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Helping in 36 U.S. Cities

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A series of experiments examined the relationship of urbanism to helping. Six types of helping behaviors were studied in a cross-sample of 36 small, medium, and large cities across the United States. The relationship of helping to a series of statistics reflecting the demographic, social, environmental, and economic characteristics of these communities was then examined. The strongest and most consistent predictor of overall helping was population density. There were significant correlations between economic indicators and helping in three situations. Helping in some situations also tended to be negatively related to violent crime rates and to environmental problems.

Thomas Wolfe (1940) wrote that city people "have no manners, no courtesy, no consideration for the rights of others, and no humanity." Several studies offer evidence that this urban stereotype is widely shared in the United States. Krupat and Guild (1980), for example, reported that a sample of university students perceived cities as anonymous, impersonal, and unsafe and the "typical urbanite" as untrusting and uninvolved with others. Schneider and Mockus (1974) reported that 79% of a sample of university students believed that help from a stranger was more likely to be received in a small town than in a large city.

Many urban theorists have offered similarly unflattering descriptions of the "urban personality." Theorists ranging from Wirth (1938) and Simmel (1950) to Milgram (1970) have described the urban dweller as alienated, unresponsive, and unhelpful. Each hypothesized that the size of a community is negatively related to the likelihood of receiving help from a stranger.

This hypothesis has generated a large number of studies in the helping literature. In a review of that research, Steblay (1987) found qualified support for the hypothesis of greater rural helpfulness. In a total of 65 studies, 46 reported greater helpfulness in smaller areas, 9 found greater helpfulness in larger areas, and the remaining 10 reported no significant differences. A subsequent meta-analysis indicated a modest negative relationship between population size and helping. The effect was stronger for studies that defined population size as a context variable (i.e., whether helping occurred in a city or rural area) than for studies that defined population as a subject variable (i.e., the population of the city where the subject was raised). For the context-defined studies, a meta-analysis produced a significant (.29) effect size in support of the inverse helping–population size hypothesis, with the decline in helping rate beginning at population sizes of 300,000. Steblay reported that this relationship was robust across variations in types of helping requests, as well as across subject and experimenter variables.

Methodological Criticisms

As Amato (1983) has pointed out, however, there have been a number of methodological problems with these studies. First, the studies have relied almost exclusively on convenience samples of a few readily testable large and small communities, making it difficult to generalize results to other communities. It also makes it difficult to determine the shape of the population size–helping relationship.

Second, issues concerning the sampling of helping behaviors have been virtually ignored. Most studies have used convenience samples of one or two helping behaviors, from which it is difficult to generalize to a wider range of helping behaviors. This problem in generalization is further complicated by a lack of attention to systematic taxonomies of helping behaviors. Without such a classification scheme, it is difficult to gauge where on the spectrum any arbitrarily selected helping behavior resides and, consequently, to determine which other helping behaviors it might be related to.

Fourth, most studies have relied on the single indicator of population size to define urbanism. As many urban scholars have pointed out, however, the "essence of cityness" comprises a considerably more complex group of characteristics (e.g., Cutter, 1985; Fischer, 1976; Krupat & Guild, 1980; Levine, Miyake, & Lee, 1989). For one thing, other population size factors, such as population density, must also be considered. Other characteristics of the population, such as heterogeneity and stability of the population, may also be important. Finally, various behavioral characteristics of geographically defined areas, such as economic vitality, the pace of life, and crime rates, may distinguish cities from noncities and from each other. Previous research has made little attempt to identify the relevant community characteristics of urbanism that best predict helping behavior (see House & Wolf, 1978, for a notable exception).

The meta-analytic procedure Steblay (1987) used attempts to

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correct for some of these methodological shortcomings—specifically, those concerning the use of limited, nonrepresentative convenience samples (Eisenberg, 1991). As critics of meta-analysis have argued, however, combining many nonrepresentative samples into one large pool does not necessarily overcome the methodological shortcomings of the original studies (Beaman, 1991). Without systematic selection of subjects, communities, and helping situations, conclusions about the population size–helping relationship and higher order interactions between population size and type of helping must be treated with caution. As Steblay pointed out, such representative sampling was not common to the literature she reviewed. Furthermore, however successful it is in overcoming the convenience sample problem, the meta-analytic procedure cannot begin to address the fourth methodological shortcoming—the need to identify characteristics other than population size that may predict helping in different geographical areas.

Amato's (1983) 55-city Australian study is the only one to our knowledge that attempted to control for all of these methodological shortcomings in one investigation. Amato examined six systematically selected helping situations in towns and cities ranging in population from under 1 thousand to over 3 million people in two states in eastern Australia. It is noteworthy that several of Amato's results were at odds with the conclusions of Steblay's (1987) meta-analysis. For example, Steblay's conclusion that the relationship between helping and population size was robust across helping situations was only partially supported in Amato's study—only four of Amato's six measures were significantly related to population size in the expected direction. Furthermore, for those situations in which Amato did find a decline in helping rate, it occurred at populations of about 20,000, whereas Steblay found a positive relationship between population size and helping up to population sizes of 300,000. Whether these difference are the result of cultural differences between Amato's Australian samples and Steblay's mostly American samples, or of their divergent methodologies, remains open to question.

Amato's (1983) approach offers at least two major advantages over most previous studies on the topic. First, it allows for a better understanding of the shape of the city size–helping relationship, across both cities and helping situations, than is provided by using convenience samples of cities and helping behaviors. Second, by studying a large number of cities, it is possible to examine the relationship of helping to a number of other readily available statistics describing the demographic, social, environmental, and economic characteristics of communities.

The present study extended Amato's (1983) multivariate approach to a representative sample of the cities of the United States. Unlike Amato's study, which included rural areas, the present research focused on helping in divergent U.S. cities. There were several reasons for this decision. First, more than 77% of the U.S. population presently resides in metropolitan areas (U.S. Bureau of the Census, 1990). Second, many more statistics reflecting community characteristics are available for metropolitan than for nonmetropolitan areas. Third, the higher pedestrian flow in central cities allowed the selection of a wider range of helping behaviors than would have been practical in many small towns.

We used Pearce and Amato's (1980) empirically derived three-dimensional model of helping to select a sample of six representative helping behaviors. This model poses a threefold structure of helping: (a) doing what one can, direct help versus giving what one has, indirect help; (b) spontaneous, informal help versus planned, formal help; and (c) serious versus nonserious help. These three dimensions correspond, respectively, to (a) the type of help offered, (b) the social setting in which help is offered, and (c) the degree of need of the recipient.

Predicting Helping

By sampling a relatively large sample of cities, it was possible to treat each city as a single "subject" for the purpose of correlational analyses. This allowed comparison of multiple community predictors of helping by drawing on available statistics reflecting community characteristics.

Our first question concerned the predictive validity of population size itself. A number of urban theorists have focused on the relationship between population size and helping. Many of the earlier theorists, such as Simmel (1950) and Wirth (1938), addressed the alienating effects of community size on personal relationships: that urbanism leads to feelings of anonymity and social isolation—not only from strangers but also from friends, relatives, and co-workers.

Among contemporary social psychologists, Milgram's (1970) system overload theory and Latane and Darley's (1970) model of bystander intervention have most often been used to explain the negative relationship between population size and helping. According to Milgram, the external demands on city dwellers lead to a state of system overload, one result of which is the screening out of stimuli that are not essential to the satisfaction of one's personal needs. This leads to a disregard for the needs and demands of nonrelevant others—in particular, those of strangers. Latane and Darley's model suggests that large groups produce diffusion of responsibility. As the number of bystanders to an emergency increases, each bystander is less likely to notice the incident, to interpret the incident as an emergency, and to assume responsibility for helping.

