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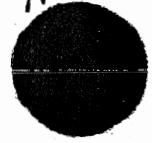
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URBAN COMMUNITY AND REACTIONS TO CRIME:

PRELIMINARY ANALYSIS OF URBAN AREA AS A DETERMINANT OF FEAR

REACTIONS TO CRIME PROJECT

CENTER FOR URBAN AFFAIRS

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Letter

URBAN COMMUNITY AND REACTIONS TO CRIME:

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Robert Kidder & Eric Hollins

Introduction

Community and fear. Some formulations of sociology and many less professional reminiscences treat these as incompatibilities. In the "good old days" strong communities protected people, gave them a place, supported them in times of stress. Fear, especially fear of what today is called "crime in the streets", was supposedly unknown in the communities of yore. Unlocked doors, warm hospitality, freedom of movement, civility - these were all facets of an earlier era before crime became the scourge of American society.

Whether or not there ever was such a period of brotherhood and tranquility, much is being said today about reconstructing community in the neighborhoods of our cities so that people can walk without fear, feel secure in their own homes and once again know the pleasure of each other's company in public places. People like James Q. Wilson (19) are telling us to give power back to the neighborhoods so that as living social units with important responsibilities, they can once again engage the energies and interest of people.

The problem of fear, to which community is the proposed solution, has been documented in various surveys. People are afraid to walk their streets at night. People avoid certain parts of cities for fear of attack. People avoid involvement in group activities which would draw them away from home because they fear going out. Older people especially live like

prisoners in their homes because they fear attack. People turn their homes into hardware fortresses to repel invaders. In all of this, we are told, we see evidence that the "quality of life" in America has been corrupted by the fear of crime.

So community is being promoted as a solution to not only the incidence of crime, but the debilitating fear of crime which robs us of the enjoyment of life. But research into the subject has not yet developed solid evidence of a connection between community characteristics and peoples' reactions to crime. The study of fear has concentrated on individuals as molecules in demographic compounds. The "aged" are studied, and their fears of crime are analyzed. Racial groups are examined and sexual differences are considered. Income, education and residential mobility differences are assessed. All of these seem to bear some relationship to the ways people react to crime.

But as the community orientation reminds us, people do not live their lives only as carriers of certain demographic characteristics. They also exist within more or less well-developed networks of interaction - communities - which may have significant effects on their experiences.

So we raise the question: Do peoples' reactions to crime vary according to the communities they live in? And if so, what community level characteristics account for those differences? If the "neighborhood" or the "urban community" is to be our salvation from the fears, suspicious and isolation which have developed in urban areas, there should be evidence that "communities" or "neighborhoods" differ in their effects on peoples reactions, regardless of other determining characteristics like income, sex, age, and race. If community makes no difference, if people in tight-knit neighborhoods are no less afraid than those in anemic urban locations,

then it is not likely that the recreation of community will solve the problem.

Method of Analysis

We began our study with the very basic question: do people in different urban communities have different reactions to crime? Our material for analysis consisted of surveys made in Cincinnati¹ and Kansas City² to measure levels of victimization, levels of fear and types of responses to crime. These surveys conducted in 1972 and 1973, were not ideally suited for our purposes. But their weaknesses were not fatal to our purpose, so we have proceeded.

In both cities, the data were gathered in such a way, that respondents could be identified by which part of the city they lived in. In Cincinnati, five separate areas of the city were surveyed, three of which were sufficiently geographically self-contained so that the term "neighborhood" or "community" could³ apply to them. The fourth area was scattered residual/territory within the same police district as the other three. The fifth area was simply defined as including everyone else in the city outside of the first four areas. The three self-contained areas were: Over-the-Rhine, West End, and Mount Adams. The residual area was called "Rest of the District" and the city sample was called "Outside the District".

In Kansas City, fifteen "neighborhoods" were distinguishable. We use the term "neighborhood" here cautiously, because the fifteen areas, although small and self-contained, were not "natural" communities in the sense that they were chosen according to measures of cohesiveness. They were fifteen contiguous police beats within which the Kansas City police were conducting an experiment. The survey was designed to assess the impact of their experiment. So although our data gave us usable areas, they did not necessarily

provide any pure examples of solidary community. With that caution in mind we proceeded to look for "area effects," reasoning that any effects found might be the results of community dynamics.

