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Title
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Publication Date
1975-10-01

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Residential Density, Local Ties & Neighborhood Attitudes: Are the Findings of Microstudies Generalizable to Urban Areas?

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Reprint No. 123

Reprinted from: Edwards, John N., ed. Sociological Symposium: Human Crowding. (Fall, 1975.)

RESIDENTIAL DENSITY, LOCAL TIES AND NEIGHBORHOOD ATTITUDES: ARE THE FINDINGS OF MICRO-STUDIES GENERALIZABLE TO URBAN AREAS?*

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Several studies performed in micro-environments have found density to be negatively related to social interaction. Mark Baldassare attempts to replicate those findings in an analysis of a Detroit Area Study, but finds no evidence of this process when controlling for other socio-demographic characteristics. The limitations of this study are discussed: the characteristics of the sample and the very specific analysis of local social ties. Baldassare also reviews some of the methodological problems found in micro-studies and the dangers of extrapolating the results of small group crowding to urban individuals.

INTRODUCTION

Most of the so-called human "crowding" studies performed in the last decade have produced negative results and contradictory findings. Clearly, nothing close to the magnitude of the "behavioral sink" effect (Calhoun, 1962) has been observed in human groups. However, a recent and comprehensive review of this field reported that several experiments, observations and housing studies do have similar results (Fischer, Baldassare and Ofshe, 1974). Apparently, there is evidence from certain studies that density is negatively related to social interaction. Our purpose is to review those findings, discuss their relevance to urban crowding, and attempt to replicate the results in an analysis of neighborhood ties and attitudes.

An early report of the social effects of crowding may be found in Hutt and Vaizey (1966). They observed the play of normal and abnormal children in three different group sizes. The higher density groups of normal children were reported to interact less than the low density groups. While this study manipulated group size, an experiment by Loo (1972) used different room sizes. After observing children in free play, she also concluded that subjects isolated themselves and were more solitary in crowded conditions.

Field studies of adult settings have produced remarkably similar findings. Ittleson, Proshansky and Rivlin (1970) conducted extensive observations of patients of psychiatric wards. They found that the number of patients per room, in both large and small rooms, was positively related to social withdrawal and passive behavior. Another naturalistic study by Tucker and Freedman (1972) involved the effects of college size of lunchroom groups. They reported

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* *The data were obtained, prepared and partly supported by NIMH Grant No. 1-R03-MH25406 to Claude S. Fischer. I was helped by discussions with Claude S. Fischer and Robert Jackson. Thanks are also rendered to Gail Satler for aiding in the literature search.*

that dense campuses had smaller social groups and more isolated individuals in their cafeterias. This, they claimed, was positive evidence of the deleterious effects of crowding on social behavior.

Several housing studies have also shown a link between density and sociability. Research on Hong Kong apartment dwellers found that household crowding led to less entertaining of neighbors (Mitchell, 1971). More recently, studies have been performed on college dormitory residents. Valins and Baum (1973) reported that residential group size was negatively related to social interaction. Also, Bickman, Teger and Gabriele (1973) found residents of high-rise dormitories to show less "helping" behavior than others during a field experiment. Perceptions of their fellow residents were similarly tinged with such remarks as "impersonal" and "uncooperative".

At first glance, the evidence from these studies appears to be substantial. One is almost tempted to conclude that dense urban living must also produce similar results. However, there are great dangers in making the leap from the laboratory, or the dwelling, to the urban world (Baldassare and Fischer, 1974). In few ways are the experiences of small groups in a crowded room analogous to urban dwellers in their natural habitat. Not only is it logically incorrect to draw inferences from micro-environments to city life, but these studies also contain methodological problems. For instance, "numbers" are often used in lieu of a more precise manipulation of density. The measures of social interaction are also dubious: children's playgroups, mental patients, and people eating lunch are generally not regarded as representative of the larger social world.

So, in order to determine if dense urban living affects social behavior, we must directly examine the local ties of urban residents. By analyzing the quality and quantity of neighborhood relations, we can see if residence in dense urban areas affects social interactions. If this is the case, there may be evidence of a general social-psychological response to densities, both in micro- and macro-environments. This would also be in agreement with the "sensory overload" and "psychic overstimulation" theories posited by several urban theorists (Milgram, 1971; Simmel, 1969; Wirth, 1938).