Although each of these overlapping theories has been used to explain population size differences in helping, their predictions more accurately derive from the density of individuals in a given area. As Hall (1966) has argued, more directly, the quality of social behavior declines when people are squeezed into too small spaces that limit personal distance (e.g., densely populated urban settings). It is when too many people invade their established life space that individuals experience anonymity, insufficient personal space, system overload, and diffusion of responsibility. Thus, although population size may be correlated with density, it was predicted from these theories, in the present study, that a city's population density would account for more variance in helping than its population size.

To further explain the relationship between population size/density and helping, we next sought to identify other community variables that affect helping. The choice of potentially predictive community variables was guided by the sociological tradition that holds that stress is a sociological, as well as a psychological, phenomenon. Rubington and Weinberg (1977), for example, have argued that urbanization may produce social conditions that are disruptive to the functioning of the community. Linsky and Straus (1986) hypothesized that stressful social conditions are associated with maladaptive individual behaviors. They developed a state stress index for each of the 50 U.S. states by adding statistics reflecting the rate of occurrence of 15 socioeconomic stressor events (e.g., unemployment rate, frequency of business failures, and rate of population change). As predicted, higher social stress levels were associated with a number of pathologies, including high rates of crime and health problems.

Taking a similar approach, we hypothesized in the present study that social stressors should also inhibit positive social behaviors, particularly those between strangers. High population size/density may be associated with a number of stressful social–environmental conditions that in turn produce the psychological responses (e.g., alienation, system overload, and diffusion of responsibility) that inhibit helping behavior. Our goal was to identify some of these social–environmental conditions that intervene between population size/density and the psychological responses affecting helping.

Specifically, a review of the literature indicated six categories of social stressors associated with urbanism that may be disruptive to the community: (a) rate of population change (e.g., Rubington & Weinberg, 1977), (b) competition for resources and other economic pressures (e.g., Linsky & Straus, 1986), (c) a rapid pace of life (e.g., Milgram, 1970), (d) stress on the environment (e.g., Zero Population Growth, 1991), and (e) deterioration in other more general conditions of a community's "quality of life" (e.g., Levine et al., 1989). Each of these conditions, it has been proposed, wears on the social order, resulting in an increase in antisocial behaviors (in particular, [f] violent crime), which in themselves act as additional stressors on the community. According to the predictions, each of these social stressors should lead to psychological responses that are detrimental to the social functioning of the community, including an inhibition of helping behavior toward strangers. To test these predictions, the present study empirically examined the relationship of each of these six categories of community stressors to helping.

In summary, the main goals of the present research were, first, to investigate differences in helping behaviors across the cities and regions of the country; second, to investigate whether population density is a stronger predictor of helping behavior than population size; and, third, to identify other social–environmental community variables that intervene between population size/density and the psychological responses affecting helping.

Method

Overview

Six measures of helping were sampled in 36 metropolitan areas across the United States. These measures were then related to available statistics reflecting the demographic, social, environmental, and economic characteristics of these communities.

Cities Used in the Study

Thirty-six U.S. cities and their surrounding metropolitan areas were "subjects" in the present study. In an attempt to achieve a cross-sample of U.S. cities, three large (populations above 2,000,000), three medium-sized (populations between 950,000–1,450,000), and three smaller (populations between 350,000–600,000) cities were sampled in each of the four census-defined regions of the United States: the northeast, north central, south, and west. City size was based on population estimates for the greater metropolitan statistical area (MSA) or, when available, the primary metropolitan statistical area (PMSA).[1]

In a previous study on the pace of life in U.S. cities, 36 small, medium, and large cities were sampled in each of the four regions of the United States (Levine, Lynch, Miyake, & Lucia, 1989). To be able to examine the correlation between helping in the present study and the pace of life from the earlier study, we chose to use the same cities in the present study, so long as they continued to meet our criteria for city size limits (with adjustments for population growth). Thirty-five of the original 36 cities met these criteria. As a result, the final sample of cities in the present study, with one exception, was identical to that from the earlier pace of life study.

It should be noted that, because of funding limitations, selection of cities was not completely random in all cases. Within each of the 12 categories (Population Size [3] × Region [4]), travel distance was a factor in selection of locales. As a result, it might be noted, no cities from the Pacific Northwest, upper New England, Florida, or southern Texas were sampled. Thus, although the four regions and three size categories do represent the population of U.S. cities, sampling within each region may be somewhat biased. (For a more complete description of the procedure for selecting cities in the original pace of life study, see Levine et al., 1989.) The final sample is presented in Table 1.

Selection of Helping Behaviors

We attempted to select helping behaviors that represented a wide range of points on the three dimensions in Pearce and Amato's (1980) taxonomy of helping (described earlier). Specifically, our list of six helping behaviors was aimed at two criteria: First, the situations should sample a wide range on the spectrum of each dimension, and, second, the behaviors should differ significantly from each other on at least one of the three dimensions.

To check that these criteria were met, the six helping situations were described in detail to a sample of 78 undergraduate students, who were then asked to rate each situation from 0 to 100 on each of the three dimensions. The respective mean ratings and corresponding standard deviations for doing versus giving, spontaneous versus planned, and serious versus nonserious were as follows: (a) helping a blind person ($M = 15.5$, $SD = 22.3$; $M = 21.1$, $SD = 21.2$; $M = 42.3$, $SD = 31.6$), (b) hurt leg ($M = 17.3$, $SD = 25.5$; $M = 13.3$, $SD = 22.0$; $M = 42.4$, $SD = 30.8$), (c) making change ($M = 42.6$, $SD = 35.4$; $M = 25.7$, $SD = 28.3$; $M =$

[1] According to the Office of Management and Budget, an area has to meet one of two criteria to qualify as an MSA: It must include one city with a minimum population of 50,000 or an urbanized area (embracing one or more towns) of at least 50,000 people located in one or more counties with at least 100,000 people (75,000 in New England, where PMSAs are the defining units). In both cases, the boundaries of the MSA include the surrounding county or counties (except in New England, where designations are based on towns and cities; U.S. Bureau of the Census, 1990. For a further discussion of the distinction between MSAs, PMSAs, and cities and the sensibility of using MSA and PMSA boundaries rather than city limits to define metropolitan area demographics, see Boyer & Savageau, 1989.)