Cincinnati

With only five areas to analyse in Cincinnati, the procedure had to be crude and the results only suggestive. We decided to look for area effects by comparing the effects of individual and contextual variables on several measures of fear of crime and feelings of safety in one's own neighborhood. Individual predictor variables were those demographic, attitudinal and behavioral characteristics often thought to have important effects on reactions to crime. These included such items as respondent's education, income, length of residence in same place, number of children in household. We also developed a composite measure of steps people take to protect themselves and their property. The variables are listed in Table 1 and the items from which they were constructed are found in Appendix 1.

We constructed contextual measures using the data from these same questionnaire items. For each individual-level variable, we derived an average score in each of the five survey areas. Then each person was assigned a contextual score for those variables based on which of the five areas he or she lived in. Each respondent could then be characterized by both his or her individual scores on each variable and the rank order score of the area he or she lived in. For example, we could measure each person's income and we could treat each person as having an area income score (a ranking of from 1 to 5). Similarly, we knew each respondent's length of residence at the same address and we could score each respondent according to the degree of residential stability in his or her area. Our procedure was to compare the explanatory power of the individual-level variable with

that of the contextual variable. We reasoned that if the contextual variable showed a different pattern of association (either stronger or in the opposite direction) with a dependent variable from that of the corresponding individual-level variable, at least part of the difference could be attributed to the effect of living within the specific area, regardless of the individual-level score. If the area has no effect on responses to crime, then scores on the independent and dependent variables should be randomly distributed across areas and there should be no difference between individual and contextual measures' abilities to predict responses to crime. For example, suppose we compare the length of time the respondent has lived at the same address with the average length of residence in that respondent's area. Does the individual's own pattern of residential stability show more or less association with measures of fear than a measure of the general residential stability in the community? Using the non-parametric measure of association Tau B, we found that there were consistent differences between these two measures of stability in their ability to "predict" measures of fear and feelings of safety. For example, responses to the question "How safe is your neighborhood compared to other parts of Cincinnati?" showed a significant Tau B of +.145 with the length of residence measure. People who have lived longer at the same address, show a slight tendency to feel safer. When respondents were assigned the average length of residence of their area, however, the Tau B of that ranking with the same question of neighborhood safety was +.253. People who live in more stable areas show an even stronger tendency to feel safer. Area, ranked by residential stability, is a better predictor of this answer than is personal residential stability.

This kind of approach cannot carry us very far, in part, because of the uncertain statistical effects of aggregating statistics in this fashion,

and in part because the sample included only five distinguishable areas. Because only five areas were studied, we lack sufficient data to isolate which characteristics of the Cincinnati areas account for the differences between individual and contextual-level effects. Table 2 shows the overall results of comparing the Tau B's of individual and contextual variables for their effects on the several measures of fear and safety. The overall pattern suggests that there is an area effect which cannot be detected by the usual survey approach of coding individuals as carriers of only individual characteristics. In a majority of the cases, the contextual-level measure of association is stronger than the individual-level one. At least some of this difference may be the product of processes within areas which make them unique determinants of people's reactions to crime.

The clearest evidence of difference appears in the comparison between a measure of self-defense steps taken by respondents personally and the contextual measure of the level of self-protection typical of each area. To the two questions, "Is it safe to walk in your neighborhood at night?" and "Is it safe to walk in your neighborhood during the day?" people's responses show a positive association (Tau B = .231 and .167 respectively) with the taking of self-protective measures. People who take defensive measures are somewhat more fearful. But for the contextual measure, the Tau B's show just the opposite (-.167 and -.131 respectively). People who live in areas where more self-protective measures are taken feel less fearful. This same pattern can be seen in several of the other comparisons between the effects of these two measures.

While this reversal of sign is interesting in itself, we will not spend further space speculating on its meaning. The limits of the survey's design are too severe to allow further confirmation. But the pattern of the table, taken as a whole, does support the conclusion that by knowing

where respondents live, we can more strongly predict their reactions to crime than by simply knowing their personal demographic characteristics. Something about peoples' residential locations (neighborhood, urban community) affects their reactions to crime regardless of individual characteristics like income, education, length of residence, number of children or sex of respondent. The Cincinnati survey does not help us to say much more than this.

Kansas City - An Alternative Approach

We took a second approach to the data from Kansas City, though our purpose here was again to ask only whether there was evidence of some kind of area effect. We developed the dependent variable by summing two items which asked respondents to assess the general safety of their neighborhood, and whether they thought their neighborhood was more or less dangerous than others in Kansas City. The correlation between the two items was .52 while the correlation of each item with the composite score was .91 and .83. These items have been used in a number of studies (Swartz, Conklin) and are interpreted as a general indicator of a respondent's feeling of personal safety in his or her own neighborhood. We examined the relationship between this variable and twelve independent variables (see Appendix II).

