal of Social Issues, 38, 107-119.
- 40 Kasarda, J. P., & Janowitz, M. (1974). Community attachment in mass society. American Sociological Review, 39, 328-339.
- 41 Taylor, R. B., & Shumaker, S. A. Questioning implicit assumptions. Manuscript submitted for publication.
- 42 Conklin, J. (1975). The impact of crime. New York: MacMillian.
- 43 Hunter (1978); Lewis & Maxfield (1980).
- 44 Rainwater, L. (1966). Fear and house as haven in the lower class. Journal of the American Institute of Planners, 32, 23-31.
- 45 Granovetter (1973) has argued that very strong local ties may promote insularity and thus a blindness to potential external threats. In this case, however, the threat (disorder) we are discussing here is internal to the neighborhood.

- 46 See Glass, D., & Singer, J. (1972). Urban stress. New York: Academic. They carried out an experimetrn in which a subject was "victimized" by an unresponsive bureaucratic arrangement and found that such victims, subsequently, were more likely to "give up." The same processes may be at work at the level of neighborhood populations.
- 47 Mancur Olson's ((1965) Logic of collective action. New York: Schacken) implies such an hypothesis. Individuals and groups make an estimate of their realistic chances of achieving a certain goal; if those chances are low, the path toward that goal will not be pursued.
- 48 For details see Taylor, R. B., Brower, S., & Drain, W. (1979, October). Toward a neighborhood-based data file: A Map of Baltimore Neighborhoods. (Occasional Paper). Baltimore, MD: The Johns Hopkins University, Center for Metropolitan Planning and Research. This mapping of neighborhoods was in essence the very same one provided to the Bureau of the Census for the 1980 Neighborhood Statistics Program.
- 49 For an example of such see Kobrin, J., & Schuerman, L. A. (1982). Interaction between neighborhood change and criminal activity. (Executive Summary). Social Science Research Institute, University of Southern California.
- 50 Neighborhoods were eliminated if they contained less than 500 residents (based on the 1970 census) or if they contained fewer than 10 census blocks.
- 51 Kish, L. (1949). A procedure for objective respondent selection within the household. Journal of the American Statistical Association, 44, 380-387.
- 52 In the case of residential burglary we actually divided by 1980 number of occupied housing units.
- 53 The fact that the crime information comes from a period of several years before the actual surveys is not a problem since across the years the ranking of neighborhoods on crime is quite stable.
- 54 For further detail and justification regarding this procedure see Igra, A. (1979). On Forming set composites to summarize a block recursive model. Social Science Research, 8, 253-264.
- 55 Cohen (1977) Table 3.3.6.
- 56 Cohen (1977) Table 9.3.3.

- 57 Cohen (1977). Table 2.3.6.
- 58 For a discussion of this problem see Warren, R. D., White, J. K., & Fuller, W. A. (1974). An Error-in-variables analysis of managerial performance. Journal of the American Statistical Association, 69, 886-893. The program used to "take care of" the error was Wayne Fuller's SUPERCARP program. (Hidiroglov, M. A., Fuller, W. A., & Hickman, R. D. (1980). SUPERCARP (6th ed.). Statistical Laboratory, Iowa State University. We assumed that crime had been reported without error. We are aware, of course, of problems in crime under-reporting. Nonetheless, we assume that crime actually recorded by police constitute actual crimes. We also assumed that people reported demographic factors without any error.
- 59 Anscombe, F.J., & Tukey, J.W. (1963). The examination and analysis of residuals. Technometrics, 5, 141-160.
- 60 Heise, D. (1972). Causal analysis. New York: Wiley.
- 61 cf. Stokols, D., & Shumaker, S.A. (1981). People in places: A Transactional view of settings. In J.H. Harvey (Ed.), Cognition, social behavior, and the environment. Hillsdale, NJ: Erlbaum.
- 62 Appleyard, D. (1981). Livable streets. Berkeley, CA: University of California Press.
- 63 Of course the actual correlation of error between the mediating composite and the outcome is 0, since the composite was optionally weighted. Using a unit weighted composite the error correlation (correlation between residuals) is .02.
- 64 Using a unit-weighted mediating composite, the actual correlation between mediating and outcome residuals was .13.
- 65 This finding corroborates Maccoby et al.'s (1958) finding that informal social control was weaker in less stable areas.
- 66 See Carr, T. H., Dixon, M. C., & Ogles, R. M. (1976). Perceptions of community life which distinguish between participants and non-participants in a neighborhood self-help organization. American Journal of Community Psychology, 4, 357-366.
- 67 For a very different viewpoint see Kobrin, & Schuerman (1982).
- 68 For an extensive discussion of this issue see Harries, K. D. (1980). Crime and environment. Springfield, IL: Charles C. Thomas.

- 69 Technically, such an operation, when inappropriate, is labeled the "partialling fallacy."
- 70 An argument for the class determination of crime levels can be made from the longitudinal study by Kobrin and Schuerman (1982).
- 71 This is if our focus is on the short term. In the long run, of course, physical environment can lead to changes in the social and class composition of the neighborhood population, as in the case of revitalizing neighborhoods.
- 72 Results from another study in Minneapolis (McPherson, M., Silloway, G., & Frey, D. L. (1983). Crime, fear and control in neighborhood commercial centers. Unpublished final report. Minnesota Crime Prevention Center, Minneapolis, Minnesota), and one in Atlanta (Taylor, R. B., & Hale, M. M. (1983)) support a conclusion very similar to ours.
- 73 The argument here on viable neighborhoods follows the proposals set forth by Schoenberg, S. P., & Rosenbaum, P. L. (1980) Neighborhoods that work. New Brunswick, NJ: Rutgers University Press.
- 74 Schoenberg, S. P., & Rosenbaum, P. L. (1980, p. 32).
- 75 Schoenberg, S. P., & Rosenbaum, P. L. (1980, p. 34).

Abstract

The question of how neighborhoods resist and/or accommodate to disorder was addressed in a study of sixty-six (66) Baltimore, Maryland neighborhoods. We sought to understand the determinants of fear of crime, behavioral restriction, and formal and informal attempts to counter crime and disorder. We focused exclusively on processes occurring at the neighborhood level. In the selected sites 1,622 households were surveyed and 808 street blocks were assessed by teams of on-site raters. Results indicated that fear levels, restriction of activity, informal social control attempts, and expectations of and awareness of anti-crime activities were largely a function of how involved people were with the neighborhood and their neighbors, and their confidence regarding the future of their neighborhood. Objective measures of the physical environment, such as deterioration and type of land use, and recorded crime levels, had minimal impacts on responses to disorder. It appeared that a neighborhood's position in the larger society, as reflected in income and racial composition, influenced responses to disorder because position determined levels of confidence, attachment, and involvement. These results suggest that practitioners concerned with issues such as reducing fear of crime and promoting community crime prevention would do well to cooperate with local organizations in furthering the development of community spirit.

Introduction

As crime, and concern about crime and its effects, have increased in the last fifteen years, so too has research into the causes and consequences of crime. As a result of this research we know a considerable amount about individuals and crime: which offenders are likely to commit a crime again,¹ which people are likely to be the victims of crime,² which people are likely to be the most fearful of crime,³ and which people are likely to participate in collective crime prevention efforts.⁴ At the same time, for theoretical and practical reasons, increasing attention has been given to the context of crime and its consequences. On the theoretical side, researchers have been required to consider the context of criminals, victimization, fear, and crime prevention as they have sought to better explain these phenomena. Factors such as neighborhood quality, homogeneity, or succession, have come to light. On the practical side, administrators and practitioners have sought organizations which could administer crime prevention, victim assistance or post-release programs. In many instances the vehicles of service delivery chosen have been neighborhood, community, or multi-neighborhood (regional, umbrella or coalition) organizations. Thus neighborhoods are important, practically as well as theoretically, for understanding crime and related issues.

But, despite the acknowledged importance of neighborhoods for understanding crime and its consequences, remarkably little is known about the relevant neighborhood processes. Why do residents of some neighborhoods have higher fear levels than residents in other neighborhoods? Why are residents of some neighborhoods more willing to exercise informal social control than residents of other neighborhoods? Why are residents of some neighborhoods more aware of local, organized anti-crime efforts than are residents of other neighborhoods? It is exactly these questions to which the current research is addressed.

Within the broad field of crime and its consequences, our effort addresses three more specific lines of inquiry: fear of crime and behavioral restriction, participation in or awareness of community crime prevention, and informal social control.⁵ We now turn to a brief discussion of some of the work in each of these three areas, and highlight some of the important issues. We then propose new ideas which may be useful for understanding and integrating these issues.

Fear of Crime

Fear of crime refers to a constellation of feelings, attitudes, and expectations concerning one's safety. It includes worries about victimization or other lesser confrontations, feelings of vulnerability, perceptions of risk, and the perception or expectation that things are just not safe. More recently it has been proposed⁶ that fear of crime is also

a reflection of more general urban unease and community concern. Clearly, fear of crime refers to a broad range of cognitive and affective concerns which all center around notions of being vulnerable to or in some way being "victimized" by conditions of disorder, particularly crime and crime-related problems.

Not surprisingly, work seeking to "explain" fear of crime began with crime itself. This hypothesis has been stated in two forms. The direct contact hypothesis proposed that those who had been victimized by crime would consequently experience a higher level of fear of crime. And, research has supported this idea.⁷ The indirect contact version of this link has received less support. This view states that those who are in subgroups of the population that are most likely to be victimized, i.e. that have the highest victimization rates, will have the highest fear levels. Research, however, has not supported this notion. It has been observed, for example, that women and the elderly, each of which has some of the lowest victimization rates, are the most fearful subgroups of the population.⁸ One potential explanation for this discrepancy is that women and the elderly, if victimized, would experience much more serious consequences than other subgroups, due to the implications of sexual assault in the case of women, and the long recovery time required with questionable health status at the end, in the case of the elderly. Although tenable, neither the direct nor the indirect contact perspective has been able to explain a very well documented pattern: fear of crime is much more widespread than

crime itself.

Such a pattern has led to a wider search for the "causes" of fear of crime. This research has moved off in two different directions: one perspective has focused on the interpersonal consequences of actual victimization, and the other has focused on community and individual-within-community dynamics.

Focusing on the interpersonal consequences of victimization, the indirect victimization perspective has suggested that people hear about friends, acquaintances, and neighbors who get victimized. Stories of such incidents are passed along via local communication channels, and those who hear the news consequently become more concerned and fearful regarding their own vulnerability. Local social ties "multiply" or propagate the impacts of crime.⁹ This perspective has received some empirical support.

Broader in scope have been the perspectives which have focused on community dynamics, and the impacts of community processes on individuals. It has been suggested that fear of crime is a reflection of community concern.¹⁰ In areas that are declining or undergoing transition, residents infer that the neighborhood is in an unstable situation. This gives rise to concern regarding the future of the community, and regarding one's own safety therein, and it is in this way that fear is engendered. Somewhat different from this has been the "incivilities" perspective.¹¹ As areas undergo ecological change this gives rise to crime, physical decay, and widespread

disrespect for the norms of acceptable public behavior. Evidence of decayed housing, vacant lots, loitering, and public drinking and drug use are more evident. Residents perceive these physical and social signs of decay, and infer that (a) the agents charged with maintaining the physical and social environment are incapable of doing so, and (b) this wider spread deviance means that the individual is more at risk, more likely to be victimized in some way. Thus, fear arises.¹² In short, these perspectives see fear emerging from an awareness of community dynamics that have significant implications for the individual's well being.

All of these perspectives--indirect victimization, incivilities, and community concern, then, are concerned with understanding why some individuals are more fearful of crime, and feel less safe, than others. And, they all have some empirical validity, although no one approach appears substantially more powerful than another, and none appears able to explain more than about one-tenth of the variation in the amount of fear of crime people report.¹³ Nonetheless, these perspectives and tests of them have confirmed that in addition to crime, the larger physical and social residential environment surrounding the individual has an impact on how fearful of crime that person is.

If neighborhood conditions influence fear of crime, and thus fear varies from neighborhood to neighborhood, it may be possible to understand neighborhood fear levels. The population of neighborhood A may report a higher fear level than the population

of neighborhood B, and this may be explainable in terms of the different conditions present in the two locales. If this understanding could be gained, it would have several practical benefits. For example, areas at risk due to high fear of crime arising out of neighborhood conditions could be pinpointed to receive fear reduction programs. Theoretically, examining fear of crime at the neighborhood level amounts to treating fear as a social fact. There is precedent for such an approach.¹⁴ What this means is that fear mainly reflects and has its origins in the social life of the neighborhood. This approach is particularly warranted by and indeed flows out of the community concern and incivilities perspectives considered above. This line of reasoning regarding fear of crime is theoretically justified, and, potentially useful.

The behavioral concomitant or consequence of fear is restriction of activity and increased levels of self protection. At the neighborhood level we would expect that the same type of conditions that give rise to fear would also give rise to patterns of restricted activity such as going out alone less, or going out at night less.

Community Crime Prevention

Community crime prevention (CCP) activities represent a behavioral, collective response to crime or related problems of disorder. CCP represents organized attempts of groups of individuals, with or without the support of local officials such

as planners or police crime prevention experts, to reduce crime or related problems. One of two general types of approaches is usually observed.¹⁵ Either residents take a victimization prevention approach, in which programs such as increased hardware, increased surveillance and reporting, or increased personal precautions are advocated; or, a social problem amelioration approach is taken in which recreational opportunities, employment training or opportunities, or other diversion programs for potential offenders are sought. A problem arises, however, exactly from the broad array of events that can be called CCP. It has recently been argued that any organized, collective efforts which in the minds of residents or participants are relevant to reducing crime, should be classified as CCP efforts.¹⁶ Others, by contrast would classify as CCP only those activities involving in recognized, coherent, "packaged" programs such as Neighborhood Watch, Operation Identification, Citizens on Patrol (COP), Block Watch, and so on. This difference of opinion about what is and what is not community crime prevention has yet to be resolved.

Equally complicated has been the question of the effectiveness of community crime prevention.¹⁷ Some have felt that CCP has already demonstrated that it is and has been quite effective in reducing crime levels,¹⁸ whereas others feel that CCP has not, and due to a variety of issues could not be effective in reducing crime.¹⁹ This latter viewpoint has led to the suggestion of somewhat different evaluation criteria. It

has been proposed, for example, that CCP programs should be allowed and encouraged to operate except in cases where the programs clearly make the situation worse. If one can not prove that the programs are helping then one simply seeks to assure that they are not hurting matters. For example one would want to be sure that a CCP program did not lower clearance rates, or increase negative perceptions of an area. It has also been suggested that one examine how aware people are of CCP activities.²⁰ If a neighborhood has a local organization, and that organization is involved in CCP, one could argue that the neighborhood where the CCP efforts were more widely known was in some respects a more successful case. As we shall explain further below, this is the approach to understanding neighborhood CCP which we took in this study.

Again, as with the fear issue, our approach is at the neighborhood level, examining how neighborhoods differ in their awareness of ongoing CCP efforts. By looking at how neighborhoods differ on this parameter we are assuming that there are neighborhood conditions and social dynamics which give rise to this variation.

Obviously, we would expect that residents in neighborhoods where crime is more prevalent would be more aware of local CCP efforts because in those locations such efforts are more prevalent. But, this relationship aside, we might also expect that neighborhoods where residents are more "tuned in" to neighborhood life would be more aware of CCP efforts that did

exist.

This approach to CCP awareness complements earlier work in which the characteristics of individuals who participated in local organizations and local CCP efforts have been examined.²¹ One conclusion of that work was that the people who got involved were "joiner" types, not those who were excessively concerned about crime. It will be interesting to see if analogous results are obtained at the neighborhood level, i.e. that those neighborhoods with residents most aware of local CCP efforts are those where residents are generally more involved in and aware of a range of neighborhood efforts.

Informal Social Control

Informal social control is a very complex concept but one which, at the same time, is very fundamental to sociology.²² Although there are many different types of informal social control or ways in which it could be manifested, the basic idea is that residents, upon witnessing behavior deemed deviant or inappropriate, will intervene or take other steps to either stop that instance of inappropriate behavior or to prevent a recurrence of such. Informal social control is a flexible concept in that it is relevant to responses to a broad range of behaviors ranging from minor nuisances such as late night noise or kids taking a shortcut across the lawn, to more serious events such as minor crimes like vandalism, to very serious crimes such as street assaults or attempted burglaries. It is, however, also

diffuse in that it can encompass interventions ranging from direct intervention, to getting organized, to calling in the police to deal with a problem. But, regardless of the form of the response, or whether it occurs during or after the event in question, the central focus is on citizen-initiated responses which are outside the purview of formal, extant organizations or organizational structures.

It has been suggested that in lower income areas which are not adequately serviced by agents of formal control such as police, informal social control may play a major role in preserving local order.²³ The elements involved may be diverse, ranging from vigilant mothers sitting on stoops, to corner gangs, to gossip. These diverse elements may weave together a fragile but nonetheless largely effective web of influence, helping to "keep things in line."

The strength of this web of influence is shaped by a host of background factors. For example, one study comparing a high vs. low delinquency area found that willingness to intervene in troublesome situations were higher in the latter area,²⁴ and this predisposition appeared related to the homogeneity of the area. A Canadian study found that areas where residents were more willing to intervene in troublesome situations were also areas where neighborliness (local acquaintanceships) was higher.²⁵ But, this relationship only emerged if the areas were stable, and did not have a transient population. Thus, as in the cases of fear and CCP, informal

social control is influenced by contextual or neighborhood factors.

If neighborhoods vary in terms of the amount of informal social control their populations are willing to exercise, this also raises the possibility of understanding or "explaining" this variation. Consequently, one of our goals here is to attempt to predict how much informal social control neighborhood populations are willing to exercise.

Again, if such insight could be gained it would have practical benefits. Areas whose "potential" for informal social control is greater than the actual amount of informal social control "demonstrated" could be counseled on ways to improve this web of influence, for example. Or, if areas low in potential and demonstrated informal social control could be pinpointed, resources for delinquency prevention, perhaps channeled through local organizations, could be targeted for such areas.

Statement of Purpose

It is clear from the above that neighborhood context influences fear, informal social control, and perhaps awareness of CCP activities. If these attitudes and behaviors do vary by neighborhood this suggests that they can be modeled or understood at the neighborhood level. This, then, was the purpose of the current project: to understand the determinants of fear,

informal social control, and awareness of CCP programs, and to predict these outcomes at the neighborhood level.

This research effort is different in two important ways from most earlier investigations in this area. First, most studies which have looked at impacts of neighborhood factors on things like fear, informal social control, and so on, have looked at impacts on individuals. That is, predictor variables included one or more neighborhood-level properties, such as crime rate, while outcomes were measured at the individual level.

Theoretically, such studies are telling us about impacts of neighborhood context on individuals; they are not informing us about processes at the neighborhood level linking predictor and outcome variables. It is the latter and not the former that is of interest to us here.

Second, earlier studies which have attempted to examine neighborhood level processes²⁶ have included only a very small number of neighborhoods, ranging anywhere from two to 21.²⁷ Such studies are problematic in the following respect. If one wants to study neighborhood processes then the appropriate unit of analysis is the neighborhood. Therefore, in a particular study, one has as many cases as one has neighborhoods. Even if a researcher has 100 resident interviews in each neighborhood in his/her study, but has only ten neighborhoods, then he/she has ten (and only ten) cases, if the primary concern is neighborhood processes. And, unfortunately, with a small number of cases, one's chances of "finding" anything out are very slim indeed.

This is due to the nature and importance of statistical power.²⁸

Statistical power ($1 - \beta$) ranges from zero to almost one, and refers to one's ability to "detect" a difference, or an "effect," that actually exists in the real world. Power is a function of three things: how large the effect or difference is that one is looking for, the level of significance of the difference that must be achieved (usually set at $p < .05$), and the number of cases in the study. As the number of cases goes up, so too does the researcher's statistical power. Power of .50 means that one has a 50/50 chance of finding an effect or a difference that actually existed out there. And, it is in terms of statistical power that many past studies have fallen short. A study with 12 neighborhoods, for example, using a conventional, two-tailed significance criterion of $< .05$, has less than a 50/50 chance of finding a large effect or difference that may actually exist. Statistical power of such a test is .40.²⁹ Even if directional or one-tailed significance tests were used, one would only have power slightly better than 50/50, i.e., .54.³⁰ Of course, in such studies chances of finding effects or differences that are less than large, are even slimmer. Consequently, such studies would not have found hypothesized effects or differences, even if such had existed, because of their low statistical power.

In the design of this study, one of our key concerns was to include enough neighborhoods, and to use an appropriate significance level, such that our levels of statistical power

would be acceptable, with "acceptable" being defined as having an 80% chance or better of finding effects or differences which really exist.

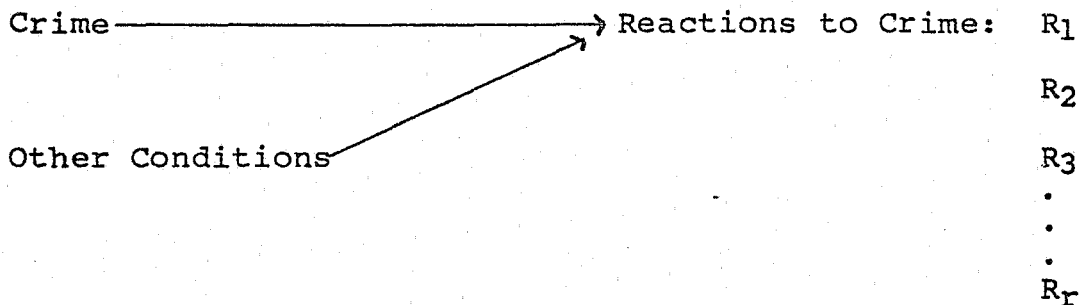
In sum, then, our purpose is to examine neighborhoods, understand and predict why some neighborhoods have less fear, more informal social control, and more awareness of community crime prevention activities, than others.

Theoretical Perspective

In order to achieve the above goal we developed a theoretical model which helped us define what concepts we wanted to use in our examination. We explain our model below. But, before getting to that exposition we want to clarify our approach to this area of inquiry.

Background Assumptions

The outcomes of interest in this area of research have been generically labeled "reactions to crime." This heading has subsumed issues such as fear, behavioral restriction, protection, and organizing collectively to combat crime. The working assumption has been that if crime is present, and if other factors are present as well (e.g., certain neighborhood features or certain individual attributes), then these responses to crime could be observed. Graphically:



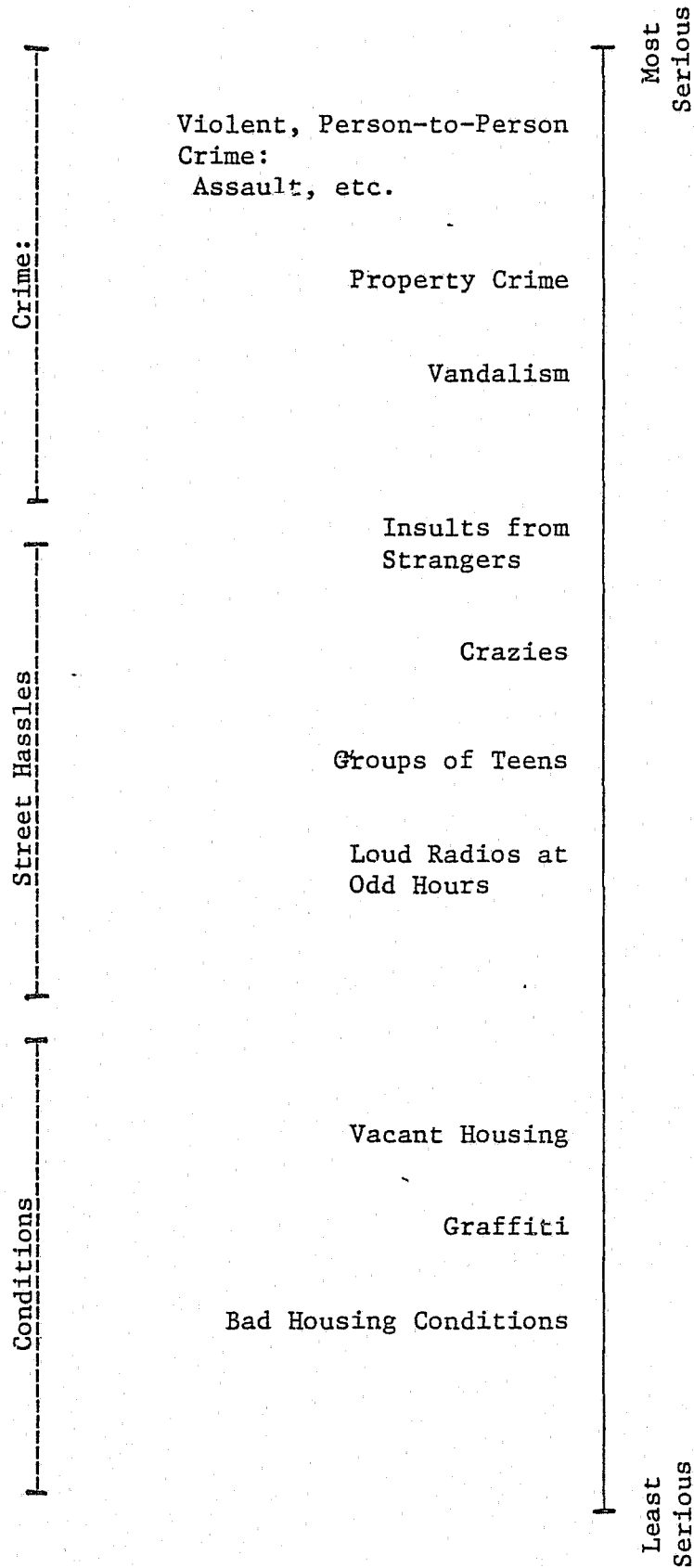
By labeling these outcomes as reactions to crime the implication has been that crime served as a prepotent, salient stimulus, overshadowing other factors. At the same time much of the recent work in this area has indicated that crime may not be the prime motivator. Two results from the recent five year Northwestern study clarify this point. One analysis of survey data from several neighborhoods found that whether or not crime inspired fear depended upon the level of physical deterioration in the locale.³¹ Another study found that residents involved in CCP saw the goals of their activities as the general amelioration of social problems, of which crime was clearly a part, but not simply the prevention of crime per se.³² Thus, on both the "stimulus" and the "response" side crime is intertwined with, rather than separated from, a constellation of related problems.