Table 1
Raw Scores and Ranks on Helping Measures by City

City	Region[a]	Population[b]	Overall helping index		Dropped pen		Hurt leg		Change		Blind person		Lost letter		United Way	
			Score[c]	Rank	%[d]	Rank	%[d]	Rank	%[d]	Rank	%[d]	Rank	%[d]	Rank	Per capita contribution[e]	Rank
Rochester, NY	NE	M	10.81	1	.50	18	.63	16	.50	19.5	.92	3	.83	12.5	37.18	1
Houston, TX	S	L	10.74	2	.71	3	.68	12	.73	2	.80	13.5	.77	20	17.34	19
Nashville, TN	S	M	10.69	3	.60	8	.83	2.5	.60	6	.88	5	.73	24	20.56	9
Memphis, TN	S	M	10.66	4	.71	4	.76	6	.54	15.5	.82	12	.80	17	18.09	16
Knoxville, TN	S	S	10.62	5	.54	13	.46	29	.71	3	.93	2	.90	6	16.85	20
Louisville, KY	S	S	10.58	6	.71	2	.43	32	.79	1	.73	18	.80	17	18.79	15
St Louis, MO	NC	L	10.58	7	.50	18	.65	15	.63	5	.83	10.5	.83	12.5	22.88	5
Detroit, MI	NC	L	10.55	8	.67	5.5	.58	22.5	.67	4	.60	24	.93	3	17.40	18
E. Lansing, MI	NC	S	10.54	9	.54	14	.58	22.5	.58	9	.85	8	.93	3	16.57	22
Chattanooga, TN	S	S	10.54	10	.39	27	.92	1	.54	15.5	.56	28	.83	12.5	33.70	2
Indianapolis, IN	NC	M	10.46	11	.44	25	.48	28	.60	7	.83	10.5	.93	3	23.35	4
Columbus, OH	NC	M	10.42	12	.42	26	.46	30	.50	19.5	.85	8	.87	7.5	33.06	3
Canton, OH	NC	S	10.35	13	.46	22	.71	10	.58	8	.67	20	.87	7.5	20.10	12
Kansas City, MO	NC	M	10.33	14	.33	31	.69	11	.54	13.5	1.00	1	.73	24	22.41	6
Worcester, MA	NE	S	10.24	15	.63	7	.56	25.5	.50	19.5	.57	26	.91	5	18.83	14
Santa Barbara, CA	W	S	10.17	16	.59	9	.59	20	.56	11	.75	16	.80	17	11.92	26
Dallas, TX	S	L	10.13	17	.50	18	.60	19	.42	25.5	.88	5	.73	24	20.85	8
San Jose, CA	W	M	10.11	18	.44	23.5	.71	8.5	.56	11	.60	24	.84	9.5	16.66	21
San Diego, CA	W	L	10.05	19	.56	12	.75	7	.35	32	.50	32.5	1.00	1	11.35	28
Springfield, MA	NE	S	9.92	20	.75	1	.57	24	.38	31	.50	32.5	.72	27	20.19	11
Atlanta, GA	S	L	9.90	21	.49	21	.67	13.5	.44	23.5	.75	16	.63	31.5	19.55	13
Bakersfield, CA	W	S	9.75	22	.57	11	.63	17.5	.50	19.5	.88	5	.57	35	4.84	35
Buffalo, NY	NE	M	9.71	23	.28	34	.44	31	.54	13.5	.80	13.5	.73	24	17.62	17
San Francisco, CA	W	L	9.66	24	.67	5.5	.29	34	.39	29	.56	28	.84	9.5	14.09	24
Youngstown, OH	NC	S	9.56	25	.29	33	.63	17.5	.51	17	.56	28	.80	17	11.37	27
Sacramento, CA	W	M	9.56	26	.38	29	.83	4.5	.39	27	.50	32.5	.76	21	9.16	31
Salt Lake City, UT	W	M	9.51	27	.50	18	.58	21	.46	22	.42	36	.83	12.5	6.19	32
Boston, MA	NE	L	9.50	28	.33	32	.56	25.5	.56	11	.50	32.5	.63	31.5	20.51	10
Providence, RI	NE	S	9.50	29	.36	30	.71	8.5	.39	28	.63	22	.65	30	14.02	25
Chicago, IL	NC	L	9.49	30	.21	36	.54	27	.42	25.5	.85	8	.67	29	16.39	23
Shreveport, LA	S	S	9.44	31	.44	23.5	.83	2.5	.33	34	.67	20	.60	33.5	6.04	33
Philadelphia, PA	NE	L	9.38	32	.39	28	.38	33	.33	33	.67	20	.69	28	20.90	7
Fresno, CA	W	S	9.34	33	.58	10	.83	4.5	.39	30	.50	32.5	.53	36	2.82	36
Los Angeles, CA	W	L	9.26	34	.50	18	.13	36	.44	23.5	.60	24	.80	17	9.71	30
New York, NY	NE	L	9.03	35	.28	35	.28	35	.29	35	.75	16	.73	24	10.48	29
Patterson, NJ	NE	M	8.92	36	.52	15	.67	13.5	.11	36	.50	32.5	.60	33.5	5.95	34

[a] NE = northeast, S = south, NC = north central, and W = west. [b] S = small (350,000–650,000), M = medium (950,000–1,450,000), L = large (>2,000,000). Based on estimates for metropolitan or primary statistical area for 1989. [c] Average of standardized scores (M = 10, SD = 1.0) for the six measures. [d] Percentage help received (see text for explanation). [e] Per capita contributions in dollars.

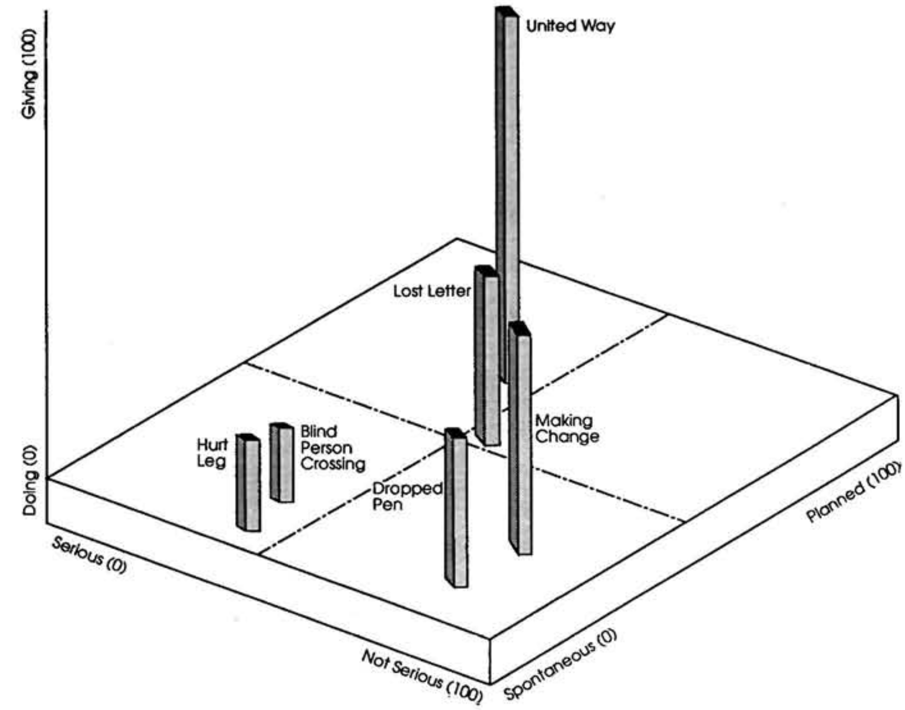

Figure 1. Location of the six helping measures in Pearce and Amato's (1980) three-dimensional taxonomic space.

83.1, *SD* = 21.4), (d) dropped pen (*M* = 28.1, *SD* = 30.7; *M* = 17.4, *SD* = 25.0; *M* = 86.6, *SD* = 18.8), (e) lost letter (*M* = 32.0, *SD* = 30.1; *M* = 52.6, *SD* = 32.4; *M* = 61.7, *SD* = 26.6), and (f) United Way contributions (*M* = 78.8, *SD* = 26.9; *M* = 72.2, *SD* = 31.4; *M* = 47.3, *SD* = 23.6).

As may be seen in Figure 1, these findings were generally consistent with our two selection criteria. The single marginal finding for the first criterion was that none of the situations were rated as extremely serious. Three of the situations were, however, rated below 50 and three above 50 on this dimension. The exception to the second criterion was the similarity in ratings for the blind person and the hurt leg situations. We felt, however, that other differences between these situations—particularly the anonymity afforded to potential helpers of the blind person in need—warranted including both in the final sample.

Procedure

Five of the helping measures involved field experiments. These data were collected in two or more locations—in main downtown areas, during main business hours, on clear days, and during the summer months of 1990 and 1991. For the three measures that required approaching pedestrians, only individuals walking alone were selected. Children (under 17 years old), handicapped, very old people, people with heavy packages, and so forth (i.e., those who might not be fully capable or expected to help) were excluded. Subjects were selected randomly, usually by approaching the second potential subject to cross a predetermined line.