In order to determine whether area effects existed independently of the twelve individual variables, we used two analysis of variance procedures. In each of these procedures, we treated area as a nominal level variable with fifteen categories. The first procedure involved a hierarchical technique which permitted measurement of the residual explained variance attributable to one variable after controlling for the total explanatory power of another variable (Kim, Kohout - SPSS). When we controlled for the explanatory power of Area, the residual explained variance of each individual

individual variable was reduced, usually to a statistically insignificant level. When we reversed the process, and controlled for demographic variables, the residual explained variance of area remained statistically (and substantively) significant. As an example of this type of analysis, Table II presents the results of the Hierarchical MANOVA analysis of Area and Race.

In addition to the individual variables previously discussed, we analyzed the relationship between feelings of neighborhood safety, Area, and Victimization using the same Hierarchical MANOVA procedure. We coded a respondent as victimized if any member of the respondent's household had experienced a criminal victimization within the previous twelve months. In contrast to the relationship between Area and the previous individual variables, Table III indicated that the explanatory powers of Area and Victimization are virtually unaffected when either variable is controlled for the other. These results indicate that the effect on a respondent's feelings of personal safety resulting from the experience of being victimized is virtually independent of which area the respondent lives in. Conversely, variance in feelings of personal safety associated with the area a respondent lives in is independent of the overall frequency of reported victimization in each area.

We used a regression technique in the SPSS MANOVA program to make a second attempt to verify the presence of an independent area effect. This procedure reports the residual explained variance attributable to each variable after controlling for the explanatory power of all other variables in the equation. In the context of this usage, the procedure tells us little about the nature of relationships among specific independent variables,⁴ since we can only ascertain the net effect of controlling for all other variables as a group. However, with respect to Area,

we can conclude that the residual variance in feelings of personal safety attributed to this variable is independent of the cumulative explanatory power of all other variables in the equation. As Table IV indicated, this residual variance is quite significant.

Summary and Conclusion

We began our research with the question, does the existence or non-existence of community in an urban environment influence people's responses to crime, including their fears about personal victimization? At this stage in our research, we have begun by hypothesizing that if community (or neighborhood) does make a difference, then people's fears and reactions to crime should be associated with the area of their cities within which they live. To be a meaningful variable, community cohesiveness must vary from one area to another. If it affects the level of peoples' fears about crime then those fears should reach different levels in different areas of the city. Therefore, if we can demonstrate that fear and types of reactions to crime are functions of area, that finding would at least be consistent with the hypothesis that community cohesiveness affects reactions to crime.

Our results confirm that reactions to crime are associated with area of residence. The strength of this finding is enhanced by the fact that we used different methods of analysis on different surveys containing different questions asked in different cities. In Cincinnati, we found that area-related variables derived from individual scores produced stronger measures of association than did the individual measures alone. In Kansas City, we found that area as a nominal variable was, aside from victimization, the strongest predictor of fear. The effect of other variables such as race and age, which appear important when individually correlated with fear,

was reduced to insignificance when we introduced area into the equation.

But we still face a major hurdle before we can say that our results confirm the importance of community solidarity in reducing the fear of crime. We have not shown that our results could only be produced by differences in community solidarity. These area effects could be the result, for example, of the fact that areas differ according to average income, or average age, or racial composition. It could be that people living in high income areas are less fearful of personal attack than those in low income areas, regardless of levels of community solidarity. The Cincinnati data, for example, show area effects for direct measures of solidarity (length of residence, percent of households consisting of lone inhabitants and degree of dislike for the neighborhood). But effects also appear under income, education, sex of household head and number of children. While these latter might affect community solidarity, we are not able, with the Cincinnati sample, to confirm that the effects these variables have on fear reactions are related in any way to solidarity. We need a larger number of areas in order to sort out the factors that contribute to the area effect.

That analysis is our next step. With fifteen areas, the Kansas City sample offers some capacity to test the validity of the community solidarity hypothesis. For the purposes of this paper, we must be satisfied with the conclusion that people's feelings of safety are affected by characteristics of the "neighborhoods" (more accurately, the city areas) in which they live.