And, this larger constellation can be termed events of disorder, which disrupt, jeopardize, or perhaps simply detract from the quality of everyday life. Further, all instances of

disorder are not created equal. Some are profoundly disturbing to individuals or a community. For example, a recent beating and knifing of an elderly couple by two teens seeking money upset residents in a northeast Baltimore neighborhood for over a year. Less disruptive to the community, but also more chronic are events such as rowdy youths hanging out playing radios late at night. Disorderly events are complemented by disorderly conditions such as playgrounds strewn with broken glass, graffiti, abandoned buildings, vacant, overgrown lots, and so on. And, although these different types of events and conditions may be dissimilar in many qualitative respects, there is one ruler that they all can be measured on, and that is their seriousness.³³ As Figure 1 shows, at the most serious end of the disorder continuum are violent, stranger-to-stranger street crimes such as assault, robbery, rape and manslaughter. Somewhat less serious are property crimes without confrontation such as burglary or motor vehicle theft. A perspective focusing solely on crime, however, would stop at this point, and not attend to less threatening instances of disorder. In the midrange of the disorder continuum are the "street hassles" of urban life which, although by and large harmless, always have the potential for direct conflict: people saying insulting things, teens, crazies, drunks or gangs loitering, loud radios or late parties, and so on. And, on the least serious side of the disorder continuum are those conditions, such as dilapidated housing or overgrown, vacant lots, which, although quite capable of undermining one's

Figure 1

The Continuum of Disorder



confidence in a locale, pose no immediate threat to the individual.³⁴ Thus, if we focus on a continuum of disorderly events and conditions, rather than just crime, we are attending to the full scope of problems experienced by residents.

Although these disorderly events and conditions vary in terms of seriousness, their impact on the neighborhood may depend, in addition to seriousness, on their frequency and possibility of amelioration. There may be two streets in the neighborhood where defiant teens with loud radios live, but on one block bothersome noise may only occur once a month whereas on another block it may occur every night. In the second case, despite equivalent seriousness, the cumulative impact will be a much higher level of annoyance.

This expanded perspective on disorder as opposed to just crime not only brings into focus the range of issues with which neighborhoods must cope, but also allows us to examine how neighborhoods deal with different types of disorder. Neighbors' willingness to intervene may vary depending upon the seriousness of the situation. But, at the same time we may find the same types of neighborhoods willing to intervene in more as well as less serious cases. Stated differently: we can examine neighborhood responses to crime in relation to neighborhood responses to other, less serious types of disorder, thereby placing responses to crime in a clearer context.

On the outcome side the concepts we have been discussing--fear, restriction, informal social control and CCP

efforts, can be recast given our focus on disorder instead of just crime. CCP and informal social control can be seen as attempts to contend with or resist disorder; to reduce it, manage it, or somehow have an impact on it. By contrast fear and behavioral restriction can be seen as accommodations, cognitive and behavioral (respectively), or simply responses to disorder. In such responses there is no implication of trying to change the external condition; no improvements are sought, the neighborhood is simply "living with" it. We would expect, of course, that those neighborhoods contending with disorder are not those accommodating to it.

The operational implications of our approach are that we will (1) investigate responses to other incidents of disorder besides crime, and (2) that we will examine the inter-relations between various types of responses to disorder in order to identify resisting vs. accommodating types of responses.

Theoretical Model

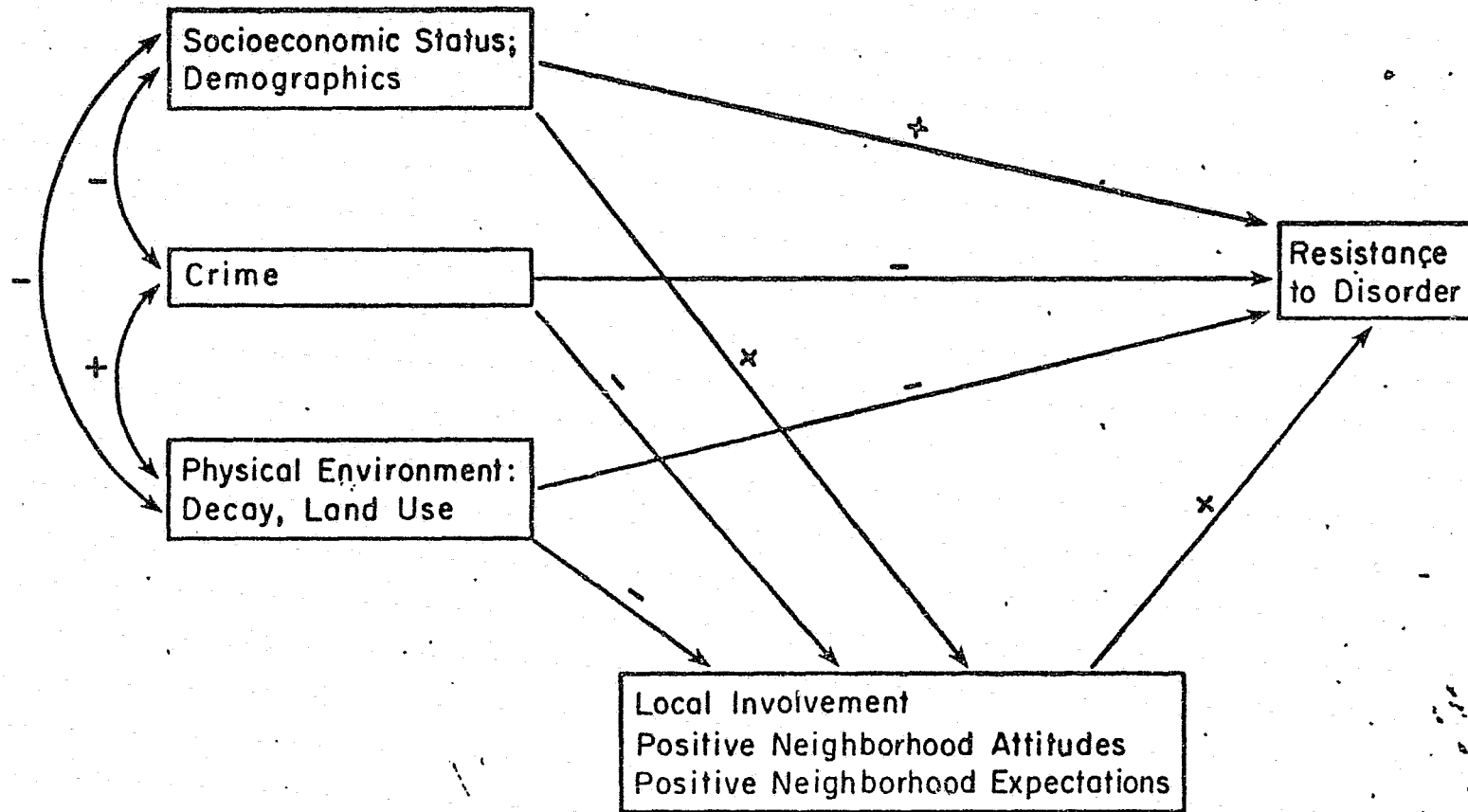
Based in large part upon past research we have proposed a theoretical model to guide our investigation. Since we are concerned about two general outcomes--resistance to disorder and accommodation to disorder, we present one model for each general outcome. Each model consists of boxes, which represent a concept or a group of concepts, and arrows, which represent causal relations; i.e., $x \rightarrow y$ means x "causes" y . These causal relations are represented as unidirectional, i.e., we rule out

that $y \rightarrow x$. Although this is undoubtedly somewhat of a simplification of how the real world operates, (a) it is in keeping with how others have modeled such processes, and (b) is justified in that many of our predictor variables, which at the left hand side of Figures 2 and 3, were measured at an earlier point in time than were the mediating and outcome concepts which appear, respectively, in the middle and on the right hand side of the causal diagram. Thus, we feel that our recursive (i.e., unidirectional) causal model is appropriate.

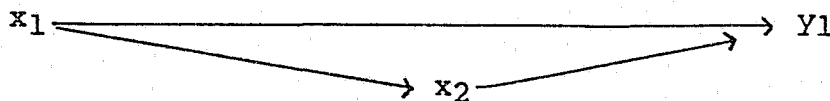
Before explaining the specific hypotheses contained in these models, the general logic of the diagrams in Figures 2 and 3 deserves exposition. The theoretical models include both direct and indirect effects. Direct effects are straightforward causal impacts where one quantity directly leads to another ($x \rightarrow y$). Consider for example, the achievement of high grades (y_1) at the end of a college semester. A good predictor of such would be how many hours of serious studying the student put in over the course of the semester (x_2). There is a direct relationship between x_2 and y_1 , thus their causal relationship could be portrayed as a direct effect: $x_2 \rightarrow y_1$. Suppose we were to now consider another determinant of end-of-semester grades: academic motivation (x_1). Suppose also that we had good, accurate measures of the student's motivation. We might hypothesize that the student's high grades at the end of the semester came about as a result of a high level of motivation at the beginning of the semester. But, this effect was not direct;

FIGURE 2

Theoretical Model:
Resistance to Disorder



there was an intervening process involved. And, that process was time spent doing serious studying (x_2) which mediated the relationship between x_1 and y_1 . x_1 (motivation) caused x_2 (serious studying) which in turn resulted in y_1 (high grades). This is an indirect effect. Graphically: $x_1 \rightarrow x_2 \rightarrow y_1$. This means that the effect of x_1 on y_1 is carried by or channeled through x_2 . Finally, it is possible for one causal variable to have both a direct and an indirect effect. In our example motivation (x_1) may have a direct as well as an indirect effect. It could, for example, result in a student trying harder to solve some particularly tough questions on a final exam, or in attempting extra credit questions. Thus, the full causal model could be expressed as:



showing both a direct and an indirect effect of motivation on end-of-semester grades.

And, this is exactly the format of the causal models we have specified. We are predicting that certain factors, such as socioeconomic status (SES) and crime and physical decay can have direct effects on (e.g.,) accommodation to disorder but, at the same time, they can have indirect effects by influencing how people feel about their neighborhood and how involved they are in it.

Figure 2 presents a model concerned with predicting resistance to disorder. The concepts in the model are as follows. On the far, left-hand side are three variables. Socioeconomic status and demographics refers to basic factors such as income or education level of the neighborhood population, the percent of the population that are homeowners, or black, or have children in the household and so on. In the present study our measures of these factors come from surveys of about 25 residents in each study neighborhood. Crime refers to the total serious (Part I) crimes in a neighborhood, per 100,000 residents, reported to the Baltimore City police department. To stabilize these figures, a three year average was taken using the calendar years 1978-1980. Physical environment measures were collected from on-site assessments (explained in more detail below) of 20% of all the street blocks in each neighborhood. The different elements measures were boiled down to two general factors: physical decay (graffiti, vacant houses, litter, people hanging out, and so on), and non-residential (industrial, commercial, vacant) vs. residential land use. Scores on both of these factors correlated with crime rates. These assessment data were collected in the summer of 1981.

The box in the middle of the diagram contains the mediating attitudes, expectations, and behaviors which we think are relevant to the outcome in question. Local involvement refers to social involvement such as strong patterns of local friendship or acquaintanceship, patterns of cooperation and organizational

involvement and awareness, and so on.³⁵ Involvement also refers to an awareness of neighborhood facts, such as boundaries, and the neighborhood name. Positive neighborhood attitudes refer to factors such as a neighborhood population which is very attached to its neighborhood or which is very satisfied or which has strong feelings of territorial responsibility.³⁶ Positive neighborhood expectations refer to feelings of confidence regarding the neighborhood and where it is going; whether it is improving or declining. Finally, as an outcome we have resistance to disorder which includes informal social control, and formal and informal crime prevention steps taken. These then are the concepts included in our model. They all refer to neighborhood level processes.

The arrows connecting the concepts represent hypotheses.³⁷ These are as follows:

SES and demographics have a direct positive impact on resistance to disorder. Higher status populations are more accustomed to assisting in the co-production of public goods such as safety.³⁸ At the same time SES has a positive indirect effect on resistance to disorder. Higher status populations can live in better quality neighborhoods to which they can become more attached, and are more likely to have like-minded neighbors, with which they are more satisfied.³⁹ Conversely lower SES groups, who move more frequently and are more likely to be renters, have less of an opportunity to become attached to an area,⁴⁰ and being in more heterogeneous locales, are likely to

be less socially involved. Thus, high SES, by promoting involvement, attachment, and so on, bolsters resistance to disorder.

Crime will have a direct, negative impact on resistance to disorder. As crime and accompanying problems increase it becomes more futile to attempt to correct them.⁴¹ When crime and related problems are intense, prospects of amelioration are dim. Corrective attempts may have failed in the past. Thus, out of feelings of hopelessness and/or learned helplessness, crime quashes attempts to promote order. At the same time crime can also weaken resistance to disorder by "atomizing community."⁴² This would be an indirect effect of crime. Crime heightens community concern, increases distrust of neighbors, and thereby jeopardizes the shared understandings which are essential for effective neighborhood coping.

Physical environment can have a direct impact on resistance to disorder. In neighborhoods where non-residential land use is more prevalent, it may be more difficult for neighbors to get together and take care of problems due to the distances separating them. Or, the background of physical decay might simply make disorderly conduct less noticeable, and thereby less likely to be responded to. Physical decay (and to a lesser extent patterns of land use) can also have indirect effects on resistance via their impacts on involvement, attachment, and so on. This is the "incivilities" notion again.⁴³ A neighborhood population looking around and seeing dilapidation and vacancy

concludes that their neighborhood is on the skids, and that co-residents (as well as themselves) are moral outcasts.⁴⁴ Thus, the population essentially becomes alienated from the neighborhood and one another.

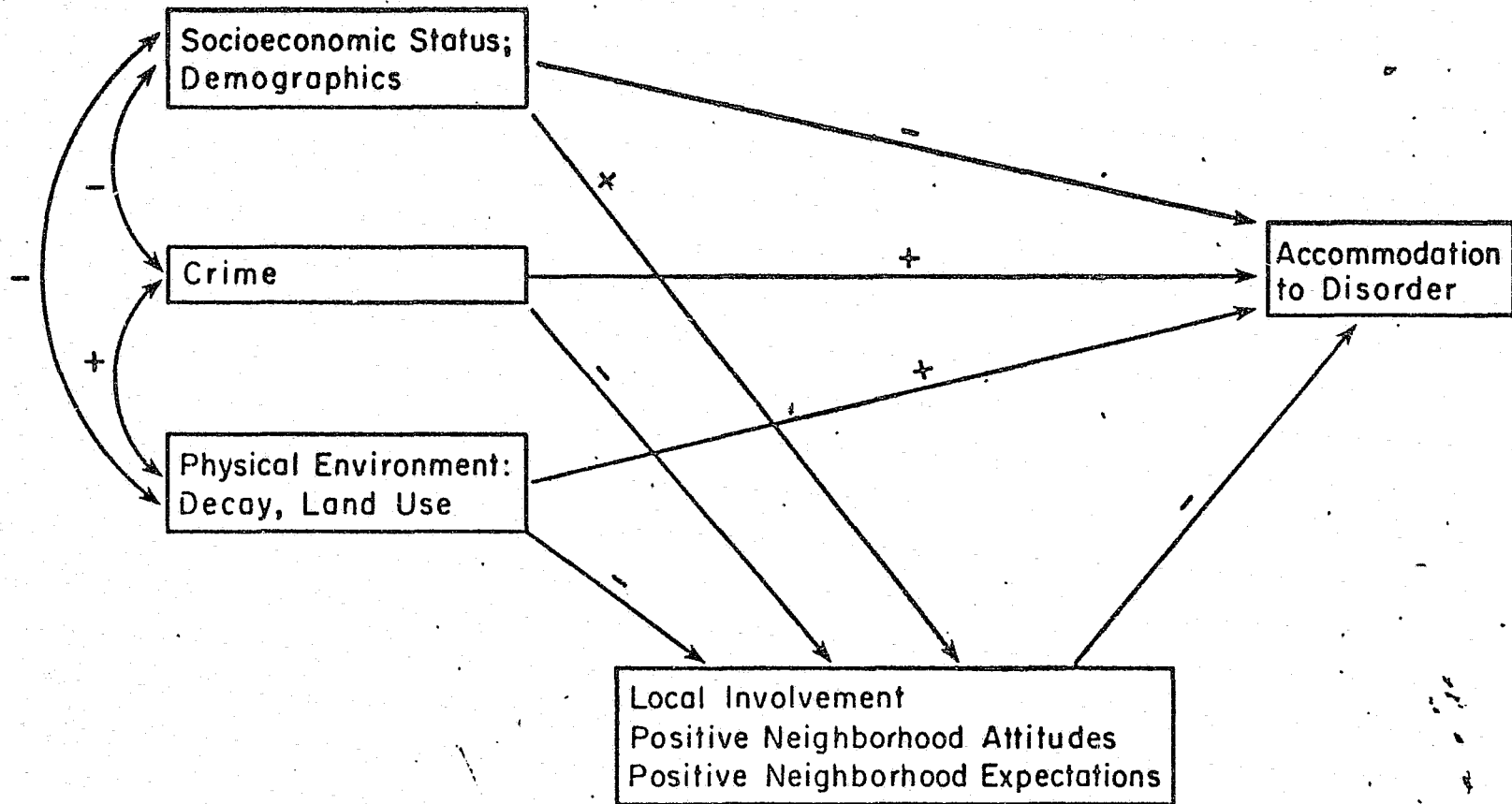
Finally, the model postulates a positive direct impact of involvement, positive attitudes and expectations, on resistance to disorder. Basically, people will defend a place if they like it, and the more residents know one another, the easier it is to cooperate in the protection of the locale.⁴⁵ This hypothesis is perhaps an obvious one, but nonetheless exceedingly vital. If this hypothesis is supported, and supported strongly in relation to the other postulated direct effects, the implications would be significant. And, this is because these factors of involvement, confidence and attachment would seem, potentially, to be amenable to change. Attitudes and expectations such as these can, theoretically at least, be built up and reinforced, resulting later on in stronger patterns of resistance to disorder. These attitudes and expectations are the very same ones which community organizations are constantly trying to build up through the process of "community development" or "community building." If we are right and these attitudes and expectations do bolster resistance to disorder then community building, such as carried out by these organizations, results in increased self-policing and self-regulation, implying that they then have less need for municipal services such as police.

The size of the direct effect of attitudes and expectations on resistance to disorder, relative to the size of the direct effect of SES on resistance to disorder, will be particularly informative. If the SES direct impact is very large relative to the involvement and attachment direct effect, it would suggest that informal social control, and CCP levels, are structurally determined; that they are determined by a neighborhood's relative position on the "social ladder" of an urban area. Relative SES is determined by large scale urban forces such as growth, succession, and so on, and is thus not easily amenable to change. To be blunt, if SES "does it all," then there is little hope for improving neighborhoods' ability to counter disorder. But, if SES effects are weak relative to impacts of attachment, involvement, and so on, then there are real possibilities for helping neighborhoods to cope better with the problems of disorder. Thus, of particular interest in our results will be not only whether or not certain predicted effects do show up, but also the relative strengths of the various impacts observed.

Our model predicting accommodation to disorder appears in Figure 3. All of the predictor and mediating concepts are the same as appeared in Figure 2. The only variable which is different is the outcome--accommodation to disorder. This is reflected in matters such as behavioral restriction, fear, and so on. Such responses indicate that the person or population have given up on trying to do away with disorder, but are instead simply trying to adjust to the extant level of disorder.

FIGURE 3

Theoretical Model:
Adaptation to Disorder



All of the direct effects of SES, crime, and physical environment on involvement, neighborhood attitudes, and expectations are exactly the same hypotheses which appeared in the first model. The new hypotheses contained in this second model are as follows:

SES and demographics can have a direct effect on accommodation to disorder. As SES decreases, and factors reflecting longer-term involvement in the area decrease, the neighborhood population should show more accommodation. This may come about as a result of lower SES groups' feelings of learned helplessness. These feelings may have developed out of experiences with unresponsive bureaucracies,⁴⁶ or an assessment that problems are so entrenched as to preclude any possibility of amelioration. By contrast higher SES groups have more experience advocating for themselves.

Crime has a direct effect on accommodation. The more severe the crime problem the more apparent it is to the population that little can be done about it. When disorder, as evident in crime and related problems, reaches epidemic proportions, the amount of effort required to achieve even a modest reduction in disorder approaches a herculean level, suggesting reconciliation as a wiser course.⁴⁷ Accommodation also makes sense from a survival point of view. A population that is under severe stress, and very much threatened by intense disorder, would do well to accommodate, simply in order to reduce their own vulnerability. As crime and perceptions of vulnerability mount, populations at

risk will take steps to reduce vulnerability, and some of these steps involve accommodation.

Physical environment may also have a direct effect on accommodation. As decay becomes more prevalent residents may infer more strongly that they are surrounded by non-law-abiding citizens, and that they themselves are more at risk. Thus, they may be more likely to accommodate, behaviorally and attitudinally.

Involvement, positive neighborhood attitudes and positive neighborhood expectations will have a direct dampening effect on accommodation. Neighborhoods whose populations have more invested, as reflected in higher levels of attachment, for example, are less likely to accept threats to the quality of life they value so dearly. Further, local friendships and acquaintanceship patterns by definition reduce the anonymity and mistrust between residents which can feed accommodation in the form of fear or restriction of activity. In short, these social and cognitive factors can serve as an antidote to "giving in" to disorder.

Our second model, as the first one, also postulates three indirect effects. (1) Low SES dampens attachment and involvement, which in turn boosts accommodation. (2) Crime interferes with attachment and involvement, thereby indirectly increasing accommodation. (3) And, decay may dampen attachment and undermine confidence, thereby promoting more accommodation to disorder.

By presenting these two separate outcomes in two separate models we are suggesting that the two are potentially independent of one another. Accommodation is not necessarily the reverse, or the flip side of resistance. It is possible to imagine that a neighborhood could be "high" on both parameters, resisting disorder but at the same time also accommodating to it. In essence, it is theoretically plausible that resistance to disorder and accommodation to disorder are neighborhood responses which can vary independently of one another.

In sum, we sought to predict neighborhood resistance to and accommodation to disorder. We expect external conditions such as makeup of the neighborhood population, crime, and state of the physical environment to influence these responses to disorder because they also influence how people feel about their neighborhood and their neighbors. Stated differently, there is a "missing link" in previous studies which have examined neighborhood conditions and responses to disorder. We think that that missing link includes how involved people are with their neighbors and neighborhood, how attached to and satisfied with their neighborhood people are, and where they expect their neighborhood is going in the future.

Method

Defining Baltimore City's Neighborhood

The delineation of Baltimore City's neighborhoods had been accomplished in the course of an earlier study.⁴⁸ Our approach involved basically finding what community organizations existed, and determining the appropriate turf of each organization. Since we wanted a mapping that was useful for social science purposes we wanted a map of neighborhoods that covered the entire city, and in which there was no overlap between neighborhoods.

We began with a published, city-wide community association directory. We eliminated associations that were smaller than the neighborhood focus (e.g., block clubs), those that were larger (e.g., coalitions or regional "umbrella" groups), and those that were simply inappropriate (e.g., merchants associations). We then went to each of the district and assistant district planners in the Baltimore City Department of Planning, presented them with a list of neighborhoods in their district, and asked them to delete now-defunct organizations, and to add new ones that had recently come into being. Once each list in each of the six districts was finalized, the planners then indicated the boundaries of each group. There were few "disputed" areas claimed by two or more groups, and those cases of overlap that arose we were able to resolve by going to experts and organizers in the field. Finally, we asked each pair of planners in each district to independently rate each neighborhood on income and

homeownership dimensions. Raters agreed well with each other, indicating shared or consensual perceptions of the neighborhoods in each district, and the raters' scores agreed well with 1970 census data, suggesting that their perceptions corresponded to the real world situation as well. The final map included 236 neighborhoods, 26 small unorganized areas with a total 1970 population of only 40,000 or about 5% of the city, and 14 public housing projects. The city, then, was revealed to be by and large a "city of neighborhoods."

We readily admit that our neighborhood mapping procedure has limitations. (1) It focused primarily on neighborhood organizations, capitalizing upon the salience of these groups in the city. The method, therefore, may be less easily applied elsewhere. (2) A mapping procedure based on extant organizations undoubtedly provides a final map much different from the one that would have been produced had we used a different procedure, such as statistically clustering proximate blocks based on data profile similarity.⁴⁹ We have not produced the (final) mapping of the city's neighborhoods, rather we have just produced one (of the many possible) mappings. (3) And, a perhaps more subtle but also probably more important limitation is that all of our subsequent results are defined by and limited to our approach to neighborhood mapping. It is conceivable that a researcher using the same concepts as we did, but a different way of defining neighborhoods, could come up with results totally at variance to our own. Although not likely, such a disconfirmation is

possible.

But, these limitations must be considered in the context of the strength of our neighborhood mapping approach. We wanted neighborhoods that corresponded as closely as possible to recognizable areas, and did not want to produce statistical chimeras. Our approach accords well with how most residents in Baltimore think about neighborhoods. Checks on our procedure indicated that it was reliable and accorded well with the real world situation. Subsequent discussions with local neighborhood experts at the city newspapers and elsewhere, have further confirmed this assertion. We have produced an accurate mapping, that accords well with current views about what neighborhoods are where, and it is a procedure that could be easily carried out in a different city if desired.

Neighborhood Selection

We drew a random sample of neighborhoods from the population of 236 neighborhoods. We wanted smaller as well as larger neighborhoods in our sample, and thus did not use a strategy which would have given a neighborhood with a larger population a better chance of being selected. We selected 90 neighborhoods. We were forced to drop two of them because of a very uncooperative neighborhood leader. Another 22 were eliminated because they were so small it would have been hard to carry out the desired surveying plan.⁵⁰ This left us with 66 neighborhoods.

The neighborhoods in the final pool varied widely on race (99% white to 99% black) and income (poverty rate of 2% to a poverty rate of 45%), and on crime. For example robbery rates per 100,000 persons ranged from 2,957 to 236.

Block and Household Selection

Within each neighborhood census blocks were listed numerically by tract, and within the tract they were listed by block number and numbered sequentially. Then, eight census blocks in each neighborhood were randomly chosen by consulting a random numbers table. Once a census block was chosen, a side of the census block was randomly selected. The Stewarts reverse telephone directory was consulted to see if there were any residential telephones listed on the block. If there were, that face block was "accepted" as one of the eight in the neighborhood. The cross streets as listed in the Stewarts were used to define the ends of the blocks. If there were no phones listed for a chosen side of the census block, then another side of the census block was randomly chosen, and the Stewarts was checked to determine if there were residential units with phones in it. This procedure was repeated until a side of the census block with residences was determined, or until all four sides of the block had been randomly selected, but yielded no residences. If the latter occurred then another census block was chosen and the procedure for choosing a side was repeated. Double-sampling of the same block-faces (two sides of the street) was not

allowed. This procedure was iterated until eight streets with one or more residential phones on them were obtained.