Helping Measures

Dropped pen. Walking at a carefully practiced, moderate pace (15 paces in 10 s), experimenters walked toward a solitary pedestrian passing in the opposite direction. When 10–15 ft from the subject, the experimenter reached into his pocket and accidentally, without appearing to notice, dropped his pen behind him, in full view of the subject, and continued walking past the subject. A total of 358 male and 361 female persons were approached. Subjects were scored as having helped if they called back to the experimenter that he had dropped the pen or picked up the pen and brought it to the experimenter.[2]

Hurt leg. Walking with a heavy limp and wearing a large and clearly visible leg brace, experimenters "accidentally" dropped, and then unsuccessfully struggled to reach down for, a pile of magazines as they came within 20 ft of a passing pedestrian. A total of 346 male and 334 female persons were approached. Helping was defined as offering to help or beginning to help without offering.

[2] The dropped pen, hurt leg, change, and blind person measures were initially scored on weighted multipoint scales and reflected increasing prosocial involvement. The dropped pen measure, for example, was scored on a 5-point scale: 1 = *did not appear to notice,* 2 = *noticed but offered no help,* 3 = *did not pick up pen but called back to experimenter that he had dropped it,* 4 = *picked up pen and called back to experimenter that he had dropped it,* and 5 = *picked up pen and caught up to experimenter to hand it to him.* The hurt leg measure was scored on a similar 3-point scale, change on a 4-point scale, and blind person on a 4-point scale. Initial reliability checks, however, indicated difficulty in accurately distinguishing between some of the categories, particularly for the blind person measure. There were also questions about the equivalence of each of the scales from measure to measure. As a result, these scales were collapsed into overall categories of helping versus not helping. Results based on analyses using the multipoint scales are available from Robert Levine.

Change for a quarter. With a quarter in full view, experimenters walked up to a pedestrian passing in the opposite direction and asked politely if the pedestrian could make change for a quarter. A total of 354 male and 348 female persons were approached. Subjects were scored as having helped if they checked their pockets for change.

Helping a blind person cross the street. Experimenters, dressed in dark glasses and carrying white canes, acted the role of a blind person needing help crossing a street. (The canes, and training for the role, were provided by the Fresno Friendship Center for the Blind.)

Experimenters attempted to locate downtown corners with crosswalks, traffic signals, and moderate, steady pedestrian flow. They stepped up to the corner just before the light turned green, held out their cane, and waited until someone offered help. A trial was terminated after the lesser of either 60 s or when the light turned red, after which the experimenter walked away from the corner. A total of 379 trials were conducted. Helping was scored if subjects, at the minimum, informed the experimenter that the light was green.

Lost letter. This experiment used Bihm, Gaudet, and Sale's (1979) variation of the classic lost letter technique. A neat hand-written note, "I found this next to your car," was placed on a stamped, addressed envelope that was then left on the windshield of a randomly selected car parked at a meter in a main shopping area. (In one city, where no meters were used in downtown areas, letters were left on cars in 1-hr parking zones.) Letters were placed on autos parked far enough from each other so that it was unlikely their drivers would have seen a similar letter/note on other cars. Obviously wrecked cars were excluded. A total of 1,032 letters were left. The percentage returned from each city served as the dependent variable.

United Way contributions. Per capita contributions to United Way campaigns for each metropolitan area for the year 1990 were calculated from the organization's records (United Way of America, 1991). (The metropolitan areas defined by United Way, it should be noted, did not exactly correspond to the U.S. Census Bureau-defined MSAs in all cases.)

Experimenters

Four of the six helping behaviors required direct contact with subjects. Three experimenters were responsible for virtually all of this data collection (in one city, a fourth experimenter assisted). In all but two cities, one experimenter collected all data. All experimenters were college age and dressed neatly and casually. To control for experimenter gender effects, all experimenters were male.

Again because of funding limitations, assignment of experimenters to cities was sometimes dictated by travel distances rather than random selection. However, at least two experimenters were assigned locales in each of the four regions and to cities in the different population size categories within each region. (Regional differences in helping were minimal; see below.)

Several steps were taken to ensure standardization in scoring and to minimize experimenter effects. First, all experimenters received both a detailed instruction sheet and on-site field training for acting their roles, procedures for subject selection, and scoring of subjects. Second, the experimenters practiced together and observed each other collecting data in at least one city. Third, in all but one experiment, no verbal communication was required of experimenters.

Reliability checks were taken during training sessions to assess standardization between experimenters in scoring subjects' responses. Interexperimenter agreement was perfect on these trials (see Footnote 3). To further check for experimenter effects, experimenter differences in elicited helping were examined. A multivariate analysis of variance (MANOVA) indicated that there were significant differences between the three experimenters on the four relevant helping measures (dropped pen, hurt leg, asking for change, and blind person crossing street; Wilks's $\lambda = .27$), approximate $F(8, 56) = 4.61$, $p < .001$. Univariate analyses of variance (ANOVAs) indicated significant main effects for three of these situations: hurt leg, $F(2, 31) = 4.76$, $p < .02$; asking for change, $F(2, 31) = 11.07$, $p < .01$; and blind person crossing the street, $F(2, 31) = 10.46$, $p < .001$. No significant main effect was found for the dropped pen situation, $F(2, 31) = 0.19$, *ns* (the two cities where more than one experimenter collected data were not used in these analyses).

Tukey post hoc comparisons indicated that all significant differences were accounted for by the lower helping rates elicited by one of the experimenters. These lower rates, it was speculated, might be explained by the fact that he was assigned more large cities (46%, or 6 of 13) than either of the other experimenters (26%, or 4 of 15, for the experimenter with the highest helping rates and 33%, or 2 of 6, for the experimenter with the second highest rates). To test this hypothesis, we conducted a multivariate analysis of covariance (ANCOVA) comparing the experimenter with the lowest helping rates with those with the two highest and partialing out for the effects of population size. The analysis partially supported the hypothesis. The resulting Wilks's lambda remained significant (.45), approximate $F(8, 56) = 8.63$, $p < .001$. However, univariate ANOVAs indicated significant main effects for only two of the experimenter-sensitive situations: asking for change, $F(2, 31) = 12.98$, $p < .001$, and blind person crossing the street, $F(2, 31) = 21.08$, $p < .001$. The univariate main effects were not significant for the hurt leg, $F(2, 31) = 0.29$, or dropped pen, $F(2, 31) = 0.19$, situations. The argument that the single experimenter's lower helping rates reflect factors other than experimenter effects was also supported by the fact that the cities he measured were also significantly lower in helping on the two measures that did not involve personal encounters: lost letters, $F(2, 31) = 3.09$, $p < .06$, and United Way contributions, $F(2, 31) = 3.67$, $p < .04$. Still, the possibility that there were experimenter effects in the blind person and asking for change situations cannot be completely ruled out.

Community Variables

Because the present study focused on city-level differences, our access to statistics reflecting social–environmental stress was more limited than that for the Linsky and Straus (1986) study. Unlike the plethora of relevant statistics that are available for state-level analyses, there is considerably less information available for U.S. cities and metropolitan areas. Statistics were found, however, for 11 potential social stressors.

Population demographics. Three indicators of the population characteristics of each MSA or PMSA were taken from U.S. Bureau of the Census (1991) statistics for the year 1990: (a) population size, (b) population density (population per square mile), and (c) the percentage of change in population size from 1980 to 1990.

Although MSAs and PMSAs seemed the most valid units of measurement for these indicators, we also examined the relationship of helping to the population size, population density, and population change of each "city" (from U.S. Bureau of the Census, 1990). The resulting correlations did not significantly differ from those obtained from MSA or PMSA statistics. These city data are not reported but are available from Robert Levine.