In the present analysis, we will attempt to explore these issues through examining the relations between residential density in Detroit and the social ties of neighborhood inhabitants. We will also have an opportunity to see how crowding may affect certain attitudes toward the neighborhood.

THE STUDY

The Detroit Area Study performed in 1965-1966 was used. This survey was reported in great detail by Laumann (1973). The sample consisted of 1,013 interviewees, chosen through a multi-stage probability sampling of dwelling units. The respondents were United States citizens, white, male, married and between the ages of 21 and 64. Much of the interview schedule consisted of extensive questions on friendships, social activities, and attitudes. Also included in our analysis were data of the respondent's tract characteristics from the 1960 census.

We used the following four indicators of local social ties: number of "best" friends living in the neighborhood; frequency of visits with those friends; closeness toward those friends; and membership in a neighborhood organization. We were also fortunate to obtain information on how "friendly and hospitable" the respondent was toward the interviewer. This was used as an indicator of how socially withdrawn the individual was toward strangers. Finally, two attitude items on the neighborhood environment were scrutinized: the importance placed on improving the neighborhood (as opposed to the city) and the desires for more open space (i.e., parks and zoos).[1]

Our measure of overcrowding was "residential density" or persons per residential acre. Commonly, the more gross measure "persons per square mile" has been used in the density literature. The latter figure may largely underrepresent the crowding experience in residential districts, since it includes all land within the census tract. For our purposes, at least, a more precise measure was needed in order to examine social relations within the neighborhood.

On the basis of the results of micro-studies and the speculations of urban theorists, we predicted that high residential density would be associated with fewer and less intimate local ties. Similarly, the residents of dense neighborhoods would be less friendly toward strangers (i.e., the interviewer).[2] As a result of the lack of community ties, dense areas will have fewer people desiring to improve their neighborhood. Also, residents of dense neighborhoods will feel crowded and want more open space (parks and zoos).

RESULTS

We used a subsample of the original Detroit Area Study (N=333), since we could only obtain the residential densities of the census tracts within the City of Detroit. The sample within the city is just as random as the area sample, so the procedure was methodologically sound.

Our first task was to determine the size and significance of the associations between crowding and the neighborhood items. The Pearson Correlations between residential density and the number of neighborhood friends (r=.001), closeness with those friends (r=.012) and frequency of contact with those friends (r=.058) were insignificant. There was also no relation between density and either of the neighborhood attitudes (open space: r=.045; improve neighborhood: r=.030). However, there were negative associations between crowding and friendliness (r=-.102, p<.034) and membership in neighborhood organizations (r=-.103, p<.032).

It seemed that residential density had no effect on specific local interpersonal relationships. Crowded urbanites also did not voice need for open space more than others, nor were they less interested in improving their neighborhoods. Although the quality and quantity of respondent's "good" local friendships were not affected, this says nothing of their lack of zeal for neighborhood organizations and their responses toward the stranger. While the hypothesis may be far-fetched, the crowded urbanites could have been maintaining their most rewarding friendships at the cost of "tuning out" their more secondary or transient encounters. This would account for our two negative associations and would be in agreement with the reports of bystander intervention in urban areas (*cf.*, Milgram, 1971).

In the past, both density and social ties have been related to many factors that were not of theoretical interest to the researcher. Our next step was to determine if the associations between residential density and neighborhood items reflected in the Pearson Correlations were similar after controlling for extraneous factors. The possibility existed that our significant relationships could be explained away by other factors, or that potentially strong associations may be suppressed by socio-demographic characteristics.

We entered six independent variables into a regression equation and examined the beta weights for each of our neighborhood items. By this procedure, we could discover the independent effects of density and the other five factors on our dependent variables. On the basis of past research we chose to enter: age, socio-economic status, presence of children at home, years living in the neighborhood and tract income (*cf.*, Blau, 1973; Keller, 1968; Gans, 1970; Bott, 1957; Kasarda and Janowitz, 1974; Freedman, 1972) along with residential density.