Once a street was chosen, the Stewarts was double checked to be sure the residences were not exclusively apartments (more than six phones at one address) or apartment complexes. If this occurred, another street was chosen.

This procedure was further checked by consulting the most up-to-date real property extract file from the Planning Department, and the latest Baltimore Gas and Electric Company maps. In cases where this checking procedure revealed no residential telephones on a street, that block was dropped and a new one randomly chosen. In neighborhoods where blocks were depleted before completing the desired number of interviews, additional blocks were added, using the same procedure. Thirty-four blocks were added to the initial pool, for a total of 562 blocks.

All eligible addresses on the eight blocks in each neighborhood were merged into one long (block by block) sampling list, and addresses were selected using a PPS procedure. That is, the number of addresses selected from each block was proportional to the ratio of addresses on that block compared to all addresses on the list for that neighborhood. One disadvantage of this procedure, which used a random start and a sampling interval, is that some small blocks, with say less than five or eight residential addresses, could be missed completely, i.e., no addresses would be sampled from that block. Thus, in

some neighborhoods our sample would not be spread out over the full eight blocks. A rule that at least two addresses must be sampled from each block was adopted since the initial purpose of the interviews was to obtain neighborhood-level estimates (means). Basically, our sampling treated every neighborhood as a stratum.

Survey Procedures

In each of the 66 neighborhoods surveys were carried out in the summer of 1982. We desired to interview 25 households in each neighborhood. All households with listed telephones were eligible households. Each chosen household received a pre-approach post card. Eligible respondents were heads of households or spouses of heads.

Initial contact was attempted by phone. In cases where repeated attempts at phone contact were unsuccessful, interviewers went to the field to make contact. Three contact attempts, at various times of day, and on weekends as well as weekdays, were made at each address. The final sample included 1,406 (88%) phone interviews and 216 (12%) face-to face interviews. From the initial 2,216 cases assigned, 1,622 completed interviews were obtained for a response rate of 73.2%.

The final sample of respondents included: 72% homeowners and 28% renters; 33% men and 67% women; a median income of between \$20,000 and \$25,000; and 51% of the respondents had children or teenagers living at home.

Crime

The Baltimore City Police Department provided us with Part I (serious) crime volumes for each crime reporting area (CRA) of the city. The CRAs were then matched to our neighborhoods. In cases where only a fraction of a CRA fell into a neighborhood we allocated to that neighborhood the fraction of CRA crime represented by the fraction of CRA census blocks in the neighborhood. Crime for the (calendar) years 1978, 1979, and 1980 were added up in each offense category, and then divided by three, and again by the 1980 neighborhood population.⁵² Thus, for each serious crime we had a three year average rate. Five of the serious crimes (murder, robbery, assault, rape, and residential burglary) were very strongly associated with one another so we added them up to produce a summary crime scale.⁵³

Physical Assessments

A randomly chosen 20% of all street blocks in each selected neighborhood were assessed by pairs of trained raters. Each member of the pair made an independent assessment as they worked on a block. Features such as land use (commercial, residential, industrial), street patterns, traffic volume, housing characteristics, vacant land, vacant houses, litter, and graffiti, were measured.

Results

Logic of Analysis

The basic logic of our analysis was as follows. As was indicated in Figures 2 and 3, we hoped to assess the direct and indirect effects of SES, crime, physical environment, and responses to disorder. These effects can be most clearly assessed through path analysis.

Before carrying out the path analysis, however, several preliminary steps were necessary. First, for each of the concepts in the model we developed one or more scales which were as reliable (internally consistent) as possible. And since our focus is on neighborhood-level processes our scale building was carried out using neighborhood means or proportions. Scales were not built for SES or demographic variables since it was assumed these were reported without error. Second, after the scales had been built it was possible for us to have more than one scale to reflect a particular concept. This is particularly likely in the case of our mediating person-neighborhood bonds. In instances where this was the case we followed a composite building strategy.⁵⁴ All scales with significant ($p < .10$) zero-order correlations with the outcome were simultaneously regressed on that outcome. Then, the resulting significant b weights were used as weights, so that each scale (or variable) in a concept was weighted in the composite according to its b weight. The final composite then "stands in" to replace the original

variables or scales. This composite building approach simplifies the resulting path analysis considerably, and also preserves precious degrees of freedom.

As mentioned earlier we were conscious of the unacceptably low levels of statistical power present in many earlier studies. Consequently we selected 66 neighborhoods. The question of power also demanded that we examine very closely the levels of statistical significance that we wished to use. After considering issues of Type I and Type II error we decided on a two tailed alpha level of .10. Two tailed tests were decided on so that, should results counter to our hypotheses emerge, we could accept them, and because, in the instance of a couple of predictors, such as neighborhood size and non-residential vs. residential land use, we were not completely confident of the sign of the link with the various outcomes. With this alpha level our analyses have the following power levels. In the zero-order correlations our power to detect medium effect sizes ($r = .30$, $r^2 = .09$) is 80%; our ability to detect large effect sizes ($r = .50$; $r^2 = .25$) is better than 99%. These power levels are quite acceptable. Our power to detect small effect sizes ($r = .10$; $r^2 = .01$), however, is only about 20%.⁵⁵ In the stepwise regression where we examine the significance of increments in R^2 our analyses have the following power levels. Our power to detect medium effect sizes ($r^2 = .13$) is almost 88%. Our power to detect large effect sizes ($r^2 = .26$) is better than 98%. These power levels are quite acceptable. Our

power to detect small effect sizes ($r^2 = .0196$) is about 20%.⁵⁶ In final regressions or path analyses the power of the t-test of significance for beta weights is as follows. For medium sized effects ($d = .5$; $r^2 = .059$), assuming 60 df in the final regression, the power is 86%. For large effect size ($d = .8$; $r^2 = .138$) power is better than 99%. These power levels are quite acceptable. For small effect sizes, ($d = .2$; $r^2 = .01$) however, our power is only about 29%.⁵⁷ Thus, for detecting medium and large effect sizes we have acceptable levels of power, since in all of these cases we have an 80% chance, or better, of finding effects which are actually present. Therefore our risks of falsely accepting the null hypothesis (of no significant difference when it actually exists) are less than 20%, and our risks of falsely rejecting the null hypothesis (concluding a significant difference exists when it does not) are less than 10%. Stated differently, we are implying that (a) the failure to find extant differences is about twice as serious as to conclude (b) that differences exist when they do not. This balance of Type II (a) to Type I (b) error is, appropriate given the very limited investigation of neighborhood-level processes regarding reactions to crime, which have been carried out in the past.

In recent years there has been growing concern regarding the effects of measurement error on regression analysis.⁵⁸ Consequently, after we had carried out initial analyses using the raw data we entered the data into a program which adjusts for measurement error. The program used was Wayne Fuller's SUPERCARP

program. This program adjusts raw data based on estimates of error variance, and then carries out regression using the adjusted data. It is also capable of outputting adjusted data scores. We used the SUPERCARP program to produce adjusted data, which we then input back into SPSS, creating new systems files with adjusted data. We also used the SUPERCARP program to see what would happen if we assumed varying amounts of error covariance between our measures of mediating person-neighborhood bonds, and our outcome measures. Both of these concepts were measured using the same instrument--the household survey. Thus, critics might argue that high correlations between person-neighborhood bonds and outcomes are due in part to shared method variance. Of course, method variance cannot be estimated unless more than one method is available, and this is not the case in our present study. So, we made varying estimates of mediating-outcome error covariance due to the same method being used, and examined what happened to the regression coefficient for the mediating composite. This analysis tells us how much of the covariance between mediating and outcome variables would have to be due to shared method before the partial correlation between the two was rendered non-significant.

When we examined the correlation matrix between variables using the adjusted data, in almost all instances the correlations between the mediating composite and the outcome were much stronger than they had been previously. These correlations, in fact, were in some cases so large ($> .90$) that the regressions

became quite meaningless. Consequently, in an effort to "pull things apart" we decomposed the mediating composite into two separate portions: that which could be predicted from sociodemographics (\hat{x}_2), and that which could not ($x_2 - \hat{x}_2$). Since the portion of person-neighborhood bonds predicted from sociodemographics correlates 1.0 with the latter, the two are interchangeable. Regressions were subsequently carried out using sociodemographics, and that portion of person-neighborhood bonds not predictable from sociodemographics. Such an approach is conservative in that a substantial portion of the mediating composite is subsumed into sociodemographics, and only the "unpredictable" part of person-neighborhood bonds is treated as reflecting those bonds.

With regard to functional form, in our first analyses using unadjusted data we examined quite closely the plot of residuals (observed against expected values), and of predicted values against residuals.⁵⁹ In the former we observed some curvilinearity (negative residuals along a certain range of the observed outcome values, and positive residuals along a different range). These anomalies were very nicely taken care of by logging (after adding a constant) all of the final predictor variables. Thus, all of the results reported here used logged predictors. This transformation, of course, also took care of any nonadditivity which may have been present.

Finally, a mention is made of the problem of multicollinearity. Since we are dealing with ecological data, in

many instances we observed sizable correlations between our various predictors. This suggests, potentially, that our results may be unstable. But, since each concept had already been reduced to one or two measures, further elimination of predictors, in an effort to solve the multicollinearity problem, would have resulted in the omission of important concepts from our model, and hence potential mis-specification. Thus, predictors were left in and we watched very carefully for clues, such as beta bounce and inflation of standard errors, which can crop up in these situations. These problems did not arise. We think they did not because our matrices did not show multicollinearity in the sense discussed by Heise.⁶⁰ He has suggested that multicollinearity does not exist if the predictors correlate more strongly with the outcome than they do with each other. And, as we shall see below, our matrices in this sense do not exhibit multicollinearity.

To sum up then, our analysis involved the following steps:

- ° All variables were aggregated to the neighborhood-level;
- ° Reliable scales for each concept (except demographics) were constructed;
- ° If there was more than one measure of a concept which was significantly associated with an outcome, those measures were regressed simultaneously on the outcome and the

resulting b weights were used to construct a single composite variable for the concept.

- Predictors were log transformed (after adding a constant), based on inspection of residuals.
- Path analyses were carried out.
- Data were corrected for measurement error.
- Effects of varying amounts of mediating composite-outcome variable error covariance (shared variance due to same method) were examined.
- The original correlation matrix was reconstructed using corrected data.
- The mediating composite reflecting person-neighborhood bonds was decomposed into that portion predictable from sociodemographics, and that portion not predicted from sociodemographics.
- Regressions using significant predictors, with sociodemographics and residual person-neighborhood bonds, were carried out.

Development of Predictor Scales

Local social involvement. Our survey asked a broad range of questions about local social dynamics: presence of local friends, acquaintances and relatives, awareness of and membership in various types of local organizations, and instances of assistance and friction between neighbors. These social network items were submitted to principal components analysis.

(Throughout, we used varimax rotation.) Four components were extracted, all with an eigenvalue > 1.0 . These four components accounted for better than 60% of the total variance. The results are displayed in Table 1.

Component I reflects trust between residents. Neighborhoods with a high score on this component are places where residents have done things for one another which imply a certain level of confidence in one another. Giving a neighbor a key, asking your neighbor to take in mail, or even asking a neighbor to watch the house expose one to threat. A neighbor with a key can enter your house while you are away. In the latter two instances the person asked knows that the asker will be away for a period of time, and this is information of which advantage could potentially be taken. For such favors to be shared, then, some minimal level of trust must exist. Also correlated with such confidence are membership patterns in the local neighborhood organization. Neighborhoods where trust is higher are also neighborhoods where a greater proportion of respondents belong to the local neighborhood or improvement organization. This bond of

Table 1

Principal Components Analysis of Social Network Variables

Variable	Component I	Component II	Component III	Component IV	Communality h^2
(Q7AM) Proportion with relatives in neighborhood	-.06	.68	.24	.21	.57
(Q8AM) Proportion with friends in neighborhood	.56	.32	-.11	.09	.44
(Q8M) ^a Average number friends in neighborhood	.28	.66	-.03	.15	.54
(Q23A\$M) Proportion know about neighborhood organization	.61	.04	-.39	.07	.53
(Q23B\$1M) Proportion know about local church groups	.23	.52	-.08	.00	.33
(Q23C\$1M) Proportion know about local PTA	-.10	.50	.08	-.52	.53
(Q23D\$1M) Proportion know about local youth groups	-.02	.80	.16	-.09	.68
(Q23A\$2M) Proportion belong local neighborhood organization	.60	-.36	.06	-.17	.52
(Q28AM) Proportion kept watch neighbors house	.73	.25	.26	-.34	.78
(Q28BM) Proportion have arranged mail take-in	.78	.31	.09	-.21	.75
(Q28CM) Proportion have given neighbor key	.84	.21	-.04	.04	.75
(Q48AM) ^b Proportion have run shopping errand	.22	.32	.76	.21	.78
(Q48BM) ^b Proportion have visited inside neighbor's house	.78	-.08	.22	.20	.71
(Q48CM) ^b Proportion have argued with neighbor	-.19	.17	-.13	.72	.60
(Q48DM) ^b Proportion have borrowed tools	.67	-.09	.05	.01	.46
(Q48EM) ^b Proportion have worked together on appearance	.03	-.01	.89	-.07	.79
(Q48FM) ^b Become annoyed with neighbor	.05	.09	.27	.76	.67
(47M) ^b Proportion known by face or name	.54	.33	.18	-.19	.47
<hr/>					
Lambda	5.01	2.57	1.72	1.60	
Variance Explained (%)	27.9	14.3	9.6	8.9	

Notes. a = excludes from average count persons who indicated they had no friends in the neighborhood.

b = these questions were asked explicitly and only with reference to the street block.

I = trust (DOHLPSAG)

II = ties (ORGBELAG)

III = instrumental helping (BLKHLPAG)

IV = negative social climate (BLKNEGAG)

membership implies further shared understandings, allegiances, and concerns among residents. Such sharing of interests and background is also implied by more respondents reporting friends in the neighborhood. Coefficient alpha based on the items loading heavily ($> .40$) on this component is .86.

Component II reflects local ties. Neighborhoods with a high score on this component are locales where many respondents are aware of many different types of local organizations (e.g., PTA, church, and youth-oriented groups), where large numbers of local friends are reported, and where many respondents have relatives living nearby. These patterns of ties and awareness do not necessarily imply intimacy or shared confidence among neighbors. Coefficient alpha for the items loading heavily on this component is .68.

Component III reflects local instrumental helping. Neighborhoods with a high score on this component report that they have helped out or worked with other residents on the block. These two items reflect a willingness to assist and cooperate, but do not imply shared trust. Coefficient alpha for the two items loading heavily on this component is .74.

Component IV reflects on-block friction. Neighborhoods where residents have tangled with other neighbors on the block, or been bothered by the opinions or activities of these neighbors, would score high on this component. Coefficient alpha for these two items is .46.

In sum three reliable dimensions of social climate have been determined: trust, local ties, and helping. A scale reflecting the fourth dimension of friction was not highly reliable.

Attachment and territorial functioning. Respondents were asked about several aspects of their attachment to place. Standard items (feel neighborhood is home vs. just a place to live) were included, as well as items relevant to place dependence.⁶¹ We also included items reflecting territorial attitudes. The results of our principal components analysis, extracting and rotating three components with eigenvalues of greater than 1.0, appear in Table 2.

Component I reflects territorial responsibility and how the current neighborhood compares to prior neighborhoods lived in. Neighborhoods with a high score on this component have residents who feel a strong sense of territorial responsibility for what happens on the block and elsewhere, who are satisfied with their neighborhood, feel it compares favorably compared to their last place of residence, and feel that they exercised choice in moving to their current location. These positive comparisons and feelings of choice undoubtedly contribute to feelings of satisfaction. Coefficient alpha for items loading heavily on this component is .84.

Component II is the dimension most clearly reflecting attachment to place. The item with the highest loading on this component is the item that has been most widely used as a measure of attachment: feeling that the neighborhood is home vs. just a

Table 2

Principal Components Analysis of Attachment Variables

Variable	Component			Communality h ²
	I	II	III	
(Q6M) Overall Satisfaction	.71	.21	.48	.77
(Q9M) Proportion expecting to live there in 5 years	.19	.58	.58	.71
(Q10A & B) Serious about moving out	-.37	-.39	-.53	.56
(Q11M) Liking of current residence compared to prior	.67	.12	.41	.63
(Q12M) Perceived choice in moving to current residence	.70	.14	-.01	.51
(Q13A) Average number moves in past five years	.07	-.74	-.27	.62
(Q14M) Feel part of neighborhood (vs. just place to live)	.32	.80	.15	.77
(Q15M) Strength of perceived sense of community	.37	.78	.05	.75
(Q16M) Proportion thinking <u>other</u> neighborhoods more attractive	.11	-.17	-.82	.72
(Q17) Strength off-block responsibility	.79	.29	-.18	.75
(Q45) Strength on-block responsibility	.64	.24	.27	.54
(Q18) Level of attachment to neighborhood	.59	.65	.16	.79
(Q44M) Level of attachment to block	.38	.74	.34	.80
Relative safety of block and neighborhood*	.49	.19	.63	.67

Lambda	6.85	1.55	1.19	
Variance Explained (%)	48.9	11.1	8.5	

Note. * is actually a scale. A person with the highest possible score on this scale would indicate that his/her block is safer than other blocks in the neighborhood, and that his/her neighborhood is safer than other nearby neighborhoods. A person with the lowest possible score would think that his/her block is less safe than other blocks within the neighborhood, and that his/her neighborhood was less safe than other, nearby neighborhoods. Block sentiments are nested within neighborhood sentiments. Thus the middle scores on the scale go to respondents who think that their neighborhood is as safe as surrounding neighborhoods, but have varying opinions regarding the relative safety of their block (vis-a-vis other blocks in the neighborhood).

place to live. Neighborhoods with high scores on this component have stable populations, who have moved little in the past and expect to be where they are now five years hence. Respondents with a high score on this dimension also report a strong sense of community, and being attached to both the block and the neighborhood. Coefficient alpha for the items loading heavily on this scale is .90.

Component III reflects current comparisons of the neighborhood vis a vis other neighborhoods. Neighborhoods with a high score on this component contain residents who think their neighborhood is more attractive, and safer than other neighborhoods, and who are not seriously contemplating moving out of the neighborhood. Coefficient alpha for the items loading heavily on this scale is .78.

We have identified three aspects of attachment: territorial functioning, sentiments of attachment, and positive evaluations of the current neighborhood vs. other possible neighborhoods. Scales tapping all three dimensions have very acceptable levels of reliability.

Neighborhood confidence and expectations. We developed a five item scale concerned with ratings, and perceived changes, in neighborhood appearance and overall quality. With regard to appearance the respondent estimated the overall condition of homes in the neighborhood (Q19), and also indicated whether, since he/she had moved, the appearance of the neighborhood had gotten better, stayed the same, or gotten worse (Q20). The

respondent also rated overall neighborhood quality, using a self-anchoring ten point scale, as it was currently (Q37), as it was two to three years ago (Q38), and as it would be two to three years in the future (Q39). Individual items were Z scored and added up to form a scale. Coefficient alpha for this scale was a very respectable .90.

Neighborhood knowledge. Two ordinal items reflecting an awareness of neighborhood features were combined to form a more general scale. One ordinal item was concerned with respondent's ability to delineate the neighborhood boundary. Scoring for each of these items is explained in Table 3. The two items were Z scored and added to produce a scale with a reliability coefficient of .75.

Crime. Neighborhood crime rates per 100,000 (1980) population, averaged over the three year period 1978-1980, were constructed for each of the Part I (serious) offenses. Five of the crimes (murder, robbery, total assaults, residential burglary, and rape) intercorrelated quite highly. Each of these five crime rates was Z scored, and then added up to form a summary crime scale. This scale is different from the others in that we assume reported crime was measured without error. Thus, we assume that the actual crime scale scores are the actual or true crime scores.

Physical environment. As discussed above in the method section, 20% of all street blocks in each study neighborhood had been assessed. Inter-rater reliability of the items assessed

Table 3

Scoring of Items in Neighborhood Knowledge Scale

NEIGHBORHOOD NAMING (Q1)

<u>Score of:</u>	<u>Reflects:</u>
1	Person does not think his/her own neighborhood has a name.
2	Person <u>does</u> think own neighborhood has a name but is unable to produce it, and/or does not recognize most widely used name.
3	Person <u>does</u> think own neighborhood has a name, cannot produce most widely used name, but does recognize most widely used name when it is offered.
4	Does think neighborhood has name, and can produce most widely used name.

AWARENESS OF NEIGHBORHOOD NEARBY (Q40)

<u>Score of:</u>	<u>Reflects:</u>
1	Person is unable to offer name of neighborhood "just beyond" his/her own, that's "closest to where (he/she) lives."
2	Person can name nearby neighborhood, but cannot provide any name.
3	Person can name nearby neighborhood, but does not provide a recognized name, or names his/her own neighborhood.
4	Person can identify nearby neighborhood, and attaches a recognized name.
5	Person can identify nearby neighborhood, and attach a recognized name, <u>and</u> specify crossover point or boundary where other neighborhood begins.

Note. In deciding whether or not respondent could produce the correct or most widely used neighborhood name, in the case of names with two words (e.g., Tuscany-Conterbury), if respondent could simply supply one word (e.g., Tuscany), this was counted as a correct name.

was, in almost all cases, better than .90 at the neighborhood-level. We selected from the assessment those items deemed to be theoretically relevant to crime and disorder. We also constructed some indices. One was density of housing structures (coefficient alpha = .56). Neighborhoods with a high score on this index have multi-unit structures, more stories per building, no housing setback, and streets with a larger number of occupied dwelling units. A foot traffic index (coefficient alpha = .84) assessed the presence of commercial establishments likely to draw pedestrian traffic. Neighborhoods with a high score on this index would have streets with bus stops, lottery outlets, personal services (e.g., barber), employment services, and other types of commercial establishments. The third index was concerned with features facilitating auto access to and egress from an area. More street traffic in a neighborhood means more anonymous streets where residents have less control.⁶²

Elements in this accessibility index (coefficient alpha = .84) included street layout (through vs. T vs. L vs. deadend), maximum and minimum lanes of traffic, one vs. two way traffic, traffic volume, type of street lighting (high pole vs. low pole vs. none) and presence of bus stop.

Using these three indices along with other items significantly associated with crime, we carried out a principal components analysis and extracted two dimensions. The results appear in Table 4. Component I clearly reflects the social and physical incivilities or decay discussed by Hunter and others.

Table 4

Principal Components Analysis of Neighborhood-Level Physical Variables

Variable	Component	Component	Communality h ²
	I	II	
Small Groups	.86	.06	.74
Commercial/Industrial/Institutional Land Use	.13	.86	.76
Amenities Drawing Foot Traffic	.31	.64	.51
Structural Housing Density	.69	.32	.59
Volume of Males	.72	-.04	.53
Vacant Houses	.71	.23	.56
Vacant Lots	.14	.50	.26
Litter	.69	.46	.69
Graffiti	.78	.33	.72
High Accessibility Streets	.08	.52	.27
Percent Residential Frontage	-.35	-.84	.83
Parking Lots	.04	.77	.59

Lambda	5.25	1.79	
Variance Explained (%)	43.8	14.9	

<u>Notes.</u>	Varimax rotation.		
	Coefficient alpha for Component I = .87		
	Coefficient alpha for Component II = .77		

Neighborhoods with high scores on this component have lots of people on the street, graffiti, litter, vacant houses, and dense housing arrangements. Reliability for items loading heavily on this factor is .87. Component II reflects non-residential vs. residential land use. Neighborhoods with a high score on this dimension have a relatively high proportion of non-residential land use, establishments that draw pedestrian traffic, vacant lots, parking lots, and high accessibility, high traffic volume streets. The reliability coefficient for the items loading heavily on this scale is .77.

SES and demographics. Survey responses were used to provide measures of the composition of the neighborhood population. Scales were not built, but rather single items were used. Available items at the neighborhood-level included proportion non-white households, proportion homeowner households, average income, average education and proportion of households with children at home.

Outcome Scales

From survey items we constructed seven outcome scales reflecting various types responses to crime. The items included in each scale, as well as the reliability of each scale, appear in Table 5. Our informal social control scale measures the predisposition to intervene in relatively non-serious but annoying incidents such as late night noise and vandalism. Our post-hoc scale is concerned with informed, resident-initiated

Table 5

Description of Outcome Measures

SCALE (PROPERTIES)	ITEMS	WEIGHT
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RESISTANCE TO DISORDER

Informal Social Control (Reliability = .832): SPRYNOIS

(Q52A) Suppose some kids were spray painting a building on your street. Do you think any of your neighbors would tell the kids to stop? (No; Yes)	1
---	---

(Q52B) Do you think any of your neighbors would get another neighbor's help to stop the kids from spray painting? (No; Yes)	1
---	---

(Q54A) Suppose some teenagers around 15 or 16 years old were shouting and making a loud disturbance on your street around 11:00 at night. Do you think any of your neighbors would tell them to stop? (No; Yes)	1
---	---

(Q54B) Do you think any of your neighbors would get another neighbor's help to stop the teenagers from making noise? (No; Yes)	1
--	---

Post-Hoc, Informal Responses to Crime (Reliability = .770): POSTHOC

Now suppose that there was a string of burglaries, say two or three that occurred within a few weeks of one another on your block. Do you think you and your neighbors on the block would:

(Q57A) Talk about the problem? (No; Yes)	1
--	---

(Q57B) Organize a system to watch each other's houses? (No; Yes)	1
(Q57C) Talk to a local neighborhood organization about the problem? (No; Yes)	1
(Q57D) Call the police to get better advice on how to protect property? (No; Yes)	1
(Q57E) Buy security devices? (No; Yes)	1

Awareness of Active, Local Organizations: Q24M

(Q24) Do you know of any local organizations or groups where people from your neighborhood get together to work on the kinds of problems we've mentioned earlier like crime, vandalism, vacant housing, trash, or teens hanging out? (No; Yes)

Organized CCP Activities (Reliability = .702): ORGCCPAG

I'm going to read a list of activities or concerns that local groups or organizations might have encouraged or been involved in during the past two or three years. Tell me whether or not the group we have been talking about has been involved in each activity:

(Q24D) Encouraging neighbors to help each other prevent crime through such things as block watch, neighborhood watch, citizens on patrol, and so on? (No; Yes)	.82
(Q24E) Trying to get better police service or more police protection? (No; Yes)	.82

Responding to a Break-In (Reliability = .920): BRKIN

Suppose a suspicious person was trying to break into a neighbor's home.