Economic indicators. Two indicators of the economic status of each MSA or PMSA were taken from U.S. Bureau of the Census (1990, 1991) statistics: (d) per capita personal income for the year 1988 and (e) unemployment rates for the year 1989. Also, (f) the average cost of living was estimated with Boyer and Savageau's (1989) combined cost of living index. This index draws on multiple government sources (see Boyer & Savageau, 1989) reflecting the cost of living in five areas: housing, food, transportation, health care, and taxes. Each of these figures is then weighted according to its average proportion of expenditure and combined. (Unfortunately, Boyer and Savageau did not clearly present the

Table 2
Intercorrelations of Helping Measures

Measure	1	2	3	4	5	6	7
1. Dropped pen	—						
2. Hurt leg	.06						
3. Change	.27	.00					
4. Blind person	−.07	−.10	.42**				
5. Lost letter	.22	−.18	.45**	.05			
6. United Way	−.06	.00	.38**	.42**	.38*		
7. Overall index	.43**	.24	.78**	.53**	.59**	.66**	

Note. All correlations are Pearson product-moment analyses; $n = 36$ in all cases.
* $p < .05$. ** $p < .01$.

formula they used to combine primary statistics into the cost of living index.) This cost of living index, in other words, is intended as an estimate of average effective buying income.

Quality of life measures. We also examined the relationship of helping to several aspects of the quality of life of each area: (g) Boyer and Savageau's (1989) index of the overall quality of life of each area, taken from their most recent *Places Rated Almanac.* This index is derived from multiple indicators, mostly drawn from government statistics, in nine domains: cost of living, jobs, climate, health care and environment, crime, transportation, education, the arts, and recreation (see Boyer & Savageau, 1989, for information about their primary sources). The overall quality of life score is then derived for each metropolitan area by adding, unweighted, its rank in each domain. (There is considerable controversy about the optimal formula for combining individual life domain scores into an overall index [see Cutter, 1985]. The Boyer and Savageau index was selected over other available places-rated indexes because it uses the most extensive list of primary sources. It is also probably the most well-known. The selection was somewhat arbitrary, however, as little validity or reliability data are available for any of these indexes). (h) Violent and (i) property crime rates for 1990 (Federal Bureau of Investigation, 1990, were also included as part of the overall index [g]). (j) Zero Population Growth's (1991) Environmental Stress Index was used as an indicator of enviornmental stress. This index rates U.S. cities on five environmental stressors: air quality, water quality, sewage quality, toxic releases, and rate of population change. (k) Levine et al.'s (1989) index of the overall pace of life, based on field data reflecting average walking speed, work speed, talking speed, and concern with clock time, was used. These data were available for 35 of the 36 cities used in the present study.

Results

Overall Helping Index

Although multiple measurements were taken for each helping situation in each city, it should be noted that, for purposes of analysis, each of the 36 cities was treated as one subject. For each city, the six measures of helping were converted to standard scores (with $M = 10$, $SD = 1.0$), which were then averaged to produce an overall index. As shown in Table 2, this overall helping index was significantly correlated with 5 of 6 of its components ($p < .001$, $df = 35$ in all cases) and positively correlated in all six cases. The alpha for the six-item helping index was .51. The measure that, if deleted, would have raised the alpha significantly was hurt leg (alpha if removed = .62). The resulting alpha if any other measure were deleted would have been .27 (change), .47 (blind person), .53 (dropped pen), .43 (lost letter), and .38 (United Way). Because the purpose of including multiple measures of helping was to achieve a representative sample of helping situations, rather than to necessarily identify a correlated group of measures, all six measures were retained in the final index.

Table 2 also presents the intercorrelations among the helping measures. In general, it may be seen, these intercorrelations were low to moderate. Five of the 15 intercorrelations were significant, all in a positive direction. Asking for change correlated most significantly with four of the five other measures, whereas the fewest significant correlations were found for the hurt leg measure (zero).

Measures of skewness and kurtosis, g1 and g2, were calculated for dropped pen (g1 = −.04, g2 = −.71), hurt leg (g1 = −.58, g2 = −.71), asking for change (g1 = −.25, g2 = .62), blind person (g1 = .01, g2 = −1.2), lost letter (g1 = −.22, g2 = −.59), United Way (g1 = .52, g2 = .52), and overall helping index (g1 = −.20, g2 = −1.21). A positive value for skewness indicates a long right tail, and a negative value indicates a long left tail. For kurtosis, a negative value indicates a shorter tailed distribution than normal and a positive value indicates a longer tailed distribution than normal. It may be seen with the skewness statistics, then, that the proportion of help showed less deviation on the high end on the hurt leg and asking for change measures and on the low end for the United Way measure. The kurtosis statistics indicate that scores on the dropped pen, lost letter, and blind person measures all showed lower than normal deviations at the tails of their distributions, whereas the opposite was true for the hurt leg, asking for change, and United Way measures.

Effects of Population Size and Region

A MANOVA examined regional differences on the six helping indicators. Region (northeast, north central, south, and west) served as the independent variable, and the six helping indicators were used as dependent variables. Regional differences on the overall helping index were tested by a one-way factorial ANOVA. (Because the overall helping index was a linear combination of the six separate indicators, it was not included in the above MANOVA.)

There were significant differences for region of the country on the overall helping measure and two of its components. On the MANOVA for the helping measures, Wilks's lambda was .246, approximate $F(18, 76) = 2.74$, $p < .01$. Univariate ANOVAs indicated significant main effects for the overall helping index, $F(3, 32) = 5.59$ $p < .01$; asking for change, $F(3, 32) = 4.31$, $p < .01$; blind person, $F(3, 32) = 4.32$, $p < .01$; and United Way contributions, $F(3, 32) = 4.73$, $p < .01$. The main effects for the dropped pen, $F(3, 32) = 2.28$, $p < .09$); hurt leg, $F(3, 32) = 1.28$; and lost letter, $F(3, 32) = 1.85$, measures were not significant.

As seen in Table 3, post hoc analyses indicated few consistent trends for these regional differences. Overall, helping was greatest in the south and north central cities and least in the northeastern and western cities. The significant main effects for the blind person and United Way measures were largely accounted

Table 3
Ranks and Scores on Helping Measures by Region of Country

	Overall helping		Dropped pen		Hurt leg		Change		Blind person		Lost letter		United Way	
Region	Rank	*M*	Rank	*M*	Rank	*M*	Rank	*M*	Rank	*M*	Rank	*M*	Rank	*M*
South	1	10.37_{a}	1	0.57	1	0.69	1	0.57_{a}	1.5	0.78_{b}	2	0.76	2	19.09_{b}
North central	2	$10.25_{a,b}$	4	0.43	3	0.59	2	0.56_{a}	1.5	0.78_{b}	1	0.84	1	20.39_{b}
Northeast	3	$9.71_{b,c}$	2	0.53	2	0.60	4	0.45	4	0.59_{a}	3	0.75	3	19.08_{b}
West	4	9.67_{c}	3	0.45	4	0.53	3	0.40_{b}	3	0.65	4	0.72	4	18.41_{a}

Note. Lower ranks and higher means indicate greater helping; regional means with different subscripts are significantly different at the .05 level by Tukey post hoc comparisons. Means represent *T* score with $M = 10$ and $SD = 1.0$ for overall helping, per capita contributions for United Way, and average percentage of helping for all other measures. $n = 9$ for each region.

for by the low helping scores in the west. The ranks and scores on each measure for the 36 cities, taken separately, are presented in Table 1.

Gender Differences

Although gender differences in helping were not a major focus of the present study, we did compare the proportion of men versus women who helped in the four applicable situations. For the three experiments where subjects were targeted by the experimenter (hurt leg, dropped pen, and asking for change), it was possible to observe gender differences in the proportion of individuals offering help. In the fourth direct contact experiment, the blind person situation, experimenters found that they were unable to accurately count the number of men and women (the potential helping pool) who were waiting at each stoplight. Thus, it was not possible to measure the proportion of men and women who offered help. We did calculate the actual number of men versus women who helped, but it should be noted that these differences may not reflect the proportion of helpers.