APPENDIX I

Survey Items Used to Construct Variables

1. Income "Would you indicate from this card which income level most closely approximates your total family income in 1972." (V 287)
2. Education "What was the highest grade or year of school you were able to complete?" (V 253)
3. Length of Residence "How long have you lived at this address?" (V 20)
4. Primary Individual "Total number of males in household." (V 8) plus
"Total number of females in household." (V 9)

If total equaled one, scored as "primary individual household."
5. Number of Children "Ages of all other household members." (V 12 - 12 15)
6. Degree of Dislike for Neighborhood "Is there anything you don't like about this neighborhood? If yes, what?"

Traffic (V 45)
Environmental problems (V 46)
Crime or fear of crime (V 47)
Public Transportation problems (V 48)
Inadequate schools, shopping (V 49)
Neighborhood changing, bad element moving in (V 50)
Problems with neighbors (V 51)
7. Self-protective Measures "Do you think people in general have limited or changed their activities in the past years because they are afraid of crime?" (V 140)

"Do you think that most people in this neighborhood have limited or changed their activities in the past few years because they are afraid of crime?" (V 141)

"Do members of your household have any of the following things:

Watch Dog (V 144)
Insurance for theft, etc. (V 146)
Locks on doors that were installed after you moved in (V 148)
8. Sex of Household Head (V 10)

APPENDIX I continued ...

Dependent Variables

1. Fear of Crime in Neighborhood

"How safe do you feel or would you feel being out alone in your neighborhood at night?" (V 106)

Very Safe Safe Unsafe Very Unsafe

"How about during the day? How safe do you feel or would you feel about being out alone in your neighborhood?" (V 107)

(Same Options as in V 106)

"Is the neighborhood dangerous enough to make you think seriously about moving somewhere else?" (V 180) (Yes) (No)

"How do you think your neighborhood compares with other in Cincinnati in terms of crime? Would you say it is:" (V 116)

Much more dangerous More dangerous About the same
Less dangerous Much less dangerous

2. Assessment of neighbors as Source of Security

"In your opinion, do policemen working in this neighborhood recognize most, some or only a few of the people who live there?" (V 170)

Most Some A Few None

"Would residents in your neighborhood usually, occasionally, or seldom take a hand if juveniles or children were causing trouble or were on the verge of breaking the law?" (V 171)

Usually Occasionally Seldom Never

"Generally, would residents in your neighborhood usually, occasionally, or seldom identify themselves if necessary or appear in court if requested to do so by the police?" (V 172)

"Would residents in your neighborhood usually, occasionally, or seldom help police identify criminals?" (V 173)

"From your viewpoint, would residents in your neighborhood usually, occasionally, or seldom report crimes they observe to the police?" (V 174)

TABLE I

VARIABLES INCLUDED IN ANALYSIS OF CINCINNATI SURVEY

Independent:

Income of Respondent
Education of Respondent
Length of Residence at same address
Whether Household Consists of Single Resident or not
Number of Persons Younger than 19 Living in Household
Degree of Respondent's Dislike of the Neighborhood
Degree of Self-Protective Measures taken by Respondent
Sex of Household Head

Dependent:

Fear of Crime in Neighborhood
Assessment of Risk
Assessment of Neighbors as Source of Security

TABLE II

COMPARISON OF INDIVIDUAL AND CONTEXTUAL VARIABLES
AS PREDICTORS OF REACTIONS TO CRIME
TAU B SCORES BETWEEN INDEPENDENT AND DEPENDENT VARIABLES

Reactions To Crime **	Fear of Crime In Neighborhood				Assessment of Neighbors As Source of Security				
	V 106	V 107	V 108	V 116	V 170	V 171	V 172	V 173	V 174
Predictor Variables #									
V 253*	-.29	-.25	.01	.15	.12	-.08	-.16	-.19	-.22
VC 253*	-.30	-.29	.06	.20	.03	-.19	-.30	-.35	-.31
V 287	-.30	-.26	.04	.16	.10	-.17	-.23	-.25	-.28
V 20	.05	.00	.13	.15	-.01	-.08	-.12	-.08	-.10
VC 20	-.09	-.07	.15	.25	.15	-.16	-.11	-.13	-.13
V PrI	.07	.02	.07	-.08	-.06	.08	.01	.01	.05
VC PrI	.19	.16	-.18	-.30	-.11	.21	.19	.23	.22
V Kids	-.03	-.00	-.11	.01	.04	-.00	.08	.11	.05
VC Kids	.18	.18	.03	-.02	.04	.08	.19	.21	.18
V Dislike	.14	.17	-.25	-.16	-.00	.08	.09	.12	.10
VC Dislike	.25	.21	-.17	-.21	.07	.15	.16	.21	.19
V Self- Protect	.23	.17	-.17	-.10	-.01	.04	.07	.03	.01
VC Self- Protect	-.17	-.13	.17	.27	.10	-.21	-.18	-.21	-.20
V 10	.23	.11	.03	-.03	-.06	.05	.09	.12	.09
VC 10	.28	.25	-.11	-.20	.00	.20	.27	.32	.28