(Q53A) Do you think any of your neighbors would personally try to stop the person? (No; Yes) 1

(Q53B) Do you think any of your neighbors would get another neighbor's help to try to stop the person from breaking into the house? (No; Yes) 1

ACCOMMODATION TO DISORDER

Fear (Reliability = .868): BIGFEAR

(Q29) How safe would you feel being out alone in your neighborhood during the day? Would you feel very safe; somewhat safe; somewhat unsafe; or very unsafe? 1

(Q30) How safe would you feel if you were out alone at night in your neighborhood? Would you feel very safe; somewhat safe; somewhat unsafe; or very unsafe? 1

(Q32) Are there any specific places in your neighborhood that many people try to avoid because they think these places might be dangerous? (No; Yes) 1

(Q49) How safe would you feel being out alone on your block during the day? Would you feel very safe; somewhat safe; somewhat unsafe; or very unsafe? 1

(Q50) How safe would you feel being out alone on your block at night? Would you feel very safe; somewhat safe; somewhat unsafe; or very unsafe? 1

(Q56) Do you think if a neighbor told the teenagers to stop making noise that these teenagers would hurt your neighbor, damage his or her property, or anything like that? 1
(No; Don't Know; Yes)

Restriction of Activity (Reliability = .909): RESTRCAG

Up to now we've talked about what you and your neighbors might do in a number of situations. Now I'd like to ask you what kinds of things you or someone in your house has done to protect you, your household, or your property.

(Q58D) Are the people in your house less willing to go out at night than they used to be? (No; Yes) 1

(Q58E) Do the people in your house go out alone less frequently than they used to? (No; Yes) 1

Notes. Scales in which items are weighted "1" are based on standardized scores (Z scores) which were then added up. Other scales were built using principal components analysis; value shown is variable loading.

No reliability is shown for the item that reflects awareness of CCP activity because the scale included only one item.

responses to a string of burglaries on the home block.

Awareness of active organizations is the proportion of respondents in a neighborhood who are aware of an active, problem-oriented neighborhood organization actively involved in activities like crime prevention, neighborhood clean up, and so on. A responding to break-in scale assesses predisposition to intervene and solicit help from neighbors in the event a break-in appears to be in progress. A fear scale uses the standard NCS items, repeating them for block as well as neighborhood; it also includes a fear of retaliation item, and an awareness of dangerous places item. And finally, a restricted activity scale measures the extent to which people stay in more, or go out less freely, due to a perception of vulnerability.

As we have discussed above, we think several of these items are related to a larger concept of resistance to disorder, and that several are related to a more passive accommodation to disorder. Examining the zero-order, neighborhood-level correlations between these items (Table 6) provides some suggestive evidence regarding these more general types of responses. Fear and behavioral restriction are significantly correlated ($r = .456$; $p < .001$) in support of our notion of an accommodation dimension. And, informal social control correlates significantly with post-hoc responses to crime ($r = .663$; $p < .001$), awareness of active organizations ($r = .320$; $p < .01$), and awareness of active community crime prevention initiatives ($r = .238$; $p < .10$), suggesting our hypothesized resistance dimension.

Table 6

Zero-Order Correlation Matrix of Seven Outcome Variables.

	(1) Informal Social Control (SPRYNOIS)	(2) Organizational Crime Prevention (ORGCCPAG)	(3) Fear (BIGFEAR)	(4) Behavioral Restrictions (RESTRCAG)	(5) Response to Break-In (BRKIN)	(6) Post-hoc Responses (POSTHOC)	(7) Awareness of Active Organizations (Q24M)
(1) SPRYNOIS	1.0	.238	-.620	-.208	.189	.663	.320
(2) ORGCCPAG		1.0	.046	.141	.002	.289	.057
(3) BIGFEAR			1.0	.456	-.128	-.329	-.303
(4) RESTRCAG				1.0	-.188	.041	-.152
(5) BRKIN					1.0	-.205	.020
(6) POSTHOC						1.0	.312
(7) Q24M							1.0

Note. Correlations greater than .21 are significant at $p < .10$;
correlations greater than .25 are significant at $p < .05$.

In an effort to extract these two proposed dimensions the principal components analysis was performed on the correlation matrix of outcomes. The resulting component matrix appears in Table 7, and the results are graphed in Figure 4. Two components explaining 57% of the variance were extracted. Although not as clearcut as might be wished the two components do resemble the resistance and accommodation dimensions proposed.

Component I reflects resistance to disorder. The item with the highest loading is the informal social control scale (.890), followed by informal post-hoc responses to a string of burglaries (.804). The third item loading substantially on the component is the proportion of respondents in a neighborhood aware of an active, problem-solving local organization (.554). This latter item indicates that formal as well as informal resources are involved in contending with disorder. At the opposite end of the component is fear (-.699), indicating that neighborhoods where residents do not seek to counter instances of disorder are also neighborhoods where residents fear for their well being.

Component II reflects accommodation to disorder, with emphasis on avoidance vs. confrontation of serious threat. Behavioral restriction has the highest positive loading on this dimension (.748). Avoidance of danger by staying in more, or being less willing to go out alone, is probably one of the clearest examples of how a neighborhood population can "live with" a threat to their safety. At the opposite, negative end of the dimension is direct confrontation with serious threat, in the

RESTRCAG

Dimension II

.6

• BIGFEAR

• ORGCCPAG

• POSTHOC

Dimension I

.6

• Q24M

• SPRYNOIS

• BRKIN

64

Table 7

Principal Components Analysis of Outcome Scales

Variable	Component I	Component II	Communality h ²
Informal Social Control (SPRYNOIS)	.890	-.086	.800
CCP Activities (ORCCCPAG)	.354	.524	.400
Fear (BIGFEAR)	-.699	.487	.726
Behavioral Restriction (RESTRCAG)	-.260	.748	.627
Responding to Break-in (BRKIN)	.035	-.548	.302
Post-hoc, informal responses to burglaries (POSTHOC)	.804	.379	.790
Awareness of Active Organization (Q24M)	.554	-.089	.315

Lambda	2.47	1.49	
Variance Explained (%)	35.3	21.3	

Note. Varimax rotation.

form of doing something about, and getting help to do something about, a suspected break-in in progress (-.548). Few would doubt that such confrontation of a serious threat is indeed the opposite of accommodation. Finally, fear has a positive albeit modest loading (.487) on this dimension.

In sum we have identified two general dimensions of response to disorder: resistance and accommodation. Although each component is somewhat complex, each does undoubtedly reflect the factor hypothesized. It is also interesting to note that the two concepts are not simply the opposite ends of one construct but, rather, are two independent vectors. We produced the two sets of component scores based on this solution, and used these scores as our two principal outcomes on which to test our hypothesized model. Of course, since we used a varimax rotation our multiple dependent variables are completely independent of one another. After presenting the analyses predicting resistance and accommodation we will present, for descriptive purposes only, an analysis of the seven outcome scales.

Predicting Resistance to Disorder

Building composites. Two sociodemographic variables correlated significantly with resistance to disorder. Neighborhoods with higher income households, and a higher proportion of owner occupied respondent households, scored higher on resistance. The unique predictive power of each of these variables was significant, and accounted for 43% of the outcome

variation. These two variables were used to form a sociodemographic composite. (see Table 8).

Six variables reflecting person-neighborhood bonds had significant zero-order correlations with the outcome. Neighborhoods where respondents trusted neighbors more, had more confidence in the future of the neighborhood, were more attached, felt a stronger sense of territorial responsibility, knew more about the neighborhood itself (name and boundary), and felt the neighborhood compared favorably to other possible locales, scored higher on resistance. Altogether these six items explained 65% of the variation in the outcome. In the final mediating composite three of these items had significant b weights (see Table 8) and three had nonsignificant b weights.

Zero-order correlation matrix. The zero-order correlation matrix appears in Table 9. All of the predictors correlate in the expected direction with resistance to disorder. Neighborhoods with a stronger predisposition to resist disorder are neighborhoods where: income and stability are higher, crime is lower, incivilities are fewer, there is less non-residential land use, and person-neighborhood bonds are stronger. This last correlation is particularly striking (.828). Not surprisingly, income and stability correlate strongly with the other predictors. Increasing income and stability are associated with less crime, less incivilities, less non-residential land use, and stronger person-neighborhood bonds.

Step-wise regression. A first crude estimate of the value

Table 8

Variables in Composites Predicting Resistance to Disorder (BIGDEP1)

Composite	Variable	b		t	R ²	R ² Total	Adjusted R ² Total
Sociodemographic Composite (DEP1SDC)	% Rental (Q3M)	-2.09	-.47	-3.99***	.407	.451	.434
	Income (Q69M)	0.24	.27	2.25*	.044		
Mediating Composite (DEP1MEDC)	Trust (DOHLPSAG)	0.26	.26	2.28*	.521	.682	.650
	Neighborhood Expectations (NBEXPECT)	0.04	.16	1.09	.111		
	Attachment (ATTACHAG)	0.24	.24	2.66**	.013		
	Responsibility (RESPCLAG)	0.30	.30	2.20*	.016		
	Neighborhood Awareness (NBAWARE)	0.07	.13	1.44	.011		
	Neighborhood Comparison (COMPARAG)	0.13	.13	1.40	.011		

Notes. * = p < .05
 ** = p < .01
 *** = p < .001

Table 9

Zero-Order Correlation Matrix Predicting Resistance to Disorder (BIGDEP1)

	(1) Socio- Demographic Composite (DEP1SDC)	(2) Crime (CRIM7880)	(3) Physical Decay (DECAYNU)	(4) Non-Residential Land Use (COMRESNU)	(5) Person- Neighborhood Bonds (DEP1MEDC)	(6) Resistance to Disorder (BIGDEP1)
(1) DEP1SDC	1.0	-.635	-.635	-.422	.816	.669
(2) CRIM7880		1.0	.625	.380	-.439	-.342
(3) DECAYNU			1.0	.005	-.482	-.369
(4) COMRESNU				1.0	-.308	-.294
(5) DEP1MEDC					1.0	.828
(6) BIGDEP1						1.0

Note. Logged predictors.

of each predictor was obtained from hierarchical, step-wise regression where the income and demographics composite was added in first, objective neighborhood features added in on subsequent steps, and person-neighborhood bonds added on the last step. Although some may feel that the presentation of these stepwise results is redundant with later analyses we feel it is worthwhile because it is an analysis that does not focus on regression coefficients, but instead on increments in R^2 . These latter measures can in no way be perturbed or distorted by problems of multicollinearity. The results appear in Table 10. Income and stability entered on the first step explain a substantial and significant ($p < .001$) 45% of the variation in the outcome. Crime and physical features, added on subsequent steps, add little. Person-neighborhood bonds, added on the last step, after all else has entered, explain a very sizable and significant ($p < .001$) additional 23% of the variation in the outcome. Thus, despite the strong association of bonds with SES factors, the former still play a major role in predicting resistance.

Path model. The results of our trimmed path model appear in Figure 5. (Paths with coefficients of less than .05 were eliminated.) The model explains 68% of the variation in resistance (adjusted $r^2 = .678$; $F(1,64) = 134.76$; $p < .001$). The model shows two very strong and sizable coefficients. Higher income, more stable neighborhoods have stronger person-neighborhood bonds, and neighborhoods with strong bonds have a stronger predisposition to resist disorder.

Table 10

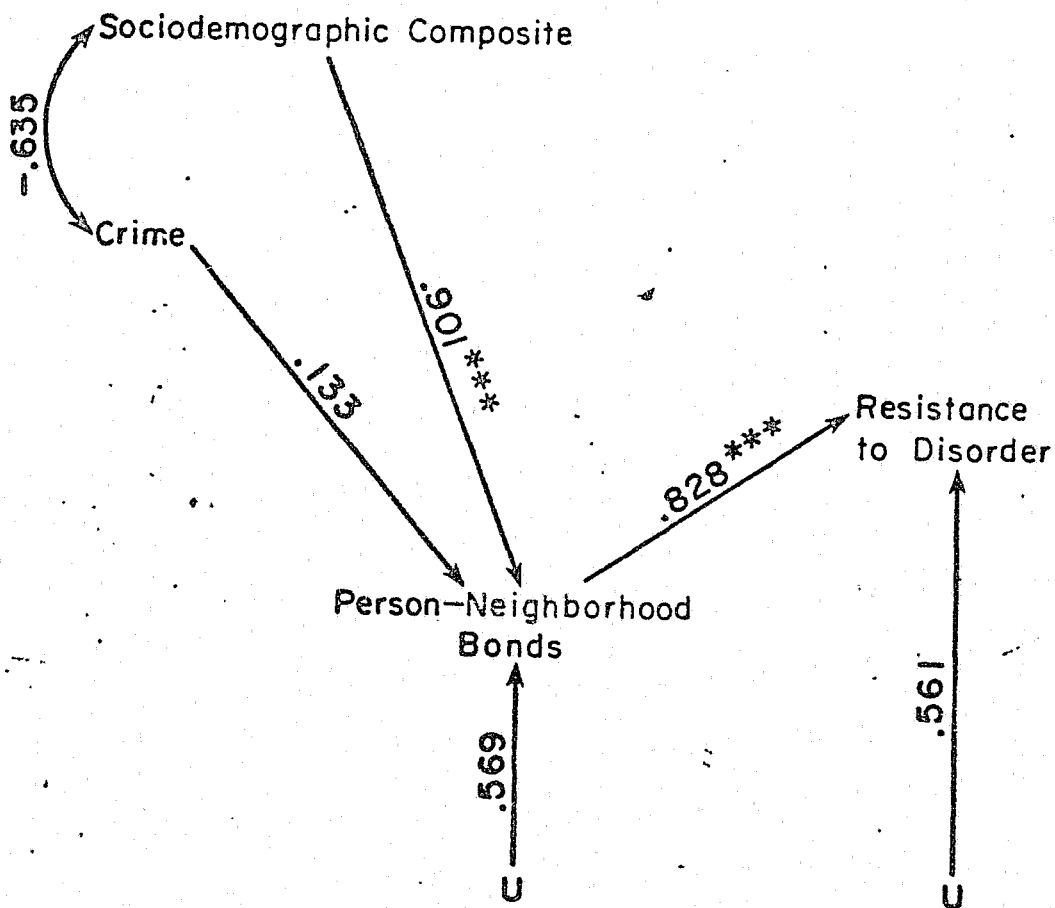
Increments in R^2 Predicting Resistance to Disorder (BIGDEP1)

Variable	R^2 increment	F increment
Sociodemographic Composite (DEP1SDC)	.448	F(1,64) = 51.95***
Crime (CRIM7880)	.012	F(1,63) = 1.36
Physical Deterioration (DECAYNU)	.001	F(1,62) < 1
Non-residential Land Use (COMRESNU)	.000	F(1,61) < 1
Person-Neighborhood Bonds (DEP1MEDC)	.228	F(1,60) = 44.13***

Note. Logged predictors.
*** = $p < .001$

FIGURE 5

Resistance to Disorder: Trimmed Path Model



This pattern of results is quite important on several counts. First, it confirms a central tenet of the model we have developed, that neighborhoods where residents are more satisfied, attached, involved and confident about their neighborhood's future are exactly those neighborhoods where instances of disorderly behavior are expected to be countered when they arise. Neighborhoods where residents like and care about where they live are neighborhoods where people expect that problems will be taken care of. Second, the path model suggests that impacts of SES are totally indirect, channeled via these person-neighborhood bonds. Income and stability are associated with more positive local attitudes and more involvement, and thereby (and only thereby) contribute to a predisposition to counter problems. Finally, crime and physical environment features are notable in that they do not contribute significantly to a predisposition to resist disorder.

Effects of correlated error. As mentioned above, some might be disinclined to accept some of our findings since several concepts in our model were measured with the same instrument--a household survey. They might argue, particularly in the case of our mediating composite and outcome, that they share method variance. This is analogous to suggesting that they have correlated error terms. Of course, we cannot accurately assess what the size of that correlation might be since we lack a second, independent method. Nonetheless, what we can do, using Fuller's SUPERCARP program, is to make varying estimates of the

mediating composite and the outcome.⁶³

The results from this analysis indicated that even if the error correlation between the mediating composite and the outcome was .40 (error covariance expressed as $r^2 = .15$) the size of the coefficient would be almost of the same size ($b = 25.81$) as compared to original (b of 29.67), and would still be highly significant ($p < .001$). Thus, even if there is shared method variance, and even if the amount is quite sizable, this fact cannot diminish or render nonsignificant the impact of the mediating composite on the outcome.

Zero-order correlation matrix: adjusted data. The zero-order correlation matrix for the resistance to disorder regression after adjusting for measurement error appears in Table 11. The main difference between this matrix and the zero-order matrix with unadjusted data is that the correlation between the person-neighborhood bonds composite and the outcome, has increased from .828 to .954. This extremely high correlation, approaching unity, renders any attempt at regression useless, since the mediating composite variable vector approaches being identical to the outcome vector. Consequently, we decided to decompose the mediating variable into two parts.

Adjusted data, decomposed person-neighborhood bonds. The person-neighborhood bonds, mediating composite can be separated into two independent portions: that which is predictable from the sociodemographic composition of the neighborhoods, and that which is not. In other words, we can use a two-stage approach

Table 11

Zero-Order Correlation Matrix for Resistance; Adjusted Data

	(1) Socio- Demographic Composite (DEP1SDC)	(2) Crime (CRIM7880)	(3) Physical Decay (DECAYNU)	(4) Non-Residential Land Use (COMRESNU)	(5) Person- Neighborhood Bonds (DEP1MEDC)	(6) Resistance to Disorder (BIGDEP1)
(1) DEP1SDC	1.0	-.648	-.623	-.440	.834	.659
(2) CRIM7880		1.0	.612	.387	-.442	-.341
(3) DECAYNU			1.0	-.016	-.519	-.368
(4) COMRESNU				1.0	-.271	-.307
(5) DEP1MEDC					1.0	.954
(6) BIGDEP1						1.0

Note. Logged predictors, data adjusted for measurement error.

where we first predict the score on the bonds composite using the sociodemographic composite, and then use these fitted values (which of course correlate 1.0 with sociodemographics since they are on the regression line), and the residuals, i.e., the portion of person-neighborhood bonds not predictable from composition of the population, in a subsequent regression. (In such an analysis it is inappropriate to "interpret" the resulting R^2 .) What does such a strategy achieve? (1) The two portions of person-neighborhood bonds (fitted values and residuals), will correlate less with the outcome than the original composite, thereby avoiding potential problems of singularity. (2) In addition, this approach provides a much more conservative test of the value of person-neighborhood bonds, because these bonds have been stripped of the portion related to sociodemographics; that portion has been merged with the sociodemographic composite.

The zero-order correlation matrix with person-neighborhood bonds decomposed into two independent portions appears in Table 12. The portion of bonds attributable to SES correlates .834 with the original mediating composite, and the remaining portion (MD1UNEXP) correlates .552 with the original composite.

This decomposition has achieved the desired uncoupling of the mediating composite with the outcome. The predictable part of the mediating bonds correlates .659 with the outcome (the same as the sociodemographic composite), and the unpredictable portion correlates .733 with the resistance outcome. It is also interesting to note that the residual portion of

Table 12

Zero-Order Correlation Matrix for Resistance to Disorder; Adjusted Data, Decomposed Person-Neighborhood Bonds

	(1) Socio- Demographic Composite (DEP1SDC)	(2) Crime (CRIM7880)	(3) Physical Decay (DECAYNU)	(4) Non-Residential Land Use (COMRESNU)	(5) Residual Person- Neighborhood (MD1UNEXP)	(6) Resistance to Disorder (BIGDEP1)
(1) DEP1SDC	1.0	-.648	-.623	-.440	.000	.659
(2) CRIM7880		1.0	.612	.387	.178	-.341
(3) DECAYNU			1.0	-.016	.001	-.368
(4) COMRESNU				1.0	.172	-.307
(5) MD1UNEXP					1.0	.733
(6) BIGDEP1						1.0

Note. Logged predictors, data adjusted for measurement error.

person-neighborhood bonds in not significantly correlated with any of the other predictors.

Regression: adjusted data, decomposed mediating composite.

Our final regression was a hierarchical, step-wise analysis. Sociodemographics entered on the first step, crime and physical environment was allowed to enter on the second step, and residual person-environment bonds entered on the last step. The results appear in Table 13. Crime, and the two physical environment parameters did not merit entry (their R^2 increment was nonsignificant, $p > .10$); only sociodemographics, and residual person-neighborhood bonds entered. And, of course, since these two predictors are uncorrelated with one another, because of the fitting procedure we have used, their beta weights are equivalent to their zero-order correlations.

The results are quite striking (see Table 13). After adjusting for measurement error sociodemographic composition accounts for about 40% of the variation in resistance to disorder, and residual person-neighborhood bonds (i.e., that portion not attributable to population composition factors), accounts for about 50% of the variation in resistance. Thus, how people feel about, and how involved they are in their neighborhood explains slightly more of their expected capacity to resist disorder than does the composition of the population itself.

The strength of the contribution of person-neighborhood bonds suggests that conceptually matters such attachment, social involvement, and resistance to disorder may, at some higher

Table 13

Final Regression Predicting Resistance to Disorder:
Adjusted Data; Decomposed Person-Neighborhood Bonds

Variable	Increment in R ²	Final beta	Significance of beta
Sociodemographic Composite (DEP1SDC)	.434	.659	p < .001
Residual Person-Neighborhood Bonds (MD2UNEXP)	.538	.733	p < .001

level, be part and parcel of the same construct. This is an issue to which we shall return later, in our discussion.

Predicting Accommodation to Disorder

Building composites. Three sociodemographic variables correlated significantly with the accommodation to disorder outcome. Neighborhoods with a larger percentage of nonwhite households, with a larger proportion of childless households, and with more female respondents to the survey, scored higher on accommodation. Altogether these variables could explain 26% of the variation in accommodation, although the unique contribution of income was not significant. These three variables, weighted according to their b weights, were used to form a sociodemographic composite variable (see Table 14).

Five variables reflecting person-neighborhood bonds had significant zero-order correlations with accommodation. Neighborhoods where residents had fewer local ties, were more attached, were less aware of neighborhood features, experienced less friction between themselves, and were more pessimistic about the future of the neighborhood, had higher scores on accommodation to disorder. Altogether, these items explained 21% of the variation in accommodation to disorder. A composite variable reflecting person-neighborhood bonds was constructed by b weighting each of these items, and summing. Only the unique contributions of local ties and attachment were significant (Table 14). The positive correlation of attachment and

Table 14

Variables in Composites Predicting Accommodation to Disorder (BIGDEP2)

Composite	Variable	b	β	t	R ²	R ² Total	Adjusted R ² Total
Sociodemographic Composite (DEP2SDC)	% Non-white (HHRACEM)	1.21	.49	4.40***	.223	.298	.264
	% Households with Children (Q63M)	-1.51	-.25	-2.25*	.050		
	Proportion Female Respondents (GENDERM)	1.40	.16	1.47	.025		
Mediating Composite (DEP2MEDC)	Local Ties (ORGBELAG)	-0.33 ^a	-.33	-2.93**	.102	.273	.213
	Attachment (ATTACHAG)	0.28	.28	2.36*	.082		
	Neighborhood Awareness (NBAWARE)	-0.06	-.11	< 1	.047		
	Friction (BLKNEGAG)	-0.20	-.20	-1.58	.015		
	Neighborhood Expectations (NBEXPECT)	-0.05	-.20	-1.51	.028		

Notes. * = p < .05
 ** = p < .01
 *** = p < .001

accommodation were not expected. Perhaps this reflects neighborhoods with older populations of residents.

Zero-order correlation matrix. The zero-order correlation matrix for accommodation to disorder and its predictors appears in Table 15. More accommodation is associated with more crime and more decay. These correlations are in the hypothesized direction. Neighborhood size also correlates negatively with accommodation. Residents in larger neighborhoods report being less accommodating to disorder. Perhaps living in a larger neighborhood affords residents more of a sense of protection, or of less vulnerability.

Step-wise regression. A first, rough estimate of the contribution of each predictor to the outcome was obtained from a hierarchical, step-wise regression. Sociodemographics were entered on the first step, crime and physical neighborhood parameters on the second step, and the person-neighborhood bonds composite on the last step. The results appear in Table 16. The sociodemographic composite explains a significant ($p < .001$) 30% of accommodation. Crime, neighborhood size and physical decay, added on subsequent steps, provide little added explanatory power. Person-neighborhood bonds, added on the last step, explain a significant ($p < .05$) additional 6% of the outcome. The mediating processes although significant, appear to be substantially less powerful in explaining accommodation than they were in explaining resistance to disorder. Nonetheless, the results still do confirm a central tenet of our model: how

Table 15

Zero-Order Correlation Matrix Predicting Accommodation to Disorder (BIGDEP2)

	(1) Socio- Demographic Composite (DEP2SDC)	(2) Crime (CRIM7880)	(3) Physical Decay (DECAYNU)	(4) Neighborhood Size (NBSIZE)	(5) Mediating Composite (DEP2MEDC)	(6) Accommodation to Disorder (BIGDEP2)
(1) DEP2SDC	1.0	.410	.359	-.251	.561	.547
(2) CRIM7880		1.0	.625	-.335	.221	.350
(3) DECAYNU			1.0	-.508	.271	.289
(4) NBSIZE				1.0	-.370	-.212
(5) DEP2MEDC					1.0	.519
(6) BIGDEP2						1.0

Note. Logged predictors.

Table 16

Increments in R^2 Predicting Accommodation to Disorder (BIGDEP2)

Variable	R^2 increment	Fincrement
Sociodemographic Composite (DEP2SDC)	.299	F(1,64) = 27.28***
Crime (CRIM7880)	.019	F(1,63) = 1.75
Neighborhood Size (NBSIZE)	.002	F(1,62) < 1
Physical Decay (DECAYNU)	.000	F(1,61) < 1
Mediating Composite (DEP2MEDC)	.066	F(1,60) = 6.48*

Note. Logged predictors.