Gender differences were analyzed by a series of two-way MANOVAs, using gender and city size as independent measures and the four experimenter-sensitive helping measures as dependent measures. City size was included in these analyses to test for possible Gender × Size interactions. (Main effects for size are discussed earlier in this section.) Wilks's lambda (.963), approximate $F(8, 128) = 0.30$, for this interaction was not significant, however, nor were the interactions on any single measure. Wilks's overall lambda for gender main effects was significant (.765), approximate $F(4, 63) = 4.83$, $p < .01$. Univariate ANOVAs indicated significant main effects for gender for three situations. Men were significantly more likely to offer help in the dropped pen ($M = .54$ for men and $M = .44$ for women), $F(1, 66) = 5.37$, $p < .05$; asking for change ($M = .58$ for men and $M = .40$ for women), $F(1, 66) = 16.10$, $p < .001$; and blind person ($M = 4.33$ for men and $M = 3.13$ for women), $F(1, 66) = 7.37$, $p < .01$, situations. The difference between men and women on helping in the hurt leg situation was not significant ($M = .57$ for men and $M = .63$ for women), $F(1, 66) = 1.45$. The significant gender differences for the first three situations are, of course, consistent with previous literature on helping (e.g., Dovidio, Piliavin, Gaertner, Schroeder, & Clark, 1991). They are easily explainable by the added fears that women bring to situations requiring interaction with strangers, particularly when the strangers are men. The lack of significant differences for the hurt leg situation is more difficult to understand. The data may reflect the fact that the hurt leg situation presented an immobile stranger, who may have been seen as less threatening than the strangers in the dropped pen and asking for change situations. This argument should, however, also apply to the blind person situation. It would be interesting, of course, to systematically study the interaction between experimenter and helper gender in a future study of this sort.[3]

Most important, the goal of the present study was to average across genders in each city rather than to focus on gender differences. Thus, for purposes of all city-level analyses presented, total city scores on the dropped pen, asking for change, and hurt leg situations were derived by averaging the proportion of male and female helpers in each city. This corrected for any gender effects resulting from differences in the total number of men versus women sampled in each city.

Relationship of Community Variables to Helping

First-order correlations. Table 4 presents first-order correlations among the 11 community variables and each of the helping measures. Note, again, that these correlation analyses treat each of the 36 cities as a single subject. Given the large number of predictor variables for a sample of 36 cities, then, these results must be treated cautiously.

For the population demographics variables, helping showed significant negative correlations with population density on two of the four helping situations that involved "spontaneous" responses (dropped pen, hurt leg, and asking for change) and with population size on two of these measures (dropped pen and hurt leg). Both also showed significant negative correlations with the overall helping index. Change in population size over the last decade was not significantly related to any of the helping measures.

The strong negative relationship ($r = -.55$) between overall helping and population density, and the fact that this correlation was higher than that between overall helping and population

[3] Gender differences for all other analyses are available from Robert Levine.

Table 4
First-Order Correlations (and Selected Partial Correlations) Between Community Variables and Helping Measures

	Helping Measure[a]						
Community variable[b]	Overall helping index	Dropped pen	Hurt leg	Change	Blind person	Lost letter	United Way
Population demographics							
Population size	−.38*	−.27*	−.57**	−.21	−.01	−.07	−.10
Partial *r*	.04	−.00	−.37*	.21	.08	.09	.10
Population density	−.55**	−.37**	−.48**	−.45**	−.09	−.18	−.22
Partial *r*[d]	−.44**	−.25	−.11	−.45**	−.12	−.19	−.22
Partial *r*[e]	−.41*	−.46**	−.39	−.29	.13	−.14	−.06
Population change	−.05	.24	.22	−.18	−.04	−.14	.10
Economic indicators							
Per capita income	−.30	−.00	−.34*	−.36*	−.21	−.05	−.02
Partial *r*[c]	−.04	.22	−.14	−.18	−.18	.04	.11
Unemployment rates	−.09	.03	.23	.10	.11	−.38*	−.40*
Partial *r*[c]	−.22	−.03	.18	−.03**	.09	−.42*	−.44**
Cost of living	−.50**	−.06	−.34*	−.49**	−.40*	−.12	−.35*
Partial *r*[c]	−.33*	.29*	−.13	−.34*	−.41*	−.04	−.29*
Quality of life measures							
Boyer and Savageau's (1989) Places Rated Index	.09	.14	.47**	.00	.00	−.20	−.12
Violent crime rate	−.27	−.13	−.30	−.22	.04	−.14	−.14
Property crime rate	−.18	−.13	.17	−.29	.11	−.31	−.14
ZPG's Environmental Stress Index	−.21	−.09	.05	−.10	−.19	−.07	−.29
Levine, Lynch, Miyake, and Lucia's (1989) Pace of Life Index	−.02	−.20	−.20	.07	.08	−.09	.29

Note. n = 36, except for violent crime rate measure (n = 32), property crime rate and ZPG's Environmental stress index (n = 33 for both), and Levine et al.'s Pace of Life Index (n = 35). ZPG = Zero Population Growth.
[a] Higher scores indicate greater helping. [b] Higher scores indicate higher population and economic figures, more positive scores on the Places Rated Index and climatic mildness, higher stress on ZPG, and faster pace of life on Levine et al.'s measure. See text for further description of variables. [c] Correlations after partialing out population density. [d] Correlations after partialing out population size. [e] Correlations after partialing out cost of living.
* $p < .05$. ** $p < .01$.

size (−.38), was particularly noteworthy. Because the relationship between population size and helping was a major hypothesis in the study, we also calculated partial correlations between helping and population size (partialing out population density) and between helping and population density (partialing out population size; see Table 4). It may be seen that the resulting partial correlation for population density and overall helping (−.44) was significantly greater than that between population size and helping (.04). It appears that population density not only correlated more strongly with helping than did population size, but that it also accounted for virtually all of the variance explained by population size.

The three economic indicators showed somewhat inconsistent relationships with helping. For per capita income, there were significant negative correlations with two of the spontaneous helping measures—hurt leg and asking for change. For unemployment rates, there were significant negative correlations with the two indirect, nonspontaneous measures—the lost letter and United Way contributions measures. Cost of living showed the highest overall correlations, showing significant negative relationships with helping in the hurt leg, asking for change, blind person, and United Way situations. The fact that both per capita income and cost of living were negatively correlated with helping led us to speculate that the variance accounted for by the two variables might be related to population density. As predicted, analyses indicated a significant positive correlation between per capita income and population density (r = .48, n = 36, p < .01) and a significant negative correlation between cost of living and population density (r = −.48, n = 36, p < .01). To test this hypothesis, we also calculated partial correlations of helping with per capita income, cost of living, and unemployment, partialing out the effects of population density (see Table 4). It may be seen that partialing out for population density removed all of the significant relationships between per capita income and helping. They were also generally lowered for cost of living. However, most of these relationships remained significant, indicating that there is a general negative relationship between the cost of living of a community and rates of helping, above and beyond the effects of population density. The single significant positive relationship between cost of living and helping that emerged in these partial correlations, for the dropped pen measure, is difficult to explain. Partialing out for density had little effect on the relationship of unemployment rates to the lost letter and United Way measures.

Conversely, we also calculated partial correlations between population density and helping, partialing out for the effects of the three economic indicators. The overall cost of living index had the strongest effect on these population density–helping correlations and are presented in Table 4. It may be seen that partialing out cost of living reduces the negative correlations of density mostly with every measure other than in the blind person situation. All of these reductions, however, were moderate. These relationships are underscored by the multiple regression analyses presented below.

Two of the quality of life measures showed moderate, borderline significant, relationships with overall helping. Greater helping tended to occur in areas rated "healthier" on Zero Population Growth's Environmental Stress Index ($r = -.30$, $n = 33$, $p < .09$). Greater helping also tended to occur in areas with lower rates of violent crime ($r = -.32$, $n = 32$, $p < .06$), particularly, once again, for three of the four spontaneous situations (dropped pen, hurt leg, and asking for change).