The standardized beta coefficients from the regression analysis are reported in Table 1. When controlling for other factors, the relations between density and the neigh-

STANDARDIZED BETA COEFFICIENTS OF THE SIX INDEPENDENT VARIABLES ON NEIGHBORHOOD TIES AND ATTITUDES

	MORE PARKS	IMPROVE NBHD.	BELONG TO NBHD. GROUP	NUMBER OF NBHD. FRIENDS	FREQUENT VISITS W/NBHD. FRIENDS	CLOSE W/NBHD. FRIENDS	RESPONDENT FRIENDLY TOWARD "STRANGER"
RESIDENTIAL DENSITY	-.003	-.001	-.002	-.038	-.005	.114	-.081
TRACT INCOME	.066	-.021	.094	-.066	-.049	.184	-.005
YEARS IN NEIGHBORHOOD	-.005	..052	.040	.272	-.019	.010	.032
AGE	.069	-.170	.I40	-.043	-.139	-.085	-.040
SOCIO-ECONOMIC STATUS	-.032	.001	.060	-.021	.048	-.109	.112
CHILDREN AT HOME	-.011	-.083	.122	.045	-.177	-.072	.005

borhood items are minimal. Particularly important to note is the disappearance of our two previous negative relations. Not only are all associations between crowding and the dependent variables weak, but in every case they are overshadowed by other explanatory factors.[3]

DISCUSSION

While the evidence from studies of micro-environments pointed to a negative association between crowding and social interaction, there is little support of this finding in our analysis of specific neighborhood ties within the City of Detroit. Instead, this examination of residential density and sociability suggests that other socio-demographic factors are more important determinants of neighborhood attitudes and local ties.

For several reasons, the present findings are not unconditionally generalizable to "urban life" in dense areas. Detroit is far from the densest city in the United States and may lack the overcrowding needed to produce deleterious effects. The sample was also limited to white males, while there is substantial evidence that responses to density may vary with sex and ethnicity (Hall, 1966; Freedman, 1973). Thus, further empirical tests are needed, using broader samples more representative of the total population.

We must also admit that this presentation only dealt with some of the interpersonal relations within the neighborhood. The number of "best" friends living in the neighborhood and their intimacy are not really indicative of overall social behavior in the local area. However, in our attempt to compare the findings of micro-studies to urban life, it was necessary to discuss very specific relationships. Here, we were not concerned with the more general impressions of the respondent regarding "neighbors" or "friends" as in other studies but with the specific responses to existing social stimuli. In fact, the study of these differently defined relationships may be hardly comparable, though their importance is dictated by the theoretical and research interests of the investigator.

Our final point concerns the all too common attempt to extrapolate from the dense room to the crowded city. Clearly, this study's results bear no resemblance to the processes occurring in small groups, but why? First, urban residents do not live at one density, but at many different levels of crowding (e.g., city, neighborhood, dwelling, bedroom). Thus, the resident of a crowded neighborhood can escape intolerable densities by going home, or taking a walk in a park. The urban resident can also choose to avoid

unpleasant situations (i.e., overcrowding) in many circumstances. So, an apartment dweller in a crowded neighborhood may seldom experience interpersonal press and thus be "unaffected" by neighborhood densities. This is obviously a far cry from the experiences of subjects left in a crowded room for several hours, or those who cannot readily escape their overcrowded situations and are forced to interact with others. Also, some of the methodological inadequacies of the micro-studies mentioned earlier should warn us against taking their findings as social psychological truths.

In conclusion, no inferences from micro-environments to city-living (and vice versa) should be made without careful empirical testing. The present case should serve as an example of the general rule that processes occurring in small settings do not always happen in larger environments. The field of crowding has all too frequently not heeded the advice, resulting in gross generalities and misleading information for social policy makers.

FOOTNOTES

1. The respondent was asked to name his three closest friends and to indicate which ones lived in the neighborhood. Another question asked whether each man mentioned was: (1) a very close personal friend (2) a good friend (3) an acquaintance. Next asked was how often the respondent got together with each of his closest friends: (1) more than once a week (2) once a week (3) two or three times a month (4) once a month (5) several times a year (6) rarely. From this information we obtained the number of best friends living in the neighborhood, and then computed the average closeness and frequency of visits with the respondent's neighborhood friends. All the other items used were dichotomous.