* = $p < .05$
 *** = $p < .001$

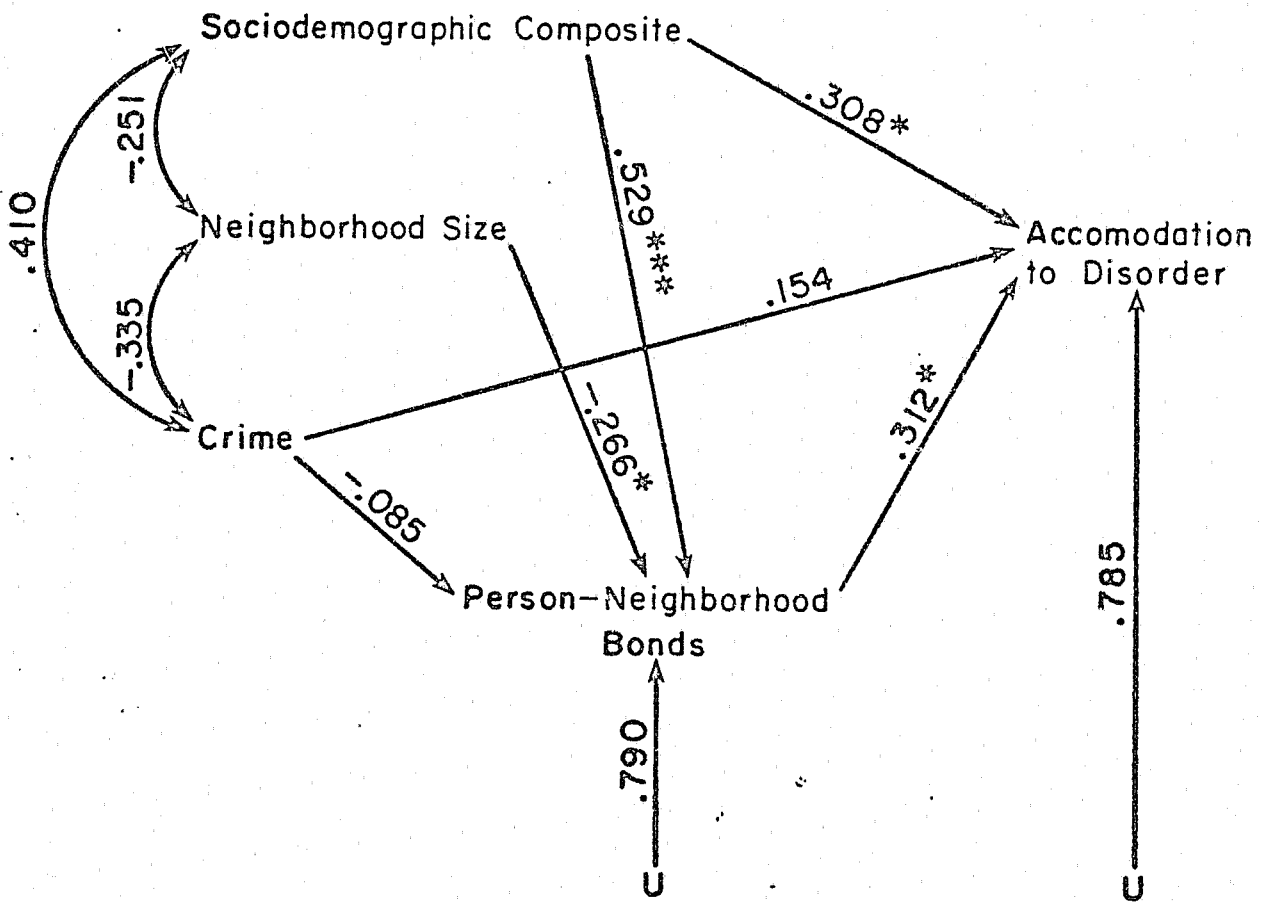
involved people are in their neighborhood and how they feel about it, net of the characteristics of the population, contributes to the extent to which they will accommodate to instances of disorder.

Path model. The results of our trimmed path model, with paths smaller than .05 eliminated, appear in Figure 6. The model explains a significant (adjusted) 35.5% of the variation in accommodation ($F(3,62) = 11.36; p < .001$).

Several features of the path model are quite interesting. The sociodemographic direct effect, in contrast to the resistance to disorder path model, is sizable (.308) and significant. Neighborhoods with greater proportions of black and childless households are more accommodating to disorder. Approximately 59% of the total causal impact of sociodemographics is represented by this direct effect. We also see, as hypothesized, a strong impact of household composition on person-neighborhood bonds (.529). Neighborhoods where non-white, childless households are more prevalent are also neighborhoods where residents are more attached to where they live but have fewer local ties. About 17% of the total causal impact of sociodemographics is funneled via person-neighborhood bonds. And finally, also as predicted, person-neighborhood bonds have a sizable (.312) and significant direct effect on disorder. Less social ties and stronger attachment is associated with more accommodation at the neighborhood-level. The size of the mediating composite direct effect is almost exactly equal to the size of the

FIGURE 6

Trimmed Path Model Predicting Accommodation to Disorder



sociodemographic direct effect.

Crime has a moderate sized direct effect on accommodation (.154), and it is in the hypothesized direction (more crime -> more accommodation), but it does not approach the statistical significance level we have set.

Basically, then, this model indicates that neighborhood population characteristics have significant direct and indirect effects on accommodation, and that person-neighborhood bonds also have a significant direct effect on the outcome. Crime appears to have a modest but non-significant role, and physical environment parameters appear to be not at all relevant.

Effects of correlated error. As we did above with the resistance to disorder regression, we can see what effect assuming varying amounts of error correlation between the mediating-composite and the outcome, has on the size and significance of the person-neighborhood bonds regression coefficient. This is equivalent to arguing that these two concepts share variance since they both come from the same method and instrument. This analysis was carried out using the SUPERCARP program. Results indicated that the error correlation between the mediating composite and the outcome would have to exceed .32 ($r^2 = .10$) before the regression coefficient would no longer be significant at the conventional alpha level (two-tailed test) of $p < .05$. Thus, even if shared method variance did result in correlated error between the mediating and outcome variable, this correlation would have to be very sizable

before it could explain away the significant impact of person-neighborhood bonds on accommodation to disorder.⁶⁴

Zero-order correlation matrix: adjusted data. The zero-order correlation matrix for the adjusted data appears in Table 17. If we compare this matrix with the zero-order matrix based on unadjusted data two sizable changes are evident. Perhaps most notable is the increased correlation between the mediating composite and the outcome, which has increased from .519 to .940. Also, the correlation between the sociodemographic composite and the outcome has increased, from .547 to .706.

This very high correlation, based on the adjusted data, causes us the same problem as in the resistance to disorder matrix. The mediating composite vector approaches being a linear transformation of the outcome vector. So, as we did before, to alleviate this problem we decomposed person-neighborhood bonds into two independent components: that predictable from the sociodemographic composite, and that component not predictable from the sociodemographic composite.

Adjusted data, decomposed person-neighborhood bonds. The results of this separation of person-neighborhood bonds appears in Table 18. The predictable portion of the mediating composite correlates .539 with the original composite, and the unpredictable (residual) portion correlates .842 with the original composite. It is interesting to note that the residual portion of the bonds is correlated little with the other predictor variables. The only significant correlation is with

Table 17

Zero-Order Correlation Matrix for Accommodation to Disorder; Adjusted Data

	(1) Socio- Demographic Composite (DEP2SDC)	(2) Crime (CRIM7880)	(3) Physical Decay (DECAYNU)	(4) Neighborhood Size (NBSIZE)	(5) Person- Neighborhood Bonds (DEP2MEDC)	(6) Accommodation to Disorder (BIGDEP2)
(1) DEP2SDC	1.0	.428	.357	-.269	.539	.706
(2) CRIM7880		1.0	.612	-.335	.233	.483
(3) DECAYNU			1.0	-.504	.274	.377
(4) NBSIZE				1.0	-.379	-.292
(5) DEP2MEDC					1.0	.940
(6) BIGDEP2						1.0

Note. Logged predictors, data adjusted for measurement error.

Table 18

Zero-Order Correlation Matrix for Accommodation to Disorder; Adjusted Data, Decomposed Person-Neighborhood Bonds

	(1) Socio- Demographic Composite (DEP2SDC)	(2) Crime (CRIM7880)	(3) Physical Decay (DECAYNU)	(4) Neighborhood Size (NBSIZE)	(5) Residual Person- Neighborhood (MD2UNEXP)	(6) Accommodation to Disorder (BIGDEP2)
(1) DEP2SDC	1.0	.428	.357	-.269	.000	.706
(2) CRIM7880		1.0	.612	-.335	.002	.483
(3) DECAYNU			1.0	-.504	.097	.377
(4) NBSIZE				1.0	-.278	-.292
(5) MD2UNEXP					1.0	.664
(6) BIGDEP2						1.0

Note. Logged predictors, data adjusted for measurement error.

neighborhood size. And, as Table 18 indicates, this decomposition technique was successful in reducing the near unity correlation between the mediating and outcome variables. The predictable portion of the mediating composite correlates (of course) .706 with the outcome (since it is isomorphic with the sociodemographic composite), and the residual portion correlates .664 with the outcome.

Regression: adjusted data, decomposed mediating composite.

As before, our final regression was hierarchical and stepwise. Sociodemographics entered on the first step, significant crime and physical environment variables entered on subsequent steps, and the residual portion of person-neighborhood bonds entered on the final step. Given the decomposition of bonds and our subsequent focus only on that portion not attributable to sociodemographics, this approach provides a very conservative test of the contribution of these bonds.

The results appear in Table 19. Composition of neighborhood population explains about 50% of accommodation, crime adds another 4%, and the portion of neighborhood involvement and attitudes independent of population characteristics adds another 44%. Basically with the adjusted data the coefficients for sociodemographics and person-neighborhood bonds have doubled in size, and the crime direct effect, moderate but not significant before, has become significant. Thus, neighborhoods that are more likely to accommodate passively to disorder are neighborhoods where: there are more black and childless

Table 19

Final Regression Predicting Accommodation to Disorder;
Adjusted Data, Decomposed Person-Neighborhood Bonds

Variable	Increment in R ²	Final beta	Significance of beta
Sociodemographic Composite (DEP2SDC)	.498	.612	p < .001
Crime (CRIM7880)	.040	.219	p < .05
Residual Person-Environment Bonds (MD2UNEXP)	.440	.664	p < .001

Note. Adjusted total R² = .978
(F(3,62) = 899; p < .001)

households, where crime is more rampant, and where residents have fewer local social ties but feel more attached to the neighborhood.

The results of this regression using adjusted data are, along with the results of the resistance to disorder regression using adjusted data, no less than astounding. The overpowering nature of these regressions is due, in part, to the fact that these are ecological correlations, based on stabilized measures of large scale aggregates. It is also due, in part we would suggest, to the conceptual affinity, at this level of analysis, between person-neighborhood bonds and responses to disorder. This is a topic we shall pursue further below.

Summary of Results to this Point

We have identified two fairly general dimensions of neighborhood-level responses to disorder: resistance and accommodation. Both of these outcomes can be almost completely explained by the composition of the neighborhood residents, and their involvements, attitudes, and expectations regarding their neighborhood. In addition, crime has a significant impact on the accommodation to threat.

The results we have presented so far constitute the major tests of our proposed models. At this point we will proceed and present, for descriptive purposes only, results using more specific outcomes. Of course, these results are redundant with what has already been presented, but are informative because the

outcomes are of a less abstract nature.

Predicting Fear

Building composites. Three sociodemographic variables each contributed uniquely to explaining fear. Fear was higher in neighborhoods where there was a greater proportion of rental households, nonwhite households, and where income was lower. Altogether these three variables could account for about half of the variation in fear. The variables were b weighted (see Table 20) and summed to form a sociodemographic composite.

The mediating composite reflecting person-neighborhood bonds was composed of four variables. Fear was higher in neighborhoods where confidence was lower, residents felt the neighborhood compared unfavorably to other neighborhoods, residents engaged in fewer activities exclusively within the neighborhood, and feelings of territorial responsibility were lower. Items were b weighted (Table 20) and summed to form the composite variable.

Zero-order correlation matrix. The zero-order correlation matrix for the regression predicting fear appears in Table 21. Both the sociodemographic and outcome composite correlate quite strongly with fear (.734 and .741, respectively). Fear also correlates in the expected direction with the other predictors. Fear is stronger in neighborhoods where crime and physical decay are more prevalent (.558 and .526, respectively), and where a greater portion of the neighborhood is given over to non-residential land use (.267). Interestingly, fear is weaker

Table 20

Variables in Composites Predicting Fear (BIGFEAR)

Composite	Variable	b	β	t	R ²	R ² Total	Adjusted R ² Total
Sociodemographic Composite (FEARSDC)	% Rental (Q3M)	8.22	.40	3.49***	.421	.520	.497
	% Non-White (HHRACEM)	2.56	.23	2.18*	.067		
	Income (Q69M)	-1.02	-.24	-2.04*	.032		
Mediating Composite (FEARMEDC)	Neighborhood Expectations (NBEXPECT)	-0.53 [†]	-.48	-3.64***	.544	.660	.638
	Comparative Attachment (COMPARAG)	-1.53	-.33	-3.60***	.078		
	Local Activities (ACTSCLM)	-4.81	-.18	-2.38*	.028		
	Responsibility (RESPCLAG)	-0.71	-.17	-1.35	.010		

Notes. * = $p < .05$
 ** = $p < .01$
 *** = $p < .001$

Table 21

Zero-Order Correlation Matrix Predicting Fear (BIGFEAR)

	(1) Socio- Demographic Composite (FEARSDC)	(2) Crime (CRIM7880)	(3) Physical Environment (DECAYNU)	(4) Non-Residential Land Use (COMRESNU)	(5) Neighborhood Size (NBSIZE)	(6) Mediating Composite (FEARMEDC)	(7) Fear (BIGFEAR)
(1) FEARSDC	1.0	.651	.612	.342	-.431	.739	.734
(2) CRIM7880		1.0	.625	.380	-.335	.576	.558
(3) DECAYNU			1.0	.005	-.508	.522	.526
(4) COMRESNU				1.0	-.013	.258	.267
(5) NBSIZE					1.0	-.316	-.310
(6) FEARMEDC						1.0	.741
(7) BIGFEAR							1.0

Note. Logged predictors.

in larger neighborhoods (-.310). The matrix also reveals very strong correlations between several predictor variables.

Sociodemographics are strongly interlocked with crime, physical decay, and resident-neighborhood bonds.

Step-wise regression. The results of our hierarchical step-wise regression appear in Table 22. Sociodemographics were entered on the first step, and accounted for a significant ($p < .001$) 54% of the variation in fear. Crime and physical parameters, entered on subsequent steps, added a non-significant additional 2% of explained variation. Person-neighborhood bonds, added on the last step, added a significant ($p < .001$) additional 8%. Thus, bonds, net of other factors, are relevant to explaining fear.

Trimmed path model. The results of our trimmed path model appear in Figure 7. Sociodemographics and resident neighborhood bonds both have very sizable and significant direct effects; the other predictors do not. Approximately 55% of the total causal impact of sociodemographics is represented by its direct effect. Slightly more than a third (39%) of its total causal impact is channeled via resident neighborhood bonds. This is a very sizable indirect effect. Thus, to a large extent lower SES neighborhoods have more fearful populations because these populations are less involved in and have less positive attitudes toward the neighborhood. The coefficients associated with crime and decay are trivial, indicting that their unique causal impacts are minimal. Thus, crime and decay, by themselves, are not

Table 22

Increments in R^2 Predicting Fear (BIGFEAR)

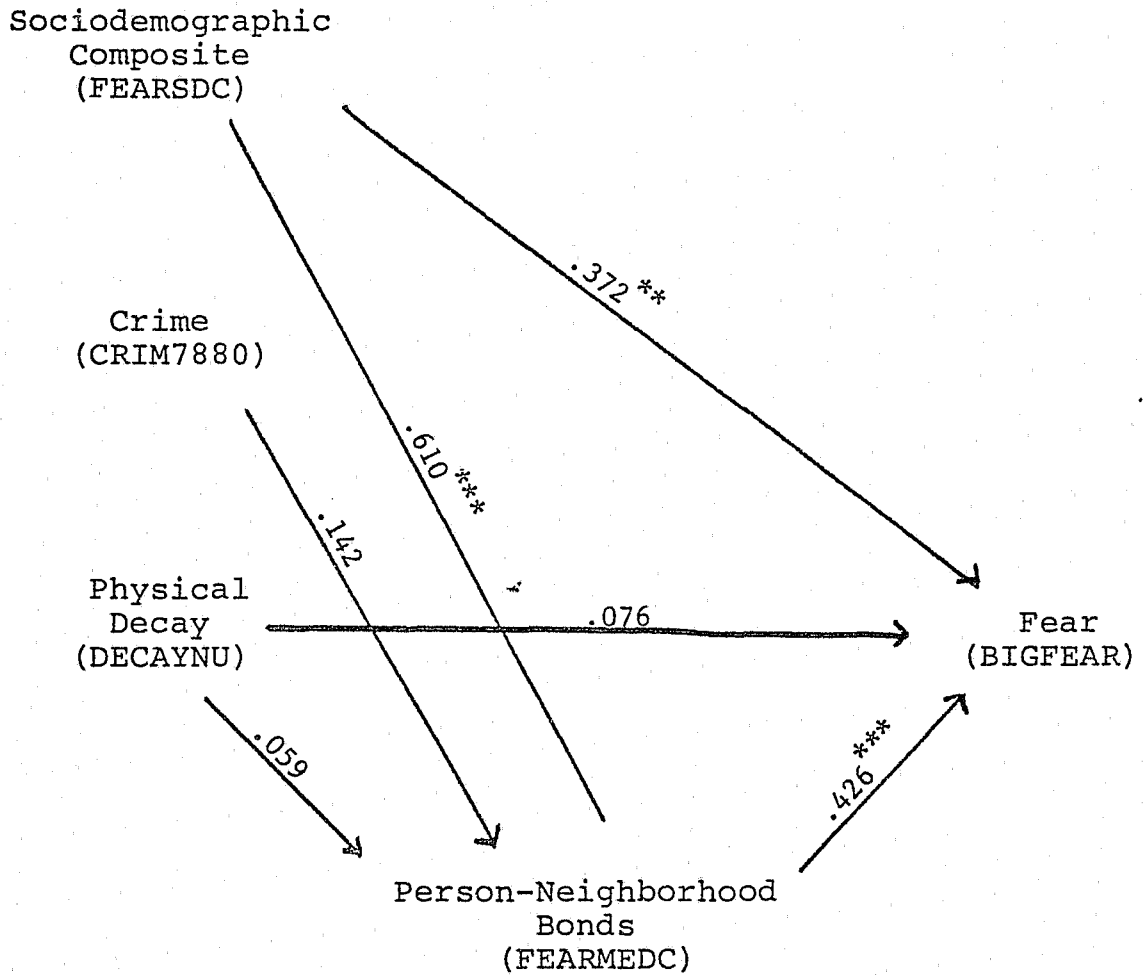
Variable	R^2 increment	F increment
Sociodemographic Composite (FEARSDC)	.538	F(1,64) = 74.62***
Crime (CRIM7880)	.011	F(1,63) = 1.58
Physical Deterioration (DECAYNU)	.004	F(1,62) < 1
Neighborhood Size (NBSIZE)	.001	F(1,61) < 1
Non-Residential Land Use (COMRESNU)	.000	F(1,60) < 1
Person-Neighborhood Bonds (FEARMEDC)	.076	F(1,59) = 12.12***

Note. Logged predictors.

*** = $p < .001$

Figure 7

Trimmed Path Model Predicting Fear (BIGFEAR)



Notes. Adjusted $R^2 = .611$ ($F(3,62) = 32.44, p .001$)

Logged Predictors. *** = $p < .001$
** = $p < .01$

fear-inspiring.

Zero-order correlation matrix; data adjusted for error. The data were input to SUPERCARP, and corrected using the errors in variables routine. The resulting correlation matrix using estimated true scores, appears in Table 23.

The matrix based on corrected data indicates only two changes. The correlation of the sociodemographic composite with fear has increased somewhat from .73 to .86, and the correlation of person-neighborhood bonds with fear has increased from .74 to .98, a correlation approaching unity.

Zero-order correlation matrix: adjusted data, person-neighborhood bonds partitioned. Using the two stage approach described above we partitioned person-neighborhood bonds into that portion predictable from the sociodemographic composite, and that residual portion unexplained. The new correlation matrix appears in Table 24. That portion of bonds not attributable to resident make up correlates .502 with fear.

This residual portion of bonds is independent of the other predictors. And, the predictable portion of the bond composite, now isomorphic with the sociodemographic composite, correlates .864 with fear.

Regression: adjusted data, partitioned mediating composite. In a final step-wise regression, significant predictors were allowed to enter, with the sociodemographic composite being entered on the first step. The results appear in Table 25. Only the sociodemographic composite, explaining 75% of fear, and the

Table 23

Zero-Order Correlation Matrix Predicting Fear; Adjusted Data

	(1) Socio- Demographic Composite (FEARSDC)	(2) Crime (CRIM7880)	(3) Physical Decay (DECAYNU)	(4) Non-Residential Land Use (COMRESNU)	(5) Neighborhood Size (NBSIZE)	(6) Person- Neighborhood Bonds (FEARMEDC)	(7) Fear (BIGFEAR)
(1) FEARSDC	1.0	.650	.611	.331	-.428	.751	.864
(2) CRIM7880		1.0	.612	.387	-.335	.583	.640
(3) DECAYNU			1.0	-.016	-.504	.527	.594
(4) COMRESNU				1.0	.310	.256	.310
(5) NBSIZE					1.0	-.320	-.359
(6) FEARMEDC						1.0	.980
(7) BIGFEAR							1.0

Note. Logged predictors, data adjusted for measurement error.

Table 24

Zero-Order Correlation Matrix Predicting Fear; Adjusted Data, Decomposed Person-Neighborhood Bonds

	(1) Socio- Demographic Composite (FEARSDC)	(2) Crime (CRIM7880)	(3) Physical Decay (DECAYNU)	(4) Non-Residential Land Use (COMRESNU)	(5) Neighborhood Size (NBSIZE)	(6) Residual Person- Neighborhood (FRMDRES)	(7) Fear (BIGFEAR)
(1) FEARSDC	1.0	.550	.611	.331	-.428	.000	.864
(2) CRIM7880		1.0	.612	.387	-.335	.144	.640
(3) DECAYNU			1.0	-.016	-.504	.104	.594
(4) COMRESNU				1.0	.310	.011	.310
(5) NBSIZE					1.0	.001	-.359
(6) FRMDRES						1.0	.502
(7) BIGFEAR							1.0

Note. Logged predictors, data adjusted for measurement error.

Table 25

Final Regression Predicting Fear (BIGFEAR); Adjusted Data,
Decomposed Person-Neighborhood Bonds

Variable	Increment in R ²	Final beta	Significance of beta
Sociodemographic Composite (FEARSDC)	.747	.864	p < .001
Residual Person- Neighborhood Bonds (FRMDRESB)	.252	.502	p < .001

residual portion of person-neighborhood bonds, explaining about 25% of fear, merited entry. Since the two predictors are independent the final regression coefficients are equal to the zero-order correlations. Thus, even when we use only that portion of person-neighborhood bonds which is independent of the composition of the neighborhood population, it still has a very significant impact on fear.

Summing up on fear. Fear is higher in neighborhoods where: renters and nonwhite households are more predominant, income levels are lower, residents are less confident about the future of the neighborhood and rate the local quality of life lower, and where residents have less localized activity patterns. Crime and physical decay, although correlated with fear, do not uniquely contribute to it. This suggests that the link between decay and fear, and crime and fear, is spurious in the sense that the common cause is lower socioeconomic levels and less stability. Of course one could also argue that crime is the main causal variable, causing low SES, decay, and fear. This view, however, is probably more appropriate for a longer time frame in which crime would have time to work as a stimulus to patterns of succession and turnover.

Predicting Behavioral Restriction

Building composites. Three sociodemographic variables correlated significantly with behavioral restriction. Restriction was greater in neighborhoods where there were more

nonwhite households, residents had lived there longer, and income levels were lower. These items were regressed on behavioral restriction, accounting for 27% of the variation, and subsequently b weighted and summed to form a composite variable (see Table 26).

Four aspects of person-neighborhood bonds correlated significantly with the outcome. Restriction was greater in neighborhoods where residents: were less aware of their surroundings (less likely to know neighborhood name, and neighborhood "next door"), more attached to their current neighborhood, had weaker feelings of territorial responsibility, and had less conflicts with their neighbors. Regressing these items on restriction explained 21% of the latter. The four items were b weighted and summed to form a mediating composite (see Table 26).

Zero-order correlation matrix. The zero-order correlation matrix appears in Table 27. The two composite variables correlate quite strongly with behavioral restriction and slightly more strongly with one another.

Step-wise regression. The step-wise regression (Table 28), which gives us a rough picture of the contribution of each predictor, indicates that sociodemographics, entered on the first step accounted for a significant ($p < .001$) 30% of the variation in behavioral restriction. Crime and physical environment parameters, added on subsequent steps, add little. Person-neighborhood bonds, however, added on the last step add a

Table 26

Variables in Composites Predicting Behavioral Restriction (RESTRCAG)

Composite	Variable	b	β	t	R ²	R ² Total	Adjusted R ² Total
Sociodemographic Composite (RESTSDC)	% Non-White (HHRACEM)	2.06	.44	3.32**	.120	.307	.274
	Length of Residence (YRSRESIM)	0.16	.43	3.71***	.172		
	Income (Q69M)	-0.25	-.14	-1.15	.015		
Mediating Composite (RESTMEDC)	Neighborhood Awareness (NBAWARE)	-0.35 ^d	-.33	-2.67**	.164	.263	.214
	Attachment (ATTACHAG)	0.44	.23	1.99*	.068		
	Responsibility (RESPCLAG)	-0.32	-.16	-1.35	.016		
	Friction (BLKNEGAG)	-0.24	-.13	-1.08	.014		

Notes. * = p < .05
 ** = p < .01
 *** = p < .001

Table 27

Zero-Order Correlation Matrix Predicting Restriction of Activity (RESTRCAG)

	(1) Socio- Demographic Composite (RESTSDC)	(2) Crime (CRIM7880)	(3) Physical Environment (DECAYNU)	(4) Non-Residential vs. Residential Land Use (COMRESNU)	(5) Person- Neighborhood Bonds (RESTMEDC)	(6) Restricted Activity (RESTRCAG)
(1) RESTSDC	1.0	.360	.396	.050	.637	.550
(2) CRIM7880		1.0	.625	.380	.109	.337
(3) DECAYNU			1.0	.005	.307	.335
(4) COMRESNU				1.0	-.190	-.010
(5) RESTMEDC					1.0	.510
(6) RESTRCAG						1.0

Note. Logged predictors.