Boyer and Savageau's (1989) Places Rated Index showed little relationship with helping, with the exception that "better" places to live offered significantly more help in the hurt leg situation. Although Levine et al.'s (1989) measure of the pace of life did not correlate significantly with overall helping, there was a tendency for faster paced cities to give more to United Way ($r = .29$, $n = 35$, *ns*) and to help less in the hurt leg situation ($r = -.20$, $n = 35$, *ns*). Although these correlations were not significant, it is noteworthy that faster paced cities helped more in the situation requiring giving and less in the situation requiring stopping one's activities and spontaneously doing.

Given the small sample ($n = 36$), it might be argued that the present findings be reported as significant at the .10 level. This is particularly relevant for findings in the hypothesized direction, which might be more appropriately evaluated using a one-tailed test. Using these criteria, the borderline trends reported above would be statistically significant.

Multiple regression analyses. Seven of the community variables were then simultaneously entered as predictors in a series of multiple regression analyses in which one of the seven helping variables served as the criterion variable. Given the large number of predictor variables for the sample size, four community variables were excluded. (Note that $N = 32$ cities for these analyses because of unavailable data for 4 cities on some predictor variables.) Because population density appeared to be the critical variable in predicting helping, the other variables selected for these analyses were those with the lowest correlations (see Table 5) and, assumably, the least overlap with population density: population change, unemployment rates, property crime, environmental stress, and pace of life. After initial multiple regression analyses indicated generally modest multiple correlations with this combination of predictors,[4] we also added cost of living scores, which had shown high bivariate correlations with helping.[4]

As can be seen in Table 6, when the seven community variables were optimally combined, the resulting uncorrected multiple correlations were generally high: $R - .48$ for dropped pen, .55 for hurt leg, .63 for asking for change, .55 for blind person, .62 for lost letter, .70 for United Way, and .72 for overall helping (*df*s = 7 and 24 in all cases, reflecting missing data for four cities). The adjusted multiple correlation values, which take into account the sample size and number of predictors, were smaller but also highly significant for four of the situations and for the overall index: $R = .07$ for dropped pen, .32 for hurt leg, .47 for asking for change, .32 for blind person, .45 for lost letter, .59 for United Way, and .61 for overall helping. It appears, then, that this heterogeneous set of community variables, when optimally combined in multiple regression formulas, successfully predicted helping in most of the helping situations.

Although population density was again the most consistently strong predictor of helping in these multiple regression analyses, these results indicate the importance of economic variables in predicting helping. Either unemployment or cost of living was the strongest predictor in four situations (asking for change, blind person, letter, and United Way) and in overall helping. These findings are consistent with the partial correlations in Table 4 that indicate that partialing out for cost of living resulted in somewhat lowered correlations of density with most of the helping measures. In many helping situations, it appears, economic factors explain at least some of the variance in helping behaviors accounted for by population density. Given the correlational nature of these findings, of course, the data do not support inferences of cause and effect.

In general, these analyses did not strongly support the value of multiple indicators of urbanism in predicting helping, at least for the indicators included in this study. First, no more than one variable accounted for significant variance in any of the multiple regression formulas. Second, the multiple correlations were significantly higher than the bivariate correlations for the highest single predictor in each situation. For four dependent measures (overall helping, pen, leg, and change), the multiple correlations were not significantly higher than the simple correlations between population density and helping. For example, population density correlated −.55 with overall helping, whereas the multiple correlation was .72 and the adjusted multiple correlation was .61. Similarly, the multiple correlations were not significantly higher than the bivariate correlations with cost of living for the blind person and United Way measures or with the bivariate correlations for unemployment rates for the lost letter measure. The significance of the differences between the highest single predictor and the multiple correlation (uncorrected) in each situation was calculated with the *r*-to-*z* transformation formula (Hays, 1973). The resulting standard scores were all nonsignificant: $z = .528$ for dropped pen, .374 for hurt leg, .805 for asking for change, .764 for blind person, 1.27 for lost letter, 1.74 for United Way, and .255 for overall helping.

Discussion

Importance of Population Density

Perhaps the strongest finding in the present study was the high negative correlation between population density and helping. As predicted, population size also showed a significant negative correlation with helping. The correlation for population density, however, was both larger than that for population size and accounted for virtually all of the variance explained by population size.

[4] These data are available from Robert Levine.

Table 5
Intercorrelations of Community Variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Population size	—										
2. Population density	.74**										
3. Population change	.00	−.23									
4. Per capita income	.34*	.48**	−.04								
5. Unemployment rates	−.12	−.16	.16	−.52**							
6. Cost of living	.36*	.48**	.23	.82**	−.32						
7. Boyer and Savageau's (1989) Places Rated Index	−.48**	−.37*	−.04	−.54**	.66**	−.35*					
8. Violent crime rate	.74**	.58**	.11	.09	.19	.21	−.03				
9. Property crime rate	.04	.03	.49**	−.22	.18	−.09	.14	.38*			
10. ZPG Environmental Stress Index	.38*	.23	.43**	.04	.31	.19	−.12	.26	.03		
11. Pace of Life	−.03	.20	−.36*	.11	−.16	−.08	−.15	−.16	−.17	−.22	—

Note. ZPG = Zero Population Growth.
* $p < .05$. ** $p < .01$.

A number of previous studies have used both Milgram's (1970) system overload theory and Latane and Darley's (1970) model of bystander intervention to predict a negative relationship between population size and helping. The present data indicate that the critical factor in this relationship is population density and that the correlation for population size per se may be largely spurious.

Theoretically, the notion of population density is clearly more consistent with Milgram's (1970) concept of sensory overload and Latane and Darley's (1970) predictions about diffusion of responsibility in bystanders. The present results thus provide both a more valid empirical test of the helping predictions of both models than do previous studies and provide clear support for these predictions.

As a further test of these theories, it would have been interesting in the present study to examine the relationship between city demographics and the proportion of people who did not notice the person in need in the four relevant field experiments. These data were not, however, available in the present study for two reasons. First, the field experiments were designed to target bystanders in a direct manner, which made it difficult not to notice the stranger in need. Second, experimenters often found it difficult to reliably distinguish between not noticing and noticing but ignoring in all but one (the dropped pen) of these four field experiments. Future multivariate studies that can better test the relationship between population demographics and noticing, it is hoped, will be designed. A related shortcoming in the four direct-contact experiments was the lack of data concerning the flow of pedestrians at the time of each measurement. In the blind person situation in particular, a greater number of potential helpers may have worked in favor of larger cities, which may help explain the relatively modest negative correlation between density and helping for that measure. Certainly, data concerning pedestrian flow is needed to more adequately test Milgram's (1970) theory.

Multiple Indicators of Urbanism

The value of using multiple indicators of urbanism to predict helping received only mixed support. On the one hand, the in-

Table 6
Results of the Multiple Regression Analyses Predicting Helping From Community Variables (Standardized Betas)

Predictor variable	Overall[a] helping index	Dropped[b] pen	Hurt leg[c]	Change[d]	Blind[e] person	Lost[f] letter	United Way[g]
Population density	−.35	−.37	−.45	−.24	−.35	−.06	−.32
Population change	−.01	.13	−.02	.03	−.01	.02	−.32
Cost of living	−.49*	.16	−.10	−.42	−.49*	−.32	−.31
Unemployment	−.26	.10	.04	−.02	−.26	−.54**	−.51**
Property crime rate	−.16	−.20	.16	−.31	−.16	−.30	.11
ZPG's Environmental Stress Index	.06	−.11	.14	.06	.06	.19	.17
Levine, Lynch, Miyake, and Lucia (1989) Pace of Life Index	−.06	−.13	−.06	.04	−.06	−.24	.18

Note. $n = 32$ for all variables. ZPG = Zero Population Growth.
[a] $R = .72$; adjusted $R = .61$. [b] $R = .48$; adjusted $R = .07$. [c] $R = .55$; adjusted $R = .32$. [d] $R = .63$; adjusted $R = .47$. [e] $R = .55$; adjusted $R = .32$.
[f] $R = .62$; adjusted $R = .45$. [g] $R = .70$; adjusted $R = .59$.
* $p < .05$. ** $p < .01$.

crease in the predictive power of optimally combined multiple indicators of urbanism, above and beyond the effects of individual predictors (population density for the overall helping, pen, leg, and change measures; cost of living for the blind person and United Way measures; and unemployment rates for the lost letter measure), was less than expected.