   For the purposes of this study, questions concerning neighboring *per se*, were excluded. In attempting to replicate the findings of micro-studies, we had to deal with the rates and qualities of actual and not potential interactions, as did past studies we reviewed. Thus, we were more interested in the effects of crowding on specific, already existing interpersonal relationships within the neighborhood. A discussion of neighboring is an issue which deserves attention in a more general framework than was called for in this paper.

2. The uses of the interviewer's appraisal of the respondent was influenced by recent work which found more refusals and lower interview completion rates in high density neighborhoods in New York. Residents of high density areas were also reported to display more suspicion at the beginning of the interview, while low density residents showed more literal openness to the interviewer at the front door (Davis, Bergin and Mazin, 1974:12, 15).

3. As a more conservative test, we employed the analytical techniques used by Galle, Gove and McPherson (1972). We examined the percent of the variance explained by each variable after the other five factors had explained all they could. For each of the seven dependent variables, residential density was again a minor factor. The explanatory value of the variables were in approximately the same rank orders as in the previous regression analysis.

REFERENCES

Baldassare, M. and C.S. Fischer
1974 "The relevance of crowding experiments to urban studies." Paper presented at the Western Psychological Association Meetings, San Francisco.

Bichman, L., A. Teger and T. Gabriele
1973 "Dormitory density and helping behavior." Environment and Behavior 5 (4):465-490.

Blau, Z. Smith
1973 Old Age in a Changing Society. New York: New Viewpoints.

Bott, E.
1957 Family and Social Network. London: Tavistock.

Calhoun, J.B.
1962 "Population density and social pathology." Scientific American 206:139-148.

Davis, D.L., K.J. Bergin and G. Mazin
1974 "When the neighbors get noisy we bang on the walls: a critical exploration of density and crowding." Paper presented at the American Sociological Association Meetings, Montreal.

Fischer, C.S., M. Baldassare and R.J. Ofshe
1974 "Crowding studies and urban life: a critical review." Institute of Urban and Regional Development Working Paper Number 242. University of California, Berkeley.

Freedman, J.L.
1972 "Population density, juvenile delinquency and mental illness." Pp. 511-523 in S. Mills Mazie (ed.), Population Distribution and Policy, Volume 5. Washington: U.S. Government Printing Office.
1973 "The effects of population density on humans." Pp. 209-238 in J. Fawcett (ed.), Psychological Perspectives on Population. New York: Basic Books

Galle, O., W. Gove and J. McPherson
1972 "Population density and pathology: what are the relations for man?" Science 176:23-30.

Gans, H.
1970 "Urbanism and suburbanism as ways of life." Pp. 70-84 in R. Gutman and D. Popenoe (eds.), Neighborhood, City and Metropolis. New York: Random House.

Hall, E.T.
1966 The Hidden Dimension. New York: Random House.

Hutt, C. and M. Vaizey
1966 "Differential effects of group density on social behavior." Nature 209:1371-1372.

Ittleson, W., H. Proshansky and L. Rivlin
1970 "The environmental psychology of the psychiatric ward." Pp. 419-438 in H. Proshansky, W. Ittleson and L. Rivlin (eds.), Environmental Psychology. New York: Holt, Rinehart and Winston.

Kasarda, J. and M. Janowitz
1974 "Community attachment in mass society." American Sociological Review 39 (3):328-339.

Keller, S.
1968 The Urban Neighborhood. New York: Random House.

Laumann, E.
1973 Bonds of Pluralism. New York: John Wiley.

Loo, C.
1972 "The effects of spatial density on the social behavior of children." Journal of Applied Social Psychology 2:372-381.

Milgram, S.
1971 "The experience of living in cities." Science 167:1461-1468.

Mitchell, R.E.
1971 "Some social implications of high density housing American Sociological Review 36:18-29.

Simmel, G.
1969 "The metropolis and mental life." Pp. 47-60 in R. Sennett (ed.), Classic Essays on the Culture of Cities. New York: Appleton, Century, Crofts.

Tucker, J. and T. Freedman
1972 "Population density and group size." American Journal of Sociology 77 (4):742-749.

Valins, S. and A. Baum
1973 "Residential group size, social interaction and crowding." Environment and Behavior 5 (4):87-115.

Wirth, L.
1938 "Urbanism as a way of life." American Journal of Sociology 44:1-24.