Table 28

Increments in R^2 Predicting Behavioral Restriction (RESTRCAG)

Variable	R^2 increment	F increment
Sociodemographic Composite (RESTSDC)	.303	F(1,64) = 27.79***
Crime (CRIM7880)	.022	F(1,63) = 2.08
Non-Residential Land Use (COMRESNU)	.011	F(1,62) = 1.01
Physical Decay (DECAYNU)	.000	F(1,61) < 1
Person-Neighborhood Bonds (RESTMEDC)	.046	F(1,60) = 4.51*

Note. Logged predictors.

* = $p < .05$

*** = $p < .001$

significant ($p < .05$) 5% explained variance. Controlling for other factors, the bonds do make a significant, unique contribution.

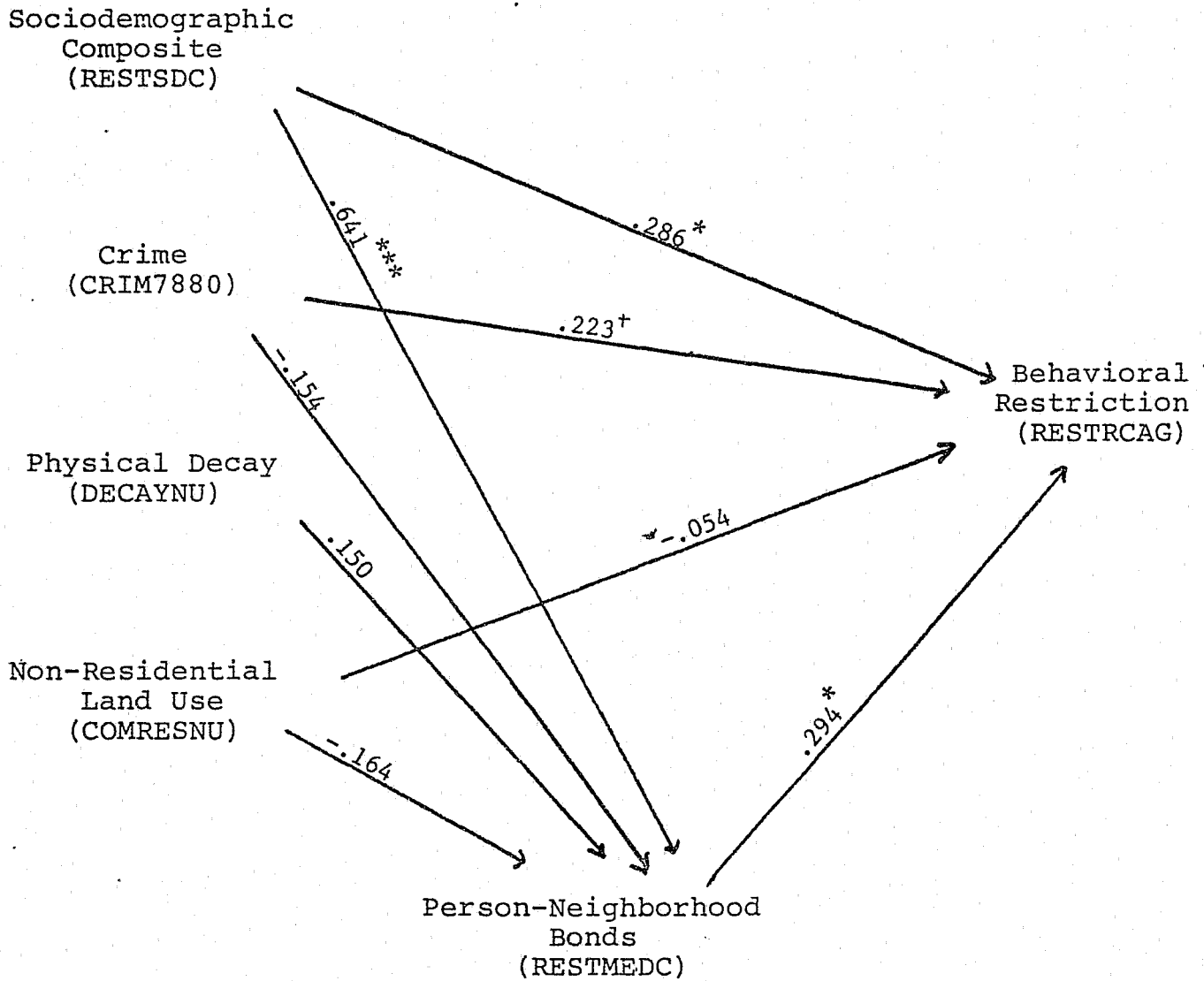
Trimmed path model. The results of the trimmed path model appear in Figure 8. Both the sociodemographic and mediating composite have sizable and significant coefficients representing their direct effects; both coefficients are comparably sized (about .3). These two factors have the same size direct impacts on the outcome. Perhaps even more interesting is the very large coefficient linking population composition to person-neighborhood bonds (.641). Consequently, about one third of the total causal effect of sociodemographics is mediated via these bonds.

The model also indicates a significant ($p < .10$) direct effect of crime on restriction (.223). Controlling for all else, crime does lead to efforts to reduce vulnerability, as through more restricted patterns of behavior.

Zero-order correlation matrix: adjusted data. The zero-order correlation matrix based on estimated true scores, after controlling for measurement error, appears in Table 29. Comparing it to the original matrix before adjusting for error (Table 27), we can see that there are only two major changes. Population composition now correlates more strongly with the outcome (.763 instead of .550), and person-neighborhood bonds correlate much more strongly with the outcome than before (.906 instead of .51). The other correlations are essentially unchanged.

Figure 8

Trimmed Path Model Predicting Behavioral Restriction (RESTRCAG)



Notes. Adjusted $R^2 = .342$ ($F(4,61) = 7.93$)

*** = $p < .001$

* = $p < .05$

† = $p < .10$

Table 29

Zero-Order Correlation Matrix Predicting Behavioral Restriction; Adjusted Data

	(1) Socio- Demographic Composite (RESTSDC)	(2) Crime (CRIM7880)	(3) Physical Decay (DECAYNU)	(4) Person- Neighborhood Bonds (RESTMEDC)	(5) Behavioral Restriction (RESTRCAG)
(1) RESTSDC	1.0	.353	.373	.636	.763
(2) CRIM7880		1.0	.613	.108	.473
(3) DECAYNU			1.0	.326	.400
(4) RESTMEDC				1.0	.906
(5) RESTRCAG					1.0

Note. Logged predictors, data adjusted for measurement error.

Zero-order correlation matrix: adjusted data, partitioned person-neighborhood bonds. Partitioning person-neighborhood bonds into the portion predictable from sociodemographics, and the remainder results in the correlation matrix shown in Table 30. Residual person-neighborhood bonds correlate .546 with the outcome, and are independent of the other predictors.

Final regression. The results of our final regression using adjusted data and the partitioned mediating composite, appear in Table 31. Sociodemographics, crime, and residual bonds all have significant coefficients. The most sizable coefficients are those for sociodemographics and residual bonds ($> .60$). When we consider only that part of local involvement, attitudes, and so on, which is independent of population composition, it has as much of an impact on behavioral restriction as population characteristics.

Summing up on behavioral restriction. Restriction of behavioral activities is more likely in neighborhoods where crime is higher, there are more minority households, older households who have lived there longer and care more about the area, but who are less aware of the symbolic and physical features of their neighborhood. The nature of the neighborhood population, and its views of the neighborhood, are equally important.

Predicting Response to Suspected Break-in

Building composites. Neighborhoods where there were fewer nonwhite households, and more long term residents, were more

Table 30

Zero-Order Correlation Matrix Predicting Behavioral Restriction;
Adjusted Data, Decomposed Person-Neighborhood Bonds

	(1) Socio- Demographic Composite (RESTSDC)	(2) Crime (CRIM7880)	(3) Physical Decay (DECAYNU)	(4) Residual Person- Neighborhood (RESTMRES)	(5) Behavioral Restriction (RESTRCAG)
(1) RESTSDC	1.0	.353	.373	.000	.763
(2) CRIM7880		1.0	.613	-.151	.473
(3) DECAYNU			1.0	.115	.400
(4) RESTMRES				1.0	.546
(5) RESTRCAG					1.0

Note. Logged predictors, data adjusted for measurement error.

Table 31

Final Regression Predicting Behavioral Restriction (RESTRCAG);
Adjusted Data, Decomposed Person-Neighborhood Bonds

Variable	Increment in R ²	Final beta	Significance of beta
Sociodemographic Composite (RESTSDC)	.581	.644	p < .001
Crime (CRIM7880)	.047	.335	p < .001
Residual Person- Neighborhood Bonds (RESTMRES)	.347	.597	p < .001

likely to respond to a suspected break-in. These two variables were regressed on the outcome, b weighted (see Table 32) and summed to form a composite variable.

Three aspects of person-neighborhood bonds correlated significantly with responding to break-ins. Interventions were more likely in neighborhoods where residents had more local ties, there was more friction, and residents were more aware of neighborhood characteristics. These items were regressed onto the outcome, b weighted (see Table 32) and summed to form our mediating composite variable.

Zero-order correlation matrix. The zero-order correlation matrix appears in Table 33. In addition to our two composite variables non-residential land use is a significant predictor. The matrix also reveals that the two composite variables are correlated with one another. (.516).

Step-wise regression. A crude estimate of the relative contribution of each predictor is given by the step-wise regression (Table 34). All three predictors add significant explained variation. The finding that responses are more likely in neighborhoods where there is more non-residential land use is intriguing. Perhaps populations in such neighborhoods are cognizant of a lack of natural guardians, and consequently are more vigilant. The regression confirms the predictive utility of person-neighborhood bonds, despite the correlation between that composite and the sociodemographic composite.

Table 32

Variables in Composites Predicting Responses to Break-In (BRKIN)

Composite	Variable	b	β	t	R ²	R ² Total	Adjusted R ² Total
Sociodemographic Composite (BRKSDC)	% Non-White (HHRACEM)	-1.61	-.34	-2.77**	.156	.172	.146
	Length of Residence (YRSRESIM)	0.05	.14	1.11	.016		
Mediating Composite (BRKMEDC)	Local Ties (ORGBELAG)	0.74	.38	3.39***	.163	.223	.193
	Friction (BLKNEGAG)	0.39	.20	1.82*	.049		
	Neighborhood Awareness (NBAWARE)	0.15	.14	1.21	.018		
<hr/>							
Notes. * = p < .05							
** = p < .01							
*** = p < .001							

Table 33

Zero-Order Correlation Matrix Predicting Responses to Break-In (BRKIN)

	(1) Socio- Demographic Composite (BRKSDC)	(2) Non-Residential vs. Residential Land Use (COMRESNU)	(3) Mediating Composite (BRKMEDC)	(4) Responses to Break-In (BRKIN)
(1) BRKSDC	1.0	-.059	.516	.411
(2) COMRESNU		1.0	.174	.204
(3) BRKMEDC			1.0	.478
(4) BRKIN				1.0

Note. Logged predictors.

Table 34

Increments in R^2 Predicting Response to Break-In (BRKIN)

Variable	R^2 increment	F _{increment}
Sociodemographic Composite (BRKSDC)	.169	F(1,64) = 13.04***
Non-Residential Land Use (COMRESNU)	.052	F(1,63) = 4.24*
Person-Neighborhood Bonds (BRKMEDC)	.089	F(1,62) = 6.08*

Note. Logged predictors.

* = $p < .05$

*** = $p < .001$

Path model. The results of our trimmed path model appear in Figure 9. All three predictors have significant direct effects. From largest to smallest direct effect the ordering was sociodemographics, person-neighborhood bonds, and non-residential land use.

In addition, population composition had a major impact on person-neighborhood bonds, as shown by the very sizable coefficient (.516). Consequently, 27% of the total causal impact of sociodemographics is channeled indirectly via these bonds. Finally, non-residential land use also strengthened the bonds between residents and their locale.

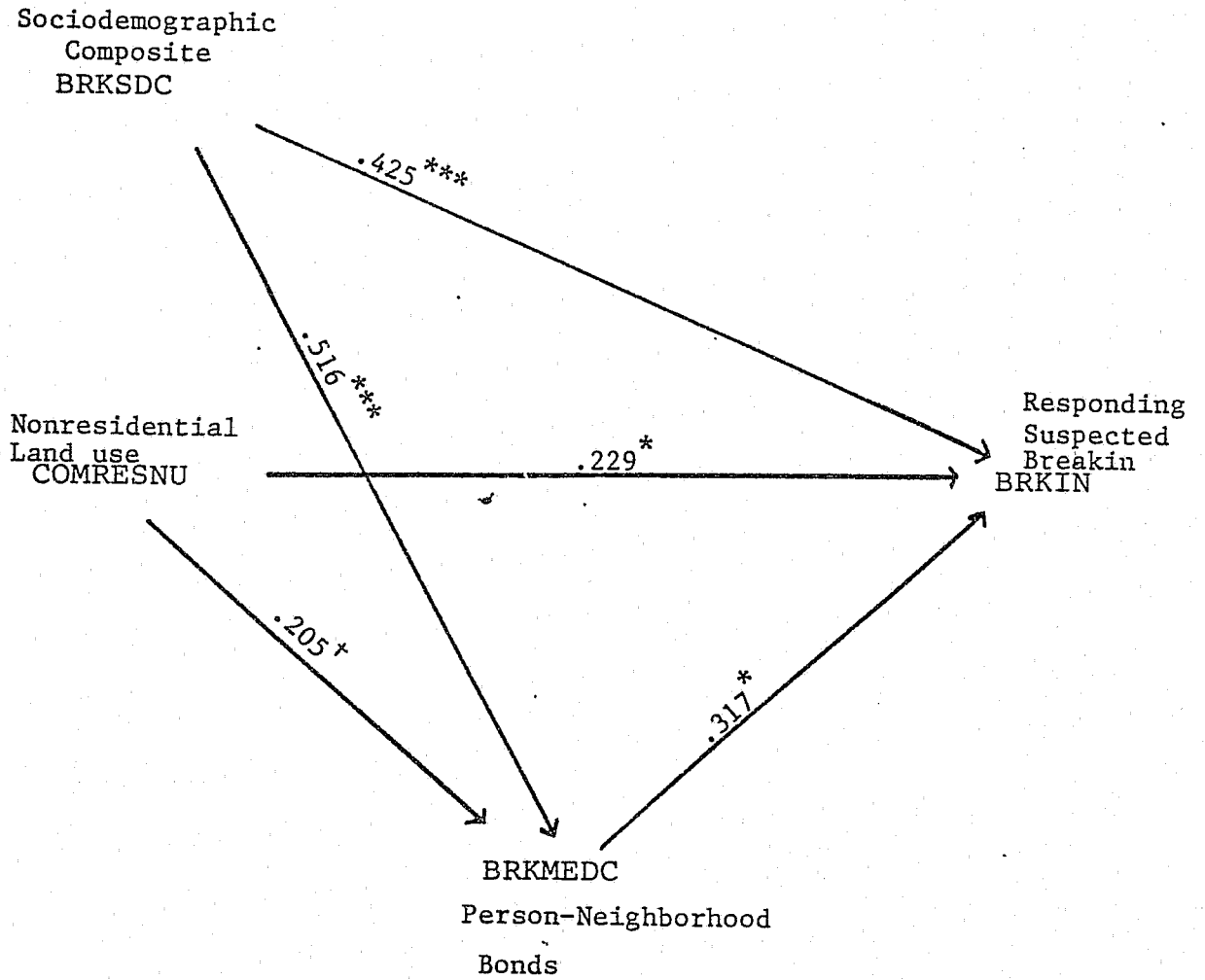
Zero-order correlation matrix: adjusted data. The zero-order correlation matrix based on estimated true scores, corrected for measurement error, appears in Table 35. The only sizable changes between this matrix is the increased correlation between sociodemographics and the outcome (up from .411 to .553), and between bonds and the outcome (up from .478 to .979).

Zero-order correlation matrix, adjusted data, partitioned person-neighborhood bonds. Regressing the mediating composite onto the sociodemographic composite, and adding the residual portion of person-neighborhood bonds resulted in the correlation matrix shown in Table 36. Residual bonds correlate .809 with response to break-in, and .25 with non-residential land use.

Final regression. The results of our final, step-wise regression using adjusted data appear in Table 37. All three predictors have significant coefficients. Residual

Figure 9

Path Model Predicting Response to Suspected Break-In (BRKIN)



Notes. Adjusted $R^2 = .29$ ($F(3,62) = 8.44$; $p < .001$)

*** = $p < .001$

* = $p < .05$

† = $p < .10$

Table 35

Zero-Order Correlation Matrix for Responding to Break-In (BRKIN); Adjusted Data

	(1) Socio- Demographic Composite (BRKSDC)	(2) Non-Residential Land Use (COMRESNU)	(3) Person- Neighborhood Bonds (BRKMEDC)	(4) Responding to Break-In (BRKIN)
(1) BRKSDC	1.0	-.074	.527	.553
(2) COMRESNU		1.0	.174	.313
(3) BRKMEDC			1.0	.979
(4) BRKIN				1.0

Note. Logged predictors, data adjusted for measurement error.

Table 36

Zero-Order Correlation Matrix for Responding to Break-In (BRKIN);
Adjusted Data, Decomposed Person-Neighborhood Bonds

	(1) Socio- Demographic Composite (Identical with Predictable Portion of Person-Neighborhood Bonds): (BRKSDC)	(2) Non-Residential Land Use (COMRESNU)	(3) Residual Person- Neighborhood Bonds (BRKMRES)	(4) Responding to Break-In (BRKIN)
(1) BRKSDC	1.0	-.074	.000	.553
(2) COMRESNU		1.0	.250	.313
(3) BRKMRES			1.0	.809
(4) BRKIN				1.0

Note. Logged predictors, data adjusted for measurement error.

Table 37

Final Regression for Responding to Break-In (BRKIN);
Adjusted Data, Decomposed Person-Neighborhood Bonds

Variable	Increment in R ²	Final beta	Significance of beta
Sociodemographic Composite (BRKSDC)	.306	.589	p < .001
Non-Residential Land Use (COMRESNU)	.126	.169	p < .10
Residual Person-Neighborhood Bonds (BRKMRES)	.510	.756	p < .001

person-neighborhood bonds have the biggest coefficient and, although added in last, add the most explanatory power. The sociodemographic composite also has a very sizable coefficient. Non-residential land use significantly (albeit modestly in comparison to the other two predictors) enhances the likelihood of responding to a suspected break-in.

Summing up. Neighborhoods where responses to suspected break-ins are more likely to occur are neighborhoods with more white households, more local ties, more friction between residents, and more non-residential land use.

Predicting Informal Social Control

Our social control outcome (SPRYNOIS) was a four item scale concerned with residents responding to inappropriate, late night noise, and a vandalism incident.

Building composites. Only one variable entered into the sociodemographic composite. Informal social control was weaker in neighborhoods with a higher proportion of rental households.⁶⁵ Five aspects of person-neighborhood bonds were significantly associated with informal social control. The unique contribution of two of these variables was significant. Informal social control was stronger in neighborhoods where trust among neighbors, and positive neighborhood attitudes, were stronger. The five variables were regressed on the outcome, b weighted, and summed to form a mediating composite variable (see Table 38).

Table 38

Variables in Composites Predicting Informal Social Control (SPRYNOIS)

Composite	Variable	b	β	t	R ²	R ² Total	Adjusted R ² Total
Sociodemographic Composite (SPRYSDC)	% Rental (Q3M)	-8.23	-.58	-5.64***	.332	.332	.321
Mediating Composite (SPRYMEDC)	Trust (DOHLPSAG)	0.97	.30	2.22*	.398	.506	.464
	Neighborhood Expectations (NBEXPECT)	0.23	.30	2.43**	.078		
	Attachment (ATTACHAG)	0.50	.15	1.52	.012		
	Neighborhood Awareness (NBAWARAG)	0.22	.12	1.09	.010		
	Comparative Attachment (COMPARAG)	0.33	.10	1.01	.010		

Notes.

* = p < .05

** = p < .01

*** = p < .001

Zero-order correlation matrix. The zero-order correlation matrix for the variables in the informal social control regression appears in Table 39. Person-neighborhood bonds correlate most strongly with the outcome (.722) The sociodemographic composite shows a sizable, but smaller correlation with the outcome (.563). Crime and the physical parameters correlate significantly, (albeit modestly in comparison) with control. As expected, increased crime, physical decay, and non-residential land use dampen control.

Step-wise regression. The results of our hierarchical regression predicting willingness to intervene appear in Table 40. Rental status, entered on the first step, explains almost 32% of the outcome. Crime and physical decay, entered on subsequent steps, add very little. Person-neighborhood bonds, entered on the very last step, added another 23% explained variation. These bonds then, are uniquely quite important to predicting the outcome.

Trimmed path model. The results of our trimmed path model appear in Figure 10. Perhaps most interesting is that almost two thirds (62%) of the total causal effect of proportion of rental households is mediated by resident-neighborhood bonds. The direct effect of this sociodemographic variable amounts to only 16% of its total causal effect.

Also striking in the model is the very sizable (.726) direct effect of bonds on willingness to intervene. The magnitude of this coefficient would be acceptable as a validity coefficient,

Table 39

Zero-Order Correlation Matrix Predicting Informal Social Control (SPRYNOIS)

	(1) Socio- Demographic Composite (SPRYSDC)	(2) Crime (CRIM7880)	(3) Physical Environment (DECAYNU)	(4) Non-Residential vs. Residential Land Use (COMRESNU)	(5) Mediating Composite (SYRYMEDC)	(6) Informal Social Control (SPRYNOIS)
(1) SPRYSDC	1.0	-.574	-.564	-.437	.747	.563
(2) CRIM7880		1.0	.638	.377	-.460	-.293
(3) DECAYNU			1.0	.000	-.525	-.265
(4) COMRESNU				1.0	-.283	-.261
(5) SPRYMEDC					1.0	.727
(6) SPRYNOIS						1.0

Note. Logged predictors.

Table 40

Increments in R^2 Predicting Informal Social Control (SPRYNOIS)

Variable	R^2 increment	F increment
Sociodemographic Composite (SPRYSDC)	.316	$F(1,64) = 29.63^{***}$
Physical Decay (DECAYNU)	.004	$F(1,63) < 1$
Crime (CRIM7880)	.000	$F(1,62) < 1$
Person-Neighborhood Bonds (SPRYMEDC)	.225	$F(1,61) = 30.24^{***}$

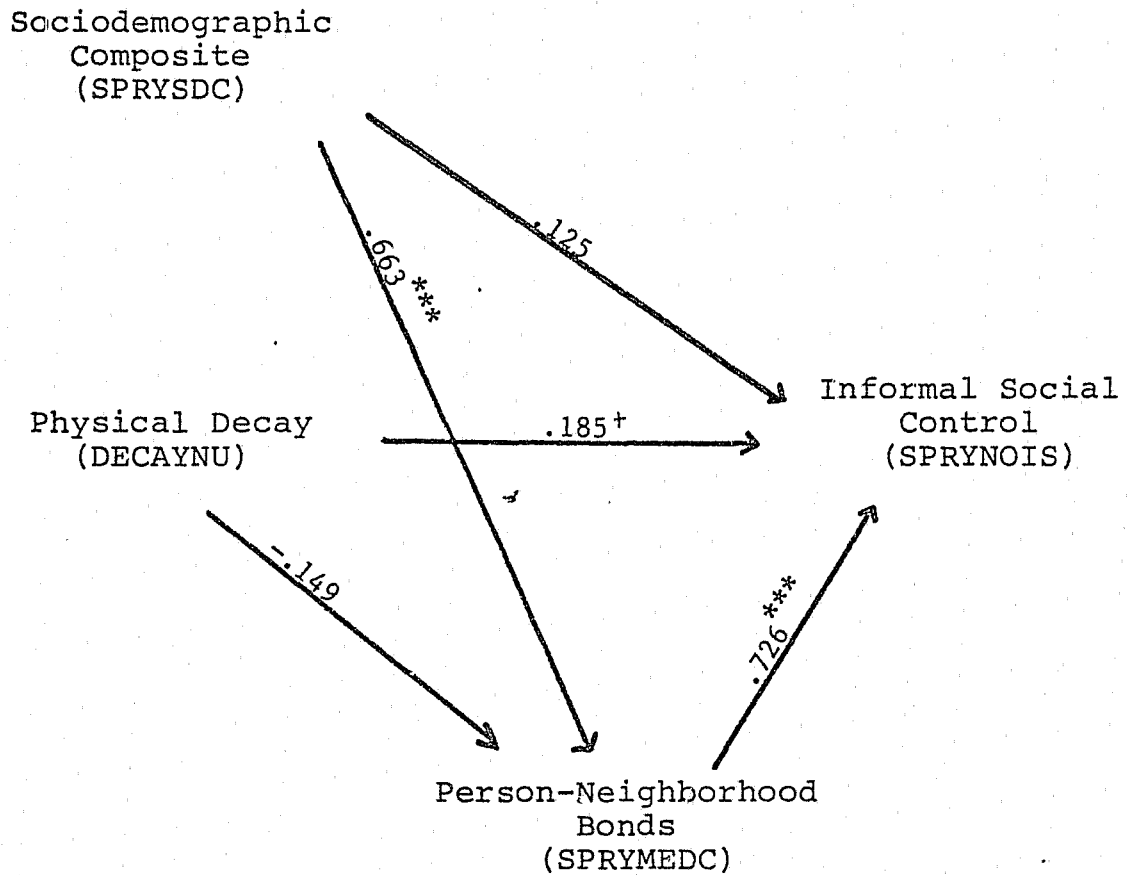
Notes. Logged predictors.

*** = $p < .001$

Non-Residential Land Use (COMRESNU) did not enter due to a very low tolerance level.

Figure 10

Trimmed Causal Model Predicting Informal Social Control (SPRYNOIS)



Notes. Adjusted $R^2 = .523$ ($F(3,62) = 22.67, p < .001$)

*** $p < = .001$

† $p < = .10$

suggesting, perhaps, that informal social control, and local ties, positive neighborhood expectations, and so on, are part and parcel of the same larger construct.

A final and intriguing result in this model is the significant albeit modest direct positive impact of physical decay on willingness to intervene. Although this coefficient is of opposite sign to the original correlation, inspection of regression tables (standard errors, in particular), suggested that this was not simply "beta bounce."

Zero-order correlation matrix with adjusted data. The correlation matrix based on estimated true scores after correcting for measurement error in variables appears in Table 41. The only change between this matrix and the original zero-order matrix is the increase in the correlation between person-neighborhood bonds and informal social control (up to .944 from .722).