On the other hand, the differences in the variance accounted for by individual predictors across situations, both in the multiple regression analyses and simple correlations, demonstrate the value of multiple predictors. It is significant, for example, that helping was best predicted by different community variables in different helping situations. Population density tended to have the highest correlations in situations requiring spontaneous action (see below). This may, perhaps, indicate that the sensory overload associated with population density is less salient when individuals are allowed to respond without time pressure. Cost of living, on the other hand, may be the critical issue in charitable situations, such as that of United Way, that require giving. The high negative correlation between unemployment rates and returning lost letters is particularly interesting. This may be a case where the availability of high concentrations of individuals without significant restraints on their time results in increased help. Whereas cost of living may be critical in situations requiring giving, high concentrations of potential helpers (i.e., unemployed) appear to be critical in conditions requiring doing.

There were also borderline significant correlations of violent crime rates with the two most direct face-to-face situations (hurt leg and change). This may be explained by Fischer's (1976) theory, which would predict that the prevalence of violent crime leads to insecurity about social contact in direct confrontations with strangers. Interestingly, property crime rates had the highest negative correlations in the lost letter situation. Perhaps environments with high property crime rates develop norms that inhibit people from touching property that is not their own. The pace of life was not significantly correlated with helping. However, it is interesting that fast pace was most negatively associated with helping in situations requiring doing (dropped pen and hurt leg), whereas it was positively related to help requiring giving (United Way). Although these correlations were not significant, they point to the possibility that Milgram's (1970) assertion that the fast pace of cities may apply more to help requiring doing than to that requiring giving.

Given the correlational nature of the present study, of course, each of these interpretations is clearly speculative. All of these community variables, however, are defining characteristics of urbanism and, at least to a limited degree, appear to predict differences in the likelihood that a stranger will be offered help in some situations.

These findings lend at least modest support to sociological theories that hold that urbanization may produce social–economic conditions that are disruptive to the functioning of the community (e.g., Rubington & Weinberg, 1977). Although the data do not provide strong support for any single moderating variable intervening between population density and helping, there was some support for theories that link the deleterious social effects of urbanism to economic pressures (e.g., Linsky & Straus, 1986). There was also weak support for theories linking the deleterious effects of urbanism to increases in antisocial activity, particularly for the two measures that directly confronted subjects (hurt leg and change; e.g., Fischer, 1976; Linsky & Straus, 1986), and stress on the environment, particularly for the least spontaneous measure (United Way contributions; e.g., Zero Population Growth). Theories predicting decreases in helping as a function of more general conditions of a community's quality of life (e.g., Cutter, 1985) were not supported by the present data.

Taxonomic Categories

The main intent of sampling helping from different taxonomic categories was to achieve a cross-sample of helping situations rather than to explore the effects of these taxonomic differences on helping. It is interesting, however, to note trends that did emerge. The discussion above indicates, for example, that the category of giving versus doing may to some extent distinguish between those helping situations that are affected by the cost of living, unemployment, crime rates, and the pace of life.

The strong relationship between population density also varied across situations. The taxonomic category of spontaneous versus planned was the best predictor of these differences, with one exception. The three measures (hurt leg, change, and dropped pen) that correlated significantly with population density showed little uniformity on the doing versus giving and serious versus nonserious dimensions. All three measures were, however, rated high on spontaneity, and two of the three measures (lost letters and United Way contributions) that did not significantly correlate with population density were rated low on spontaneity. The exception to this trend was the blind person measure, which was rated high on spontaneity but did not significantly correlate with population density. It appears that, in general, the inhibition against helping observed in urban areas may be more common to situations that require spontaneous action toward strangers.

Perhaps other taxonomic categories need to be developed to distinguish the blind person situation from the other three spontaneous situations. One possibility concerns the degree of stigmatization of the victim, which was highest for the blind person. It may be that permanently handicapped individuals are exempted from fears about offering spontaneous help to strangers in large cities. Another possibility, which derives from the theories of Simmel (1950), Wirth (1938), and Zimbardo (1970), is the perceived anonymity with which helping can be offered. Helping can be offered to a blind person without compromising one's anonymity. In areas of high population density, fear of crossing this norm of anonymity may be a critical deterrent to urban helping in spontaneous situations.

It would be helpful in future studies to systematically develop and explore some of these other taxonomic dimensions of helping. One possibility would be to conduct postexperimental interviews with potential helpers. Another approach would be to have people rate situations used in previous urbanism–helping studies on potentially useful dimensions and see which factors best discriminate between situations that did and did not predict urban differences in helping. Steblay's (1987) meta-analytic review of these previous studies might provide a starting point for that task.

It might be noted that a lack of attention to taxonomy is common to research in most of the broader field prosocial behavior. In the recent *Review of Personality and Social Psychology* volume on prosocial behavior, both Clark (1991) in her introduction and Darley (1991) in his concluding chapter single out the need to taxonomize and to address differences between types of helping behaviors as one of the most glaring in the prosocial literature.

A Social Psychology of Places

Krupat and Guild (1980) have argued that the quality of life in cities is a multidimensional concept, and reducing it to a single variable or score will inevitably prove inaccurate and misleading. The present study underscores the importance of designing studies that allow a multivariate approach to the study of helping in cities. For one thing, multiple predictors of helping were available for analyses because we used a large enough sample of cities to allow each city to be treated as a single subject in correlational analyses. Differences in the predictive validities of population density versus population size, for example, would not have been possible had we compared only two or three cities. Similarly, the relationship of economic variables to helping in some situations, but not in others, emerged. Even the fact that the study was less successful than we hoped in using multiple indicators of urbanism to predict helping underscores the importance of sampling cities. Without a sufficient sample of cities, it would not have been possible to assess the relationship between multiple community indicators to helping.

The study also demonstrates the importance of using multiple measures of helping. There were generally modest intercorrelations among the six helping measures. On the one hand, this signals caution against generalizing about a city's "overall" tendency to help strangers. The overall rankings that were derived in the present study were clearly dependent on the measures sampled and undoubtedly would have differed had other helping behaviors been used or had some of the present measures not been included. On the other hand, the sampling of multiple helping measures allows for more valid generalizations about the relationship of helping to other variables—such as population density and size. It also allows comparison of the relationship of helping behaviors to each other. Most important, the results indicate a need to strive for a representative sample of helping situations on the basis of a systematic taxonomy of helping situations.

The present study also, it is hoped, demonstrates the value of a psychology of places—the systematic characterization of the attributes of environments and situations, as opposed to individuals. Psychology has mostly ignored the stimulus side of the stimulus-response relationship, certainly when it comes to characterizing the urban environment. As Strauss (1976) has argued, however, "the entire complex of urban life can be thought of as a person rather than a distinctive place, and the city can be endowed with a personality of its own" (Krupat & Guild, 1980, p. 21).

In the present study, we have attempted to characterize one salient dimension of cities' "personalities." In the process, we have discovered relationships in the psychology of helping that might not be easily visible at the individual level of analysis. These findings may now be further explored at the individual level, resulting in a more complete understanding of the social psychology of helping.

Finally, our rankings of places may serve two practical purposes. First, they provide tangible information for self-study of the quality of the helping environment in individual cities. Second, as social indicators, they may be compared over time with marked trends in American urban life.

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