*Each of the predictor variables is listed here in pairs. The first one listed is the individual-level variable. The second is the contextual-level measure derived from that individual level variable. So, V 253 is "Respondent's Education", while VC 253 is the variable derived by averaging the educational level in each of the five areas and assigning each respondent the average educational score of his or her area.

**The number of each variable is listed here for convenience. See Appendix I for the content of each variable so numbered.

#See Appendix I for the content of each of these variables.

TABLE III

HIERARCHICAL MULTIPLE ANALYSIS OF VARIANCE:

Feelings of Personal Safety by Race, Area (controlling for Race)					
	<u>Σ of Squares</u>	<u>D.F.</u>	<u>M Square</u>	<u>F</u>	<u>Sig. of F</u>
Main Effects	401.838	15	26.789	10.869	.001
Race	85.554	1	85.554	34.712	.001
Area	316.284	14	22.592	9.166	.001
Feelings of Personal Safety by Race, Area (controlling for Race)					
Main Effects	401.838	15	26.789	10.869	.001
Race	400.775	14	28.627	11.615	.001
Area	1.063	1	1.063	.431	.512

The first half of this table presents the total explanatory power of Race (\bar{M} Square = 85.554) and the explanatory power of Area after the effect of Race has been removed (\bar{M} Square = 22.592). Note that both variables are able to explain a significant amount of variance in the dependent variable. However, in the second half of the table, we can see that the explanatory power of Race (\bar{M} Square = 1.063) has been reduced to an insignificant level after removing the total explanatory power of Area. We conclude that differences in feelings of personal safety attributable to individual areas are independent of differences in the racial characteristics of the residents. Furthermore, those differences attributed to an individual's race virtually disappear when we control for Area, that is, we find no difference in feelings of personal safety for Blacks and Whites within the same Areas.

TABLE IV

MULTIPLE ANALYSIS OF VARIANCE: REGRESSION PROCEEDURE ON
FEELINGS OF PERSONAL SAFETY

	Σ Of Square	D.F.	\bar{M} Square	F	Sig. of F
Main Effects	458.619	22	20.846	8.702	.001
Area	219.545	14	15.682	6.546	.001
Victim	66.391	1	66.391	27.714	.001
Race	.063	1	.063	.026	.871
Own-Rent	3.133	1	3.133	1.308	.253
Marital Status	3.670	1	3.670	1.532	.216
Income	7.877	1	7.877	3.288	.070
Education	5.274	1	5.274	2.201	.138
Length Residence	.261	1	.261	.109	.741
Age	7.622	1	7.622	3.182	.075

In this procedure, the explanatory power of Area (\bar{M} square = 15.682) remains significant after controlling for the effects of all other variables in the equation. This represents the explanatory power attributable to Area, independently of the cumulative effects of the other variables. This result is analogous to a Stepwise Multiple Regression procedure in which Area is the last variable entered in the equation.

TABLE V

HIERARCHICAL MULTIPLE ANALYSIS OF VARIANCE:

Feelings of Personal Safety by Victimization, Area (controlling for Victim)					
	<u>Σ of Squares</u>	<u>D.F.</u>	<u>M Square</u>	<u>F</u>	<u>Sig. of F</u>
Main Effects	497.278	15	33.152	13.996	.001
Victim	77.006	1	77.006	32.510	.001
Area	420.272	14	30.019	12.673	.001
Feelings of Personal Safety by Area, Victimization (controlling for Area)					
Main Effects	497.278	15	33.152	13.996	.001
Area	400.257	14	28.590	12.070	.001
Victim	97.021	1	97.021	40.960	.001

Note that the \bar{M} squares and F values for Area and Victimization are not reduced when either one is controlled for the other. In fact, they are marginally increased, i.e., Area is better able to explain variance in the dependent variable after accounting for the effect of Victimization and vice versa. However, this intervening effect is not substantial and we conclude that the effects of Area and Victimization are independent of, or orthogonal to, each other.