Zero-order correlation matrix with adjusted data, partitioned person-neighborhood bonds. Regressing the mediating composite onto the proportion of renter households allowed us to separate the portion of neighborhood bonds that could be predicted from tenure mix, and the proportion that could not. The zero-order correlation matrix using only the residual portion of these bonds appears in Table 42. This residualized variable still correlates significantly with informal social control, but not with any of the predictors in the matrix.

Table 41

Zero-Order Correlation Matrix for Informal Social Control (SPRYNOIS); Adjusted Data

	(1) Socio- Demographic Composite (SPRYSDC)	(2) Crime (CRIM7880)	(3) Physical Decay (DECAYNU)	(4) Non-Residential Land Use (COMRESNU)	(5) Person- Neighborhood Bonds (SPRYMEDC)	(6) Informal Social Control (SPRYNOIS)
(1) SPRYSDC	1.0	-.593	-.566	-.429	.772	.607
(2) CRIM7880		1.0	.613	.387	-.498	-.322
(3) DECAYNU			1.0	-.016	-.555	-.267
(4) COMRESNU				1.0	-.297	-.278
(5) SPRYMEDC					1.0	.944
(6) SPRYNOIS						1.0

Note. Logged predictors, data adjusted for measurement error.

Table 42

Zero-Order Correlation Matrix for Informal Social Control (SPRYNOIS); Adjusted Data, Decomposed Person-Neighborhood Bonds

	(1) Socio- Demographic Composite (Identical with Predictable Portion of Person-Neighborhood Bonds): (SPRYSDC)	(2) Crime (CRIM7880)	(3) Physical Decay (DECAYNU)	(4) Non-Residential Land Use (COMRESNU)	(5) Residual Person- Neighborhood Bonds (SPMDRES)	(6) Informal Social Control (SPRYNOIS)
(1) SPRYSDC	1.0	-.593	-.566	-.429	.000	.607
(2) CRIM7880		1.0	.613	.387	-.064	-.322
(3) DECAYNU			1.0	-.016	-.185	-.267
(4) COMRESNU				1.0	.053	-.278
(5) SPMDRES					1.0	.747
(6) SPRYNOIS						1.0

Note. Logged predictors, data adjusted for measurement error.

Final regression. Allowing only predictors with significant contributions to enter, a final step-wise regression using the adjusted data and the residual person-neighborhood bonds was carried out. The results appear in Table 43. Only the (reflected) rental variable and residual bonds entered. The contribution of residual bonds was about 50% greater than the contribution of tenure mix.

Summing up. Willingness to intervene, one important aspect of informal social control, is stronger in neighborhoods with a higher proportion of homeowners, and where residents trust one another more and feel more positively about present and future neighborhood quality of life.

Predicting Post-Hoc Responses to a String of Burglaries (POSTHOC)

Building composites. Two sociodemographic variables were regressed onto the outcome and subsequently b weighted and summed to make the sociodemographic composite variable (see Table 44). The only significant unique contribution was that of tenure. Post-hoc responses were more likely in neighborhoods with a higher proportion of owner-occupied houses.

Five mediating variables were regressed on the outcome, and subsequently b weighted and summed to make the person-neighborhood bonds composite variable (see Table 44). Post-hoc responses were more likely in neighborhoods where trust was stronger, residents felt more responsible for what happened in nearby outdoor places, engaged in fewer exclusively local

Table 43

Final Regression Predicting Informal Social Control (SPRYNOIS);
Adjusted Data, Decomposed Person-Neighborhood Bonds

Variable	Increment in R ²	Final beta	Significance of beta
Sociodemographic Composite (SPRYSDC)	.368	.607	p < .001
Residual Person- Neighborhood Bonds (SPMDRES)	.559	.747	p < .001

Table 44

Variables in Composites Predicting Post-Hoc Responses to a String of Burglaries (POSTHOC)

Composite	Variable	b	β	t	R ²	R ² Total	Adjusted R ² Total
Sociodemographic Composite (POSTSDC)	% Rental (Q3M)	-7.38	-.46	-4.25***	.229	.254	.230
	% Households with Children or Teens (Q 63M)	-3.47	-.16	-1.46	.025		
Mediating Composite (POSTMEDC)	Trust (DOHLPSAG)	1.37 _k	.38	2.99**	.314	.477	.433
	Friction (BLKNEGAG)	-0.74	-.21	-2.06*	.075		
	Local Activities (ACTSCLM)	-4.11	-.20	-2.13*	.053		
	Responsibility (RESPCLAG)	0.76	.21	1.75†	.016		
	Attachment (ATTACHAG)	0.59	.16	1.49	.019		

Notes. † = p < .10
 * = p < .05
 ** = p < .01
 *** = p < .001

activities, and had fewer local conflicts.

Zero-order correlation matrix. The zero-order correlation matrix of predictors and outcomes appears in Table 45. Both the sociodemographic and bonds composites correlate very strongly with the outcome (.51 and .71 respectively). The two composites are also strongly intercorrelated (.64).

Step-wise regression. Entered on the first step in a hierarchical regression the sociodemographic composite explains 25% of the outcome (see Table 46). Crime and physical parameters, added on subsequent steps, provide little added explanatory power. Person-neighborhood bonds, entered on the last step, provide a very significant additional 23% explained variance, confirming that their unique importance is of about the same magnitude as population characteristics.

Path model. The results of our trimmed path model appear in Figure 11. The only significant direct effect on post-hoc responses comes from person-neighborhood bonds; this path coefficient is very sizable (.652), and approaches the size of a validity coefficient (.7). By contrast the sociodemographic direct effect is non-significant and only about a third as large (.224). In fact, the indirect causal impact of the sociodemographic composite on POSTHOC via person-neighborhood bonds (.351), is actually much larger than the sociodemographic direct effect. This is because the population make up has such a strong impact on those bonds (.539).

Table 45

Zero-Order Correlation Matrix Predicting Post-Hoc Responses to a String of Burglarles (POSTHOC)

	(1) Socio- Demographic Composite (POSTSDC)	(2) Crime (CRIM7880)	(3) Physical Environment (DECAYNU)	(4) Non-Residential vs. Residential Land Use (COMRESNU)	(5) Mediating Composite (POSTMEDC)	(6) Post-Hoc Responses to Crime Problem (POSTHOC)
(1) POSTSDC	1.0	-.580	-.568	-.379	.640	.510
(2) CRIM7880		1.0	.625	.380	-.331	-.165
(3) DECAYNU			1.0	.005	-.406	-.200
(4) COMRESNU				1.0	-.374	-.297
(5) POSTMEDC					1.0	.710
(6) POSTHOC						1.0

Note. Logged predictors.

Table 46

Increments in R^2 for Post-Hoc Responses to a String of Burglaries (POSTHOC)

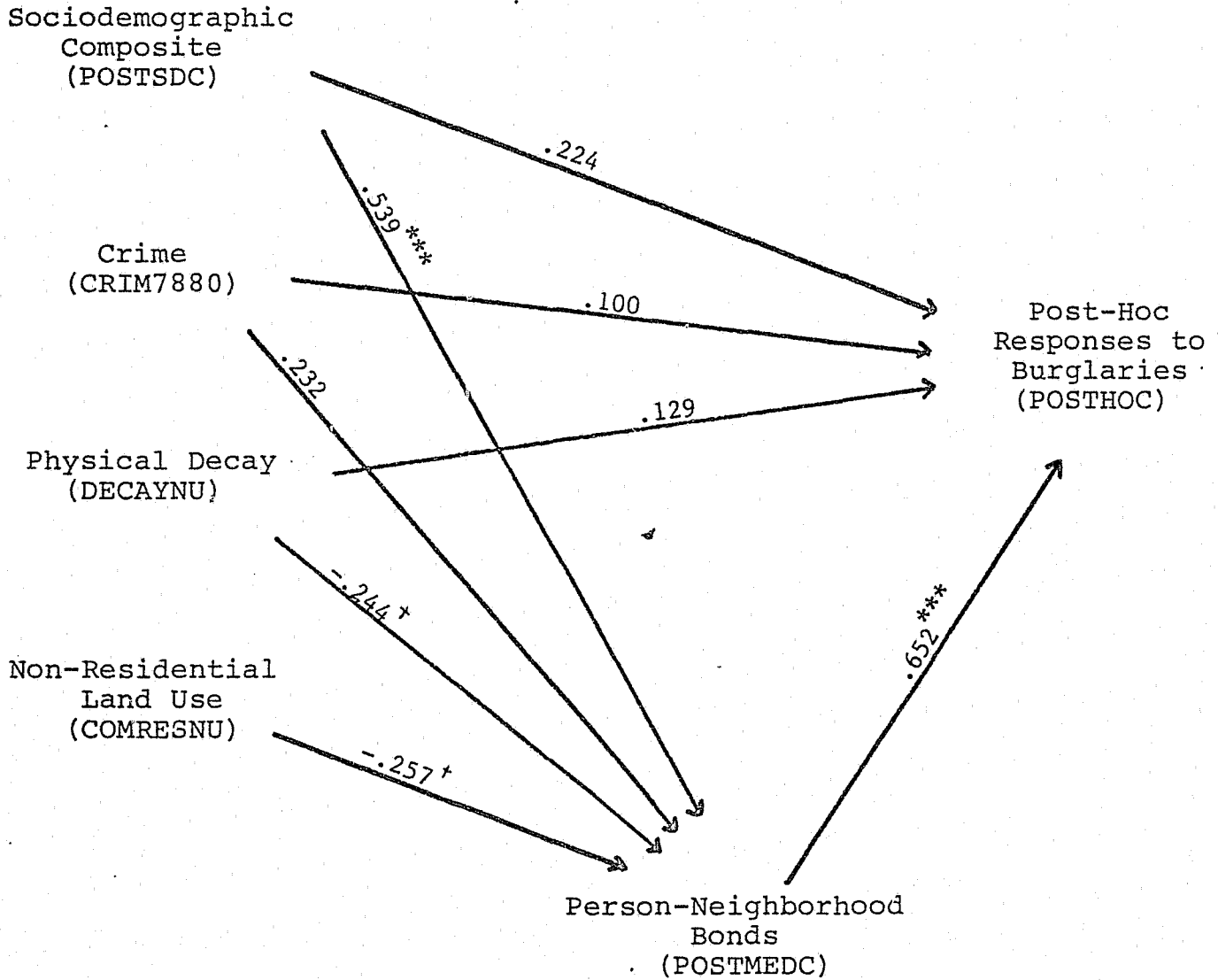
Variable	R^2 increment	F increment
Sociodemographic Composite (POSTSDC)	.260	$F(1,64) = 22.47^{***}$
Crime (CRIM7880)	.026	$F(1,63) = 2.28$
Non-Residential Land Use (COMRESNU)	.023	$F(1,62) = 2.02$
Physical Decay (DECAYNU)	.001	$F(1,61) < 1$
Mediating Composite (POSTMEDC)	.226	$F(1,60) = 29.15^{***}$

Note. Logged predictors.

*** = $p < .001$

Figure 11

Trimmed Causal Model Predicting Post Hoc Responses to a String of Burglaries (POSTHOC)



Notes. Adjusted $R^2 = .504$ ($F(4,61) = 15.51, p < .001$)

*** = $p < .001$

† = $p < .10$

Also of interest are the significant impacts of physical decay and non-residential land use on person-neighborhood bonds, serving to dampen the latter.

Zero-order correlation matrix with adjusted data. The correlation matrix based on estimated true values after correcting for measurement error appears in Table 47. The only sizable differences as compared to the original matrix based on raw data are that the correlation between the sociodemographic composite and the outcome has increased somewhat (from .51 to .617), and the correlation between bonds and the outcome has increased substantially (.71 to .963), and approaches unity.

Zero-order correlation matrix with adjusted data, partitioned bonds. By regressing the sociodemographic composite onto the mediating composite, and working with the residual portion of bonds, person-neighborhood bonds were decomposed into that portion predictable from sociodemographics, and residual bonds. The new correlation matrix appears in Table 48. The residual portion of person-neighborhood bonds now correlates .74 with post-hoc responses, and not at all with the other two predictors.

Final regression. A final stepwise regression including all variables with significant unique contributions was carried out and the results appear in Table 49. Only the two composites entered; physical decay did not merit entry. Results indicate that residential composition, and that portion of bonds predictable therefrom explained 38% of the outcome, and residual

Table 47

Zero-Order Correlation Matrix for Post-Hoc Responses to
a String of Burglaries (POSTHOC); Adjusted Data

	(1) Socio- Demographic Composite (POSTSDC)	(2) Physical Decay (DECAYNU)	(3) Person- Neighborhood Bonds (POSTMEDC)	(4) Post-Hoc Responses to a String of Burglaries (POSTHOC)
(1) POSTSDC	1.0	-.572	.648	.617
(2) DECAYNU		1.0	-.427	-.208
(3) POSTMEDC			1.0	.963
(4) POSTHOC				1.0

Note. Logged predictors, data adjusted for measurement error.

Table 48

Zero-Order Correlation Matrix for Post-Hoc Responses to
a String of Burglaries (POSTHOC); Adjusted Data,
Decomposed Person-Neighborhood Bonds

	(1) Socio- Demographic Composite (Identical with Predictable Portion of Person-Neighborhood Bonds): (POSTSDC)	(2) Physical Decay (DECAYNU)	(3) Residual Person- Neighborhood Bonds (POSTMRES)	(4) Post-Hoc Responses to a String of Burglaries (POSTHOC)
(1) POSTSDC	1.0	-.572	.000	.617
(2) DECAYNU		1.0	-.073	-.208
(3) POSTMRES			1.0	.740
(4) POSTHOC				1.0

Note. Logged predictors, data adjusted for measurement error.

Table 49

Final Regression for Post-Hoc Responses to Crime (POSTHOC);
Adjusted Data, Decomposed Person-Neighborhood Bonds

Variable	Increment in R ²	Final beta	Significance of beta
Sociodemographic Composite (POSTSDC)	.381	.617	p < .001
Residual Person-Neighborhood Bonds (POSTMRES)	.548	.740	p < .001

bonds explained an additional 55% of the outcome. Thus, the unique contribution of how people feel about and behave in their neighborhood is slightly more important for explaining post-hoc responses, than is the composition of the neighborhood population itself.

Summing up. Neighborhoods where residents are more stable, trust one another more, fight less, feel more locally responsible, and have a less circumscribed behavioral round are neighborhoods where people are likely to take more informal actions in the face of a string of burglaries. Local attitudes and involvement are slightly more important than population characteristics in determining these responses.

Awareness of Active Organizations

Our outcome here is a one item measure: the proportion of residents in a neighborhood who are aware of a local organization that is actively working on matters of crime and/or related problems.

Building composites. Three sociodemographic variables were used to build the sociodemographic composite variable (Table 50). A significantly greater proportion of residents were aware of an active organization in neighborhoods where income levels were higher, and there were more male respondents in the survey.

Four mediating variables were used to build the person-neighborhood bonds composite variable (Table 50). A significantly greater proportion of residents were aware of

Table 50

Variables in Composites Predicting Awareness of Active Organizations (Q24M)

Composite	Variable	b	β	t	R ²	R ² Total	Adjusted R ² Total
Sociodemographic Composite (Q24MSDC)	Income (Q69M)	0.05	.31	2.12*	.200	.252	.216
	% Female (GENDERM)	-0.33	-.22	-1.93*	.041		
	% Rental (Q 3M)	-0.10	-.13	< 1	.011		

Mediating Composite (Q24MMEDC)	Trust (DOHLPSAG)	0.04	.21	1.35	.293	.381	.341
	Responsibility (RESPCLAG)	0.05	.30	2.37*	.048		
	Attachment (ATTACHAG)	0.03	.19	1.69†	.020		
	Neighborhood Awareness (NBAWARE)	0.02	.18	1.44	.021		

Notes. † = p < .10
* = p < .05

active organizations in neighborhoods where residents were more attached, and felt a stronger sense of local responsibility.

Zero-order correlation matrix. The zero-order correlation matrix appears in Table 51. The sociodemographic and mediating composites have the strongest correlation with the outcome (.501 and .616 respectively), and they also correlate strongly with one another (.699).

Stepwise regression. The results of the hierarchical regression appear in Table 52. Only the two composites add significant amounts of explained outcome variance. The sociodemographic composite, adding 25% on the first step, outperforms the person-neighborhood bonds.

Trimmed path model. The results of our path model appear in Figure 12. Person-neighborhood bonds have the most sizable direct effect on awareness of active organizations (.542). By contrast, the indirect effect of sociodemographics channeled via the mediating composite, is very sizable (.360), far outweighing the direct sociodemographic effect. This is due to the very large coefficient (.665) linking the two composite variables.

Zero-order correlation matrix with adjusted data. The zero-order correlation matrix including only significant predictors, based on estimated true scores after correcting for error in variables, appears in Table 53. The major changes are the increased correlations of the composites with the outcomes, and the decreased intercorrelation of the two composites.

Table 51

Zero-Order Correlation Matrix for Proportion Aware of Active Organizations (Q24M)

	(1) Socio- Demographic Composite (Q24MSDC)	(2) Crime (CRIM7880)	(3) Physical Environment (DECAYNU)	(4) Non-Residential vs. Residential Land Use (COMRESNU)	(5) Mediating Composite (Q24MMEDC)	(6) Proportion Aware of Groups (Q24M)
(1) Q24MSDC	1.0	-.442	-.542	-.201	.699	.501
(2) CRIM7880		1.0	.625	.380	-.318	-.110
(3) DECAYNU			1.0	.005	-.387	-.214
(4) COMRESNU				1.0	-.243	-.047
(5) Q24MMEDC					1.0	.616
(6) Q24M						1.0

Note. Logged predictors.

Table 52

Increments in R^2 for Proportion Aware of Active Local Organizations
Involved in Crime and Related Issues (Q24M)

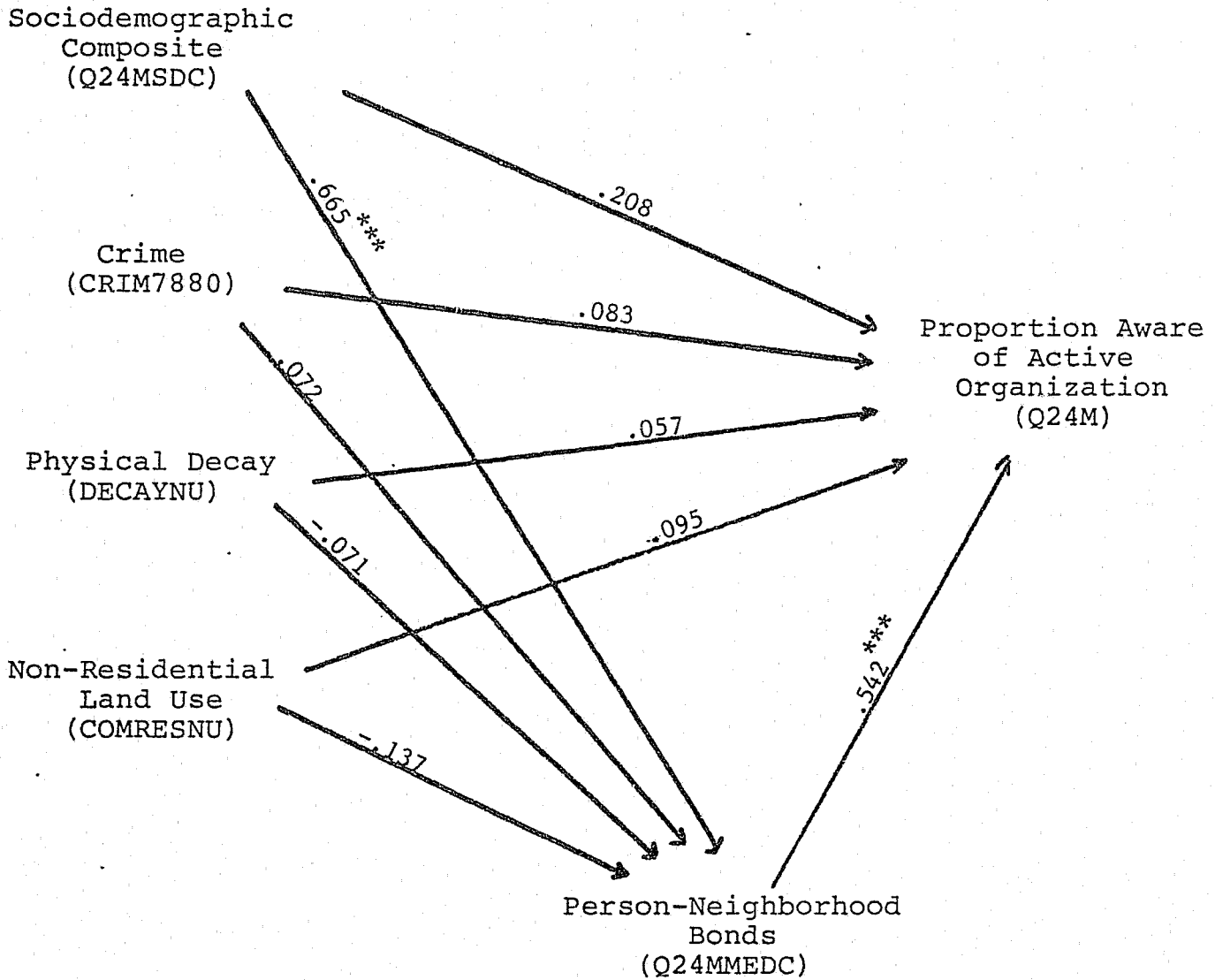
Variable	R^2 increment	F increment
Sociodemographic Composite (Q24MSDC)	.251	F(1,64) = 21.47***
Crime (CRIM7880)	.015	F(1,63) = 1.30
Non-Residential Land Use (COMRESNU)	.000	F(1,62) < 1
Physical Decay (DECAYNU)	.000	F(1,61) < 1
Mediating Composite (Q24MMEDC)	.146	F(1,60) = 14.93***

Note. Logged predictors.

*** = $p < .001$

Figure 12

Trimmed Causal Model for Proportion Aware of Active Local Organization Involved in Crime and Related Issues (Q24M)



Notes. Unstandardized coefficients appear in parentheses.

Adjusted $R^2 = .364$ ($F(5,60) = 6.87$; $p < .001$)

*** = $p < .001$

Table 53

Zero-Order Correlation Matrix for Awareness of Active Organization (Q24M); Adjusted Data

	(1) Socio- Demographic Composite (Q24MSDC)	(2) Physical Decay (DECAYNU)	(3) Person- Neighborhood Bonds (Q24MMEDC)	(4) Proportion Aware of Active, Local Organization (Q24M)
(1) Q24MSDC	1.0	-.316	.301	.806
(2) DECAYNU		1.0	-.235	-.343
(3) Q24MMEDC			1.0	.755
(4) Q24M				1.0

Note. Logged predictors, data adjusted for measurement error.

Zero-order correlation matrix with adjusted data,
partitioned person-neighborhood bonds. Focusing only on that portion of person-neighborhood bonds not predictable from the sociodemographic composite results in the matrix shown in Table 54. The residual aspect of bonds correlates only .537 with the outcome.

Final regression. The results of the final hierarchical regression including only those variables with significant unique contributions appear in Table 55. Only the two composite variables enter. Since they are uncorrelated with one another their final betas equal the zero-order correlations. Sociodemographic composition, and the portion of bonds attributable thereto, explains about twice as much outcome variation as residual bonds.

Summing up. A greater proportion of residents are aware of active groups concerned with crime and/or related issues in neighborhoods where income levels are higher, and residents feel more attached to and responsible for what goes on in the locale. The nature of the population is about twice as important as the bonds in determining this awareness.

Awareness of Community Crime Prevention (ORGCCPAG) Activity

Our outcome here is a two item scale reflecting the proportion, who knew about an active local organization, that indicated the group was involved in sponsoring community crime prevention (CCP) activities.

Table 54

Zero-Order Correlation Matrix for Awareness of Active Organization (Q24M);
Adjusted Data, Decomposed Person-Neighborhood Bonds

	(1) Socio- Demographic Composite (Identical with Predictable Portion of Person-Neighborhood Bonds): (Q24MSDC)	(2) Physical Decay (DECAYNU)	(3) Residual Person- Neighborhood Bonds (Q24MMRES)	(4) Proportion Aware of Active, Local Organization (Q24M)
(1) Q24MSDC	1.0	-.316	.000	.806
(2) DECAYNU		1.0	-.147	-.343
(3) Q24MMRES			1.0	.537
(4) Q24M				1.0

Note. Logged predictors, data adjusted for measurement error.

Table 55

Final Regression for Proportion Aware of Active Organization
Involved in Crime and Related Issues (Q24M); Adjusted Data,
Decomposed Person-Neighborhood Bonds

Variable	Increment in R ²	Final beta	Significance of beta
Sociodemographic Composite (Q24MSDC)	.650	.806	p < .001
Residual Person- Neighborhood Bonds (Q24MMRES)	.289	.537	p < .001

Building composites. None of our sociodemographic variables correlated significantly with the outcome, thus no sociodemographic composite was built. Two of our person-neighborhood bond variables correlated with the outcome. More CCP activity was acknowledged in neighborhoods where residents had more positive expectations regarding the future of their neighborhood, and where residents were more attached. Together these two variables explained 5% of the variation in the outcome. They were b weighted and summed to form a composite (see Table 56).

Zero-order correlation matrix. The zero-order correlation matrix appears in Table 57. CCP activity is more widely known in smaller neighborhoods, and in neighborhoods where person-neighborhood bonds are stronger. Crime is associated with CCP in the expected direction (more crime, more CCP), but the relationship is not significant.

Step-wise regression. The results of our hierarchical regression appear in Table 58. The person-neighborhood bonds variable is the only one which significantly adds to the explanatory power of the equation, increasing it by almost 8%.

Trimmed path model. The results of the trimmed path model appear in Figure 13. There are only two significant path coefficients. Residents in neighborhoods with a more predominantly residential land use mix feel more positive about their neighborhood, and neighborhoods where residents feel more positive about their neighborhood are more widely aware of CCP

Table 56

Variables in Composites Predicting Awareness of Local Organizational Responses to Crime (ORGCCPAG)

Composite	Variable	b		t	R ²	R ² Total	Adjusted R ² Total
Mediating Composite (ORGMEDC)	Neighborhood Expectations (NBEXPECT)	0.04	.15	1.18	.033	.051	.021
	Attachment (ATTACHAG)	0.14	.14	1.09	.018		

Table 57

Zero-Order Correlation Matrix Predicting Awareness of Local Organizational Crime Prevention Activities (ORCCPAG)

	(1) Crime (CRIM7880)	(2) Physical Environment (DECAYNU)	(3) Non-Residential vs. Residential Land Use (COMRESNU)	(4) Neighborhood Size (NBSIZE)	(5) Mediating Composite (ORGMEDC)	(6) Organized Crime Prevention Response (ORCCPAG)
(1) CRIM7880	1.0	.625	.380	-.335	-.382	.125
(2) DECAYNU		1.0	.005	-.508	-.347	.058
(3) COMRESNU			1.0	-.013	-.316	-.051
(4) NBSIZE				1.0	.194	-.196
(5) ORGMEDC					1.0	.226
(6) ORCCPAG						1.0

Note. Logged predictors.

Table 58

Increments in R^2 for Proportion Aware of Local Organizational
Crime Prevention Activities (ORGCCPAG)

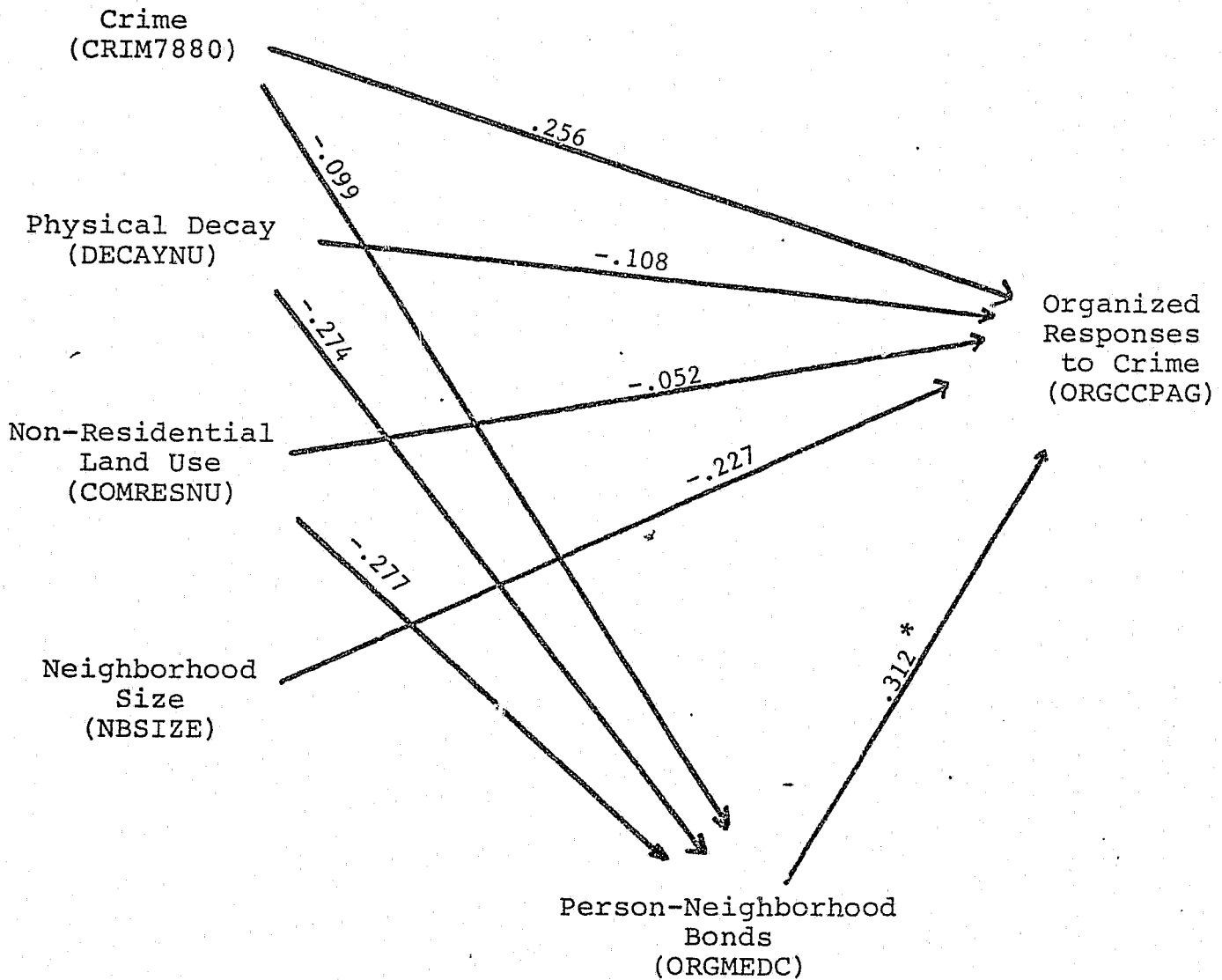
Variable	R^2 increment	F increment
Neighborhood Size (NBSIZE)	.038	F(1,64) = 2.56
Crime (CRIM7880)	.004	F(1,63) < 1
Physical Decay (DECAYNU)	.010	F(1,62) < 1
Non-Residential Land Use (COMRESNU)	.015	F(1,61) < 1
Person-Neighborhood Bonds (ORGMEDC)	.076	F(1,60) = 5.29*

Notes. Logged predictors.
* = $p < .05$

The fact that the partial correlation between ORGMEDC and ORGCCPAG is bigger than the zero-order correlation suggests that there was some suppression.

Figure 13

Path Analysis Predicting Organized Responses to Crime (ORGCCPAG) Using Raw Data



Note. Adjusted $R^2 = .071$ ($F(5,60) < 1$)

activity.

Zero-order correlation matrix with adjusted data. The zero-order correlation matrix using adjusted data, and including only significant predictors, appears in Table 59. The picture is quite different from the one obtained with the unadjusted data. Here we see that, in addition to CCP activity being more widely noted in cases where people feel more positively about their neighborhood, that CCP activity is also more prevalent in neighborhoods with more crime, a preponderance of residential land use, and which are smaller in area. The mediating bonds variable was not decomposed since no sociodemographics entered the equation.

Final regression. The results of the final regression using adjusted data appear in Table 60. It is a hierarchical regression, with person-neighborhood bonds being entered last. All of the predictors make a significant contribution to explaining the outcome. Person-neighborhood bonds have the largest beta, followed by crime, neighborhood size and non-residential land use.

Summary comments. Of those people who are aware of a local organization, more are aware of local organized CCP activity in areas where there is more crime, people feel more positive about their neighborhood, the neighborhood is smaller, and the land use mix is more decidedly residential.

Table 59

Zero-Order Correlation Matrix for Local Organizational Crime Prevention Activities (ORGCCPAG);
Adjusted Data

	(1) Crime (CRIM7880)	(2) Neighborhood Size (NBSIZE)	(3) Non-Residential Land Use (COMRESNU)	(4) Person- Neighborhood Bonds (ORGMEDC)	(5) Organized Crime Prevention Activities (ORGCCPAG)
(1) CRIM7880	1.0	-.335	.388	-.390	.366
(2) NBSIZE		1.0	-.005	.262	-.526
(3) COMRESNU			1.0	-.333	-.266
(4) ORGMEDC				1.0	.372
(5) ORGCCPAG					1.0

Note. Logged predictors, data adjusted for measurement error.

Table 60

Final Regression for Proportion Aware of Local Organizational
Crime Prevention Activities (ORGCCPAG); Adjusted Data

Variable	Increment in R ²	Final beta	Significance of beta
Neighborhood Size (NBSIZE)	.276	-.501	p < .001
Non-Residential Land Use (COMRESNU)	.072	-.271	p < .10
Crime (CRIM7880)	.116	.545	p < .001
Person-Neighborhood Bonds (ORGMEDC)	.307	.628	p < .001

Note. Adjusted total R² = .757
(F(4,61) = 47.51; p < .001)

Some Summary Comparisons Across Outcomes

Residual Correlations Across Outcomes

The relatedness of our seven outcomes is shown not only in the intercorrelations between the outcomes, but in the correlations between residuals as well. This is shown in Table 61. The upper triangle presents correlations between outcome residuals, and the lower triangle presents correlations between mediating composite residuals. These figures are based on unadjusted data.

On the outcome side there are several significant albeit modest (.2 -.3) correlations between residuals. Considerably larger is the correlation between fear and behavioral restriction residuals (.503). Neighborhoods much more (or less) fearful than predicted also had residents who restricted their behavior much more (or less) than predicted.

The mediating composite residual correlations were consistently higher. Residuals from four of the seven outcomes (informal social control, post-hoc responses, and awareness of local organizations and CCP), were all quite strongly inter-correlated. Neighborhoods which were stronger than predicted on one of these bonds, were also stronger on the others.

Variables Entering Mediating Composites

As can be seen from Table 62, the types of variables which entered the mediating composites were broad ranging. Social,

Table 61

Correlations Between Residuals of Various Outcomes (Above Diagonal); Mediating Composites (Below Diagonal)

	(1) SPRYNOIS	(2) POSTHOC	(3) RESTRCAG	(4) Q24M	(5) BRKIN	(6) ORCCCPAG	(7) BIGFEAR
(1) SPRYNOIS	1.0	.483	-.254	-.028	.207	.125	-.391
(2) POSTHOC	.725	1.0	-.017	.032	-.205	.256	-.174
(3) RESTRCAG	-.213	-.006	1.0	.007	-.140	.146	.503
(4) Q24M	.755	.717	-.375	1.0	-.018	-.087	.004
(5) BRKIN	-.011	-.150	-.370	.246	1.0	-.019	-.141
(6) ORCCCPAG	.649	.580	.027	.635	.036	1.0	.221
(7) BIGFEAR	-.385	-.056	.035	-.246	-.034	-.344	1.0

Note. Logged predictors.

Table 62

Type of Variables that Entered into Mediating Composites

<u>OUTCOME</u>		<u>TYPE OF VARIABLE</u>		
		Social Ties	Attachment/ Territoriality	Neighborhood Perceptions
(SPRYNOIS)	Informal Control	1	2	2
(POSTHOC)	Post-Hoc Responses	2	2	0
(RESTRCAG)	Behavioral Restriction	1	2	1
(Q24M)	Awareness of Active Organizations	1	2	1
(BRKIN)	Responding to Break-In	2	0	1
(ORCCCPAG)	Organized Crime Prevention	0	1	1
(BIGFEAR)	Fear	0	2	1
<hr/>				
(BIGDEP1)	Resistance to Disorder	1	3	2
(BIGDEP2)	Accommodation to Disorder	2	1	2

attachment, and neighborhood perception variables all contributed. This reaffirms our conviction that all of these aspects of person-neighborhood bonds are relevant to the outcomes we have considered here.

Discussion

Major Findings and Implications

Without a doubt the single most significant finding of our research is that the local sentiments, involvements, and levels of confidence expressed by a neighborhood's population are part and parcel of that neighborhood's predisposition to combat disorder. Neighborhoods where, regardless of the class level or stability, residents know one another, feel responsible for what happens in nearby outdoor spaces, value their locale and expect it to continue to be a good neighborhood to live in, are neighborhoods where informal social control is stronger, fear levels are lower, and residents are more likely to take care of problems that may come up. In short, if people care about, and are invested in where they live, they are willing, and expect that their neighbors are willing, to take care of events that might threaten their quality of life. Or, to state it from the opposite point of view, neighborhoods where residents distrust one another and are alienated from and not involved in their locale, are neighborhoods where incidents suggestive of deviance,

disorder, or decline are not countered, but rather inspire selfish attempts at self preservation. If people care, they take care of problems that may come up. If they do not care, such instances are not countered but rather inspire even more alienation.

Before going into some of the processes that appear to underly this linkage, it is worth emphasizing that although some may think such a finding obvious, their rationale for the manifest nature of such is undercut by our pattern of findings. Those who would claim that the above finding is a trite self-evident truth would probably harbor an implicit logic that goes as follows: better class neighborhoods offer a better physical residential environment, and a more congenial social environment. Due in large part to the better quality environment, residents become more attached to and involved in their locale. This, in conjunction with middle and upper class tendencies to join organizations and advocate leads to a stronger proclivity to counter problems that come up. This line of argument is negated on two grounds. First, although SES does determine local sentiments and involvement, there is a significant element of the latter that is unassociated with class but significantly associated with resistance and accommodation to disorder. In addition, physical quality of locale, as measured by evidence of decay and patterns of land use, net of SES, was not associated with patterns of resistance or accommodation to disorder. Thus, it is not simply the case that environmental

quality, offered by high SES, inspires both involvement and predispositions to maintain an orderly locale. Consequently, our major finding is not obvious, because class factors do not completely determine the outcomes we have investigated.

There may, however, be other grounds for discounting our major finding as one which is plain as day. These are not as easily dismissed, however, as the first argument. One might suggest that neighborhood involvement, expectations and sentiments relate so well to resistance to disorder because they are part and parcel of the same larger concept: neighborhood stability vs. instability. Attachment vs. alienation and informal social control both function to preserve and maintain the viability of a neighborhood; they make for effective neighborhood functioning. We think that this argument is sound, and serves to cast a very different light on the research area of neighborhood reactions to crime. We will pick up this line of reasoning again, below, when we move into a more explicitly theoretical discussion.

But, disclaimers regarding the patent nature of our observation aside, comment on the relevant processes linking responses to disorder with neighborhood social and attitudinal bonds is required. Much of the connection centers around the part played by neighbors. In neighborhoods where residents view one another as more like-minded, and stable, it is easier to contemplate joining organizations or groups along with these others.⁶⁶ In such areas residents are also more willing to

attempt to mobilize others if events arise where they are needed. Knocking on the door of a known, like-minded, neighbor who shares one's local concerns is much easier than knocking at the house of a lesser known, less like-minded neighbor. In short: a congenial social climate facilitates the formal and informal mobilization of resources.

The connection is also partly explained by a related, less social, more cognitive or attitudinal process by which people who are more strongly wedded to a locale inevitably get more involved. There is a correspondence between how one feels about a neighborhood and what one is willing to do to try to save it or at least keep it up. This correspondence between attitudes and behaviors is both rational and affective. It is rational in that it is common sense to seek to preserve and protect that for which one cares--in this case quality of the residential environment. It is also grounded in sentiment in that feelings of attachment or proprietorship can serve as a motivator of actions. In sum: the linkage we have been discussing between local bonds and the resistance to disorder has social, cognitive, and emotional (or affective) facets.

As mentioned, these neighborhood bonds are partially determined by SES factors. But, much of involvement and attachment is also not explained by SES. Both portions of the bonds are relevant to the outcomes we have discussed. And, an interesting question becomes: what factors determine this segment of the bonds that are independent of social class

factors? Several matters come to mind, and these undoubtedly deserve attention. One feature is the historicity of a neighborhood. There are some locales that have, for some length of time, always drawn a certain type of population. One of our study neighborhoods, for example, has a heavily Greek population. It provides inexpensive but quality housing and proximity to factory jobs. Before being Greek it was heavily Polish, and before that (1910s - 1930) it was predominantly German. The neighborhood has always attracted, due to history and location, a very particular type of resident, which, as a group, make a very strong blue collar, ethnic neighborhood, quite capable of taking care of its own problems.

Also of importance are physical factors that occurred at a larger scale than we measured in our on-street assessments. Ecological factors such as distance from high offender-density neighborhoods, or proximity to nearby commercial areas, or isolation due to surrounding non-residential land use may be relevant. The very strong neighborhood we have described above is also strengthened by surrounding industrial and institutional land use. Or, a neighborhood can be located in proximity to an institution, such as a university, which makes it a desirable location for white collar professionals, thereby maintaining the desirability of an area. In short, extra-neighborhood matters such as location and type of land use may promote neighborhood desirability and stability, thereby enhancing the bonds between the neighborhood and its residents.

Finally, strong neighborhood organizations and leaders can promote involvement in local matters. Particularly charismatic leaders may be adept at raising awareness of local problems and what residents must do to help solve those problems. Although tendencies toward joining organizations may be class-related, organizational and leadership effectiveness probably is not. Effectiveness in one sense can be equated with the enhancement of community spirit, and this issue will be discussed in some detail further below. The main point here is simply that organization dynamics are somewhat independent of class factors, and these dynamics may strengthen residents' bonds to a neighborhood.

Considering at somewhat more length the aspects of neighborhood bonds not determined by class factors, a more general implication that can be drawn is that a neighborhood's relative social standing in the urban area is not the sole determinant of its ability to resist disorder. Neighborhoods which, perhaps due to their socioeconomic structure, ought to succumb to disintegrative forces, may well be able to avoid being victimized by such trends. A neighborhood's immunity to progressive disorganization is not determined simply by the social class of its residents. Therefore it is possible to programmatically enhance a neighborhood's ability to maintain itself by enhancing social, cognitive, and affective bonds between residents in a location. Social events, booster and public relations campaigns, and so on, can potentially enhance these bonds, and thereby help preserve the public order. Stated

differently: large scale, region-wide forces which determine a neighborhood's relative "standing" in the region do not therefore doom that neighborhood to disintegration and decay.⁶⁷ Internal factors may allow that neighborhood to withstand such forces.

Probably our second most important finding is that we have indicated exactly how much, and in what way social class is relevant to a neighborhood's tendency to resist and/or accommodate to disorder. In the case of resistance to disorder we see that SES is only of indirect importance because it enhances resident bonds to locale. In the case of accommodation to disorder, we see that although class still did enhance bonds to locale, this indirect influence was weaker than its direct impact on accommodation. This is a level of clarification regarding the means by which class influences the outcomes examined, that has not been obtained in earlier studies. In fact, earlier studies which have correlated class factors with responses to crime may be accused of omitting a "missing link"--the social, cognitive, and affective factors measured here. Further, not only is class important for the direct and indirect effects it brings about, the impact of SES is important in relation to impacts of crime, which were extremely minimal by comparison, as were the impacts of environmental factors. Relative to SES, these two factors were of little importance.

And our third most important finding is exactly this minimal contribution of crime and physical environment. For both of our major outcomes, these characteristics played a minimal role. The

pattern of findings for both these factors deserves closer attention.

In the case of crime there are several artificial reasons one might invoke to explain its poor performance. One might argue that the time lag between the measurement of crime and the measurement of impacts such as fear was too great, and that had we measured crime at a point in time closer to its impacts, we would have found a stronger relationship. We do not think this is the case because the ranking of the neighborhoods, in terms of crime rates, has changed very little in the past few years, particularly when we consider multi-year averages based on several types of serious offenses. Thus the weak relationship between crime, and what has heretofore been referred to as reactions to crime (fear, behavioral restriction) cannot be explained away by methodological factors. Our results indicate that when we control for variation in social class, crime's influence on resistance to and accommodation to disorder is reduced to practically nothing. This is due to the very strong link between socioeconomic factors and crime.⁶⁸ Crime by itself is only marginally relevant to reactions to disorder. Crime neither mobilizes nor debilitates the ability of a neighborhood to resist, or its predisposition to adapt to disorder.

Counter arguments regarding the importance of crime can be mounted on the following grounds. One could argue that in actual neighborhoods crime rates and SES levels are always inversely

related, and that this relationship is of at least moderate strength. Therefore, to artificially separate the influence of SES and crime is unrealistic and un-helpful.⁶⁹ The two (high crime and low SES) co-occur, and to ignore this factor is tantamount to mis-representation of facts. But, at the same time the researcher wants to isolate the unique contribution of particular concepts. This same dilemma has bedevilled other areas of research such as delinquency and density. The general solution to such a problem is not immediately clear. Nonetheless, in our case here the most useful resolution is to bear in mind that class strongly determines crime and "reactions" to crime,⁷⁰ but also realize at the same time, that in daily life crime and low SES, and the influences of the two are inextricably interwoven, thereby impeding people from discounting the relevance of the threat of crime.

The same problem also crops up when we assess impacts of environmental quality and land use. Once we control for variation in social class we see that physical decay of environment, or land use patterns, have very little impact on resistance to and accommodation to disorder. But, in the real world class and physical dilapidation and patterns of land use are inevitably interlocked. So, to separate the influence of these two factors is artificial, because the two are experienced as one. Nonetheless, this dilemma aside, our results concerning the relative unimportance of physical environment suggest that fear reduction programs which concentrate solely or mainly on

physical improvements will not be successful.⁷¹ Our results cast considerable doubt on what we referred to earlier as the "incivilities" notion: people see physical deterioration, assume a more general social and moral breakdown, and become fearful. Our results, which represent the first test of this hypothesis at the neighborhood level, and the first test using objective data as opposed to perceptions of problems, indicate that this notion, appealing though it may be, simply does not hold up.⁷²

Consequently, planners, practitioners and organizers should not place undue emphasis on physical environment improvements as a strategy for increasing a neighborhood's immunity to disorder.

In sum, our major findings are that: neighborhoods where people care about where they live, and are involved, are neighborhoods where residents act to control problems related to disorder; social class is also relevant to a neighborhood's willingness to maintain order, mainly because residents in higher class neighborhoods tend to care more, although a good portion of caring attitudes are not due to SES; and, crime and physical environment have much less impact on resisting and accommodating to disorder than has previously been proposed. Finally, the general perspective that we have proposed for explaining reactions to disorder worked exceedingly well, successfully explaining anywhere from 1/2 to 2/3 of responses to disorder. In the next section we attempt to explore some more general theoretical implications which, we feel, can justifiably be drawn from our findings.

General Theoretical Implications

Resistance to disorder, and to a lesser extent accommodation to disorder, should no longer be labeled, and theoretically pursued as, responses to crime. Our results indicate that a reactions to crime perspective on such behaviors, attitudes, and predispositions is simply not accurate. That perspective assumes that crime is perhaps the strongest determinant of such responses. Our results suggest that this is not the case.

Rather, a much more accurate theoretical context within which to examine these outcomes, is the conceptual work on viable neighborhoods.⁷³ Resistance to disorder is an integral characteristic of neighborhoods that work, and accommodation to disorder is a characteristic of neighborhoods that do not work. In short these outcomes reflect a neighborhood that is viable and working, or a neighborhood that is not viable, and not working.

One criterion of a viable neighborhood is that there are "established mechanisms to define and enforce shared agreements about public behavior."⁷⁴ These mechanisms can be informal, and even inactive much of the time, but are available when the need arises. Outcomes we have examined here such as informal social control, and neighbors getting together to do something about a string of burglaries, clearly fall into this domain. Patterns of local acquaintanceships, friendship and helping, which we have assessed, also fall into this domain. Outcomes such as fear and behavioral restriction suggest residents are aware that these mechanisms do not exist in their neighborhood.

In a more structured vein the existence (and we would add awareness) of formal, local organizations has been suggested as another criterion of a viable neighborhood.⁷⁵ The outcomes we have assessed such as awareness of local organizations and local CCP activities fall into this domain.

To put it simply then, the neighborhood-resident attitudes, sentiments and involvements we have assessed, as well as the outcomes of resistance to and accommodation to disorder, are indices of or reflections of neighborhood viability, of a neighborhood that is working (or not working).

Consequently, theorizing around such issues needs to become even more fully conceptually integrated with work concerned with aspects of internal and external neighborhood functioning. This includes work in areas such as neighborhood satisfaction, local social ties, organizations, informal control, neighborhood politics, and so on. With a much broader perspective the necessary conceptual cross-fertilization can be accomplished that will move us to a more complete understanding of how and why some neighborhoods work, and others do not.

And, these lines of inquiry should be spurred on by the fact that in the present research we have been able to model neighborhood functioning quite successfully, suggesting that the ongoing dynamics at this level can be "captured." This success is, in its own right, quite important. What it means is that the heavy policy burden that has been placed on neighborhoods is theoretically justified; the processes of these units can be

understood and in many cases work as expected. Consequently, neighborhoods as a unit of theoretical analysis, and as a unit of service delivery or policy attention, deserve continuing attention.

Another important matter for further investigation is to not only understand how neighborhoods work, but to understand how neighborhood conditions and dynamics have impacts on the blocks and individuals contained and residing therein. Such relationships which span different units of analysis are important because they clarify how surrounding context can influence attitudes and behaviors.

Finally, and perhaps most crucially, our results raise a very big action research question. We have shown that matters such as neighborhood confidence, involvement, and attachment are powerfully linked to resistance to and accommodation to disorder. One way, then, to enhance a neighborhood's ability to maintain itself would be to enhance these very same attitudes and behaviors. Can this be accomplished? This is a question to be answered by experimental action research in which neighborhoods randomly do (or do not) receive some kind of treatment to enhance these factors. Such an endeavor should be carried out in collaboration with neighborhood organizations who spend the better part of their collective life trying to bolster exactly these same factors.

Implications for Policymakers and Practitioners

We have shown that neighborhood attitudes, sentiments, expectations and involvement determine that neighborhood's predisposition to resist or accommodate to disorder. It is exactly those bonds that neighborhood organizations spend most of their time trying to enhance. Consequently, if federal and state agencies concerned with crime prevention deem that the encouragement of ability to resist disorder is part of their mandate, then this mandate can be most effectively served by these agencies working in a cooperative relationship of co-production with these organizations. To state the argument in simple terms: a neighborhood can handle its own problems if residents care. Neighborhood organizations have as one of their major goals the enhancement of such caring attitudes. Consequently, state and federal agencies can help promote order by helping these organizations to do what they are already doing.

What would this co-production relationship look like? We can see several roles appropriate for government agencies. At the city level, agencies can provide current and precise information on the nature of problems in the locale. Information could be regularly reported to these groups regarding crime levels, calls for service, and so on, as well as enough background information (e.g., city level trends) to put figures into perspective. The city can also help establish the kind of reward system that provides recognition to groups that are working hard. At the state level agencies can act as a

clearinghouse for neighborhood ideas, linking local organizations with national organizations such as National Neighbors, ACORN, and others, thereby helping to funnel stimulating and supportive ideas to the local organizations. Another role for state agencies would be to help match up technical assistance needs with available personnel in university and private sector settings. Neighborhoods in need of a program evaluation, strategies for a membership drive, victimization surveys, or even a fullblown needs assessment could turn to the state agency, which would then match these needs with available local offerors.

One might then ask what role would be left for federal agencies? Basically, they would (1) continue neighborhood research, (2) be sure, through publications and regional conferences such as recently started by the Census, that information was properly disseminated, (3) oversee and evaluate the operation of these state agencies, and (4) provide funding for technical assistance. Neighborhood research, with its demands for extensive environmental sampling, is very expensive. States or the private sector will be unable to provide the needed resources. The same applies for a state-level technical assistance operation. In this proposed scenario the federal, state and city governments, drawing upon university and private sector expertise as needed, serve as support personnel to neighborhood organizations.

Even were such a multi-tiered scheme not to come about, there is still much that local agencies can do to support

neighborhood organizations, which in turn are building community spirit. They can provide: workshops on leadership training, funds for community newsletters, and publicity surrounding important local initiatives. The list is potentially quite lengthy, but the goal is simple: help organizations build levels of pride and involvement in their own communities. As such pride and involvement is enhanced, neighborhood will be better capable of preserving order.